SACE 1st Response to Staff 012660



March 1, 2012

Stephen Garl Division of Regulatory Analysis Florida Public Service Commission 2540 Shumard Oak Boulevard, Room 110 Tallahassee, FL 32399-0850

Re: 2011 Demand Side Management (DSM) Annual Report

Dear Mr. Garl:

In accordance with Rule 25-17.0021(5), Florida Administrative Code, Florida Power & Light Company ("FPL") is submitting its 2011 DSM Annual Report. The Report includes the results of FPL's DSM Plan as approved by Order No. PSC-11-0346-PAA-EG (consummated by Order No. PSC-11-0590-FOF-EG). FPL's DSM Plan consists of the DSM programs approved by the Commission in 2004 and subsequent modifications approved by the Commission in 2006. FPL's actual 2011 results are compared to the demand and energy goals established by Order No. PSC-09-0855-FOF-EG, issued December 30, 2009, in Docket No. 080407-EG.

FPL was able to exceed its Residential Summer MW, Winter MW, and GWH goals. This achievement in the residential sector is primarily attributable to federal rebates and manufacturer rebates that were made available to customers in 2011, which encouraged the purchase and installation of air conditioning systems several efficiency levels above the level expected by FPL. In the business sector, FPL was unable to achieve its Summer MW and GWH goals, but did achieve its Winter MW goals. DSM achievements in the business sector continued to be hampered by current economic factors, which caused some businesses to withdraw plans for large energy efficiency capital projects or to delay such projects to 2012. As a result, the 2011 business sector achievement remained approximately the same as 2010. In the aggregate (residential and business sectors combined), FPL was still able to achieve its Summer MW and Winter MW goals, and its GWH achievements were within 15% of the GWH goal. FPL believes that, overall, these are good results considering the fact that its DSM Plan was not designed to meet the DSM goals.

Florida Power & Light Company

2011 DSM Annual Report Transmittal p. 2

Enclosed are three copies of the DSM 2011 Annual Report. Please do not hesitate to contact me should you have any questions.

Sincerely,

a

Wayne Besley Director, Demand Side Management Programs

Enclosures

Florida Power & Light Company

700 Universe Boulevard, Juno Beach, FL 33408

SACE 1st Response to Staff 012662

## FLORIDA POWER & LIGHT COMPANY 2011 DEMAND SIDE MANAGEMENT ANNUAL REPORT

March 1, 2012

## UTILITY: FLORIDA POWER & LIGHT COMPANY 2011 DEMAND SIDE MANAGEMENT ANNUAL REPORT

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FLORIDA POWER & LIGHT COMPANY Comparison of Achieved MW and GWh Reductions with Annual Commission Goals Established December 30, 2009 Reporting Period: 2011

			Residenti	al and Busin	ess Combined (@	) Generator	)		
	Summ	ner Peak MW Redu	ction	Wint	er Peak MW Reduc	tion	G\	Wh Energy Reduction	n
Year	Annual Total Achieved	Annual Commission Established Goal	% Variance	Annual Total Achieved	Annual Commission Established Goal	% Variance	Annual Total Achieved	Annual Commission Established Goal	% Variance
2010	129.2	110.4	17%	59.4	41.3	44%	204.1	204.3	0%
2011	146.2	142.2	3%	64.2	52.3	23%	261.1	295.2	-12%
2012		166.5			61.9				
2013		179.8			69.4			389.4	
2014		183.6			74.6			394.1	
2015		172.2			71.0				
2016		155.9			66.3			317.6	
2017		140.1			61.1			279.0	
2018		1 <u>28</u> .7			56.4			253.3	
2019		118.3			51.4			228.5	

				Residentia	al (@ Generator)				
	Summ	ner Peak MW Redu	ction	Wint	er Peak MW Reduc	tion	G	Wh Energy Reduction	n
	Annual Total	Annual Commission		Annual Total	Annual Commission		Annual Total	Annual Commission	0())
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance
2010	92.9	67.7	37%	38.2	33.2	15%	<u>1</u> 41.3	119.6	18%
2011	109.5	79.7	37%	46.2	42.4	9%	196.1	145.8	35%
2012		90.2			50.3			168.8	
2013		98.5			56.3			186.7	
2014		104.3			60.2			200.0	
2015		100.7			55.9			193.0	
2016		95.9			51.3			183.4	
2017		91.4			47.0		_	174.2	
2018		87.4			43.2			166.4	
2019		83.3			39.4			157.5	

				Business	(@ Generator)				
	Sumn	ner Peak MW Redu	ction	Wint	er Peak MW Reduc	tion	GI	Wh Energy Reduction	n
	Annual Total	Annual Commission		Annual Total	Annual Commission		Annual Total	Annual Commission	
Year	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance	Achieved	Established Goal	% Variance
2010	36.2	42.7	-15%	21.3	8.1	162%	62.8	84.7	-26%
2011	36.8	62.5	-41%	18.0	9.9	82%	64.9	149.4	57%
2012		76.3			11.6			191.5	
2013		81.3			13.1			202.7	
2014		79.3			14.4			194.1	· .
2015		71.5			15.1			167.5	
2016		60.0			15.0			134.2	
2017		48.7			14.1			104.8	
2018		41.3			13.2			. 86.9	
2019		35.0			12.0			71.0	

Utility: Program Name:	Florida Power &   Residential Buil
Program Start Date:	January 1981
Reporting Period:	2011

Program		
lorida Power & Light Company esidential Building Envelope Program		
lorida Power <b>esidential B</b>	anuary 1981	

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	sidential Building Envelope Program		
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i (g-d)		Cumulative Participation Over (Under) Projected	Participants	(4,118)	(8,732)								
h (g/c)	Actual	Cumulative Penetration	Level %	0.6%	1.1%								
D	Ac	Cumulative Number of Program	Participants <sup>(1)</sup>	14,041	27,716								
f		Annuai Number of Program	Participants	14,041	13,675								
e (d/c)	pe	Cumulative Penetration	Level %	0.7%	1.5%	2.2%	2.9%	3.6%	4.2%	4.9%	5.5%	6.1%	6.8%
q	Projected	Cumulative Number of Program	Participants	18,159	36,448	54,891	73,508	92,321	111,135	129,948	148,761	167,575	186,388
υ		Total Number of Eligible	Customers	2,483,638	2,493,710	2,528,354	2,562,588	2,596,138	2,629,080	2,661,746	2,694,101	2,726,069	2,755,712
Ą		Total Number of	Customers	4,010,837	4,056,428	4,141,910	4,226,978	4,311,223	4,394,802	4,477,937	4,560,569	4,642,575	4,720,827
Ø			Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019

	Per Installation	ation	Program Total	n Total
2011	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.35	0.38	4,786	5,265
Winter kW Reduction	0.36	0.40	4,990	5,490
kWh Reduction	1,849	1,986	25,279,453	27,158,845

<sup>(1)</sup> Cumulative participants prior to 2010 =

502,577

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Utility:	Florida F
Program Name:	Duct Sy:
Program Start Date:	August 1
Reporting Period:	2011

Power & Light Company /stem Testing and Repair Program 1991

		e e		<b>3</b> 3)	(6†								
i (g-d)		Cumulative Participation Over (Under) Projected	Participants	(1,393)	(15,849)								
h (g/c)	Actual	Cumulative Penetration	Level %	1.0%	1.2%								
ß	AC	Cumulative Number of Program	Participants	16,348	19,923								
f		Annual Number of Program	Participants	16,348	3,575								
e (d/c)	pe	0 5	Level %	1.0%	2.1%	3.1%	4.2%	5.2%	6.2%	7.2%	8.2%	9.1%	10.1%
q	Projected	Cun	Participants	17,741	35,772	54,093	72,704	91,608	110,513	129,418	148,323	167,227	186,132
υ		Total Number of Eligible	Customers	1,708,376	1,710,053	1,728,433	1,746,346	1,763,618	1,780,313	1,796,819	1,813,111	1,829,136	1,843,562
q		Total Number of	Customers	4,010,837	4,056,428	4,141,910	4,226,978	4,311,223	4,394,802	4,477,937	4,560,569	4,642,575	4,720,827
ŋ			Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019

	Per Installation	lation	Program	m Total
2011	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.17	0.18	263	652
Winter kW Reduction	0.14	0.15	501	551
kWh Reduction	280	301	1,001,000	1,075,419

2011	
Utility Cost per Installation	\$264
Total Utility Program Cost (\$000)	\$945
Net Benefits (\$000)	\$1

<sup>(1)</sup> Cumulative participants prior to 2010 =

478,515

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Florida Power & Light Company Residential Air Conditioning Program October 1990 2011

						_						
i (g-d)		Cumulative Participation Over (Under) Projected Participants		(7,350)								
h (g/c)	Actual	Cumulative Penetration Level %	3.1%	6.7%								
a	Ac	Cumulative Number of Program Participants <sup>(1)</sup>	99,897	213,804								
f		Annual Number of Program Participants	99,897	113,907								
e (d/c)	p	Cumulative Penetration Level %	3.4%	7.0%	10.7%	14.7%	19.0%	23.4%	27.7%	32.1%	36.8%	41.4%
q	Projected	Total Number Cumulative Number of Eligible of Program Customers Participants	106,731	221,154	343,459	473,914	612,872	751,830	890,787	1,029,745	1,168,703	1,307,661
υ		Total Number of Eligible Customers	3,172,427	3,180,593	3,206,087	3,227,951	3,225,622	3,219,715	3,212,539	3,205,241	3,176,065	3,158,213
q		Total Number of Customers	4,010,837	4,056,428	4,141,910	4,226,978	4,311,223	4,394,802	4,477,937	4,560,569	4,642,575	4,720,827
Ø		Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019

	Per Installation	ation	Program	n Total
		41011	1	•
2011	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.71	0.78	81,261	89,396
Winter kW Reduction	0.23	0.26	26,678	29,349
kWh Reduction	1,303	1,400	148,445,717	159,481,861

Jtility Cost per Installation	\$670
otal Utility Program Cost (\$000)	\$76,340
Vet Benefits (\$000)	\$332

<sup>(1)</sup> Cumulative participants prior to 2010 =

1,239,291

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Florida Power & Light Company	Residential Load Management (On Call) Program	July 1986	2011
Utility:	Program Name:	Program Start Date:	Reporting Period:

i (a-d)	- 21	Cumulative Participation Over (Inder) Projected	Participants	(9,074)	(18,253)								
h (a/c)	Actual	Cumulative	Level %	0.2%	0.5%								
D	Ac	Cumulative I Number of Program	Participants <sup>(1)</sup>	6,826	14,847								
4-		Annual Number	Participants	6,826	8,021								
e (dlc)		Cumulative	Level %	0.5%	1.0%	1.6%	2.1%	2.7%	3.4%	4.0%	4.5%	5.1%	5.6%
q	Projected	Cumulative Number	Participants	15,900	33,100	51,600	71,400	94,700	118,000	141,300	164,600	187,900	211,200
υ		Total Number	or Linguate Customers	3,225,872	3,255,563	3,323,845	3,390,413	3,454,858	3,515,137	3,574,972	3,634,304	3,693,010	3,747,962
q		Total Niimher of	Customers	4,010,837	4,056,428	4,141,910	4,226,978	4,311,223	4,394,802	4,477,937	4,560,569	4,642,575	4,720,827
ល			Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019

	Per Installation	lation	Program	m Total
2011	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	1.14	1.25	9,144	10,059
Winter kW Reduction	1.02	1.12	8,181	9,000
kWh Reduction	18	20	148,228	159,248

Ity Cost per Installation <sup>(2)</sup> \$69           tal Utility Program Cost (\$000) <sup>(3)</sup> \$55,497           t Benefits (\$000)         \$365	2011	
ogram Cost (\$000) <sup>(3)</sup> \$5: \$000)	tility Cost per Installation <sup>(2)</sup>	\$69
\$000)	Fotal Utility Program Cost (\$000) <sup>(3)</sup>	\$55,497
	Net Benefits (\$000)	\$365

<sup>(1)</sup> Cumulative participants prior to 2010 =
 <sup>(2)</sup> Utility cost per installation is based on cumulative active year end total =
 799,812
 <sup>(3)</sup> Includes depreciation, return & rebates paid in 2011 to active participating customers who were signed up in 2011 & in years prior

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Utility: Florida Power & Light Company Program Name: Residential New Construction (BuildSmart<sup>®</sup>) Program Program Start Date: February 1996 Reporting Period: 2011

1,124 477 (Under) Projected Participation Over Participants Cumulative (p-d) 11.3% 9.0% Penetration Cumulative Level % (a/c) £ Actual 2,089 4,406 Participants<sup>(1)</sup> Number of Jumulative Program σ 2,089 2,317 Annual Number Participants of Program ч--8.7% 6.7% 6.3% 6.0% 5.8% 5.5% 5.3% 5.2% 5.1% 5.0% Cumulative Penetration Level % e (d/c) Projected 13,528 19,368 15,474 17,421 1,612 3,282 5,431 7,582 9,635 11,581 **Cumulative Number** of Program Participants σ 30,508 41,313 43,800 45,278 Total Number 44,274 46,918 18,505 36,750 39,597 43,189 Customers of Eligible υ 4,056,428 4,226,978 4,394,802 4,560,569 4,642,575 4,141,910 4,311,223 4,477,937 4,720,827 4,010,837 Total Number of Customers Ω 2016 2013 2015 2018 2019 2010 2012 2014 2011 2017 Year ത

	Per Installation	ation	Program	m Total
2011	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	1.08	1.19	2,497	2,747
Winter kW Reduction	0.55	0.61	1,276	1,404
kWh Reduction	1,566	1,682	3,627,310	3,896,982

<sup>(1)</sup> Cumulative participants prior to 2010 =

22,515

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Utility:	Florida Power & Light Company
Program Name:	Residential Low Income Weathe
Program Start Date:	April 2004
Reporting Period:	2011

Residential Low Income Weatherization April 2004

	(b-d)		Cumulative Participation Over	(Under) Projected Participants	256	1,313								
Ļ	(g/c)	ual	Cumulative Pa	Penetration (Ur Level %	%	0.4%								
D		Actual	Cumulative Number of	Program Participants <sup>(1)</sup>	. 837	2,503								
۴			Annual Number	of Program Participants	. 837	1,666								
Ð	(d/c)	pe	Cumulative	Penetration Level %	0.1%	0.2%	0.3%	0.3%	0.4%	0.5%	0.6%	0.7%	0.8%	0.8%
σ		Projected	Cumulative Number	of Program Participants	581	1,190	1,828	2,496	3,197	3,897	4,598	5,299	5,999	6,700
U			Total Number	of Eligible Customers	693,875	701,181	715,361	729,439	743,345	757,104	770,786	784,380	797,867	810,704
р				Total Number of Customers	4,010,837	4,056,428	4,141,910	4,226,978	4,311,223	4,394,802	4,477,937	4,560,569	4,642,575	4,720,827
IJ				Үеаг	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019

	Der leefallation	ation	Drocrom	n Total
		auon		
2011	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	0.24	0.26	394	434
Winter kW Reduction	0.07	0.08	117	128
kWh Reduction	558	299	929,628	998,741

	rogram Cost (\$000) (\$000)	st per Installation \$117			\$117 \$196 \$9	2011 Utility Cost per Installation Total Utility Program Cost (\$000) Net Benefits (\$000)
--	--------------------------------	---------------------------	--	--	-----------------------	---

<sup>(1)</sup> Cumulative participants prior to 2010 =

1,961

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Utility:	Program Name:	Program Start Date:	Reporting Period:
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Florida Power & Light Company Residential Home Energy Surveys January 1981 2011

IJ	q	U	q	e (d/c)	¥	Ø	h (g/c)	i (g-d)
			Projected	þ		Ac	Actual	
		Total Number	Cumulative Number	Cumulative	Annual Number	Cumulative Number of	Cumulative	Cumulative Participation Over
Year	Total Number of Customers	of Eligible Customers	of Program Participants	Penetration Level %	of Program Participants	Program Participants <sup>(1)</sup>	Penetration Level %	(Under) Projected Participants
2010	4,010,837		75,000 - 100,000	1.9% - 2.5%	139,837	139,837	3.5%	64,837 - 39,837
2011	4,056,428	4,056,428	150,000 - 200,000	3.7% - 4.9%	159,620	299,457	7.4%	149,457 - 99,457
2012	4,141,910	4,141,910	225,000 - 300,000	5.4% - 7.2%				
2013	4,226,978	4,226,978	300,000 - 400,000	7.1% - 9.5%				
2014	4,311,223	4,311,223	375,000 - 500,000	8.7% - 11.6%				
2015	4,394,802	4,394,802	450,000 - 600,000	10.2% - 13.6%				
2016	4,477,937	4,477,937	525,000 - 700,000 11.7% - 15.6%	11.7% - 15.6%				
2017	4,560,569	4,560,569	600,000 - 800,000	13.2% - 17.5%				
2018	4,642,575	4,642,575	675,000 - 900,000	14.5% - 19.4%				
2019	4,720,827	4,720,827	750,000 - 1,000,000 15.9% - 21.2%	15.9% - 21.2%				

2011		
Utility Cost per Installation	\$75	
Total Utility Program Cost (\$000)	\$12,001	
Net Benefits (\$000)	N/A - N	V/A - No kW or kWh reductions are attributed to this program

<sup>(1)</sup> Cumulative participants prior to 2010 =

2,751,350

Page 8

 Utility:
 Florida Power & Light Company

 Program Name:
 Business Heating, Ventilating and Air Conditioning Program

 Program Start Date:
 February 1990

 Reporting Period:
 2011

(8,057) (18,812) Participation Over (Under) Projected Participants Cumulative (p-b) 2.8% 5.3% Penetration Cumulative Level % (a/c) ᄃ Actual 19,400 10,611 Participants<sup>(1)</sup> Number of Cumulative Program D 8,789 10,611 Annual Number Participants of Program 4--4.9% 10.3% 22.1% 28.6% 42.7% 50.4% 58.4% 66.9% 17.0% 35.5% Cumulative Penetration Level % (o/p) Ø Projected 18,668 38,212 77,380 177,302 57,831 117,349 157,318 197,286 97,364 137,333 Cumulative Number of Program Participants σ 340,406 349,806 330,789 Total Number 369,436 340,390 321,447 312,369 303,562 295,033 378,692 Customers of Eligible υ 651,779 684,583 635,972 719,037 605,498 620,548 667,980 701,598 736,909 755,226 Total Number of Customers q 2015 2018 2014 2016 2019 2012 2013 Year 2010 2011 2017 ത

	Per Installation	ation	Program	Program Total
2011	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	1.00	1.10	8,789	699'6
Winter kW Reduction	0.54	09.0	4,781	5,260
kWh Reduction	2,163	2,324	19,014,350	20,427,965

Utility Cost per Installation\$481Total Utility Program Cost (\$000)\$4,231Net Benefits (\$000)\$203	2011	
7\$	Utility Cost per Installation	\$481
\$000)	Total Utility Program Cost (\$000)	\$4,231
	Net Benefits (\$000)	\$203

<sup>(1)</sup> Cumulative participants prior to 2010 (@ Generator) = Note: One Customer, Participant or Installation equals one Summer kW

325,170

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DEMAND-SIDE MANAGEMENT ANNUAL REPORT

Utility:	Flori
Program Name:	Bus
Program Start Date:	June
Reporting Period:	201

ida Power & Light Company siness Efficient Lighting

June 1984	2011

i (g-d)		Cumulative Participation Over (Under) Projected Participants	2,321	4,216								
h (g/c)	Actual	Cumulative Penetration Level %	0.8%	1.6%								
g	Ac	Cumulative Number of Program Participants <sup>(1)</sup>	3,810	7,320								
f		Annual Number of Program	3,810	3,509								
e (d/c)	pe	Cumulative Penetration Level %	0.3%	0.7%	1.0%	1.4%	1.8%	2.1%	2.5%	2.8%	3.1%	3.4%
đ	Projected	Cumulative Number of Program Participants	1,489	3,104	4,837	6,681	8,630	10,579	12,528	14,477	16,427	18,376
C		Total Number of Eligible Customers	449,346	459,025	468,857	478,855	489,033	499,405	510,084	521,076	532,390	544,034
q		Total Number of Customers	842,587	863,530	884,994	906,991	929,535	952,639	976,317	1,000,584	1,025,454	1,050,943
B		Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019

	Per Installation	ation	Prograr	Program Total
2011	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	1.00	1.10	3,509	3,861
Winter kW Reduction	0.63	0.69	2,214	2,435
kWh Reduction	5,120	5,500	17,966,782	19,302,516

tillity Cost per Installation \$176 otal Utility Program Cost (\$000) \$617 let Benefits (\$000) \$161	2011	
	Itility Cost per Installation	\$176
	Total Utility Program Cost (\$000)	\$617
	Net Benefits (\$000)	\$161

<sup>(1)</sup> Cumulative participants prior to 2010 (@ Generator) = Note: One Customer, Participant or Installation equals one Summer kW

270,713

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DEMAND

Utility:
Program Name:
Program Start Date:
Reporting Period:

Florida Power & Light Company Business Building Envelope June 1995 2011

	_		_			_	_	_		_		_		
i (q-d)		Cumulative Participation Over (Under) Projected	Participants	(2,244)	(5,498)									
h (a/c)	Actual	Cumulative Penetration	Level %	1.4%	2.7%									
ŋ	Ac	Cumulative Number of Program	Participants <sup>(1)</sup>	6,358	12,222									
<b>4</b>		Annual Number of Program	Participants	6,358	5,864									
e (d/c)		Cumulative Penetration	Levei %	1.9%	3.9%	5.9%	8.1%	10.3%	12.5%	14.7%	16.8%	18.9%	21.0%	
σ	Projected	Cumulative Number of Program	Participants	8,602	17,720	27,329	37,404	47,922	58,440	68,958	79,476	89,994	100,512	
o		Total Number	Customers	455,771	458,497	460,989	463,279	465,398	467,377	469,667	472,276	475,210	478,479	
.Q		Total Number of	Customers	455,771	467,099	478,709	490,608	502,802	515,300	528,108	541,234	554,687	568,474	
ŋ			Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	

	Dor Installs	tion	Droaram Total	n Total
	LCI IIISIAIIAUUI		LIUUIAI	
2011	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	1.00	1.10	5,864	6,451
Winter kW Reduction	0.01	0.01	72	79
kWh Reduction	1,996	2,144	11,704,859	12,575,053

	\$971	\$5,694	\$172	
2011	Utility Cost per Installation	Total Utility Program Cost (\$000)	Net Benefits (\$000)	

<sup>(1)</sup> Cumulative participants prior to 2010 (@ Generator) = Note: One Customer, Participant or Installation equals one Summer kW

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Utility:	Florida Power & Light Company
Program Name:	<b>Business Custom Incentive Program</b>
Program Start Date:	April 1993
Reporting Period:	2011

		L	71		4	0		-			
i (g-d)		Cumulative Participation Over	(Under) Projected	Participants	2,304	4,120					
h (g/c)	Actual	Cumulative	Penetration	Level %	2.8%	5.0%					
D	Ac	Cumulative Number of	Program	Participants <sup>(1)</sup>	2,586	4,684					
f		Annual Number	of Program	Participants	2,586	2,098					
e (d/c)	pe	Cumulative		Level %	0.3%	0.6%	%6.0	1.2%	1.4%	1.7%	1.9%
σ	Projected	Cumulative Number	of Program	Participants	282	564	846	1,128	1,410	1,692	1,974
υ		Total Number		Customers	90,912	92,890	94,924	97,015	99,165	101,376	103,649
р			Total Number of	Customers	139,467	142,934	146,487	150,128	153,859	157,683	161,603
ŋ				Year	2010	2011	2012	2013	2014	2015	2016

	Per Installation	ation	Program	n Total
2011	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	1.00	1.10	2,098	2,308
Winter kW Reduction	1.00	1.10	2,098	2,308
kWh Reduction	4,767	5,121	9,999,346	10,742,744

2.1% 2.3% 2.5%

2,256 2,538 2,820

105,985

165,619

2017

108,387 110,855

169,736 173,955

2018 2019

2011 Utility Cost per Installation	\$146
Total Utility Program Cost (\$000)	\$306
Net Benefits (\$000)	\$0

Note: One Customer, Participant or Installation equals one Summer kW (1) Cumulative participants prior to 2010 (@ Generator) =

34,162

Utility:	Florida Power & Light Company
Program Name:	<b>Business Water Heating</b>
Program Start Date:	May 2006
Reporting Period:	2011

		l

i (g-d)		Cumulative Participation Over (Under) Projected Participants	. (162)	(352)								
h (g/c)	Actual	Cumulative P Penetration (I Level %	%	0.0%								
ß	Act	Cumulative Number of Program Participants <sup>(1)</sup>	25	31								
f		Annual Number of Program Participants	25	9								
e (d/c)	p	Cumulative Penetration Level %	0.3%	0.5%	0.8%	1.0%	1.3%	1.5%	1.7%	1.9%	2.2%	2.3%
q	Projected	Cumulative Number of Program Participants	187	383	589	802	1,021	1,241	1,461	1,681	1,900	2,120
υ		Total Number of Eligible Customers	73,863	75,512	77,197	78,920	80,683	82,488	84,344	86,252	88,212	90,227
م		Total Number of Customers	80,321	82,317	84,363	86,460	88,609	90,812	690'86	95,382	97,753	100,182
ល		Vear	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019

	Per Installation	ation	Program	m Total
2011	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	1.00	1.10	9	2
Winter kW Reduction	0.62	0.68	4	4
kWh Reduction	4,304	4,623	27,542	29,590

	\$14,710	\$94	\$0	
2011	Utility Cost per Installation	Total Utility Program Cost (\$000)	Net Benefits (\$000)	

(1) Cumulative participants prior to 2010 (@ Generator) = Note: One Customer, Participant or Installation equals one Summer kW

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Utility:	Florida Power & Light Company
Program Name:	<b>Business Refrigeration</b>
Program Start Date:	May 2006
Reporting Period:	2011

i (g-d)		Cumulative Participation Over	(Under) Projected Participants	(263)	(426)								
h (g/c)	Actual	Cumulative	Penetration Level %	0.1%	0.4%								
ð	Ac	Cumulative Number of	Program Participants <sup>(1)</sup>	40	181								
f		Annual Number	of Program Participants	40	141								
e (d/c)	pé	Cumulative	Penetration Level %	0.7%	1.3%	1.9%	2.5%	3.0%	3.5%	4.0%	4.5%	4.9%	5.3%
q	Projected	Cumulative Number	of Program Participants	304	607	906	1,196	1,474	1,751	2,029	2,307	2,584	2,862
υ	-	Total Number	of Eligible Customers	45,200	46,020	46,868	47,749	48,668	49,630	50,623	51,647	52,703	53,793
q			Total Number of Customers	87,601	822/68	92,010	94,297	96,641	99,043	101,505	104,028	106,613	109,263
Ø			Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019

			•	
	Per Installation	ation	Program	n lotal
2011	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	1.00	1.10	141	155
Winter kW Reduction	0.86	0.95	122	134
kWh Reduction	4,872	5,235	687,979	739,127

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<sup>(1)</sup> Cumulative participants prior to 2010 (@ Generator) = Note: One Customer, Participant or Installation equals one Summer kW

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	Name:	Start Date:	g Period:
Utility:	Program Name:	Program Start Date	Reporting Period

Florida Power & Light Company Business On Call June 1995 2011

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<sup>2</sup> ,	(g-d)		Cumulative	Participation Over	(Under) Projected	Participants	(4,623)	(5,486)									
<u>ب</u>	(g/c)	Actual		Cumulative	Penetration	Level %	0.1%	0.5%									
D		Ac	Cumulative	Number of	Program	Participants <sup>(1)</sup>	1,901	7,562									H
f				Annual Number	of Program	Participants	1,901	5,662									C
U :	(d/c)	pe		Cumulative	Penetration	Level %	0.4%	0.8%	1.1%	1.5%	1.8%	2.2%	2.5%	2.8%	3.0%	3.3%	
σ		Projected		Cumulative Number	of Program	Participants	6,524	13,048	19,572	26,096	32,620	39,144	45,668	52,192	58,716	65,240	
U				Total Number	of Eligible	Customers	1,632,987	1,667,052	1,702,125	1,738,233	1,775,401	1,813,654	1,853,020	1,893,527	1,935,203	1,978,077	
q					Total Number of	Customers	1,723,593	1,766,434	1,810,340	1,855,337	1,901,452	1,948,714	1,997,150	2,046,791	2,097,665	2,149,804	
Ø						Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	

	Per Installation	ation	Prograr	Program Total
2011	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	1.00	1.10	5,662	6,228
Winter kW Reduction	0.00	00.00	0	0
kWh Reduction	1	1	5,718	6,143

(1) Cumulative participants prior to 2010 (@ Generator) =

90.6 99.2

<sup>(2)</sup> Utility cost per installation is based on cumulative active year end total = 99.2
<sup>(3)</sup> Includes depreciation, return & rebates paid in 2011 to active participating customers who were signed up in 2011 & in years prior Note: One Customer, Participant or Installation equals one Summer kW

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			Projected	ed		Ac	Actual	
	_	Total Number	Cumulative Number	Cumulative	Annual Number	Cumulative Number of	Cumulative	Cumulative Participation Over
Year	Total Number of Customers	of Eligible Customers	of Program Participants	Penetration Level %	of Program Participants	Program Participants <sup>(1)</sup>	Penetration Level %	(Under) Projected Participants
2010	4,895,780	3,780,346	6,333	0.2%	7,786	7,786	0.2%	1,453
2011	5,017,468	3,867,976	12,666	0.3%	7,038	14,825	0.4%	2,159
2012	5,142,180	3,957,941	18,999	0.5%				
2013	5,269,992	4,050,300	25,332	0.6%				
2014	5,400,981	4,145,112	31,665	0.8%				
2015	5,535,225	4,242,438	366'28	0.9%				
2016	5,672,807	4,342,340	44,331	1.0%				
2017	5,813,808	4,444,883	50,664	1.1%				
2018	5,958,314	4,550,133	56,997	1.3%				
2019	6,106,411	4,658,155	63,330	1.4%				

	Per Installation	ation	Prograi	Program Total
2011	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	1.00	1.10	7,038	7,743
Winter kW Reduction	1.00	1.10	7,038	7,743
kWh Reduction	8	8	53,489	57,465

lility Cost per Installation <sup>(2)</sup> \$43 tai Utility Program Cost (\$000) <sup>(3)</sup> \$9,576 et Benefits (\$000) (3) \$45	2011	
	Utility Cost per Installation <sup>(2)</sup>	\$43
	Total Utility Program Cost (\$000) <sup>(3)</sup>	\$9,576
	Net Benefits (\$000)	\$45

<sup>(1)</sup> Cumulative participants prior to 2010 (@ Generator) = 210.5
 <sup>(2)</sup> Utility cost per installation is based on cumulative active year end total = 222.4
 <sup>(3)</sup> includes depreciation, return & rebates paid in 2011 to active participating customers who were signed up in 2011 & in years prior Note: One Customer, Participant or Installation equals one Summer kW

Florida Power & Light Company	m Name: Business Energy Evaluation Program	m Start Date: October 1990	ing Period: 2011
Utility:	Program Name:	Program Start Date:	Reporting Period:

i (g-d)		Cumulative Participation Over	(Under) Projected Participants	7,228	12,918								
h (g/c)	Actual	Cumulative	Penetration Level %	2.5%	4.6%								
6	Ac	Cumulative Number of	Participants <sup>(1)</sup>	13,228	24,918								
f		Annual Number	of Program Participants	13,228	11,690								
e (d/c)	pe	Cumulative	Penetration Level %	1.1%	2.2%	3.3%	4.3%	5.3%	6.3%	7.2%	8.1%	9.0%	9.8%
q	Projected	Cumulative Number	of Program Participants	6,000	12,000	18,000	24,000	30,000	36,000	42,000	48,000	54,000	60,000
υ		Total Number	of Eligible Customers	534,490	541,775	549,390	557,344	565,645	574,301	583,321	592,714	602,491	612,659
q			Total Number of Customers	534,490	547,697	561,576	575,598	290,087	604,956	620,071	635,559	651,590	667,785
Ø			Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019

			N/A - No kW or kWh reductions are attributed to this program
	\$529	\$6,179	N/A
2011	Utility Cost per Installation	Total Utility Program Cost (\$000)	Net Benefits (\$000)

<sup>(1)</sup> Cumulative participants prior to 2010 =

141,194

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Utility:	Florida Power & Light Company
Program Name:	Residential Solar Water Heating Pilot Project
Program Start Date:	May 2011
Reporting Period:	2011

i (g-d)		Cumulative Participation Over (Under) Projected	Participants	0	(4,065)								
h (g/c)	Actual	Cumulative Penetration	Level %	0.0%	0.0%								
в	Ac	Cumulative Number of Program	Participants	0	523								
f		Annual Number of Program	Participants	0	523								
e (d/c)	ed	Cumulative Penetration	Level %	0.0%	0.1%	0.2%	0.3%	0.5%					
σ	Projected	Cumulative Number of Program	Participants <sup>(1)</sup>	0	4,588	9,470	14,444	19,414					
υ		Total Number of Eligible	Customers	4,010,837	4,056,428	4,137,322	4,217,507	4,296,778					
q		Total Number of	Customers	4,010,837	4,056,428	4,141,910	4,226,978	4,311,223					
Ø			Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019

2011 @ Meter Summer kW Reduction				FIUUIAIII I UIAI
$\leq$	-	@ Generator	@ Meter	@ Generator
	0.22	0.24	115	121
Winter kW Reduction	0.45	0.50	235	259
kWh Reduction 1.	1,482	1,592	775,086	832,709

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Florida Power & Light Company Residential Solar Water Heating (Low Income Pilot Project) May 2011 2011 Program Name: Program Start Date: Reporting Period: Utility:

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			Projected	ed (u.c.)		Ac	Actual	6
						Cumulative		Cumulative
		Total Number	Cumulative Number	Cumulative	Annual Number	Number of	Cumulative	Participation Over
	Total Number of	of Eligible	of Program	Penetration	of Program	Program	Penetration	(Under) Projected
Year	Customers	Customers	Participants <sup>(1)</sup>	Level %	Participants	Participants	Level %	Participants
2010	4,010,837	404	0	0.0%	0	0	%0.0	0
2011	4,056,428	404	200	24.8%	0	0	%0.0	(200)
2012	4,141,910	404	400	33.0%				
2013	4,226,978	404	600	37.1%				
2014	4,311,223	404	008	39.6%				
2015								
2016								
2017								
2018								
2019								

	Per Installation	ation	Program	m Total
2011	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	00'0	00.00	0	0
Winter kW Reduction	00.0	0.00	0	0
kWh Reduction	0	0	0	0

	N/A - There were no installations in 2011		
	V/N	11\$	\$0
2011	Utility Cost per Installation	Total Utility Program Cost (\$000)	Net Benefits (\$000)

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Florida Power & Light Company	Business Solar Water Heating Pilot Project	May 2011	2011
Utility:	Program Name:	Program Start Date:	Reporting Period:

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		d ïr	0	(34)								_
i (g-d)		Cumulative Participation Over (Under) Projected Participants										
h (g/c)	Actual	Cumulative Penetration Level %	0.0%	0.0%								
D	Ac	Cumulative Number of Program Participants	0	6								
Ŧ		Annual Number of Program Participants	0	6								
e (d/c)	pa	Cumulative Penetration Level %	0.0%	0.0%	0.0%	0.0%	0.0%					
ס	Projected	Cumulative Number of Program Participants <sup>(1)</sup>	0	43	<b>t</b> 6	157	233					
υ		Total Number of Eligible Customers	534,490	547,697	561,533	575,503	589,930					
A		Total Number of Customers	534,490	547,697	561,576	575,598	590,087					
ŋ	•	Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019

	Per Installation	ation	Prograr	Program Total
2011	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	6.87	7.56	62	68
Winter kW Reduction	0.49	0.54	4	5
kWh Reduction	24,883	26,733	223,945	240,594

2011	
Utility Cost per Installation	\$12,336
Total Utility Program Cost (\$000)	\$111
Net Benefits (\$000)	(\$4)

Utility:	Florida Power & Light Company
Program Name:	Residential Photovoltaic Pilot Project
Program Start Date:	May 2011
Reporting Period:	2011

												_
i (g-d)		Cumulative Participation Over (Under) Projected Participants	0	(69)								
h (g/c)	Actual	Cumulative Penetration Level %	0.0%	0.0%								
D	Ac	Cumulative Number of Program Participants	0	271								
f		Annual Number of Program Participants	0	271								
e (d/c)	pe	Cumulative Penetration Level %	%0.0	0.0%	0.0%	%0.0	%0:0					
q	Projected	Cumulative Number of Program Participants <sup>(1)</sup>	0	340	680	1,020	1,360					
U		Total Number of Eligible Customers	4,010,837	4,056,428	4,141,570	4,226,298	4,310,203					
q		Total Number of Customers	4,010,837	4,056,428	4,141,910	4,226,978	4,311,223					
ø		Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019

	Per Installation	ation	Program	m Total
2011	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	2.62	2.89	711	782
Winter kW Reduction	0.08	0.09	21	23
kWh Reduction	8,636	9,278	2,340,229	2,514,213

	\$11,874	\$3,218	(\$47)	
2011	Utility Cost per Installation	Total Utility Program Cost (\$000)	Net Benefits (\$000)	

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DEMAND-SIDE MANAGEMENT ANNUAL REPORT

Florida Power & Light Company	Business Photovoltaic Pilot Project	May 2011	2011
Utility:	Program Name:	Program Start Date:	Reporting Period:

	(d-d)		Cumulative Participation Over	(Under) Projected	ranicipants	0	(32)								
ح	(g/c)	Actual	Cumulative	Penetration	Level %	0.0%	%0.0								
ס		Ac	Cumulative Number of	Program	ranicipants	0	31								
Ŧ			Annual Number	of Program	ranicipants	0	TE								
Φ	(d/c)	pe	Cumulative	Penetration	Level 70	0.0%	%0.0	%0.0	0.0%	0.0%					
σ		Projected	Cun	of Program	Participants	0	63	130	201	281					
υ			Total Number	of Eligible	CUSIOITIELS	534,490	547,697	561,512	575,468	589,886					
q				Total Number of of Eligible	CUSIOITERS	534,490	547,697	561,576	575,598	590,087					
a					rear	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019

	Per Installation	ation	Program	n Total
2011	@ Meter	@ Generator	@ Meter	@ Generator
Summer kW Reduction	8.12	8.93	252	277
Winter kW Reduction	0.24	0.27	7	8
kWh Reduction	24,528	26,351	760,367	816,896

2011 Utility Cost per Installation \$30,972 Total Utility Program Cost (\$000) \$960 Net Benefits (\$000) (\$47)
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Utility:	Florida Power & Light Company
Program Name:	Business Photovoltaics for Schools Pilot Project
Program Start Date:	May 2011
Keporting Period:	2011

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i (g-d)		Cumulative Participation Over (Under) Projected Participants	0	(18)								
h (g/c)	Actual	Cumulative Penetration Level %	0.0%	0.0%								
Ø	Ac	Cumulative Number of Program Participants	0	0								
f		Annual Number of Program Participants	0	0								
e (d/c)	pe	Cumulative Penetration Level %	0.0%	1.3%	3.0%	4.7%	6.2%					
q	Projected	Cumulative Number of Program Participants <sup>(1)</sup>	0	18	40	61	62					
υ		Total Number of Eligible Customers	1,334	1,334	1,316	1,294	1,273					
Ą		Total Number of Customers	534,490	547,697	561,576	575,598	590,087					
B		Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019

2011 Summer kW Reduction Winter kW Reduction	Per Installation @ Meter @ ( 0.00	ation @ Generator 0.00	Program @ Meter 0	m Total @ Generator (
KVVN REQUCTION	0	0	0	

	N/A - There were no installations in 2011	\$4	20
	Z		
2011	Utility Cost per Installation	Total Utility Program Cost (\$000)	Net Benefits (\$000)

## **RESEARCH & DEVELOPMENT**

<u>Conservation Research & Development (CRD) Program</u>: Under the umbrella of CRD, FPL has researched a wide variety of technologies in an effort to quantify the energy, peak hour load, and bill savings benefits associated with each new potential DSM program measure. In recent years, new program measures identified by CRD have included: Business HVAC Energy Recovery Ventilators; Demand Control Ventilation; and Residential Air Conditioning Duct Plenum sealing. Several technologies researched last year are potentially viable candidates for further product development such as: variable speed pool pumps; hotel occupancy sensors; and residential heat pump water heaters.

Through CRD, FPL also participated in funding new research projects D through Electric Power Research Institute (EPRI). This arrangement allows for cost sharing by numerous utilities enabling FPL to leverage CRD dollars to obtain technical updates on a larger number of energy efficiency and demand reduction measures than would otherwise be practical.

**Renewable Research & Demonstration (RRD) Project:** FPL's RRD has three primary purposes. First is to demonstrate commercially available photovoltaic (PV) and solar water heating (SWH) systems in real world field installations. The second is to conduct specific research projects to quantify the performance of a wider range of renewable products which are less widely known, but worthy of closer examination. The third is to help educate contractors and the public about the proper way to install solar systems for best performance. The ultimate goal is to increase awareness of mainstream solar technologies and evaluate emerging renewable product types and their applications.

FPL plans to accomplish these by:

- Installing photovoltaic and solar water heating systems at public facilities which have suitable mounting locations for the solar panels and educational displays so they can be seen by visitors;
- Funding scientific research conducted by Florida universities or other qualified laboratories to test emerging renewable energy technologies in order to quantify customer savings and the hourly contribution to utility generation; and
- Partnering with universities and technical centers to increase training for solar contractors and educate FPL's residential and business customers about renewable energy.

In 2011, RRD was in the start-up phase. Activities included: beginning the identification of potential sites for PV demonstrations; requesting proposals for renewable research projects resulting in the award of a solar DC air conditioner test; and beginning to formulate plans for partnering with universities for contractor and public seminars.

## OTHER CONSERVATION ACTIVITIES

**Cogeneration & Small Power Production**: The objective of this program is to facilitate these installations. In 2011, there were purchases from twelve facilities. Combine, they produced 3,423GWh with summer and winter MW of 842 and 744 respectively.