BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 040029-EG

DEMAND-SIDE MANAGEMENT PLAN OF FLORIDA POWER & LIGHT COMPANY

PLAN DOCUMENT

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INTRODUCTION

Pursuant to Florida Administrative Code Rule 25-17.0021, Florida Power & Light Company (FPL) is submitting a Demand Side Management (DSM) Plan designed to meet the conservation goals established by the Commission in Order No. PSC-04-0850-CO-EG. This Demand Side Management Plan consists of: seven (7) Residential DSM programs, nine (9) Commercial/Industrial (C/I) DSM programs, one (1) Conservation Research and Development program, and three (3) research and development (R&D) projects. FPL anticipates that the proposed programs will achieve FPL's approved goals in their entirety through the year 2014. FPL's R&D projects and the continuation of the existing Conservation Research and Development to find the savings necessary to ensure that it achieves its goals through 2014, as well as other DSM potential which may emerge.

This report builds upon FPL's Petition for Approval of Numeric Conservation Goals Report filed with the Commission and reviewed and approved in Docket No. 040029-EG. That report contained a detailed evaluation of 329 measures and identified 92 of those measures to be cost-effective under the Rate Impact Measure (RIM) and Participant tests. Those 92 measures have been packaged into comprehensive FPL programs as part of this DSM Plan.

This report contains five sections. Section I provides an overview of FPL's DSM Plan, addressing how the Plan will achieve FPL's goals, listing the programs, projects and measures offered. Section II is a detailed description of the Residential DSM programs being proposed. Section III is a detailed description of the Commercial/Industrial DSM programs being proposed.

Section IV is a detailed description of FPL's DSM research and development efforts being undertaken and proposed.

Section V is a summary of this plan.

This report also has a companion Appendix A, which contains copies of the cost-effectiveness analyses performed in support of individual programs.

SECTION I - OVERVIEW

A. Commission-Approved Goals

FPL has developed a comprehensive portfolio of DSM programs in order to achieve the goals approved in Order No. PSC-04-0850-CO-EG. The approved goals for FPL are shown in Tables 1, 2 and 3 below.

Summer M ws Approved Goals @ Meter								
	Residential		Comn	nercial	Total			
Year	Annual	Cum	Annual	Cum	Annual	Cum		
2005	47.8	47.8	26.3	26.3	74.0	74.0		
2006	44.1	91.9	23.6	49.8	67.6	141.7		
2007	48.7	140.6	21.4	71.3	70.2	211.9		
2008	54.0	194.6	21.3	92.6	75.3	287.2		
2009	57.5	252.1	21.2	113.8	78.8	365.9		
2010	61.1	313.2	20.8	134.6	81.9	447.9		
2011	63.8	377.1	20.4	155.1	84.3	532.1		
2012	66.5	443.6	20.2	175.2	86.7	618.8		
2013	69.2	512.8	19.9	195.1	89.1	707.9		
2014	74.1	586.9	19.8	214.9	93.8	801.7		

Table 1Summer MWs Approved Goals @ Meter

Winter MWs Approved Goals @ Meter								
	Resid	lential	Comm	nercial	To	tal		
Year	Annual	Cum	Annual	Cum	Annual	Cum		
2005	26.0	26.0	12.8	12.8	38.8	38.8		
2006	29.6	55.6	10.9	23.7	40.4	79.3		
2007	33.6	89.2	9.6	33.3	43.2	122.5		
2008	38.1	127.3	9.9	43.2	48.0	170.6		
2009	40.6	168.0	10.3	53.5	50.9	221.5		
2010	43.3	211.3	10.4	63.9	53.7	275.2		
2011	45.1	256.5	10.5	74.4	55.7	330.9		
2012	46.9	303.3	10.7	85.1	57.6	388.5		
2013	48.7	352.0	11.0	96.1	59.6	448 .1		
2014	53.1	405.1	11.3	107.3	64.3	512.4		

 Table 2

 Winter MWs Approved Goals @ Meter

	Residential		Commercial		Total	
Year	Annual	Cum	Annual	Cum	Annual	Cum
2005	90.3	90.3	31.5	31.5	121.8	121.8
2006	75.7	166.0	19.3	50.8	95.0	216.8
2007	80.9	246.9	8.3	59.1	89.2	306.0
2008	86.4	333.3	8.7	67.8	95.1	401.1
2009	90.9	424.1	9.2	77.0	100.1	501.2
2010	95.4	519.5	9.5	86.5	104.9	606.1
2011	98.4	617.9	9.8	96.4	108.2	714.3
2012	101.4	719.3	10.1	106.5	111.5	825.8
2013	104.3	823.7	10.4	116.9	114.7	940.5
2014	107.3	931.0	10.7	127.6	118.1	1058.6

 Table 3

 Energy GWh's Approved Goals @ Meter

B. Composition of DSM Plan

FPL's DSM Plan is a diversified plan designed to achieve FPL's approved conservation goals. To meet those goals, FPL's DSM Plan captures all known cost-effective DSM potential and attempts to find additional cost-effective savings through research. As set forth herein, FPL's DSM Plan consists of seven (7) Residential programs, nine (9) Commercial/Industrial programs, one (1) research program and three (3) individual research projects. Other concepts may evolve into research projects or programs. As with prior plans, FPL anticipates that the Plan will likely change over time due to program experience, research results, changes in FPL's system needs, and the options which may become available to FPL.

Residential Programs

- Residential Building Envelope
- Duct System Testing and Repair
- Residential Air Conditioning
- Residential Load Management (On Call)

- Residential New Construction (BuildSmart)
- Residential Low Income Weatherization
- Residential Conservation Service (RCS)

Commercial/Industrial Programs

- Commercial/Industrial Heating, Ventilating and Air Conditioning
- Commercial/Industrial Efficient Lighting
- Commercial/Industrial Building Envelope
- Business Custom Incentive
- Business On Call
- Commercial/Industrial Demand Reduction
- Business Energy Evaluation
- Cogeneration and Small Power Production
- Commercial/Industrial Load Control

Research Efforts

Research Program:

Conservation Research and Development

Research Projects:

- Residential On Call Pilot Project
- Green Power Pricing Research Project
- Business Green Energy Research Project

C. Comparison of Existing and Proposed DSM Plans

Tables 4 and 5 show how existing conservation programs are being incorporated into FPL's proposed Plan. These tables show that all existing FPL programs will be continued in some fashion.

DSM Program	Existing Program or R&D Project to	Existing Program or R&D Project to Continue with	New Program or R&D
Or R&D Project	Continue w/o Change	Modifications	Project
Building Envelope Program			
Duct System Testing and Repair		x	
Program			
Air Conditioning Program		x	
Residential Load Management (On Call)	x		
Program			
Residential New Construction	X		
(BuildSmart Program)			
Residential Low Income Weatherization	X		
Residential Conservation Service	x		
Program			
Conservation Research & Development		X	
Residential On Call Pilot Project	X		
Green Power Pricing Research Project	X		

Table 4Classification of Residential Programs and R&D Projects

 Table 5

 Classification of Commercial/Industrial Programs and R&D Projects

	Existing Program or	Existing Program or R&D Project to	
DSM Program	R&D Project to	Continue with	New Program or R&D
or R&D Project	Continue w/o Change	Modifications	Project
Heating, Ventilating & Air Conditioning		X	
Program			
Efficient Lighting Program		X	
Building Envelope Program		X	
Business Custom Incentive Program	X		
Business On Call Program	Х		
Commercial/Industrial Demand	X		
Reduction Program			
Commercial/Industrial Load Control	Х		
Program			
Business Energy Evaluation Program	X		
Cogeneration and Small Power	x		
Production Program			
Conservation Research & Development		X	
Business Green Energy Research Project			X

The Commercial/Industrial Load Control program has been closed to new participants as of December 31, 2000. Since 2000, no new customers have been added to the

Commercial/Industrial Load Control program, but the program continues in effect for existing participants.

D. Measures Comprising Programs

FPL' DSM Plan includes seven (7) Residential programs: Residential Building Envelope, Duct System Testing and Repair, Residential Air Conditioning, Residential Load Management (On Call), Residential New Construction (BuildSmart), Residential Low Income Weatherization and Residential Conservation Services. Table 6 lists the proposed Residential programs and the measures offered in each program.

Program	Measure
Residential Building Envelope	RBE Strip heat
	RBE HP
	Refl Roof
Duct System Testing and Repair	Duct- Strip Heat
	Duct - HP
Residential Air Conditioning	RHVAC -HP
	RHVAC -SC
	RHVAC -Grnd
	Plenum Repair - HP
	Plenum Repair - SC
Residential Load Management	Load Control
Residential New Construction	BuildSmart
Residential Low Income Weatherization	Low Income AC Maintenance
	Low Income Infiltration
Residential Conservation Service	Residential Audits

Table 7 lists the Commercial/Industrial programs and their associated measures. The nine (9) Commercial/Industrial programs are: Commercial/Industrial Heating, Ventilation and Air Conditioning, Commercial/Industrial Efficient Lighting, Commercial/Industrial Building Envelope, Business Custom Incentive (BCI), Commercial/Industrial Demand Reduction (CDR), Business On Call, Business Energy Evaluation (BEE), Cogeneration and Small Power Production and Commercial/Industrial Load Control (CILC).

		T
Program	Measure	Rate Classes
Commercial/Industrial Heating, Ventilating and	Chiller	GSD, GSLD
Air Conditioning	DX	GS, GSD, GSLD
	Room AC	GS, GSD, GSLD
	TES	GSD, GSLD
	ERV No Heat Act Bypass	GS, GSD, GSLD
	ERV No Heat No Bypass	GS, GSD, GSLD
	ERV Strip Heat Act Bypass	GS, GSD, GSLD
	ERV Strip Heat No Bypass	GS, GSD, GSLD
Commercial/Industrial Efficient Lighting	Lighting	GS, GSD, GSLD
Commercial/Industrial Building Envelope	Roof Insulation	GS, GSD, GSLD
	Ceiling Insulation	GS, GSD, GSLD
	Reflective Roof Coatings	GS, GSD, GSLD
Business Custom Incentive	BCI	GSD, GSLD
Business On Call	Business On Call	GS, GSD
Commercial/Industrial Demand Reduction	CDR	GSLD
Business Energy Evaluation	C/I Energy Audits	GS, GSD, GSLD
Cogeneration and Small Power Production	Cogeneration Support	All
Commercial/Industrial Load Control	CILC	GSLD

 Table 7

 Summary of Commercial/Industrial Programs

E. Summary

FPL's DSM Plan provides a variety of programs in which FPL's customers may participate. It is designed to achieve FPL's Commission-approved RIM-based goals. To meet those goals, FPL will offer programs that include all measures currently known to be cost-effective to both participants and non-participants. To achieve its goals through 2014 and to address changing market conditions, FPL is supplementing these programs with additional R&D efforts as well.

SECTION II - RESIDENTIAL PROGRAMS

A. Residential Program Overview

FPL's DSM Plan offers seven (7) Residential DSM programs. The seven conservation programs are: Residential Building Envelope, Duct System Testing and Repair, Residential Air Conditioning, Residential Load Management (On Call), Residential New Construction (BuildSmart), Residential Low Income Weatherization and Residential Conservation Service. All of these Residential DSM programs have previously been approved by the Commission, and most remain unchanged. While the program descriptions that follow provide details as to any proposed changes to each program, the significant modifications being proposed are:

- **Residential Building Envelope** The incentive structure is being revised and incentives will be provided for reflective roofs.
- Duct System Testing and Repair The incentive structure is being revised.
- **Residential Air Conditioning** The incentive structure is being revised and incentives will be provided for plenum sealing.

B. Detailed Program Descriptions

Residential Building Envelope Program

Program Description

The Residential Building Envelope Program is designed to encourage qualified customers to install energy-efficient roof and ceiling insulation measures that cost-effectively reduce FPL's coincident peak air conditioning load and customer energy consumption. The objective is accomplished by providing incentives to customers to facilitate the installation of these measures.

The proposed Residential Building Envelope Program will be expanded to include reflective roof measures with a maximum incentive of \$461 per summer kW. In addition, the maximum cost-effective incentive for ceiling insulation is decreasing from \$626 per summer kW to \$570 per summer kW.

FPL makes residential customers aware of this program through contractors, retail outlets, other trade allies, appropriate advertising and promotion activities, as well as direct contact with potential participants by FPL personnel.

FPL plans to facilitate the application of this program to potential low income participants by targeting public agencies and governmental housing authorities for program education and implementation. An example of this effort is the qualification of public agency or housing authorities as participating contractors, thus assisting in lowering the installation costs of measures for low income participants. FPL also will assist agencies in selecting qualifying

contractors, if requested to do so.

Description of Program Administration

The Residential Building Envelope Program will be available to all existing residential customers served by FPL who have whole-house electric air conditioning or heating. Whole-house electric air conditioning or heating is defined as a central system(s) or sufficient window/wall units to provide cooling to the majority of the living spaces of the house. For ceiling insulation, homes must be pre-certified by FPL, and an incentive certificate will be issued. For reflective roof measures, roof contractors will issue incentive certificates which will be used to reduce the upfront cost to the customer. A list of independent FPL participating contractors is also provided to the customer. When the measure installation is complete, the customer signs and gives the Watt-Saver Certificate to the contractor as partial payment for the installation. The contractor then completes the Watt-Saver certificate and it is processed by FPL. FPL will perform post installation inspections on a random basis for a sample of participants prior to payment of incentives.

Building envelope measures that are required to be installed, by federal, state or local building or energy codes when additions and/or renovations are made to existing buildings, are not eligible for this program. To be eligible for incentives, qualifying building envelope measures must be installed according to manufacturer's recommendations and specifications by contractors who are certified, licensed and insured as deemed necessary by applicable state or local governmental agencies and FPL. All performance claims must be supported by testing procedures and documentation which are acceptable to FPL. All installations must be accessible for verification All incentive requests will be tracked by a computer system, which will record a history of the incentive payments made to customers/contractors.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to, technological advances, operational needs, program results, application assumptions and incentive amounts.

Projected Participation and Savings

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The energy consumption and demand reduction projections are based on evaluation results.

The projected participation in this program and associated savings are shown on Attachments A, B and C. The projected participation is based upon FPL's Petition for Approval of Numeric Conservation Goals, filed June 1, 2004.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix A. These analyses show the following benefit-cost ratios: 2.39 Participant, 1.04 RIM, and 1.58 TRC for the Residential Building Envelope program.

Program Monitoring and Evaluation

The ceiling insulation measure of the Residential Building Envelope Program is a mature technology, which has been studied by FPL for many years. Demand and energy impacts are allocated as a function of the difference between a final insulation level and the beginning (preexisting) level of insulation measured in the attic. Ceiling insulation program impacts will be adjusted annually, according to changes in participation patterns by market segment. Over the next several years, evaluation of the Program will emphasize study of the new reflective roof measure of the program.

FPL will utilize any or all three major impact evaluation analysis methods in a manner that most cost-effectively meets the overall impact evaluation objectives: engineering analysis, statistical billing analysis and on-site metering research.

Initially, impacts for reflective roofs will depend upon the savings calculated during the Conservation R&D Energy Efficient Roof Study of six identical homes with different roofs. As participation grows, FPL will begin to utilize billing analysis and/or metered research samples to refine average impacts realized. As participation in the reflective roof measure grows in the future, this will create an opportunity to apply the different evaluation techniques for verifying demand and energy impacts.

		(b)		(d)
	(a)	Total Number	(c)	Cumulative
	Total Number	of Eligible	Annual Number	Penetration
Year	of Customers	Customers	of Participants	Level %
2005	3,816,452	1,029,114	15.642	2%
2006	3,889,044	1,011,727	16,533	3%
2007	3.960.492	994.790	16.630	5%
2008	4,030,954	978,291	16,747	7%
2009	4,100,566	962,220	16,885	9%
2010	4.169.514	946.564	17.044	11%
2011	4,238,239	931,313	17,222	13%
2012	4,306,727	916,457	17,422	15%
2013	4,374,980	901,985	17,641	17%
2014	4,443,827	887,887	17,882	19%

Program Name: Residential Building Envelope Program

Note: Column a - The total number of customers in residential rate class

Column b - The total number of eligible customers in residential rate class

Column d - Column c cumulative / Column b (does not reflect participation prior to 2005)

Attachment B - At the Meter

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	630	0.45	0.25	9,855,402	7,093	3,834
2006	675	0.42	0.27	11,162,951	6,922	4,401
2007	691	0.41	0.27	11,496,898	6,755	4,553
2008	708	0.39	0.28	11,850,086	6,593	4,712
2009	724	0.38	0.29	12,222,625	6,435	4,879
2010	740	0.37	0.30	12,614,630	6,282	5,055
2011	756	0.36	0.30	13,026,227	6,132	5,238
2012	772	0.34	0.31	13,457,552	5,987	5,430
2013	788	0.33	0.32	13,908,747	5,845	5,630
2014	804	0.32	0.33	14.379.965	5.708	5.839

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	681	0.50	0.27	10,646,432	7,840	4,238
2006	729	0.46	0.29	12,058,930	7,651	4,865
2007	747	0.45	0.30	12,419,680	7,467	5,032
2008	764	0.44	0.31	12,801,217	7,288	5,208
2009	782	0.42	0.32	13,203,656	7,113	5,393
2010	800	0.41	0.33	13,627,125	6,944	5,587
2011	817	0.39	0.34	14,071,759	6,778	5,790
2012	834	0.38	0.34	14,537,703	6,618	6,002
2013	852	0.37	0.35	15,025,113	6,461	6,223
2014	869	0.35	0.36	15,534,153	6,309	6,454

Duct System Testing and Repair Program

Program Description

The objective of FPL's Duct System Testing and Repair Program is to encourage demand and energy conservation through air leak identification in air conditioning duct systems and repair of those leaks by qualified contractors. This objective is accomplished by performing on-site tests at the customers' premises, identifying leak sites and providing incentives to customers for leak repairs.

The proposed Duct System Testing & Repair Program remains essentially unchanged from the existing program. The maximum incentive is changing from \$406 per kW to \$466 per kW.

FPL makes residential customers aware of this program through contractors, retail outlets and other trade allies, appropriate advertising and promotion activities, as well as direct contact with potential participants by FPL personnel.

Description of Program Administration

The Duct System Testing and Repair Program is available to residential customers. Dwellings must have an electric air conditioning duct system and have accessible duct systems. Duct tests are performed by diagnosticians using measurement equipment designed to assist in locating air leakage in air conditioning duct systems. A charge for this test may be assessed, and FPL proposes to continue to pay a portion of the customer cost of the test. If leaks are identified during the test, the diagnostician will provide the customer with a diagram of the leak sites and a

list of independent FPL participating contractors. Repair incentive certificates are also given to customers by the diagnostician at the time the test is performed. When the repair of the duct system is completed, the customer signs and gives the Watt-Saver Certificate to the contractor as partial payment for the installation. The contractor then completes the Watt-Saver certificate and it is processed by FPL. FPL will perform post installation inspections on a random basis for a sample of participants prior to payment of incentives.

Duct system repairs will be performed by approved FPL Duct System Repair Contractors, in order to qualify for conservation incentives. As part of the Duct System Repair Contractor responsibilities, each contractor must complete an FPL-specified training course in testing and repair techniques.

Repair incentives will be based on the amount of time required to repair the leak sites identified and will be included in the Program Standards. Incentives will not exceed a program average of \$466 per summer kW, which is based on cost-effectiveness analyses included in Appendix A. All incentive requests will be tracked by a computer system, which will record a history of incentive payments made to customers/contractors.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to, technological advances, program results, operational needs, application assumptions and incentive amounts.

Projected Participation and Savings

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The energy consumption and demand reduction projections are based on evaluation results.

The projected participation in this program and associated savings are shown on Attachments A, B and C. The projected participation is based upon FPL's Petition for Approval of Numeric Conservation Goals, filed June 1, 2004.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix A. These analyses show the following benefit-cost ratios: 2.95 Participant, 1.02 RIM, and 1.76 TRC for the Duct System Testing and Repair program.

Program Monitoring and Evaluation

FPL continues to use all the major evaluation methods to determine impacts for this program. A metered before/after field study was recently completed to update the metered results from the mid 1990s. Metered studies are used to calibrate the engineering model estimates of peak hour demand. Statistical billing analysis is used to adjust the engineering model estimate of energy savings to reflect actual realized savings, which are effected by behavioral factors such as rebound. Rebound can be the result of the customer's decision to maintain a lower temperature in the home once duct leaks have been repaired. Additionally, FPL adjusts the program-level

impacts annually in response to changes in participation patterns in the various market segments.

FPL will utilize any or all three major impact evaluation analysis methods, engineering analysis, statistical billing analysis and on-site metering, in a manner that most cost-effectively meets the overall impact evaluation objectives. As these evaluations proceed, the accuracy of the evaluation-based estimates will continue to be enhanced.

	Attachment A							
		(b)		(d)				
	(a)	Total Number	(c)	Cumulative				
	Total Number	of Eligible	Annual Number	Penetration				
Year	of Customers	Customers	of Participants	Level %				
2005	3,816,452	1,780,617	16,176	1%				
2006	3,889,044	1,803,765	16,517	2%				
2007	3,960,492	1,827,214	16,841	3%				
2008	4,030,954	1,850,967	17,150	4%				
2009	4,100,566	1,875,030	17,449	4%				
2010	4,169,514	1,899,405	17,741	5%				
2011	4,238,239	1,924,098	18,031	6%				
2012	4,306,727	1,949,111	18,320	7%				
2013	4,374,980	1,974,449	18,611	8%				
2014	4,443,827	2,000,117	18,905	9%				

Program Name: Duct System Testing & Repair Program

Note: Column a - The total number of customers in residential rate class

Column b - The total number of eligible customers in residential rate class

Column d - Column c cumulative / Column b (does not reflect participation prior to 2005)

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	308	0.15	0.15	4,988,175	2,478	2,426
2006	308	0.15	0.15	5,093,313	2,530	2,478
2007	308	0.15	0.15	5,193,115	2,580	2,526
2008	308	0.15	0.15	5,288,432	2,627	2,573
2009	308	0.15	0.15	5,380,548	2,673	2,617
2010	308	0.15	0.15	5,470,727	2,718	2,661
2011	308	0.15	0.15	5,560,027	2,762	2,705
2012	308	0.15	0.15	5,649,244	2,807	2,748
2013	308	0.15	0.15	5,738,933	2,851	2,792
2014	308	0.15	0.15	5,829,457	2,896	2.836

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	333	0.17	0.17	5,388,544	2,739	2,682
2006	333	0.17	0.17	5,502,120	2,797	2,739
2007	333	0.17	0.17	5,609,933	2,852	2,792
2008	333	0.17	0.17	5,712,901	2,904	2,844
2009	333	0.17	0.17	5,812,410	2,955	2,893
2010	333	0.17	0.17	5,909,828	3,004	2,942
2011	333	0.17	0.17	6,006,295	3,053	2,990
2012	333	0.17	0.17	6,102,672	3,102	3,038
2013	333	0.17	0.17	6,199,560	3,152	3,086
2014	333	0.17	0.17	6.297.350	3.201	3.134

Residential Air Conditioning Program

Program Description

The Residential Air Conditioning Program is designed to reduce the summer and winter coincident peak demand and energy attributable to central heating, ventilating, and air conditioning (HVAC) equipment by encouraging customers, through the use of incentives, to purchase higher efficiency equipment.

FPL proposes to implement the following changes to the Residential Air Conditioning Program:

- The addition of plenum repair measures with a maximum incentive of \$412 per summer kW.
- An increase of the program maximum incentive for straight cool and heat pump units from a range not exceeding \$216 to \$436 per summer kW to a range not to exceed \$356 to \$490 per summer kW, respectively.

Description of Program Administration

The primary method of encouraging prospective customers to participate in the program will be the payment of incentives. The amount of the incentives will vary depending on several factors, including the size of the unit being installed and the Seasonal Energy Efficiency Ratio (SEER) or Energy Efficiency Ratio (EER) for central units and whether or not a plenum repair was performed. Incentive tables will be included in FPL's Program Standards and will range from \$356 to \$490 per summer kW based on cost-effectiveness analyses included in Appendix A. To be eligible for incentives for this program, the customer must make an installation at a residence which has had a Certificate of Occupancy or equivalent for at least one year.

FPL plans to make residential customers aware of this program through contractors, retail outlets and other trade allies, appropriate advertising and promotion activities, as well as direct contact with potential participants by FPL personnel.

The incentives for central air conditioning systems will be issued to the customer at the time the customer purchases a qualifying HVAC unit or units and/or has a plenum repair from a qualifying contractor. The contractor fills out the incentive certificate and gives it to the customer for signature. The customer signs and gives the incentive certificate back to the contractor as partial payment for the installation. The incentive certificate is then processed by FPL for payment.

FPL will perform random post installation inspection on a selected sample of participants prior to payment of incentives. All incentive requests will be tracked by a computer system, which will record a history of incentive payments made to customers/contractors.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based upon factors such as, but not limited to, technological advances, operational needs, program evaluation results, application assumptions, and incentive amounts.

Projected Participation and Savings

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The energy consumption and demand reduction projections are based on evaluation results.

The projected participation in this program and associated savings are shown on Attachments A, B and C. The projected participation is based upon FPL's Petition for Approval of Numeric Conservation Goals, filed June 1, 2004.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix A. These analyses show the following benefit-cost ratios: 1.46 Participant, 1.02 RIM, and 1.01 TRC for the Residential Air Conditioning program.

Program Monitoring and Evaluation

FPL continues to use all the major evaluation methods to determine impacts for this program. Metered studies are used to calibrate the engineering model estimates of peak hour demand. Statistical billing analysis is used to adjust the engineering model estimate of energy savings to reflect actual realized savings, which are effected by behavioral factors such as rebound. Rebound can be the result of some customers maintaining a lower temperature in the home once the HVAC system is replaced with a more efficient system, which has lower operating cost. Additionally, FPL adjusts the program-level impacts annually in response to changes in participation patterns in the various market segments. The efficiency levels of HVAC units installed outside FPL's rebate program are also periodically measured using non-participant surveys or other sources of efficiency sales data.

A metered field study of HVAC units with efficiencies of SEER 14 or higher was recently completed to supplement the metered results from the late 1990's. The next metered study planned for the future will focus on the super-high efficiency systems including those with dual or multi-speed compressors. As these evaluations proceed, the accuracy of the evaluation-based estimates will continue to be enhanced.

		(U)		(4)
	(a)	Total Number	(c)	Cumulative
	Total Number	of Eligible	Annual Number	Penetration
Year	of Customers	Customers	of Participants	Level %
2005	3,816,452	1,519,896	58,975	4%
2006	3.889.044	1.568.827	48.617	7%
2007	3,960,492	1,615,754	51,543	10%
2008	4,030,954	1,661,525	55.130	13%
2009	4,100,566	1,706,797	58,767	16%
2010	4.169.514	1.752.039	62.431	19%
2011	4,238,239	1,797,564	66,142	22%
2012	4,306,727	1,843,563	69,950	26%
2013	4,374,980	1,890,148	73,920	29%
2014	4,443,827	1.937.375	78.118	32%

Program Name: Residential Air Conditioning Program

Attachment A

Note: Column a - The total number of customers in residential rate class

Column b - The total number of eligible customers in residential rate class

Column d - Column c cumulative / Column b (does not reflect participation prior to 2005)

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	1180	0.12	0.56	69,607,990	6,838	33,217
2006	1057	0.11	0.50	51,388,125	5,348	24,549
2007	1043	0.11	0.50	53,751,616	5,635	25,682
2008	1028	0.11	0.49	56,664,330	5,987	27,078
2009	1012	0.11	0.48	59,465,952	6,337	28,422
2010	995	0.11	0.48	62,121,701	6,682	29,697
2011	977	0.11	0.47	64,640,489	7,022	30,907
2012	959	0.11	0.46	67,059,566	7,364	32,071
2013	939	0.10	0.45	69,424,396	7,712	33,209
2014	919	0.10	0.44	71,778,657	8,073	34,345

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	1275	0.13	0.62	75,194,977	7,559	36,716
2006	1142	0.12	0.56	55,512,720	5,912	27,135
2007	1127	0.12	0.55	58,065,913	6,229	28,388
2008	1110	0.12	0.54	61,212,412	6,618	29,930
2009	1093	0.12	0.53	64,238,902	7,005	31,416
2010	1075	0.12	0.53	67,107,811	7,385	32,825
2011	1056	0.12	0.52	69,828,766	7,762	34,163
2012	1036	0.12	0.51	72,442,007	8,139	35,449
2013	1015	0.12	0.50	74,996,647	8,524	36,708
2014	993	0.11	0.49	77,539,870	8,924	37,962

Residential Load Management Program

(On Call Program)

Program Description

The On Call Program is designed primarily to reduce system peak demand, but it also reduces energy consumption. The On Call Program involves the installation of direct load control equipment on selected customer end-use equipment to allow FPL to control customer loads on an as needed basis.

FPL is proposing no change to this program.

FPL plans to make residential customers aware of this program through contractors, appropriate advertising and promotion activities, as well as direct contact with potential participants by FPL personnel.

Description of Program Administration

FPL's On Call Program is available to all residential customers who are individually metered (i.e., who do not receive service through commonly owned facilities of condominium, cooperative or homeowners' associations) and who have one or more of the following electrical appliances/equipment: central electric air conditioners, central electric space heaters, conventional electric water heaters and swimming pool pumps. A customer may sign up for one or more of these appliances/equipments (with the exception of electric space heating, which is eligible only in combination with one of the other equipment types).

Customers who participate in the Program will be eligible, based on three primary factors: whether the customer has the proper eligible loads, whether their service characteristics (voltage, etc.) are compatible with existing load control equipment, and whether the customer receives service from a substation which has load control equipment installed.

Once the customer signs up for the program, the installation request will be sent to a contractor for installation. Once the installation is completed, the contractor sends the information to FPL for entry into the Load Management Information System (LMIS), resulting in the activation of the equipment at the customer's facility. Upon installation and inspection of the equipment, the customer will receive a monthly credit, which may vary seasonally, on his/her electric bill.

The incentives normally are paid as specified in the On Call Program tariff, Schedule RSL. FPL currently has a reduced incentive research and development effort underway which is more fully discussed in the research and development section of this plan. FPL maintains an internal audit trail for all incentive payments by means of LMIS. This computer database maintains interview and installation information for each program participant, as well as, a history of all incentives paid.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to, technological advances, operational needs, program results, application assumptions and incentive amounts.

Projected Participation and Savings

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The energy consumption and demand reduction projections are based on the program monitoring and evaluation results performed to determine the demand reductions obtained for the On Call Program and are from FPL's Petition for Approval of Numeric Conservation Goals, filed June 1, 2004.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix A. These analyses show the following benefit-cost ratios: infinite Participant, 1.31 RIM, and 2.92 TRC for the On Call Program.

Program Monitoring and Evaluation

During the past two years, an extensive examination of metered data was performed to observe duty cycles during peak hours, by geographic area, for a wide range of temperature conditions. A sophisticated model was developed to estimate system-level impacts as a function of appliance, region, temperature and time of day. Quality control checks are currently under way to ensure reliable communications throughout the entire load control network. FPL is continuously exploring techniques to further verify and refine the impacts for this program.

FPL continuously tracks all participants in the On Call program. Participation by appliance combination and market segment is used annually to adjust program-level impacts. Periodic

field metering is the primary method of estimating program impacts by measuring appliance connected loads and duty cycles of HVAC systems.

Attachment A							
		(b)		(d)			
	(a)	Total Number	(c)	Cumulative			
	Total Number	of Eligible	Annual Number	Penetration			
Year	of Customers	Customers	of Participants	Level %			
2005	3,816,452	2,692,343	5,300	0%			
2006	3,889,044	2,719,674	8,500	1%			
2007	3,960,492	2,745,465	10,600	1%			
2008	4,030,954	2,769,246	13,200	1%			
2009	4,100,566	2,792,163	14,500	2%			
2010	4,169,514	2,814,114	15,900	2%			
2011	4,238,239	2,835,178	17,200	3%			
2012	4,306,727	2,855,343	18,500	4%			
2013	4,374,980	2,874,597	19,800	4%			
2014	4,443,827	2,890,943	23,300	5%			

Program Name: Residential Load Management Program

Note: Column a - The total number of customers in residential rate class

Column b - The total number of eligible customers in residential rate class

Column d - Column c cumulative / Column b (does not reflect participation prior to 2005)

Attachment B - At the Meter

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	19	1.18	0.99	98,830	6,254	5,247
2006	19	1.18	0.99	158,501	10,030	8,415
2007	19	1.18	0.99	197,660	12,508	10,494
2008	19	1.18	0.99	246,142	15,576	13,068
2009	19	1.18	0.99	270,383	17,110	14,355
2010	19	1.18	0.99	296,489	18,762	15,741
2011	19	1.18	0.99	320,731	20,296	17,028
2012	19	1.18	0.99	344,972	21,830	18,315
2013	19	1.18	0.99	369,213	23,364	19,602
2014	19	1.18	0.99	434,478	27.494	23.067

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	20	1.30	1.09	106,762	6,913	5,800
2006	20	1.30	1.09	171,222	11,087	9,301
2007	20	1.30	1.09	213,525	13,826	11,599
2008	20	1.30	1.09	265,898	17,217	14,445
2009	20	1.30	1.09	292,085	18,912	15,867
2010	20	1.30	1.09	320,287	20,738	17,399
2011	20	1.30	1.09	346,474	22,434	18,822
2012	20	1.30	1.09	372,661	24,130	20,244
2013	20	1.30	1.09	398,848	25,825	21,667
2014	20	1.30	1.09	469,351	30,390	25,497

Residential New Construction Program (BuildSmart[®] Program)

Program Description

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

The BuildSmart Program will accomplish its program objective through a variety of activities. FPL will conduct educational activities, advertise and market to builders and homebuyers explaining and promoting the benefits of building new homes more energy-efficiently than required under Florida's Energy Efficiency Code for Building Construction. Employing energy rating tools ⁽¹⁾, FPL will review house plans and provide recommendations to improve energy efficiency ratings under the Florida Energy Efficiency Code. FPL will also perform postconstruction inspections to assess energy efficiency of new homes. Qualifying homes that pass inspection will be certified by FPL as BuildSmart homes. Additionally, FPL will provide builder incentives for qualifying BuildSmart homes that also achieve ENERGY STAR[®] certification by meeting the requirements of the United States Department of Energy (DOE) and Environmental Protection Agency's (EPA) ENERGY STAR[®] Program. FPL plans to make residential customers aware of this program through appropriate advertising and promotional channels. For example, the program may be promoted through participating builders, community developments

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

and new homebuyer workshops.

There are no changes to this program.

Description of Program Administration

The BuildSmart Program is available to all new, residential single family homes, whether detached or attached, in FPL's service territory, whether built by a residential builder or an owner-builder. The new home must have whole-house electric air-conditioning to qualify. Each participating residential builder must enter into a BuildSmart Program Agreement with FPL. An owner-builder must enter into a BuildSmart Program Single Home Agreement with FPL. To be eligible for BuildSmart certification, builders must comply with all national, state and local codes and ordinances.

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

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

Under the prescriptive measure approach, to receive BuildSmart certification, a home must include specific prescriptive energy efficiency measures targeted to achieve an energy efficiency rating at least 10% better than the rating required by the Florida Energy Efficiency Code⁽²⁾. Under this approach, builders must submit to FPL plans or specifications that FPL can use to validate that the installed measures meet BuildSmart prescriptive requirements.

FPL reserves the right to perform a series of inspections on each BuildSmart home to verify that energy-efficiency upgrades are incorporated as submitted. FPL will inspect homes to verify that all energy measures specified have been installed and to determine whether any changes were made to a home that will affect the energy efficiency level of the home. In addition, an air conditioning duct test may be performed to determine the level of tightness of the air ducts. Following this inspection, FPL will recalculate the energy efficiency level, if needed, and then certify the home at its final energy efficiency level. A certificate is then issued for the qualifying home and provided to the builder or homeowner. FPL will determine whether the requirements of the BuildSmart Program are met.

Builder incentives, such as cooperative advertising incentives of up to \$50 per home, will be available to builders for qualifying BuildSmart homes that also achieve certification through the

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

DOE and EPA's ENERGY STAR[®] program.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to, technological advances, operational needs, program results, application assumptions, state energy code revisions or rating tool improvements.

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The energy consumption and demand reduction projections are based on the program monitoring and evaluation results performed and are from FPL's Petition for Approval of Numeric Conservation Goals, filed June 1, 2004.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix A. These analyses show the following benefit-cost ratios: 1.75 Participant, 1.06 RIM, and 1.10 TRC for the BuildSmart Program.

Program Monitoring and Evaluation

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

The impacts predicted by the robust engineering model developed during the initial study were validated by a smaller metered study conducted in 1999. Since that time, the impacts in the BuildSmart model have been reviewed and/or adjusted several times. Revisions were made as changes have occurred in both the Florida energy efficient building code and in the EnergyGauge software. EnergyGauge is used to certify that Florida homes meet minimum code requirements or the higher BuildSmart standards. The FPL BuildSmart model was also used to develop demand and energy impacts for the newly redesigned BuildSmart Program filed with the Commission in mid-2004. FPL believes the demand and energy impacts estimated by the BuildSmart model will be valid until there are substantial changes in construction practices or new technology applications emerge.

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

Program participation and efficiency upgrades will be tracked in a BuildSmart database. FPL

will monitor the program's actual results on a continual basis and re-evaluate the forecasted participation levels and the energy and demand impact data, as necessary, over time.

	Attachment A								
		(b)		(d)					
	(a)	Total Number	(c)	Cumulative					
	Total Number	of Eligible	Annual Number	Penetration					
Year	of Customers	Customers	of Participants	Level %					
2005	3,816,452	59,108	3,816	6%					
2006	3,889,044	58,661	5,344	8%					
2007	3,960,492	58,213	6,945	9%					
2008	4,030,954	59,205	8,335	10%					
2009	4,100,566	59,809	9,170	11%					
2010	4,169,514	62,952	10,084	12%					
2011	4,238,239	65,119	10,084	13%					
2012	4,306,727	60,704	10,084	13%					
2013	4,374,980	56,556	10,084	14%					
2014	4,443,827	54,502	10,084	14%					

Program Name: Residential New Construction

Note: Column a - The total number of customers in residential rate class

Column b - The total number of eligible customers in residential rate class

Column d - Column c cumulative / Column b (does not reflect participation prior to 2005)

Attachment B - At the Meter

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

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	1577	0.97	0.86	6,018,143	3,712	3,290
2006	1577	0.97	0.86	8,427,687	5,198	4,607
2007	1577	0.97	0.86	10,953,549	6,755	5,988
2008	1577	0.97	0.86	13,145,047	8,107	7,186
2009	1577	0.97	0.86	14,462,785	8,920	7,906
2010	1577	0.97	0.86	15,904,016	9,808	8,694
2011	1577	0.97	0.86	15,904,016	9,808	8,694
2012	1577	0.97	0.86	15,904,016	9,808	8,694
2013	1577	0.97	0.86	15,904,016	9,808	8,694
2014	1577	0.97	0.86	15,904,016	9,808	8,694

Residential Low Income Weatherization Program

Program Description

The Residential Low Income Weatherization Program is an energy conservation program designed for low-income, residential customers. The Program employs a combination of energy audits and incentives to encourage low-income housing administrators to retrofit homes with energy efficiency measures. As part of each audit, HVAC systems and reduced air infiltration are addressed.

FPL accepts energy audits performed by FPL, its designees, or local weatherization providers to determine the need for energy efficiency measures in each home. The local weatherization providers work with the Department of Community Affairs (DCA) and include both Weatherization Assistance Program (WAP)¹ providers and State Housing Initiatives Partnership (SHIP)² administrators. Representatives from the DCA and both WAP and SHIP agencies are trained by FPL on the program.

Once the energy audit has been conducted, FPL will offer incentives for the following measures:

- HVAC maintenance up to \$35 towards the maintenance of air conditioning units
- Reduced air infiltration up to \$10 towards weatherization, caulking or weatherstripping.

¹ WAP providers receive funding from the DCA, and use these funds to improve the energy efficiency of low-income housing. Eligible households in the WAP must have income that does not exceed 125% of the poverty level.

² SHIP funding comes from the Sadowski Act. In the SHIP program funds are allocated on a population-based formula to eligible communities from documentary stamps and are deposited into the Local Government Housing Trust Fund. The local administrators use these funds to assist those with very low, low and moderate incomes to install energy efficiency measures in their homes.

There are no changes to this program.

Description of Program Administration

Residential customers who are eligible for WAP and SHIP weatherization programs will be eligible for the Program. Thus, local weatherization providers will be responsible for qualifying which customers are eligible to participate in the Program. The Program is available to all state-approved, low-income housing administrators. FPL will distribute collateral to all weatherization providers within our service territory. Once an agency demonstrates an interest in participating in the program, FPL will conduct personal follow-up. To be eligible to serve as an agent for the Program, the local housing administrators must comply with all national, state and local codes and ordinances and the Program Standards.

The Department of Community Affairs (DCA) is responsible for providing annual updates to participating providers. Additional program requirements are as follows:

- The residence must be in FPL's service area and be an FPL residential metered customer.
- Participants must meet all state weatherization low-income criteria.
- All installations must be accessible for verification by an FPL representative.
- Homes less than one year old are not eligible for incentives.
- All work must be performed by state approved providers or their approved contractors.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to, technological advances, operational needs, program results, application assumptions and incentive amounts.

Projected Participation and Savings

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The energy consumption and demand reduction projections are based on the program monitoring and evaluation results performed to determine the demand reductions obtained for the Weatherization Program and are from FPL's Petition for Approval of Numeric Conservation Goals, filed June 1, 2004.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix A. These analyses show the following benefit-cost ratios: 1.75 Participant, 1.05 RIM, and 1.16 TRC for the Weatherization Program.

Program Monitoring and Evaluation

1

The feasibility and cost-effectiveness of residential low-income weatherization measures were studied in detail during the recently completed Low-Income Weatherization Research Project (Project). The Project report included results from an engineering modeling effort augmented with a statistical billing analyses. The demand and energy impacts from that research effort were used to develop and design the Program described in this filing. The impact of the Program on energy consumption and peak electrical demand will be adjusted over time when significant changes in technology take place. As was the case in the Project, samples of program

participants and non-participants will have to be analyzed in order to estimate the net program benefit compared to what would have occurred in the absence of the program. Participant data will be compared against non-participant data to update technology selections, net energy savings and demand impacts. For conservation programs of this size, engineering model adjustments and/or statistical billing analysis remain the most appropriate options for program evaluation. As cumulative participation grows, FPL will have more data to include in such analyses.

		(6)		(d)
	(a)	Total Number	(c)	Cumulative
	Total Number	of Eligible	Annual Number	Penetration
Year	of Customers	Customers	of Participants	Level %
2005	3,816,452	506,960	435	0%
2006	3,889,044	513,551	457	0%
2007	3,960,492	520,227	480	0%
2008	4,030,954	526,990	503	0%
2009	4,100,566	533,841	529	0%
2010	4,169,514	540,781	555	1%
2011	4,238,239	547,811	583	1%
2012	4,306,727	554,932	612	1%
2013	4,374,980	562,147	643	1%
2014	4,443,827	569,454	675	1%

Program Name: Residential Low Income Weatherization

Attachment A

Note: Column a - The total number of customers in residential rate class

Column b - The total number of eligible customers in residential rate class

Column d - Column c cumulative / Column b (does not reflect participation prior to 2005)

Attachment B - At the Meter

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	335	0.05	0.16	145,705	20	69
2006	335	0.05	0.16	152,990	21	73
2007	335	0.05	0.16	160,639	22	76
2008	335	0.05	0.16	168,671	23	80
2009	335	0.05	0.16	177,105	24	84
2010	335	0.05	0.16	185,960	25	88
2011	335	0.05	0.16	195,258	26	93
2012	335	0.05	0.16	205,021	28	97
2013	335	0.05	0.16	215,272	29	102
2014	335	0.05	0.16	226,036	30	107

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	362	0.05	0.18	157,399	22	76
2006	362	0.05	0.18	165,269	23	80
2007	362	0.05	0.18	173,533	24	84
2008	362	0.05	0.18	182,209	25	88
2009	362	0.05	0.18	191,320	26	93
2010	362	0.05	0.18	200,886	28	98
2011	362	0.05	0.18	210,930	29	102
2012	362	0.05	0.18	221,477	30	108
2013	362	0.05	0.18	232,550	32	113
2014	362	0.05	0.18	244,178	34	119

Residential Conservation Service

Program Description

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

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

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

During the RCS Program audit, the auditor discusses a variety of potential conservation

measures with the customer. In addition, if the customer is eligible for participating in any, or all, of the residential conservation programs featuring incentive payments, the customer receives a Watt-\$aver certificate(s), which can be used by the customer as a partial payment for the cost of the conservation measure with the participating contractors. Upon request, FPL's representative also provides a list of participating contractors from which the customer can choose.

There are no changes to this program.

Description of Program Administration

The number of audits which FPL will conduct in the future is related to the number of projected participants for the residential conservation programs featuring incentive payments as well as customers' requests for evaluations of their overall energy conservation opportunities.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to, technological advances, operational needs, program results and application assumptions.

Projected Participation and Savings

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FPL does not project demand or energy savings associated with the performance of a home energy audit. Demand and energy savings attributable to the implementation of measures identified during the performance of a residential home energy audit will be reported through their respective programs. It should be pointed out that FPL recommends measures and practices

beyond FPL's programs, and there should be additional savings associated with these measures, although FPL does not quantify or report these savings.

Cost-Effectiveness Analysis

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

Program Monitoring and Evaluation

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

Program Name: Residential Conservation Service

		(b)		(d)
	(a)	Total Number	(c)	Cumulative
	Total Number	of Eligible	Annual Number	Penetration
Year	of Customers	Customers	of Participants	Level %
2005	3,816,452	3,816,452	75,000 - 100,000	2% - 3%
2006	3,889,044	3,889,044	75,000 - 100,000	4% - 5%
2007	3,960,492	3,960,492	75,000 - 100,000	6% - 8%
2008	4,030,954	4,030,954	75,000 - 100,000	7% - 10%
2009	4,100,566	4,100,566	75,000 - 100,000	9% - 12%
2010	4,169,514	4,169,514	75,000 - 100,000	11% - 14%
2011	4,238,239	4,238,239	75,000 - 100,000	12% - 17%
2012	4,306,727	4,306,727	75,000 - 100,000	14% - 19%
2013	4,374,980	4,374,980	75,000 - 100,000	15% - 21%
2014	4,443,827	4,443,827	75,000 - 100,000	17% - 23%

Attachment A

Note: Column a - The total number of customers in residential rate class

Column b - The total number of eligible customers in residential rate class

Column d - Column c cumulative / Column b (does not reflect participation prior to 2005)

Attachment B - At the Meter

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	N/A	N/A	N/A	N/A	N/A	N/A
2006	N/A	N/A	N/A	N/A	N/A	N/A
2007	N/A	N/A	N/A	N/A	N/A	N/A
2008	N/A	N/A	N/A	N/A	N/A	N/A
2009	N/A	N/A	N/A	N/A	N/A	N/A
2010	N/A	N/A	N/A	N/A	N/A	N/A
2011	N/A	N/A	N/A	N/A	N/A	N/A
2012	N/A	N/A	N/A	N/A	N/A	N/A
2013	N/A	N/A	N/A	N/A	N/A	N/A
2014	N/A	N/A	N/A	N/A	N/A	N/A

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	N/A	N/A	N/A	N/A	N/A	N/A
2006	N/A	N/A	N/A	N/A	N/A	N/A
2007	N/A	N/A	N/A	N/A	N/A	N/A
2008	N/A	N/A	N/A	N/A	N/A	N/A
2009	N/A	N/A	N/A	N/A	N/A	N/A
2010	N/A	N/A	N/A	N/A	N/A	N/A
2011	N/A	N/A	N/A	N/A	N/A	N/A
2012	N/A	N/A	N/A	N/A	N/A	N/A
2013	N/A	N/A	N/A	N/A	N/A	N/A
2014	N/A	N/A	N/A	N/A	N/A	N/A

SECTION III - COMMERCIAL/INDUSTRIAL PROGRAMS

A. Commercial/Industrial Program Overview

FPL's DSM Plan includes nine (9) Commercial/Industrial Conservation Programs. FPL will continue to offer with some modifications the following programs: Commercial/Industrial Heating, Ventilating and Air Conditioning, Commercial/Industrial Lighting, and Commercial/Industrial Building Envelope. While the program descriptions that follow provide details as to the proposed changes to each program, the significant modifications being proposed are:

- Commercial/Industrial Heating Ventilating and Air Conditioning This program will have a revised incentive structure, revised minimum efficiency levels, eliminate incentives for rooftop unit sealing, add incentives for energy recovery ventilator units and add post-commissioning incentives for thermal energy storage systems.
- **Commercial/Industrial Building Envelope** In addition to revised incentive structures, window treatment measures will be eliminated.
- Commercial/Industrial Lighting Will have slightly revised maximum incentives.

The Business On Call, Commercial Demand Reduction, Business Custom Incentive, Business Energy Evaluation, Commercial/Industrial Load Control, and Cogeneration and Small Power Production programs remain unchanged.

B. Detailed Program Descriptions

Commercial/Industrial Heating, Ventilating

and Air Conditioning Program

Program Description

FPL's Commercial/Industrial Heating, Ventilating and Air Conditioning (C/I HVAC) Program is designed to reduce the current and future growth of coincident peak demand and energy consumption of commercial and industrial customers by increasing the use of high-efficiency heating, ventilating and air conditioning (HVAC) systems.

FPL will provide an incentive to customers, or their designees, who install qualifying HVAC equipment. The customers will also receive any operating savings from the installation of the equipment.

FPL proposes to make the following modifications to the existing C/I HVAC Program:

- Decrease the maximum thermal storage incentive from \$367 per kW to \$350 per summer kW.
- Decrease the maximum incentive for chillers from \$77 per kW to \$75 per summer kW.
- Adopt minimum program efficiencies using ASHRAE 90.1 2001 as a baseline.
- Add incentives for energy recovery ventilator (ERV) units with a maximum incentive of \$399 per summer kW.
- Eliminate incentives for rooftop unit sealing.

FPL plans to make commercial and industrial customers aware of this program through dealers,

distributors, contractors, other trade allies, appropriate advertising and promotion activities, as well as direct contact with potential participants by FPL personnel.

Description of Program Administration

All commercial and industrial customers are eligible for this program. The program applies to customers who are retrofitting/replacing existing or installing new HVAC equipment. They must also comply with the requirements specified in the FPL Program Standards.

The chiller and DX split/packaged electric equipment incentives are based on efficiency improvements above ASHRAE 90.1 2001. New high efficiency chillers may include adjustable speed drives. All thermal energy storage systems must use electricity as the primary energy source. The systems must be designed and operated to reduce FPL's summer and winter system peaks. Before the installation of the thermal energy storage system, the cooling load to be shifted must regularly operate, or be designed to operate, during FPL's on-peak hours as defined by the current or any subsequent applicable time-of-use rate tariff approved by the Commission.

The incentive for DX split/packaged and chillers electric equipment will not exceed \$100 per summer kW and \$75 per summer kW, respectfully. The incentive for thermal energy storage will not exceed \$350 per summer kW. Incentives for thermal energy storage will include both rebates paid for installations and funding for other inducements such as feasibility studies and commissioning. These incentives are based on cost-effectiveness analyses, an average participant's payback to be not less than 2 years, and the assumption the load being reduced is associated with equipment that operates between the hours of 3:00 P.M. and 6:00 P.M.,

weekdays, for the months of April through October.

FPL will determine the incentive amount based on:

- heating and cooling equipment efficiency above the ASHRAE 90.1 2001 with a minimum threshold;
- kW or tons removed from FPL's summer peak period for thermal energy storage, or
- kW removed from FPL's peak periods for energy recovery ventilator based on the cubic feet per minute of ventilation or outside air.

In order to calculate incentives, the customer will supply FPL with the equipment specifications. FPL will calculate the incentive based on the customer's equipment specifications and FPL Program Standards. All incentive payments will be tracked by a computer system. This system will record a history of incentive payments made to customers.

FPL will do random post installation inspections to verify the proper installation of equipment. The participating customer shall allow FPL, at FPL's discretion, to access, monitor and/or analyze the customer's system.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to, technological advances, operational needs, program results, application assumptions and incentive amounts.

Projected Participation and Savings

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The energy consumption and demand reduction projections are based on evaluation results.

The projected participation in this program and associated savings are shown on Attachments A, B and C. The projected participation is based upon FPL's Petition for Approval of Numeric Conservation Goals, filed June 1, 2004.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix A. These analyses show the following benefit-cost ratios: 1.44 Participant, 1.06 RIM, and 1.38 TRC for the Commercial/Industrial Heating, Ventilating and Air Conditioning program.

Program Monitoring and Evaluation

With the adoption of ASHRAE 90.1 2001 into the energy efficiency code beginning in 2005, the State has embraced dramatic increases in the minimum energy efficiency of HVAC systems installed in Florida. Beginning in 2005, FPL will adopt the new minimum efficiency levels as the baselines for calculating the impact of its HVAC incentive programs. The new code will serve as a suitable efficiency baseline for several years to come. Going forward, FPL will

monitor how the next generation of more efficient HVAC equipment influences the commercial HVAC market.

The new code will supersede much of FPL's role in the HVAC market to encourage the installation of high-efficiency HVAC equipment. In an effort to encourage new HVAC efficiency measures, FPL is introducing a new measure called ERVs to this program.

Commercial buildings are required to bring fresh air from the outside into the building at a prescribed rate for each person expected to occupy the building. A similar amount of conditioned air is correspondingly exhausted from the building. ERVs recover much of the energy contained in the air being exhausted. In summer, the exhaust air is cooler and less humid than the fresh air being brought in. The ERV will transfer heat and moisture from the fresh air stream to the exhaust air stream, thereby significantly lowering the cooling load of the building. Under cold winter conditions, the ERV uses the exhaust air to preheat the fresh air coming in from outside.

Program Name: Commercial/Industrial Heating, Ventilating and Air Conditioning

		(b)		(d)
	(a)	Total Number	(c)	Cumulative
	Total Number	of Eligible	Annual Number	Penetration
Year	of Customers	Customers	of Participants	Level <u>%</u>
2005	654,939	306,288	8,177	3%
2006	668,486	292,338	8,119	6%
2007	682,314	279,039	8,147	9%
2008	701,610	295,643	8,036	11%
2009	720,476	309,388	7,983	13%
2010	738.599	316.767	7.566	15%
2011	756,882	323,289	7,220	17%
2012	775,298	328,520	6,936	19%
2013	793.892	332.568	6.712	21%
2014	812.885	337 126	6.576	2.2%

Note: Column a - The total summer kw of all C/I HVAC equipment

Column b - The total summer kw of all eligible C/I HVAC equipment

Column d - Column c cumulative / Column b (does not reflect participation prior to 2005)

Attachment B - At the Meter

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	306	0.29	1.00	2,503,037	2,346	8,177
2006	300	0.30	1.00	2,433,999	2,431	8,119
2007	275	0.31	1.00	2,240,844	2,555	8,147
2008	338	0.35	1.00	2,714,737	2,837	8,036
2009	402	0.40	1.00	3,210,314	3,200	7,983
2010	471	0.44	1.00	3,560,537	3,326	7,566
2011	540	0.48	1.00	3,901,552	3,486	7,220
2012	610	0.53	1.00	4,233,420	3,678	6,936
2013	679	0.58	1.00	4,559,280	3,903	6,712
2014	750	0.64	1.00	4,933,444	4,204	6,576

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	331	0.32	1.11	2,703,939	2,593	9,038
2006	324	0.33	1.11	2,629,361	2,687	8,974
2007	297	0.35	1.11	2,420,703	2,824	9,005
2008	365	0.39	1.11	2,932,631	3,136	8,882
2009	434	0.44	1.11	3,467,985	3,537	8,824
2010	508	0.49	1.11	3,846,318	3,676	8,363
2011	584	0.53	1.11	4,214,704	3,853	7,980
2012	659	0.59	1.11	4,573,210	4,066	7,667
2013	734	0.64	1.11	4,925,224	4,315	7,419
2014	810	0.71	1.11	5,329,420	4,647	7,269

Commercial//Industrial Efficient Lighting Program

Program Description

The Commercial/Industrial Efficient Lighting (CIL) Program is designed to reduce FPL's commercial and industrial on-peak lighting loads and energy usage. This program encourages eligible commercial and industrial customers to install high efficiency, cost-effective lighting measures at time of replacement.

Through the CIL program, FPL will provide incentives to customers, or their designees, for the installation of high efficiency lighting retrofit measures. The CIL participating customer will also receive any energy and operating savings derived from the installation of the higher efficiency lighting measures.

The only modification to this program is to revise the maximum cost-effective incentive from \$119 per summer kW to \$101 per summer kW.

FPL plans to make commercial and industrial customers aware of this program through dealers, distributors, contractors, retail outlets and other trade allies, as well as direct contact with potential participants by FPL personnel.

Description of Program Administration

The CIL Program will be available to commercial and industrial customers who are ready to receive service from FPL and whose facility is a completed building for which a Certificate of

Occupancy, or equivalent approval for occupancy, has been issued. Participating customers must replace existing lighting measures (measures are units of qualifying lighting technologies -- i.e., ballasts, fluorescent and H.I.D. fixtures) with higher efficiency lighting measures that meet the technical requirements and reduce on-peak summer loads. For customers with facilities that have twenty (20) or less lighting fixtures (a self-contained combination of luminaire, lamp and, if necessary, ballast), all qualifying measures must be performed at the same time and included on the same application. For customers with more than twenty (20) lighting fixtures, multiple incentive applications may be submitted, as long as a minimum of twenty (20) measures are installed at each application.

All proposed measures must meet minimum power quality specifications for power factor and total harmonic distortion established by FPL, which will be listed in the Program Standards. Product specific power quality ratings reflecting test results from an accredited independent testing facility must be provided. The lighting levels resulting from the installation of measures must meet or exceed standard levels recommended by the Illuminating Engineering Society of North America.

Installations may be performed by either the customer or a contractor. Installations must result in a net installed kW reduction, and the customer must provide assurance that the lighting fixtures for which incentives are provided will operate between the hours of 3:00 P.M. and 6:00 P.M., weekdays, for the months of April through October.

Incentives will be paid to customers, or their designees, and will be based upon the net installed

kW reduction for specific measures. Measures will be aggregated into groups reflecting permanence and other factors, and incentives will not exceed an average of \$101 per summer kW reduced for all installations. Within cost-effectiveness parameters, incentives will be adjusted over time in response to changing market conditions and emergence of new measures.

All installations shall be open to inspections, before and after installation and prior to payment of incentives. Proof of purchase and purchase price must be provided to FPL prior to an incentive being paid.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to, technological advances, operational needs, program results, application assumptions and incentive amounts.

Projected Participation and Savings

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The energy consumption and demand reduction projections are based on evaluation results.

The projected participation in this program and associated savings are shown on Attachments A, B and C. The projected participation is based upon FPL's Petition for Approval of Numeric Conservation Goals, filed June 1, 2004.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix A. These analyses show the following benefit-cost ratios: 4.13 Participant, 1.01 RIM, and 3.20 TRC for the Commercial/Industrial Efficient Lighting program.

Program Monitoring and Evaluation

Revisions to the Federal Consumer Products Conservation Standards (DOE 10 CFR part 430 for fluorescent fixtures) will take the place of a large portion of the efficiency upgrades formerly covered by FPL's CIL Program. Beginning in 2006, the program will be limited to technologies not already addressed by the code change. FPL will promote the other energy efficient lighting technologies remaining in the program, while continuing to follow any new developments in lighting technologies which can be examined for cost-effectiveness.

FPL will utilize any or all three major impact evaluation analysis methods, engineering analysis, statistical billing analysis and on-site metering research, in a manner that most cost-effectively meets the overall impact evaluation objectives. The efficiency levels of lighting equipment installed outside FPL's rebate program may also be periodically measured using non-participant surveys or other sources of efficiency sales data.

Program Name: Commercial/Industrial Efficient Lighting

		(h)		(d)
	(-)			
	(a)	I otal Number	(c)	Cumulative
	Total Number	of Eligible	Annual Number	Penetration
Year	of Customers	Customers	of Participants	Level %
2005	562,920	288,104	4,789	2%
2006	344,185	169,199	2,453	4%
2007	115,877	55,326	313	14%
2008	118,346	54,881	310	14%
2009	120,867	54,441	308	15%
2010	123,442	54,007	306	16%
2011	126,071	53,579	304	16%
2012	128,757	53,156	302	17%
2013	131,500	52,738	300	18%
2014	134,301	52,325	298	19%

Attachment A

Note: Column a - The total summer kw of all C/I lighting equipment

Column b - The total summer kw of all eligible C/I lighting equipment

Column d - Column c cumulative / Column b (does not reflect participation prior to 2005)

Attachment B - At the Meter

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	4975	0.66	1.00	23,825,664	3,140	4,789
2006	5011	0.64	1.00	12,291,983	1,573	2,453
2007	4929	0.66	1.00	1,540,635	207	313
2008	4931	0.66	1.00	1,530,568	205	310
2009	4933	0.66	1.00	1,520,590	204	308
2010	4934	0.66	1.00	1,510,700	203	306
2011	4936	0.66	1.00	1,500,897	201	304
2012	4937	0.66	1.00	1,491,179	200	302
2013	4939	0.66	1.00	1,481,546	199	300
2014	4940	0.66	1.00	1,471,996	197	298

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	5374	0.72	1.11	25,737,997	3,471	5,294
2006	5414	0.71	1.11	13,278,582	1,739	2,711
2007	5325	0.73	1.11	1,664,292	229	345
2008	5327	0.73	1.11	1,653,417	227	343
2009	5328	0.73	1.11	1,642,638	226	341
2010	5330	0.73	1.11	1,631,954	224	338
2011	5332	0.73	1.11	1,621,364	222	336
2012	5333	0.73	1.11	1,610,867	221	334
2013	5335	0.73	1.11	1,600,460	219	332
2014	5337	0.73	1.11	1,590,144	218	329

Commercial/Industrial Building Envelope Program

Program Description

The Commercial/Industrial Building Envelope (CIBE) Program is designed to reduce FPL's commercial and industrial heating, ventilating and air conditioning (HVAC) loads. This program will encourage eligible commercial and industrial customers to increase the efficiency of qualifying portions of their building's envelope, which will reduce HVAC energy consumption and demand.

This program will provide incentives to customers, or their designees, for the installation of costeffective high-efficiency building envelope measures and products, such as roof/ceiling insulation and reflective roof coatings. The CIBE participating customer will also receive all energy, demand and operational savings from the installation of the higher efficiency measures.

FPL proposes to make the following modifications to the existing Program:

- The program incentive structure will change from a range not exceeding \$150 to \$320 per summer kW to, not to exceed \$181 per summer kW.
- Window-related technologies will no longer be part of the Program.

FPL plans to make commercial and industrial customers aware of this program through dealers, distributors, contractors and other trade allies, as well as, through direct contact with potential participants by FPL personnel.

Description of Program Administration

The CIBE program will be available to commercial and industrial customers who are currently receiving electric service from FPL and whose facility is a completed building for which a Certificate of Occupancy, or equivalent approval for occupancy, has been issued. Participating customers must either replace specific existing building envelope components with higher efficiency products, or enhance these components with higher efficiency retrofit measures.

All measures and products will be required to meet technical eligibility requirements, which will be detailed in the CIBE Program Standards. The Program Standards will be subject to periodic review and may be modified over time in response to factors such as, but not limited to, changing program delivery strategies, market needs, program evaluation results and incentive amounts.

In order to qualify for the CIBE program, a customer must provide assurance that the portion of the building for which an incentive is being provided is conditioned by an HVAC system using electricity as its primary fuel source. This HVAC system must operate between the hours of 3:00 P.M. and 6:00 P.M., weekdays, for the months of April through October.

Products and measures which are required by or necessary to meet the requirements of any applicable federal, state, or local municipal building or energy codes are not eligible for CIBE program incentives. Eligible installations shall be open to inspections before and after installation for verification of qualifying criteria, as well as for monitoring and assessment of the

impact of the installed measures and products. The Program Standards will detail all qualifying requirements for participation in the CIBE program.

The CIBE program incentives will be capped at an average incentive of \$181 per summer kW. Incentive payments will be tracked in a computer database over the lifetime of the CIBE program. Within cost-effectiveness parameters, incentives may be adjusted over the program's lifetime in response to program evaluation results, changing market conditions and the emergence of new technologies.

Incentive amounts to the customer will be based upon the efficiency of existing building envelope components as well as the efficiency of the installed measures or products. CIBE program incentives for each measure or product will be limited to provide no less than a twoyear payback on the incremental installation cost to the average participant. Incentive amounts for individual participants will be limited to the actual incremental installation cost of the building envelope measures or products.

Incentive certificates will be issued to qualifying customers prior to the installation of building envelope measures and products. It is expected that these certificates will be submitted by the customer to either the contractor or to FPL for payment of the incentive. Prior to payment of incentives, FPL will require proper documentation of all installations and will make the final determination as to eligibility and applicability.

FPL will file Program Standards for this program. The Program Standards will be subject to

periodic review and may change over time based on factors such as, but not limited to, technological advances, operational needs, program results, application assumptions and incentive amounts.

Projected Participation and Savings

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The energy consumption and demand reduction projections are based on evaluation results.

The projected participation in this program and associated savings are shown on Attachments A, B and C. The projected participation is based upon FPL's Petition for Approval of Numeric Conservation Goals, filed June 1, 2004.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix A. These analyses show the following benefit-cost ratios: 1.49 Participant, 1.06 RIM, and 1.27 TRC for the Commercial/Industrial Building Envelope program.

Program Monitoring and Evaluation

The ceiling insulation measures of the Program are a mature technology which has been studied by FPL for a number of years. Demand and energy impacts are allocated as a function of the difference between the pre- and post-retrofit insulation level. Impacts for the roof insulation measures will be adjusted as necessary, to the extent the new building code establishes a new baseline for minimum insulation levels for some building retrofits. Over the next several years, evaluation of the Program will emphasize study of the growing reflective roof measures. Program-level impacts for all measures will be adjusted annually, according to changes in participation patterns by market segment.

FPL will utilize any or all three major impact evaluation analysis methods, engineering analysis, statistical billing analysis and on-site metering research, to most cost-effectively meet the overall impact evaluation objectives. In 2005, FPL will expand upon evaluation of the reflective roof measure by applying statistical billing analysis. Depending on the precision achieved by that method, FPL may follow up with on-site metering of a sample of program participants.

Attachment A							
		(b)		(d)			
	(a)	Total Number	(c)	Cumulative			
	Total Number	of Eligible	Annual Number	Penetration			
Year	of Customers	Customers	of Participants	Level %			
2005	1,111,876	977,008	2,146	0%			
2006	1,314,316	1,122,250	1,855	0%			
2007	1,342,671	1,114,621	1,841	1%			
2008	1,371,635	1,107,049	1,827	1%			
2009	1,401,219	1,099,534	1,813	1%			
2010	1,431,437	1,092,074	1,800	1%			
2011	1,462,303	1,084,671	1,786	1%			
2012	1,493,830	1,077,323	1,773	1%			
2013	1,526,033	1,070,030	1,759	2%			
2014	1,559,331	1,063,067	1,747	2%			

Program Name: Commercial/Industrial Building Envelope

Note: Column a - The total summer kw of all C/I building envelope technologies

Column b - The total summer kw of all eligible C/I building envelope technologies

Column d - Column c cumulative / Column b (does not reflect participation prior to 2005)

Attachment B - At the Meter

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	1971	0.33	1.00	4,230,695	705	2,146
2006	1939	0.14	1.00	3,596,890	257	1,855
2007	1939	0.14	1.00	3,569,736	254	1,841
2008	1939	0.14	1.00	3,542,811	251	1,827
2009	1939	0.14	1.00	3,516,114	248	1,813
2010	1939	0.14	1.00	3,489,642	245	1,800
2011	1939	0.14	1.00	3,463,394	243	1,786
2012	1939	0.14	1.00	3,437,366	240	1,773
2013	1939	0.13	1.00	3,411,558	237	1,759
2014	1939	0.13	1.00	3,386,958	235	1,747

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	2129	0.36	1.11	4,570,266	779	2,372
2006	2095	0.15	1.11	3,885,590	284	2,050
2007	2095	0.15	1.11	3,856,255	281	2,035
2008	2095	0.15	1.11	3,827,169	278	2,020
2009	2095	0.15	1.11	3,798,330	274	2,004
2010	2095	0.15	1.11	3,769,733	271	1,989
2011	2095	0.15	1.11	3,741,378	268	1,974
2012	2095	0.15	1.11	3,713,262	265	1,959
2013	2095	0.15	1.11	3,685,382	262	1,945
2014	2095	0.15	1.11	3,658,808	260	1,931

Business Custom Incentive Program

Program Description

The Business Custom Incentive (BCI) Program is designed to encourage FPL's commercial and industrial customers to implement unique energy conservation measures or projects not covered by other FPL programs, but which cost-effectively reduce or shift electric demand from FPL's system peak.

FPL plans to make commercial and industrial customers aware of this program through direct contact between FPL field representatives and FPL's commercial/industrial customers.

There are no changes to this program.

Description of Program Administration

The program is available to all of FPL's commercial and industrial customers. In order for a conservation measure or project to be eligible, it must not be covered by another of FPL's conservation programs, and it must reduce or shift at least 25 kW between the hours of 3:00 P.M. and 6:00 P.M., weekdays, for the months of April through October. The demand and energy savings attributable to the conservation project must be verifiable through monitoring. Both retrofit and new construction projects are eligible. In order to qualify for an incentive, the Rate Impact Measure (RIM) test benefit-to-cost ratio of a project, including the incentive, must be at least 1.01. The project must also pass the Participant test.

Incentives are paid based on the cost-effectiveness achieved under the RIM Test. To determine the incentive amount available, the project will be evaluated utilizing the assumptions of the current integrated resource plan, either as a replacement of a portion of existing DSM resources included in the resource plan, or as an addition of resources beyond the needs satisfied by DSM in the current resource plan. If it is determined that the project is a replacement of some existing DSM resources, it will have, with the incentive, at least the same net benefits per kW under RIM as the competing DSM, as well as a minimum 1.01 benefit-to-cost ratio against the same generation resource deferred by the competing DSM. If the project is positioned as an addition, it will, with the incentive, have at least a 1.01 RIM benefit-to-cost ratio against the next required generation resource beyond the needs satisfied by DSM in the current resource plan. FPL will determine whether the project is a replacement or addition of resources based on all project and resource plan information available at the time.

In addition, the incentive amount shall not cause the customer's payback to be less than two years. The number and timing of payments toward the total incentive amount will be determined by FPL for each project on an individual basis.

Any customer receiving an incentive under this program must remain served by FPL for its electricity-related needs for at least five years from the date of payment of the incentive, or the customer shall refund the incentive amount in full to FPL. FPL will be solely responsible for determining the eligibility of any measure or project, performing the RIM and Participant cost-effectiveness tests of any measure or project and determining the available incentive.

The program is not available for: operational or maintenance improvements that are not permanent, equipment eligible under other FPL programs (unless bundled with and related to equipment not eligible under another FPL program), equipment or measures which FPL is actively researching, fuel switching, power generation technologies, or wheeling of any type.

Projected Participation and Savings

FPL has incorporated into the Business Custom Incentive Program the projected DSM contributions of representative measures included in its Petition for Approval of Numeric Conservation Goals, filed June 1, 2004. FPL anticipates measures other than these in the Program, but cannot meaningfully quantify the projected contributions from these measures at this time. These projections are shown in Attachments A, B and C.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix A. The analyses for the representative program participating measures resulted in the following benefit-cost ratios: 2.18 Participant, 1.04 RIM, and 1.89 TRC. For other measures, FPL cannot predict at this time the demand or energy reduction impacts that will result, so cost-effectiveness evaluations will be performed at the time such measures are proposed for participation in the program. Only measures with at least a 1.01 Rim and Participant tests ratios will qualify in the Program.

Program Monitoring and Evaluation

The Business Custom Incentive Program is intended to address conservation opportunities in the business sector which are not covered by any other FPL program. The project must reduce summer demand by at least 25 kW in order to be eligible for the BCI Program. All BCI projects will be evaluated to ensure they meet the standard criteria for customer and utility payback. Cost-effectiveness testing will follow the same protocol used for the other conservation and load control programs which verifies the economic benefits for both the utility and the customer. Determination of energy, demand and bill savings will consist of one of two levels of activity based on FPL's determination:

- High-Moderate confidence projects measures with which FPL has significant experience and/or confidence as to the performance characteristics: For these projects, FPL will require, at a minimum, an engineering analysis with relevant calculations. FPL, at its discretion, may also require a feasibility study performed by an independent, registered professional engineer, and/or field monitoring of the project.
- Innovative or Unique projects These are measures for which FPL has no significant experience with the performance characteristics. For these projects, FPL will require bill analysis, lab testing, or field measurement of the demand and energy savings from the installed efficiency measure.

The costs for all monitoring equipment and activities will be included in the cost-effectiveness determination for each project. FPL will maintain a record of the kW and kWh savings for participants in the program.

Attachment A							
		(b)		(d)			
	(a)	Total Number	(c)	Cumulative			
	Total Number	of Eligible	Annual Number	Penetration			
Year	of Customers	Customers	of Participants	Level %			
2005	12,806	10,107	282	3%			
2006	13,126	12,844	282	4%			
2007	13,455	12,891	282	7%			
2008	13,791	12,945	282	9%			
2009	14,136	13,008	282	11%			
2010	14,489	13,079	282	13%			
2011	14,851	13,159	282	15%			
2012	15,223	13,249	282	17%			
2013	15,603	13,347	282	19%			
2014	15,993	13,455	282	21%			

Program Name: Business Custom Incentive

Note: Column a - The total summer kw of representative loads

Column b - The total summer kw of all non-participating representative loads

Column d - Column c cumulative / Column b (does not reflect participation prior to 2005)

Attachment B - At the Meter

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	3056	1.00	1.00	861,792	281	282
2006	3056	1.00	1.00	861,792	281	282
2007	3056	1.00	1.00	861,792	281	282
2008	3056	1.00	1.00	861,792	281	282
2009	3056	1.00	1.00	861,792	281	282
2010	3056	1.00	1.00	861,792	281	282
2011	3056	1.00	1.00	861,792	281	282
2012	3056	1.00	1.00	861,792	281	282
2013	3056	1.00	1.00	861,792	281	282
2014	3056	1.00	1.00	861,792	281	282

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	3301	1.10	1.11	930,963	310	312
2006	3301	1.10	1.11	930,963	310	312
2007	3301	1.10	1.11	930,963	310	312
2008	3301	1.10	1.11	930,963	310	312
2009	3301	1.10	1.11	930,963	310	312
2010	3301	1.10	1.11	930,963	310	312
2011	3301	1.10	1.11	930,963	310	312
2012	3301	1.10	1.11	930,963	310	312
2013	3301	1.10	1.11	930,963	310	312
2014	3301	1.10	1.11	930,963	310	312

Business On Call Program

Program Description

The Business On Call Program is designed primarily to reduce system peak demand, but will also reduce energy consumption. The Business On Call Program involves the installation of direct load control equipment on customers' direct expansion (DX), central air conditioners, allowing FPL to control customer loads on an as-needed basis.

FPL plans to make commercial and industrial customers aware of this program through contractors, appropriate advertising and promotion activities, as well as direct contact with potential participants by FPL personnel.

There are no changes to this program.

Description of Program Administration

The Business On Call Program will be available to commercial and industrial customers with a demand of 499 kW or less and who are individually metered and have DX central air conditioners that can be successfully interrupted by FPL when needed. A customer may sign up if its facility has one or more DX central air conditioning units. Customers who participate in the Program will be eligible based on three primary factors: whether the customer has the proper type of air conditioning equipment, whether their service characteristics (voltage, etc.) are compatible with existing load control equipment and whether the customer receives service from a substation which has load control equipment installed.
Participants in the Business On Call Program will receive an incentive payment, in the form of a monthly credit, of \$2.00 per ton of air conditioning. The tonnage will be based on the nameplate rating of the customer's air conditioning system and will be rounded to the nearest one-half ton. Once the customer signs up for the program, the installation request will be sent to a contractor for installation. Once the installation is completed, the contractor sends the information to FPL for entry into the Load Management Information System (LMIS), resulting in the activation of the equipment at the customer's facility. Upon installation and inspection of the load management equipment, the customer will receive a monthly credit on his/her electric bill.

The incentives will only be paid during the months of April through October. FPL maintains an internal audit trail for all incentive payments by means of its LMIS system. This computer database maintains interview and installation information for each program participant, as well as a history of all incentives paid.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to, technological advances, operational needs, program results, application assumptions and incentive amounts.

Projected Participation and Savings

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The energy consumption and demand reduction projections are based on evaluation results.

The projected participation in this program and associated savings are shown on Attachments A, B and C. The projected participation is based upon FPL's Petition for Approval of Numeric Conservation Goals, filed June 1, 2004.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix A. These analyses show the following benefit-cost ratios: infinite Participant, 1.52 RIM, and 4.73 TRC for the Business On Call program.

Program Monitoring and Evaluation

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Over the past six years, FPL has verified Business On Call load control demand impacts with metered samples for both the eligible rate classes, General Service (GS-1) and General Service Demand (GSD-1). In 2003, the metered data was used to observe duty cycles during peak hours, by geographic area, for a wide range of temperature conditions. A sophisticated model was developed to estimate system-level impacts as a function of appliance, region, temperature and time of day. Additionally, quality control checks are currently under way to ensure reliable communications throughout the entire load control network. FPL is continuously exploring techniques to further verify and refine the impacts for the Business On Call program.

FPL tracks all participants in the Business On Call program using a database. Participation by rate class and market segment is used annually to adjust program-level impacts. Periodic field metering is the primary method of estimating program impacts by measuring appliance

connected loads and duty cycles of HVAC systems.

Program Name:	Business On Call
Attach	iment A

		(b)		(d)
	(a)	Total Number	(c)	Cumulative
	Total Number	of Eligible	Annual Number	Penetration
Year	of Customers	Customers	of Participants	Level %
2005	1,303,882	1,260,287	4,524	0%
2006	1,331,655	1,283,535	4,524	1%
2007	1,360,019	1,307,376	4,524	1%
2008	1,388,987	1,331,820	4,524	1%
2009	1,418,573	1,356,881	4,524	2%
2010	1,448,788	1,382,573	4,524	2%
2011	1,479,648	1,408,908	4,524	2%
2012	1,511,164	1,435,901	4,524	3%
2013	1,543,352	1,463,565	4,524	3%
2014	1,576,225	1,491,914	4,524	3%

Note: Column a - The total summer kw demand reduction of C/I controllable load

Column b - The total summer kw demand reduction of eligible C/I controllable load

Column d - Column c cumulative / Column b (does not reflect participation prior to 2005)

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	1	0.00	1.00	4,581	0	4,524
2006	1	0.00	1.00	4,581	0	4,524
2007	1	0.00	1.00	4,581	0	4,524
2008	1	0.00	1.00	4,581	0	4,524
2009	1	0.00	1.00	4,581	0	4,524
2010	1	0.00	1.00	4,581	0	4,524
2011	1	0.00	1.00	4,581	0	4,524
2012	1	0.00	1.00	4,581	0	4,524
2013	1	0.00	1.00	4,581	0	4,524
2014	1	0.00	1.00	4,581	0	4,524

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	1	0.00	1.11	4,948	0	5,001
2006	1	0.00	1.11	4,948	0	5,001
2007	1	0.00	1.11	4,948	0	5,001
2008	1	0.00	1.11	4,948	0	5,001
2009	1	0.00	1.11	4,948	0	5,001
2010	1	0.00	1.11	4,948	0	5,001
2011	1	0.00	1.11	4,948	0	5,001
2012	1	0.00	1.11	4,948	0	5,001
2013	1	0.00	1.11	4,948	0	5,001
2014	1	0.00	1.11	4,948	0	5,001

Commercial/Industrial Demand Reduction Program

Program Description

The Commercial/Industrial Demand Reduction program is designed to reduce coincident peak demand by controlling customer loads of 200 kW or greater during periods of extreme demand or capacity shortages. Participation in the program involves the installation of direct load control equipment on the customers' electrical switch gear to allow FPL to control customer loads. Customers in the program contract for a firm demand level which may not be exceeded during control periods. All other loads are subject to direct control by FPL. Participants receive advance notification of load control events via an FPL provided notification system installed at the customer's location. Participants in the program receive a monthly credit for allowing FPL to control their loads.

There are no changes to this program.

FPL will make eligible commercial and industrial customers aware of this program through direct contact with their FPL Account Managers.

Description of Program Administration

The Commercial/Industrial Demand Reduction Program will be available to customers served under Rate Schedules GSD-1, GSDT-1, GSLD-1, GSLDT-1, GSLD-2, GSLDT-2, GSLD-3 and GSLDT-3 that allow FPL to control at least 200 kW of their load. Customers may participate in this program by allowing FPL to directly control selected switch gear in the customer's facility or to transfer the load to the customer's standby generator.

Participants in the Commercial/Industrial Demand Reduction Program will receive a monthly incentive credit of \$4.75 per kW based on their average demand during a specified controllable rating period less their Firm Demand. The controllable rating period shall be those periods specified in the Commercial/Industrial Demand Reduction Rider, which are consistent with FPL's typical system peak periods. The incentive is applied to the customer's monthly demand charges. The customer's Firm Demand is that level of demand not subject to direct load control by FPL.

The customer begins service on the Commercial/Industrial Demand Reduction Program after successfully demonstrating its load can be reduced to the Firm Demand during a load control test conducted and monitored by FPL.

Participants in the Commercial/Industrial Demand Reduction Program shall not have their nonfirm load served on a firm service basis until service has been terminated under the Commercial/Industrial Demand Reduction rider.

The level of Firm Demand shall not be exceeded during the periods when FPL is controlling the customer's load. If the customer exceeds the Firm Demand during a period when FPL is controlling load, then the customer will be billed \$4.75 per kW for the excess kW above the contracted firm demand for the prior 60 months, or the number of months the customer has been billed under this rate schedule, whichever is less. A customer will not be penalized or re-billed

twice for the same excess kW. The customer will also be billed a penalty charge of \$1.00 per kW of excess kW for each month of rebilling. However, if the cause for the customer's failure to meet its firm demand is a result of a) force majeure events, b) maintenance of generation equipment or switchgear necessary for the implementation of load control, which is performed at a pre-arranged time and date mutually agreeable to FPL and the customer, c) adding firm load that was not previously non-firm load to the customer's facility, d) an event affecting local, state, or national security, or e) an event whose nature requires that space launch activities be placed in the critical mode (requiring a closed-loop configuration of FPL's transmission system) as designated and documented by the NASA Test Director at Kennedy Space Center and/or the USAF Range Safety Officer at Cape Canaveral Air Force Station, the re-billing and penalty will not be imposed.

Compliance with Firm Demands are verified after each event on an individual customer basis. For those customers that exceed their Firm Demand level during a load control event, the causes for exceeding Firm Demand are investigated to determine if they meet allowed exclusions to the penalty or if they are to be penalized.

A Continuity of Service Provision is available which allows customers to continue using power during load control events when power is available from non-FPL providers.

Service under this rider requires a five-year termination notice, except in very specific circumstances set forth in the Rider. This termination notice ensures that the load that is being deferred by this program is not placed back on the FPL system without giving FPL the ability to

plan and respond to that load. Customers are allowed to exit the Commercial/Industrial Demand Reduction rider under certain conditions, but they will be penalized for returning to Firm Service without meeting those conditions.

To establish initial qualification for service under this program, the customer must have had a demand during the summer controllable rating period (3:00 P.M. to 6:00 P.M., weekdays, April through October) for at least three of the previous twelve months of at least 200 kW greater than their Firm Demand. This prevents low load factor, seasonal customers from realizing program savings without providing the corresponding benefits.

Interconnection of the FPL control circuit and customer's energy management system is allowed under special circumstances where prevention of human intervention in control activities can be assured.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to, technological advances, operational needs, program results, application assumptions and incentive amounts.

Projected Participation and Savings

The projected demand and energy savings for a typical installation are shown on Attachments B and C. The types of customers that are potential candidates for this program include, but are not limited to, office buildings, water and sewer plants, hospitals, computer centers and industrial

process customers such as mills and aggregate plants. The energy consumption and demand reduction projections are based on FPL's experience with its load control programs.

The projected participation in this program and associated savings are shown on Attachments A, B and C. The projected participation is based upon FPL's Petition for Approval of Numeric Conservation Goals, filed June 1, 2004.

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix A. These analyses show the following benefit-cost ratios: infinite Participant, 1.25 RIM and 15.97 TRC for the Commercial/Industrial Demand Reduction program.

Program Monitoring and Evaluation

The system that is utilized to activate demand reductions is also used to monitor individual participant's performance during control/interruption periods. A check of individual participant's performance is done following each of these control/interruption periods. In addition, FPL continually monitors the program through periodic reviews of performance indicators. The information necessary to monitor these program performance indicators is maintained in computer and/or paper files.

	Attachment A						
		(b)		(d)			
	(a)	Total Number	(c)	Cumulative			
	Total Number	of Eligible	Annual Number	Penetration			
Year	of Customers	Customers	of Participants	Level %			
2005	1,386,728	1,386,728	6,333	0%			
2006	1.413.001	1.406.668	6.333	1%			
2007	1,438,974	1,426,308	6,333	1%			
2008	1,464,432	1,445,433	6,333	2%			
2009	1,489,580	1,464,248	6.333	2%			
2010	1,514,604	1,482,939	6,333	3%			
2011	1.539.565	1.501.567	6.333	3%			
2012	1,564,409	1,520,078	6,333	3%			
2013	1,589,229	1,538,565	6,333	4%			
2014	1.614.159	1.557.162	6.333	4%			

Program Name: Commercial/Industrial Demand Reduction

Note: Column a - The total summer kw demand reduction of C/I controllable load > 200 kw / customer Column b - The total summer kw demand reduction of eligible C/I controllable load > 200 kw / customer Column d - Column c cumulative / Column b (does not reflect participation prior to 2005)

Attachment	B -	At	the	Meter
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		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	13	1.00	1.0	85,442	6,333	6,333
2006	13	1.00	1.0	85,442	6,333	6,333
2007	13	1.00	1.0	85,442	6,333	6,333
2008	13	1.00	1.0	85,442	6,333	6,333
2009	13	1.00	1.0	85,442	6,333	6,333
2010	13	1.00	1.0	85,442	6,333	6,333
2011	13	1.00	1.0	85,442	6,333	6,333
2012	13	1.00	1.0	85,442	6,333	6,333
2013	13	1.00	1.0	85,442	6,333	6,333
2014	13	1.00	1.0	85,442	6,333	6,333

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	15	1.11	1.11	92,299	7,000	7,000
2006	15	1.11	1.11	92,299	7,000	7,000
2007	15	1.11	1.11	92,299	7,000	7,000
2008	15	1.11	1.11	92,299	7,000	7,000
2009	15	1.11	1.11	92,299	7,000	7,000
2010	15	1.11	1.11	92,299	7,000	7,000
2011	15	1.11	1.11	92,299	7,000	7,000
2012	15	1.11	1.11	92,299	7,000	7,000
2013	15	1.11	1.11	92,299	7,000	7,000
2014	15	1.11	1.11	92,299	7,000	7,000

Business Energy Evaluation

Program Description

The Business Energy Evaluation program is designed to encourage energy efficiency in commercial and industrial facilities by identifying DSM opportunities and providing recommendations to the customer. Energy efficiency encompasses analysis of all energy sources and customer energy-related productivity. Customer eligibility in FPL's other commercial and industrial programs will be determined and participation promoted through the evaluation.

There are no changes to this program.

The Business Energy Evaluation program will:

- Provide for different levels of evaluation complexity (there can be less complex and more complex levels).
- Allow for cost sharing of more complex evaluations by the customer and FPL. The standard level field evaluations will still be free of charge.
- Allow for evaluations without an on-site visit. This could be accomplished via telephone or internet.
- Perform evaluations based on the needs of our commercial and industrial customers rather than having a goal.

FPL plans to make commercial and industrial customers aware of this program through advertising, trade allies, such as architects, engineers and educational systems. In addition,

customers will be made aware through direct contact with FPL personnel.

Description of Program Administration

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All commercial and industrial customers are eligible for this program whether they have existing facilities or are planning, expanding or renovating facilities in FPL's service territory. Customers are eligible for as many evaluations as necessary to encourage implementation of recommendations.

The program will be free of charge to eligible customers for standard level evaluations. For more complex evaluations, the customer and FPL may share in the cost. While on-site visits are encouraged, they are not necessary as long as the customer's evaluation needs are met.

It will be recommended to the customer that the evaluation be used as a tool to examine energy efficient opportunities in the customer's facility and to determine eligibility in all of FPL's other commercial and industrial DSM programs. However, in cases where the customer wants to focus on the implementation of one technology at a time, the evaluation is a less effective tool. Therefore, while the Business Energy Evaluation is encouraged, it is not a requirement for eligibility in the other FPL commercial and industrial programs. The eligibility requirements for the other programs will be determined, consistent with their program guidelines.

FPL will file Program Standards for this program. The Program Standards will be subject to periodic review and may change over time based on factors such as, but not limited to, technological advances, operational needs, program results and application assumptions.

Projected Participation and Savings

Electric demand and energy savings from implementing the Business Energy Evaluation recommendations will occur, but they will not be directly claimed through the Business Energy Evaluation program. Instead, some savings will be claimed through FPL's other commercial and industrial incentive programs. There should also be additional savings resulting from recommendations identified in the evaluation that are not addressed by FPL's programs.

Based on historical participation and current FPL program offerings, it is estimated that 6,000 evaluations will be performed per year. The actual participation will be market driven.

Cost-Effectiveness Analysis

Since FPL does not project savings for this program, a cost-effectiveness analysis is not directly performed for this program. Cost-effectiveness has been shown for other programs served by this program, and that approach avoids double counting benefits or attempting to quantify benefits beyond other programs.

Program Monitoring and Evaluation

This program will be evaluated annually by the number of evaluations performed and the cost per evaluation. It will be indirectly evaluated for its effectiveness in providing leads for FPL's other commercial and industrial programs. A computerized database will be used to track and record the effectiveness of the evaluations.

	Attachment A						
		(b)		(d)			
	(a)	Total Number	(c)	Cumulative			
	Total Number	of Eligible	Annual Number	Penetration			
Year	of Customers	Customers	of Participants	Level %			
2005	484,801	484,801	6,000	1%			
2006	493,723	493,723	6,000	2%			
2007	502,842	502,842	6,000	4%			
2008	511,352	511,352	6,000	5%			
2009	519,746	519,746	6,000	6%			
2010	528,421	528,421	6,000	7%			
2011	537,122	537,122	6,000	8%			
2012	545,698	545,698	6,000	9%			
2013	554,434	554,434	6,000	10%			
2014	562,920	562,920	6,000	11%			

Program Name: Business Energy Evaluation

Note: Column a - The total number of C/I customers

Column b - The total number of eligible C/I customers

Column d - Column c cumulative / Column b (does not reflect participation prior to 2005)

Attachment B - At the Meter

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	N/A	N/A	N/A	N/A	N/A	N/A
2006	N/A	N/A	N/A	N/A	N/A	N/A
2007	N/A	N/A	N/A	N/A	N/A	N/A
2008	N/A	N/A	N/A	N/A	N/A	N/A
2009	N/A	N/A	N/A	N/A	N/A	N/A
2010	N/A	N/A	N/A	N/A	N/A	N/A
2011	N/A	N/A	N/A	N/A	N/A	N/A
2012	N/A	N/A	N/A	N/A	N/A	N/A
2013	N/A	N/A	N/A	N/A	N/A	N/A
2014	N/A	N/A	N/A	N/A	N/A	N/A

Attachment C - At the Generator

		Per Customer	Per Customer		Total Annual	Total Annual
	Per Customer	Winter KW	Summer KW	Total Annual	Winter KW	Summer KW
Year	KWh Reduction	Reduction	Reduction	KWh Reduction	Reduction	Reduction
2005	N/A	N/A	N/A	N/A	N/A	N/A
2006	N/A	N/A	N/A	N/A	N/A	N/A
2007	N/A	N/A	N/A	N/A	N/A	N/A
2008	N/A	N/A	N/A	N/A	N/A	N/A
2009	N/A	N/A	N/A	N/A	N/A	N/A
2010	N/A	N/A	N/A	N/A	N/A	N/A
2011	N/A	N/A	N/A	N/A	N/A	N/A
2012	N/A	N/A	N/A	N/A	N/A	N/A
2013	N/A	N/A	N/A	N/A	N/A	N/A
2014	N/A	N/A	N/A	N/A	N/A	N/A

Cogeneration and Small Power Production

Program Description

FPL's Cogeneration and Small Power Production program was established in order to implement and execute FPL's obligations to facilities defined as Qualifying Facilities (QFs) under the Public Utility Regulatory Policies Act of 1978 (PURPA) and Florida Public Service Commission rules. A QF may be classified as either a cogeneration facility (Cogenerator) or a small power production facility (SPP). A Cogenerator is a facility which produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating or cooling purposes, through the sequential use of energy. An SPP facility is one which is less than 80 MW and that produces electric energy using, as a primary source of fuel, biomass, waste, renewable resources or any combination thereof.

The Federal Energy Commission (FERC) has adopted rules, 18 CFR 292.01, et al, which guide the states in their implementation of PURPA. The State of Florida has also enacted legislation relating to cogeneration and small power production facilities (F.S. §366.051 and §366.80 -366.85). The Commission has implemented these various mandates through the adoption of rules relating to the purchase of power and energy from QFs (F.A.C. Sections 25-17.080 et al).

The objectives of FPL's Cogeneration and Small power Production program are to comply with all regulatory requirements and applicable law relating to the purchase of energy and capacity from Cogenerators and SPPs; interconnect as necessary to accomplish purchases, sales, operation in parallel; transmit energy and capacity to another utility for purchase by that utility; and assist customers in the evaluation of potential cogeneration applications, including self-generation, while minimizing costs to FPL's ratepayers and shareholders.

There are no changes to this program.

Description of Program Administration

FPL's Cogeneration and Small Power Production Program is intended to facilitate the installation of Cogenerators and SPPs and the administration of contracts with such facilities. The administration of FPL's program to comply with all regulatory requirements and applicable laws relating to the purchase of energy and capacity from Cogenerators and SPPs includes activities associated with:

- interconnection,
- installation, inspection, calibration and maintenance of meters,
- administration of power billing and accounting processes,
- FPSC reporting,
- contract negotiation,
- contract administration, including legal expenses resulting from litigation,
- facility inspections and audits,
- communications,
- operating coordination, and
- problem resolution.

Utility payments for as-available energy made to qualifying facilities pursuant to the utility's

tariff are recoverable by the utility through the Florida Public Service Commission's (FPSC) periodic review of its' fuel and purchased power costs. Utility payments to QFs for firm capacity and energy are also similarly reviewed and recovered by the utility with FPSC approval. In addition, pursuant to FPSC approval, FPL has historically recovered its cogeneration and small power production program costs through its Energy Conservation Cost Recovery clause (ECCR). The FPSC approved the most recent version of FPL's Cogeneration and Small Power Production program as part of FPL's current DSM plan.

Cost-Effectiveness Analysis

Since FPL does not project demand and energy savings for this program, a cost-effectiveness analysis is not directly performed for this program. The costs to administer the program are ultimately reflected in electric rates to the customer through the Energy Conservation Cost Recovery clause. Therefore, to reduce upward pressure on electric rates, all efforts will be made to keep the program costs to a minimum, while at the same time protecting the welfare of all FPL ratepayers.

Commercial/Industrial Load Control

Program Description

The Commercial/Industrial Load Control (CILC) program is designed to reduce peak demand by controlling customer loads of 200 kW or greater during periods of extreme demand or capacity shortages. The permanent CILC program began in November 1990 after a multi-year trial project.

FPL made eligible commercial and industrial customers aware of this program through direct contact with their FPL Account Managers.

Description of Program Administration

The CILC Program is available to existing CILC customers that allow FPL to control 200 kW or more of their load. Customers may participate by allowing FPL to control directly selected switch gear in the customer's facility or to transfer the load to the customer's standby generator.

The customer receives service under a lower rate in return for allowing FPL to control its load. The incentive is the difference between their prior rate and the CILC rate. The customer begins service on the CILC rate after successfully demonstrating its load can be reduced to the contracted Firm Demand during a one hour load control test conducted and monitored by FPL.

FPL provides advance notification of load control events via an FPL-provided notification system installed at the customer's location. Compliance with contracted Firm Demands is

verified after each event on an individual customer basis. The causes of exceeding Firm Demand are investigated to determine if they meet allowed exclusions to the penalty or if they are to be penalized. A Continuity of Service Provision is available which allows customers to continue using power during load control events when power is available from non-FPL providers. Customers are allowed to exit CILC under certain conditions but will be penalized for returning to Firm Service without meeting those conditions.

Current Program Status

Pursuant to Order No. PSC-96-0468-FOF-EG, issued April 4, 1996, in Docket No. 960130-EG, the Commission granted FPL's request to limit the availability of its Commercial Industrial Load Control (CILC) program to existing customers and those which had entered into a CILC agreement as of March 19, 1996. Subsequently, on March 10, 1999, the Commission issued Order No. PSC-99-0505-PCO-EG in which it required customers under contract to take CILC service but not yet on the rate to initiate CILC service by December 31, 2000. Any customers who were not taking service under the CILC rate by December 31, 2000 were no longer eligible for the CILC rate.

SECTION IV - RESEARCH & DEVELOPMENT EFFORTS

FPL's DSM Plan contains research and development activities in addition to established programs. Historically, FPL has pursued DSM research and development activities through, not only a research program, Conservation Research and Development, but also individual research projects.

A. Research Overview

FPL's continuing research efforts include activities within this DSM Plan. FPL has one (1) research program and three (3) individual research and development projects. FPL's research program is its existing Conservation Research and Development Program, which FPL is proposing to continue. FPL's research and development projects include the following previously approved projects:

- Residential On Call Pilot Project
- Green Power Pricing Research Project

In addition, FPL is proposing the following new research and development project:

Business Green Energy Research Project

Historically, FPL has performed extensive DSM research and development, and FPL will continue such activities under this plan. Such efforts are an integral part of FPL's strategy to achieve the goals established for FPL in the recent conservation goals proceeding. These efforts will examine a wide variety of technologies, building on prior FPL research, where applicable,

and expanding the research to new and promising technologies as they emerge.

B. Detailed Research Program and Project Descriptions

Conservation Research and Development (CRD) Program

FPL currently has an approved Conservation Research and Development Program that is scheduled to end on December 31, 2004. This program was originally approved by the Commission in November of 1990 as part of FPL's DSM Plan for the 1990's. It has been updated several times since then, and FPL proposes to continue to use this very successful tool. The CRD Program has been used by FPL to research and, where appropriate, develop emerging DSM technologies. FPL has researched a wide variety of technologies under the CRD Program such as condenser coil cleaner and coating, ultra violet lights for evaporator coils, Energy Recovery Ventilators (ERV), fuel cell demonstrations, CO2 ventilation control, two-speed air handlers and duct plenum repair. Many of the technologies examined have resulted in enhancements to existing programs or the development of new programs. FPL regularly reports in its true-up and projection filings for its ECCR clause the activities within the CRD Program.

The CRD Program has worked, serving FPL's customers well. It allows FPL to research emerging conservation technologies without always creating extensive research projects. Through CRD, FPL can investigate new technologies and determine whether they should be incorporated into a program, further researched as a research project, or abandoned. If FPL is to continue to stay abreast of emerging DSM technologies and develop new programs, the CRD Program needs to be continued.

As part of this DSM Plan, FPL seeks to extend its CRD program beginning with the approval of this Plan and continue until the approval of FPL's next DSM Plan, with a spending cap of \$2,500,000 for the period. In the past, FPL has requested and received several time extensions to this Program during the time periods between subsequent DSM Plan approvals. As part of this Plan, FPL is requesting the time period for CRD program approval be extended until the next DSM Plan is approved, or six years, whichever occurs first. Aside from the proposed changes to the approval period and funding level, FPL proposes no other changes to the CRD Program.

Existing Research and Development Projects

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The following are active research projects previously approved by the Commission and which will continue as part of FPL's DSM Plan.

Green Power Pricing Research Project

Project Purpose - The purpose of the Green Power Pricing Research Project (Project) is to develop a cost-effective means of fostering renewable energy development. By allowing residential customers to sign up voluntarily and pay for energy produced by renewable resources, FPL is intending to foster the development of supplies of renewable energy that would not otherwise be developed because renewable energy is not generally cost-effective to the general body of FPL's customers. The final order for this project, PSC-04-0047-CO-EI, was approved by the Commission on January 16, 2004.

Project Description and Administration - FPL proposed a special tariff, the Green Power Pricing - ECCR Rider, under which interested residential customers may voluntarily pay a premium for a monthly 1,000 kWh block of renewable energy. Initially, the monthly premium is \$9.75 over and above the customer's charges under the Residential Service rate schedule. To supply the renewable energy for the Project, FPL has entered into a contract with a supplier for the purchase of Tradable Renewable Energy Credits (TRECs). For every 10,000 customers participating in the Project, FPL will either purchase TRECs associated with, buy energy directly from, or develop 150 kW of photovoltaic capacity.

TRECs are traded certificates that reflect the market value of the perceived environmental benefits associated with renewable energy. A renewable energy facility can currently sell two commodities associated with the energy it generates: kWh, the actual energy generated, and TRECs, the market value of the perceived environmental benefits associated with the renewable energy. For every kWh of energy generated by a renewable energy facility, there is a corresponding TREC; a TREC cannot be created without the generation of energy by a renewable energy facility. TRECs are retired once the energy is sold to an end-use customer. So that FPL could offer renewable (green) energy in its Green Power Pricing Project immediately, FPL purchased its initial TRECs associated with new (after 1998) and existing renewable energy facilities in the Southeastern Electric Reliability Council (SERC) region, Florida and such other geographic areas as FPL and its TREC supplier mutually agreed to. Over time, as new renewable energy facilities in Florida come on line with the expansion of the renewable energy market, FPL envisions it will purchase additional TRECs associated with renewable energy facilities in Florida.

For purposes of the Project, eligible renewable facilities shall include photovoltaic facilities, facilities utilizing biomass fuel, facilities using land-fill gas, facilities using wind, ocean currents, tides and other hydrological applications, and other renewable energy sources as approved by FPL and FPL's TREC supplier.

The monthly premium paid by participating customers was designed to cover the cost of the purchase of TRECs and marketing services as well as internal FPL administration costs. Over time, FPL forecasts that participation levels will increase such that the monthly premium will more than pay for TRECs and administration. When that occurs, the excess revenues will be deferred to develop a reserve to buy or develop additional renewable energy within Florida, to lower the monthly green pricing charge or to increase marketing activity.

FPL is promoting the Green Power Pricing Research Project through a variety of measures and methods. Part of the research effort of the Project will be to assess which means of promotion are most effective.

Currently, the Commission approves DSM programs that are cost-effective to both participating and non-participating customers. The Green Power Pricing Research Project should be costeffective to both participating and non-participating customers.

Research Project Duration and Budget - The Green Pricing Power Research Project will run through the end of 2006. FPL projects total revenues from the Project of \$19,168,500. FPL also projects total expenses of \$18,906,270 over the period, \$17,890,593 of which would be paid to

the selected vendor of TRECs for TRECs and marketing services. Thus, FPL's internal project administration costs are forecast to be \$1,015,677 over the period. FPL has a Commission approve a cap of internal FPL administration costs of \$1,500,000 for the project.

Project Monitoring - The Project is reflected as a separate project on FPL's ECCR forms, so that revenues and expenses associated with the Project are regularly reported to the Commission. In addition, in its ECCR true-up filings FPL provides a status report for the Project. FPL is monitoring and maintaining records of customer sign-ups and removals through its reporting system. FPL is also monitoring customer response to various educational and marketing efforts. FPL is also tracking the total renewable kWh supported by the participating customers.

Project Status – As of June 2004, which is the last status report filed, FPL has 4,088 customers participating in the project. Project revenues are \$101,322 with expenses of \$91,925. TREC's have been purchased from wind and biomass facilities.

Residential Load Control Pilot Project

Project Purpose - FPL has successfully implemented a residential load control program (On Call) since 1987. The On Call Program involves the installation of load control equipment on select customer end-use equipment to allow FPL to control residential customer loads on an asneeded basis. By exercising control, FPL can reduce demand on its system at times of peak or system emergency. FPL has over 750,000 active participants in the On Call Program. As part of the program structure FPL provides a monthly credit on the bills of On Call participants. These

credits are recovered through FPL's ECCR clause and were forecasted to be approximately \$52 million dollars in 2003. Given the magnitude of these charges, FPL performed market research to determine if FPL could reduce these credits and ECCR charges. FPL's market research sought to determine the best incentive strategy to pursue by comparing new marketing strategies and reduced incentives to the current marketing strategy and incentives. The research indicated that compared to the existing strategy, new positioning of the On Call program actually enhanced customers' perception, understanding and benefits of the program. Overall, demand for the On Call program with the new positioning was greater, even with the lower incentives, than the demand with the current positioning and the current incentives. The market research also concluded that, in spite of reduced incentives, there would still be a demand for load control program participation.

FPL's market research, while encouraging, was based solely on survey data. It had not been tested. FPL believed the market research needs to be field tested. Therefore, FPL proposed a pilot project to test customer response to changed market strategies and lower credits for residential load control. The final order for this project, PSC-03-0442-CO-EI, was approved by the Commission on March 31, 2003.

Project Description and Administration - In recent years, the program has needed relatively small numbers of incremental participants. However, approximately 100,000 On Call participants move each year from existing On Call locations to other residences within FPL's service territory. At the same time, new customers also move back into those existing On Call locations. Thus, FPL understands that On Call participation changes each year due to customer

movement. FPL can also expect that within four years, based upon the established customer churn rate, approximately 45% of the residential load control program participants will potentially be participating via the pilot project.

As part of the research project, FPL has closed the existing On Call rate schedule to additional participants. Existing participants will not be affected while remaining at their current location, provided they do not make changes to their appliances currently on the program, and/or change their interruption options. A new pilot project rate schedule offering reduced incentives for all new residential load control participants has been opened. New participants include customers enrolling for the first time, as well as previous On Call customers moving into existing locations where On Call equipment has or has not been previously installed.

The comparisons of the reduced incentives used for this project as compared to non-project incentives are:

Monthly Incentives	Non-Project	Project
Air Conditioning Cvcle (1)	\$6.00	\$3.00
Air Conditioning Shed (1)	\$9.00	\$9.00
Space Heat Cycle (2)	\$2.00	\$2.00
Space Heat Shed (2)	\$4.00	\$4.00
Water Heating (3)	\$3.50	\$1.50
Pool Pump (3)	\$3.00	\$3.00

(1) Paid summer months of April through October

(2) **Paid winter months of November through March**

(3) Paid year-round

FPL will closely track the dropout rates as well as response rates for new participants. If results differ significantly from the research estimates, qualitative research will be conducted to understand the variations. The primary benefit of such a phased-in program change would be a

significant reduction in the costs recovered through the ECCR clause, with a corresponding reduction in the ECCR clause factors charged to all customers.

Research Project Duration - This research project was approved to last through March 31, 2006.

Pilot Monitoring - Through its Customer Information Systems, FPL will track all Residential Load Control Pilot Project participants. Customers will be tracked according to the appliances they have participating in the program, as well as any changes in their participation status. This will allow FPL to determine dropout rates as well as the reasons for the dropouts. In addition, FPL will be able to determine if any variations exist between sign-up rates under the new pilot project incentive levels and marketing strategies versus the existing program design.

Project Status – As of July 2004, FPL had over 141,000 customers participating in the project. This represents a savings to the ECCR Clause of approximately \$4,600,000. In addition, there have been very limited customer concerns expressed over the reduced incentives.

New Research and Development Projects

FPL is requesting approval of one new research project.

Business Green Energy Research Project

Project Purpose - FPL currently has a R&D project addressing residential customer acceptance

of green energy. In an attempt to determine the business customer acceptance of green pricing rates, FPL proposes to investigate and, if determined by FPL to be feasible, to design and implement a Green Energy Program that addresses these customer segments.

Project Description - Under this project FPL would generate, purchase electric energy, or purchase Tradable Renewable Energy Certificates (TRECs) generated from new renewable resources, including solar-powered technologies, biomass energy, landfill methane, wind energy, low impact hydroelectric energy and/or other renewable resources. Participants will be business customers who elect to be charged an additional charge calculated to recover the costs of this project. Costs include project administration costs (administration costs are the administrative costs associated with the delivery of the project; they would include but not be limited to personnel costs, marketing and promotion costs, materials and supplies, start-up costs and office costs) and the TRECs or excess of total power production costs for new renewable energy (expressed in cents per kWh) over and above normally applicable charges (i.e., the fuel, purchased power capacity and energy, conservation, environmental cost recovery and basic energy charges) which would have been charged by FPL for delivery of an equivalent amount of energy from conventional power supply resources.

Project Development and Analysis - The first step in the development of this project will consist of research into business customer requirements and acceptance of the concept. FPL will investigate the availability of new renewable resources that meet the customers' needs. FPL will also retain final control over the content and conduct of the research and project design.

First, FPL will conduct consumer research to determine:

- the preferences of its business customers for new renewable energy,
- customer willingness to pay the incremental costs associated with new renewable energy, and
- the amounts of new renewable energy customers are willing to purchase and the acceptance of blended rate offerings.

Specifically, the consumer research will build upon the key lessons from FPL's recently launched residential Green Power Pricing Research Project and will determine any necessary modifications to address business customer preferences regarding energy offerings linked to renewable sources, including the perceived benefits and costs of these technologies.

The second step will be research to determine:

- the availability of new renewable energy sources and supplies (their availability by season, day of week, time of day, etc.),
- the terms and conditions, including prices and contract lengths, pursuant to which FPL may obtain the resources for the project participants, and
- the regulatory issues that may arise in offering a Business Green Energy Program.

FPL anticipates the total development and analysis phase of the project will be for a period of at least 24 months, as follows:

Stage IA Establish Research Parameters and Concept Objectives 3 Months

Stage IB	Market Segment Research Objectives	5 Months
Stage II	Technical Evaluation Objectives	6 Months
Stage III	Develop Project Objectives	10 Months

Project Design - If FPL's research shows that a sufficient number of customers are willing to pay the incremental costs associated with new renewable energy, under terms and conditions that correspond favorably with the availability and terms and conditions pursuant to which FPL can purchase new renewable energy and that there are no regulatory impediments, FPL will proceed with the design and implementation of the project.

Project Costs

Stage I		
 A. Establish Research Parameters and Concept Objectives: Gather preliminary data; establish availability of renewable energy sources in Florida; avoid duplication of existing work and findings; and define more specific research objective and scope for project. 	\$75,000	
 Literature Search Industry Search Research Institute Work Search (FSEC, U of F, prior FPL R&D, etc.) 		
B. Market Segment Research Objectives:	\$175,000	
 Conduct Focus Groups among FPL customers Conduct Quantitative analysis to determine cost-effective market segment and confirm sales potential 	ts	
Stage II		
Technical Evaluation Objectives: (Only Required If Renewable Resources are Available)	\$100,000	
Identify Feasibility, Risk and Operating Factors		
 Determine availability of new projects Develop cost analysis Develop contract terms and conditions 		
Stage III		
Develop Project Objectives:	\$350,000	
 Develop and Execute Marketing Plan Develop Project Collateral Materials Advertise Project to FPL customers Develop renewable energy accounting system Revise billing system to accommodate Project 		
Total Project Cost		

SECTION V - SUMMARY

The Commission established RIM and Participant tests based DSM goals for FPL. FPL's DSM Plan is designed to achieve these DSM goals. FPL's DSM Plan includes all currently identified cost-effective achievable potential under the Participant and RIM tests. It also envisions additional savings that may be achieved from additional cost-effective DSM potential to be found through FPL's research efforts. To realize those additional savings, FPL's DSM Plan includes research and development activities that will build on prior efforts, examine specific technologies and allow FPL to research emerging technologies.

All of the existing FPL DSM programs will be continued with modifications to several of them. Most programs have been enhanced by building on prior experience and the results of FPL's end-use monitoring and evaluation efforts. Many of the modifications should enhance customer participation.

FPL's research efforts will continue to be a key part of the overall DSM Plan. FPL proposes to continue its successful CRD program. In addition, two (2) current R&D projects will be continued, and one (1) additional R&D project will be introduced.

FPL's DSM Plan is a well-balanced, comprehensive plan that captures all presently known achievable potential that is cost-effective under the Participant and RIM tests and lays the groundwork for finding more potential. It should achieve all of FPL's conservation goals as approved by the Commission. In doing so, it will capture significant amounts of DSM and help keep customers' rates low.