

21 West Church Street  
Jacksonville, Florida 32202-3139

February 28, 2013



Stephen Garl  
Regulatory Analyst II  
Division of Electricity and Gas  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850  
Phone: (850) 413-6676

ELECTRIC

Re: Demand Side Management Plan, 2012 FEECA Annual Report

WATER

Dear Mr. Garl:

SEWER

Enclosed is JEA's 2012 FEECA annual report on Demand Side Management activities.

If you have any questions, please do not hesitate to contact me at (904) 665-5720.

Sincerely,

A handwritten signature in blue ink that reads 'Kent O. Mathis'.

Kent O. Mathis, PE, CEM, CMVP  
Manager, DSM Support Services

Encl: 2012 FEECA Annual Report

cc:	Paul McElroy	Bud Para
	Richard Vento	Jane Upton
	Jay Worley	Nancy Kilgo
	James Healy	Don Wucker
	Mike Brost	Brian Roche
	Sheila Pressley	

# **JEA**

## **Demand Side Management (DSM) Annual Report for 2012**

### **Public Service Commission (PSC) Goals**

Sections 366.S0 through 366.S5, and 403.519, Florida Statutes (F.S.), are collectively known as the Florida Energy Efficiency and Conservation Act (FEECA). Section 366.82(2), (F.S.), requires the Florida PSC to adopt appropriate goals designed to increase the conservation of expensive resources, such as petroleum fuels, to reduce and control the growth rates of electric consumption and weather-sensitive peak demand.

In accordance with the FEECA sections noted above, JEA's goals were established in DOCKET NO. 080413-EG, ORDER NO. PSC-10-0198-FOF-EG, ISSUED: March 31, 2010.

### **DSM Plan 2010 – 2019**

Pursuant to Sections 366.81 and 366.82, F.S., Rule 25-17.0021, Florida Administrative Code (F.A.C.), JEA petitioned the Florida PSC to approve the DSM plan filed on March 30, 2010. Subsequently, JEA's plan was approved on October 28, 2010 under docket number: 100157-EG.

### **DSM Reporting Requirements**

In accordance with Section 366.82 (10), F.S., Rule 25-17.0021(5), F.A.C., each utility shall submit an annual report no later than March 1 of each year summarizing its DSM plan and the total actual achieved results for its approved DSM plan in the preceding calendar year.

### **2012 Total Actual Achieved Results**

JEA met all PSC goals as established in DOCKET NO. 080413-EG, ORDER NO. PSC-10-0198-FOF-EG, ISSUED: March 31, 2010. The attached summary contains the relevant details.

As a not-for-profit, community-owned utility, JEA will continue to review and adjust its investment in energy and efficiency.

### **JEA's DSM FEECA Portfolio**

JEA's FEECA portfolio consists of six (6) residential programs, four (4) commercial programs as described below.

## A. Residential Programs

- **Residential Energy Audit Program** uses auditors to examine homes, educate customers and make recommendations on low-cost or no-cost energy-saving practices and measures.
- **Residential Energy Efficient Products** promotes the use of energy efficient lighting and other energy efficient products in homes by offering a financial incentive. JEA includes messaging concerning the proper disposal of bulbs containing mercury.
- **Green Built Homes of Florida** encourages the application of energy efficient construction and products in new homes by offering a financial incentive to builders and developers.
- **Residential Solar Water Heating** pays a financial incentive to customers to encourage the use of solar water heating technology.
- **Residential Solar Net Metering** promotes the use of solar photovoltaic systems by purchasing excessive power from residential customers implementing these systems.
- **Neighborhood Efficiency Program** offers education concerning the efficient use of energy & water as well as the direct installation of an array of energy & water efficient measures at no cost to income qualified customers.

## B. Commercial Programs

- **Commercial Energy Audit Program** uses auditors to examine businesses, educate customers and make recommendations on low-cost or no-cost energy-saving practices and measures.
- **Commercial Energy Efficient Products** promotes the use of energy efficient lighting and other energy efficient products in businesses by offering a financial incentive. JEA includes messaging concerning the proper disposal of bulbs containing mercury.
- **District Chilled Water Program** utilizes district chilled water to reduce energy costs, other operating costs as well as capital costs.
- **Commercial Solar Net Metering** promotes the use of solar photovoltaic systems by purchasing excessive power from commercial customers implementing these systems.



Comparison of Achieved kW and kWh Reductions  
with Annual Target Included in Public Service Commission Approved Goals  
Report Period: 2012

Year	Residential					
	Winter Peak MW Reduction			Summer Peak MW Reduction		
	Cumulative Total Achieved	Cumulative Commission Approved Goal	% Variance**	Cumulative Total Achieved	Cumulative Commission Approved Goal	% Variance**
2010 *	2.7	1.0	172%	2.3	1.2	91%
2011 *	6.3	2.1	198%	5.3	2.4	119%
2012	9.4	3.1	205%	7.8	3.6	117%
2013		4.1			4.8	
2014		5.2			6.1	
2015		6.2			7.3	
2016		7.2			8.5	
2017		8.2			9.7	
2018		9.3			10.9	
2019		10.3			12.1	
				Cumulative Total Achieved	Cumulative Commission Approved Goal	% Variance**
				15.9	5.4	194%
				37.1	10.8	243%
				56.3	16.1	250%

Year	Commercial/Industrial					
	Winter Peak MW Reduction			Summer Peak MW Reduction		
	Cumulative Total Achieved	Cumulative Commission Approved Goal	% Variance**	Cumulative Total Achieved	Cumulative Commission Approved Goal	% Variance**
2010 *	1.2	0.4	205%	0.9	0.6	53%
2011 *	3.3	0.8	315%	2.4	1.3	84%
2012	5.4	1.2	346%	4.0	1.9	111%
2013		1.6			2.6	
2014		2.0			3.2	
2015		2.4			3.8	
2016		2.8			4.5	
2017		3.2			5.1	
2018		3.6			5.8	
2019		4.0			6.4	
				Cumulative Total Achieved	Cumulative Commission Approved Goal	% Variance**
				11.1	10.1	10%
				30.2	20.3	49%
				48.9	30.4	61%

\* - 2010 and 2011 filing numbers have been corrected to more accurately reflect Energy Efficient Products savings per Dec. '12 phone discussion with Stephen Carl

\*\* - Variance calculated based on unrounded values



Program Name: REA: Residential Energy Audits  
 Program Start Date: 1978  
 Reporting Period: 2012

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Number of Eligible Customers	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % (d/cx100)	Actual Annual Number of Program Participants*	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % (g/cx100)	Actual Participation Over (Under) Projected Participants (g-d)
2010	368,783	368,783	2,800	0.8%	4,112	4,112	1.1%	1,312
2011	372,471	372,471	5,600	1.5%	4,906	9,018	2.4%	3,418
2012	376,196	376,196	8,400	2.2%	3,337	12,355	3.3%	3,955
2013	379,958	379,958	11,200	2.9%				
2014	383,758	383,758	14,000	3.6%				
2015	387,595	387,595	16,800	4.3%				
2016	391,471	391,471	19,600	5.0%				
2017	395,386	395,386	22,400	5.7%				
2018	399,340	399,340	25,200	6.3%				
2019	403,333	403,333	28,000	6.9%				

Estimated Annual Demand and Energy Savings	Per Installation		Program Total	
	@meter	@generator	@meter	@generator
Summer kW Reduction	0.100	0.104	333.7	347.4
Winter kW Reduction	0.100	0.104	333.7	347.4
kWH Reduction	200	208	667,400	694,763

\* Participant counts are determined by taking savings values and dividing by the filed, deemed kWh savings per participant



Program Name: REEP: Residential Energy Efficient Products  
 Program Start Date: 2007  
 Reporting Period: 2012

a	b	c	d	e	f	g	h	i
Year	*Total Number of Customers	*Total Number of Eligible Customers	*Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % (d/cx100)	Actual Annual Number of Program Participants**	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % (g/cx100)	Actual Participation Over (Under) Projected Participants (g-d)
2010	1,843,918	1,843,918	13,590	0.7%	14,690	14,690	0.8%	1,100
2011	1,862,357	1,862,357	23,871	1.3%	20,960	33,127	1.8%	9,256
2012	1,880,981	1,880,981	34,152	1.8%	18,902	54,552	2.9%	20,400
2013	1,899,791	1,899,791	44,433	2.3%				
2014	1,918,789	1,918,789	54,714	2.9%				
2015	1,937,977	1,937,977	64,995	3.4%				
2016	1,957,356	1,957,356	75,276	3.8%				
2017	1,976,930	1,976,930	85,557	4.3%				
2018	1,996,699	1,996,699	95,838	4.8%				
2019	2,016,666	2,016,666	106,119	5.3%				

Estimated Annual Demand and Energy Savings	Per Installation		Program Total	
	@meter	@generator	@meter	@generator
Summer kW Reduction	0.066	0.069	1,244.6	1,295.6
Winter kW Reduction	0.089	0.092	1,683.7	1,752.7
kWh Reduction	789.8	822.2	14,929,077	15,541,170

\*Customers & eligible participants are equivalent to the number of filed DSM measures per customer  
 \*\* Participant counts are determined by taking savings values and dividing by the filed, deemed kWh savings per participant



Program Name: GBHF: Green Built Homes of Florida (Energy Star)

Program Start Date: 2006

Reporting Period: 2012

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Number of Eligible Customers	Projected Cumulative Number of Program Participants	*Projected Cumulative Penetration Level % (e/ex100)	Actual Annual Number of Program Participants**	Actual Cumulative Number of Program Participants	*Actual Cumulative Penetration Level % (e/ex100)	Actual Participation Over (Under) Projected Participants (g-d)
2010	368,783	3,688	350	9.5%	363	363	9.8%	13
2011	372,471	3,725	700	9.4%	658	1021	17.7%	321
2012	376,196	3,762	1,050	9.3%	630	1651	16.7%	601
2013	379,958	3,800	1,400	9.2%				
2014	383,758	3,838	1,750	9.1%				
2015	387,595	3,876	2,100	9.0%				
2016	391,471	3,915	2,450	8.9%				
2017	395,386	3,954	2,800	8.9%				
2018	399,340	3,993	3,150	8.8%				
2019	403,333	4,033	3,500	8.7%				

Annual Demand and Energy Savings	Per Installation		Program Total	
	@meter	@generator	@meter	@generator
Summer kW Reduction	0.510	0.531	322.8	336.0
Winter kW Reduction	0.750	0.781	472.5	491.9
kWh Reduction	2,021	2,104	1,272,844	1,325,031

\* Cumulative participation levels are not applicable where the target refreshes annually (i.e new construction)

\*\* Participant counts are determined by taking savings values and dividing by the filed, deemed kWh savings per participant



Program Name: RSWH: Residential Solar Water Heating

Program Start Date: 2002

Reporting Period: 2012

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Eligible Customers	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % (d/cx100)	Actual Annual Number of Program Participants*	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % (g/cx100)	Actual Participation Over (Under) Projected Participants (g-d)
2010	368,783	368,783	250	0.1%	138	138	0.0%	-112
2011	372,471	372,471	500	0.1%	107	245	0.1%	-255
2012	376,196	376,196	750	0.2%	95	340	0.1%	-410
2013	379,958	379,958	1,000	0.3%				
2014	383,758	383,758	1,250	0.3%				
2015	387,595	387,595	1,500	0.4%				
2016	391,471	391,471	1,750	0.4%				
2017	395,386	395,386	2,000	0.5%				
2018	399,340	399,340	2,250	0.6%				
2019	403,333	403,333	2,500	0.6%				

Estimated Annual Demand and Energy Savings	Per Installation		Program Total	
	@meter	@generator	@meter	@generator
Summer kW Reduction	0.420	0.437	40.3	42.0
Winter kW Reduction	0.475	0.494	67.2	70.0
kWH Reduction	2,322	2,417	220,608	229,653

\* Participant counts are determined by taking savings values and dividing by the filed, deemed kWh savings per participant





Program Name: Residential Solar Net Metering  
 Program Start Date: 2009  
 Reporting Period: 2012

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Number of Eligible Customers	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % (d/cx100)	Actual Annual Number of Program Participants*	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % (g/cx100)	Actual Participation Over (Under) Projected Participants (g-d)
2010	368,783	368,783	38	0.01%	29	29	0.01%	-9
2011	372,471	372,471	76	0.02%	8	37	0.01%	-39
2012	376,196	376,196	114	0.03%	25	62	0.02%	-52
2013	379,958	379,958	152	0.04%				
2014	383,758	383,758	190	0.05%				
2015	387,595	387,595	228	0.06%				
2016	391,471	391,471	266	0.07%				
2017	395,386	395,386	304	0.08%				
2018	399,340	399,340	342	0.09%				
2019	403,333	403,333	380	0.09%				

Estimated Annual Demand and Energy Savings	Per Installation		Program Total	
	@meter	@generator	@meter	@generator
Summer kW Reduction	0.70	0.73	17.5	18.2
Winter kW Reduction	0.00	0.00	0.0	0.0
kWH Reduction	5,900	6,142	147,500	153,548

\* Participant counts are determined by taking savings values and dividing by the filed, deemed kWh savings per participant



**Program Name:** NEE: Neighborhood Energy Efficiency

**Program Start Date:** 2008

**Reporting Period:** 2012

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Number of Eligible Customers	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % (d/cx100)	Actual Annual Number of Program Participants*	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % (g/cx100)	Actual Participation Over (Under) Projected Participants (g-d)
2010	368,783	110,635	1,350	1.2%	1,564	1,564	1.4%	214
2011	372,471	111,741	2,700	2.4%	1,539	3,103	2.8%	403
2012	376,196	112,859	4,050	3.6%	1,534	4,637	4.1%	587
2013	379,958	113,987	5,400	4.7%				
2014	383,758	115,127	6,750	5.9%				
2015	387,595	116,279	8,100	7.0%				
2016	391,471	117,441	9,450	8.0%				
2017	395,386	118,616	10,800	9.1%				
2018	399,340	119,802	12,150	10.1%				
2019	403,333	121,000	13,500	11.2%				

**Estimated Annual Demand and Energy Savings**

	Per Installation		Program Total	
	@meter	@generator	@meter	@generator
Summer kW Reduction	0.359	0.374	501.8	522.4
Winter kW Reduction	0.359	0.374	501.8	522.4
kWH Reduction	817	850	1,253,652	1,305,052

\* Participant counts are determined by taking savings values and dividing by the filed, deemed kWh savings per participant



Program Name: CEA: Commercial Energy Audits  
 Program Start Date: 1978  
 Reporting Period: 2012

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Number of Eligible Customers	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % (d/cx100)	Actual Annual Number of Program Participants*	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % (g/cx100)	Actual Participation Over (Under) Projected Participants (g-d)
2010	45,925	45,925	410	0.9%	171	171	0.4%	-239
2011	46,383	46,383	820	1.8%	34	205	0.4%	-615
2012	46,848	46,848	1,230	2.6%	9	214	0.5%	-1,016
2013	47,316	47,316	1,640	3.5%				
2014	47,789	47,789	2,050	4.3%				
2015	48,267	48,267	2,460	5.1%				
2016	48,750	48,750	2,870	5.9%				
2017	49,237	49,237	3,280	6.7%				
2018	49,730	49,730	3,690	7.4%				
2019	50,227	50,227	4,100	8.2%				

Estimated Annual Demand and Energy Savings	Per Installation		Program Total	
	@meter	@generator	@meter	@generator
Summer kW Reduction	0.120	0.125	1.1	1.1
Winter kW Reduction	0.120	0.125	1.1	1.1
kWH Reduction	540	562	4,860	5,059

\* Participant counts are determined by taking savings values and dividing by the filed, deemed kWh savings per participant



Program Name: CEEP: Commercial Energy Efficient Products

Program Start Date: 2007

Reporting Period: 2012

a	b	c	d	e	f	g	h	i
Year	*Total Number of Customers	*Total Number of Eligible Customers	*Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % (d/cx100)	Actual Annual Number of Program Participants**	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % (g/cx100)	Actual Participation Over (Under) Projected Participants (g-d)
2010	229,623	229,623	17,297	7.5%	12,962	12,962	5.6%	-4,335
2011	231,919	231,919	30,382	13.1%	23,100	38,585	16.6%	8,203
2012	234,238	234,238	40,663	17.4%	21,675	57,737	24.6%	17,074
2013	236,580	236,580	50,944	21.5%				
2014	238,946	238,946	61,225	25.6%				
2015	241,336	241,336	71,506	29.6%				
2016	243,749	243,749	81,787	33.6%				
2017	246,187	246,187	92,068	37.4%				
2018	248,648	248,648	102,349	41.2%				
2019	251,135	251,135	112,630	44.8%				

Estimated Annual Demand and Energy Savings

	Per Installation		Program Total	
	@meter	@generator	@meter	@generator
Summer kW Reduction	0.066	0.069	1,312.3	1,366.1
Winter kW Reduction	0.089	0.092	1,880.4	1,957.5
kWH Reduction	789.8	822.2	17,119,178	17,821,064

\*Customers & eligible participants are equivalent to the number of filed DSM measures per customer

\*\* Participant counts are determined by taking savings values and dividing by the filed, deemed kWh savings per participant



Program Name: DCW: District Chilled Water  
 Program Start Date: 2002  
 Reporting Period: 2012

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Number of Eligible Customers	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % (d/cx100)	Actual Annual Number of Program Participants*	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % (g/cx100)	Actual Participation Over (Under) Projected Participants (g-d)
2010	45,925	455	0	0.0%	0	0	0.0%	0
2011	40,400	400	0	0.0%	0	0	0.0%	0
2012	40,800	404	1	0.2%	1	1	0.2%	0
2013	41,200	408	0	0.0%				
2014	41,600	412	0	0.0%				
2015	42,000	416	0	0.0%				
2016	42,400	420	0	0.0%				
2017	42,800	424	0	0.0%				
2018	43,200	428	0	0.0%				
2019	43,600	432	0	0.0%				

Estimated Annual Demand and Energy Savings	Per Installation		Program Total	
	@meter	@generator	@meter	@generator
Summer kW Reduction	240.0	249.8	240.0	249.8
Winter kW Reduction	72.0	75.0	72.0	75.0
kWH Reduction	840,000	874,440	840,000	874,440

\* Participant counts are determined by taking savings values and dividing by the filed, deemed kWh savings per participant



Program Name: CSNM: Commercial Solar Net Metering  
 Program Start Date: 2009  
 Reporting Period: 2012

a	b	c	d	e	f	g	h	i
Year	Total Number of Customers	Total Eligible Customers	Projected Cumulative Number of Program Participants	Projected Cumulative Penetration Level % (d/cx100)	Actual Annual Number of Program Participants*	Actual Cumulative Number of Program Participants	Actual Cumulative Penetration Level % (g/cx100)	Actual Participation Over (Under) Projected Participants (g-d)
2010	45,925	45,925	8	0.02%	5	5	0.01%	-3
2011	46,383	46,383	16	0.03%	4	9	0.02%	-7
2012	46,848	46,848	24	0.05%	0	9	0.02%	-15
2013	47,316	47,316	32	0.07%				
2014	47,789	47,789	40	0.08%				
2015	48,267	48,267	48	0.10%				
2016	48,750	48,750	56	0.11%				
2017	49,237	49,237	64	0.13%				
2018	49,730	49,730	72	0.14%				
2019	50,227	50,227	80	0.16%				

Estimated Annual Demand and Energy Savings	Per Installation		Program Total	
	@meter	@generator	@meter	@generator
Summer kW Reduction	1.50	1.562	0.0	0.0
Winter kW Reduction	0.00	0.000	0.0	0.0
kWH Reduction	10,000	10,410	0	0

\* Participant counts are determined by taking savings values and dividing by the filed, deemed kWh savings per participant