#### **Matilda Sanders**

From:

Mathis, Kent O. [mathko@jea.com]

Sent:

Monday, February 28, 2011 4:41 PM

To:

Filings@psc.state.fl.us

Subject:

JEA 2010 FEECA DSM Annual Report

Attachments: PSC 2010 FEECA Annual DSM Report.pdf

Attached is JEA's Florida Energy Efficiency Conservation Act (FEECA) Demand Side Management Annual Report for calendar year 2010. Please do not hesitate to contact me if you have any questions.

Thank you,

#### Kent O. Mathis, PE, CEM, CMVP

Team Lead, Customer Analytics and EM&V JEA 21 W Church St Jacksonville, FL 32202 (904)665-5720 ph

Florida has a very broad Public Records Law. Virtually all written communications to or from State and Local Officials and employees are public records available to the public and media upon request. JEA does not differentiate between personal and business e-mails. E-mail sent on the JEA system will be considered public and will only be withheld from disclosure if deemed confidential pursuant to State Law. Under Florida law, e-mail addresses are public records. If you do not want your e-mail address released in response to a public-records request, do not send electronic mail to this entity. Instead, contact JEA by phone or in writing.

DOCUMENT NUMBER-DATE

01323 FEB 28 =

21 West Church Street Jacksonville, Florida 32202-3139

February 28, 2011

IEA.

Stephen Garl Regulatory Analyst II Division of Electricity and Gas Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

ELECTRIC

WATER

SEWER

Re: Demand Side Management Plan, 2010 FEECA Annual Report

Dear Mr. Garl:

Enclosed is JEA's 2010 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,

Kent O. Mathis, P.E., C.E.M., C.M.V.P.

Encl: 2010 DSM report

cc:

Jim Dickenson

James Chansler

**Bud Para** 

Greg Quick

Richard Vento

Jay Worley

Paul McElroy

Athena Mann

Marlene Murphy-Roach

Wanyonyi Kendrick

Jane Upton

Don Wucker

DOCUMENT NUMBER-DATE

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FPSC-COMMISSION CLERK

# JEA Demand Side Management (DSM) Annual Report for 2010

### 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.

## 2010 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.

01323 FEB 28 =

- 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.
- <u>Neighborhood Efficiency Program</u> 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 business, 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 businesses by offering a financial incentive. JEA includes messaging concerning the proper disposal of bulbs containing mercury.
- <u>District Chilled Water Program</u> 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.

# JEA.

Comparision of Achieved kW and kWH Reductions with Annual Target Included in Public Service Commission Approved Goals Report Period: 2010

# Residential

	Winter Peak MW Reduction			Summer Peak MW Reduction			GWh Energy Reduction		
		Cumulative			Cumulative			Cumulative	
	Cumulative	Commission		Cumulative	Commission		Cumulative	Commission	
	Total	Approved	%	Total	Approved	%	Total	Approved	%
<u>Year</u>	<u>Achieved</u>	Goal	<u>Variance</u>	<u>Achieved</u>	<u>Goal</u>	<u>Variance</u>	<u>Achieved</u>	<u>Goal</u>	<u>Variance</u>
2010	2.5	1.0	150%	2.1	1.2	75%	13.7	5.4	154%
2011		2.1			2.4			10.8	1
2012		3.1			3.6			16.1	
2013		4.1			4.8			21.5	
2014		5.2			6.1			26.9	
2015		6.2			7.3			32.3	
2016		7.2			8.5			37.7	1
2017		8.2			9.7			43.0	
2018		9.3			10.9			48.4	
2019		10.3			12.1			53.8	

# Commercial/Industrial

	Winte	r Peak MW Red	uction	Summ	er Peak MW Red	duction	GW	h Energy Reduc	tion
		Cumulative			Cumulative			Cumulative	
	Cumulative	Commission		Cumulative	Commission		Cumulative	Commission	
	Total	Approved	%	Total	Approved	%	Total	Approved	%
<u>Year</u>	<u>Achieved</u>	<u>Goal</u>	<u>Variance</u>	Achieved*	<u>Goal</u>	<u>Variance</u>	<u>Achieved</u>	<u>Goal</u>	<u>Variance</u>
2010	1.5	0.4	275%	1.1	0.6	83%	13.2	10.1	31%
2011	:	0.8			1.3			20.3	
2012	į	1.2			1.9			30.4	
2013		1.6			2.6			40.6	
2014		2.0			3.2			50.7	
2015		2.4		i	3.8			60.9	
2016	:	2.8			4.5			71.0	
2017		3.2			5.1			81.2	
2018		3.6			5.8			91.3	
2019	j	4.0			6.4			101.5	_

Program Name:
Program Start Date:

**REA: Residential Energy Audits** 

Program Start Date: Reporting Period:

Winter kW Reduction

kWH Reduction

1978 **2010** 

а	b	С	d	е	f	g	h	1
								Actual
			Projected	Projected	Actual	Actual	Actual	Participation
		Total	Cumulative	Cumulative	Annual	Cumulative	Cumulative	Over (Under)
	Total	Number of	Number of	Penatration	Number of	Number of	Penatration	Projected
	Number of	Eligible	Program	Level %	Program	Program	Level %	Participants
<u>Year</u>	<u>Customers</u>	<u>Customers</u>	<u>Participants</u>	(d/cx100)	<u>Participants</u>	<u>Participants</u>	(g/cx100)	<u>(g-d)</u>
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%				
2012	376,196	376,196	8,400	2.2%				
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 R	Reduction			0.100		411.2	428.1	

0.100 200 0.104

208

411.2

822,400

428.1

856,118

2/28/2011 REA

JEA.

Program Name: Program Start Date: REEP: Residential Energy Efficient Products

Program Start Dat Reporting Period: 2007 **2010** 

*Total	*Projected Cumulative	Projected	Actual	Antoni		Actual
		Projected	Actual	A second		
	Cumulativa		notual	Actual	Actual	Participation
	Cultitulative	Cumulative	Annual	Cumulative	Cumulative	Over (Under)
otal Number of	Number of	Penatration	Number of	Number of	Penatration	Projected
ber of Eligible	Program	Level %	Program	Program	Level %	Participants
omers <u>Customers</u>	Participants	(d/cx100)	<u>Participants</u>	Participants	(g/cx100)	<u>(g-d)</u>
3,918 1,843,918	13,590	0.7%	12,167	12,167	0.7%	-1,423
2,357 1,862,357	23,871	1.3%				
0,981 1,880,981	34,152	1.8%				
9,791 1,899,791	44,433	2.3%				
8,789 1,918,789	54,714	2.9%				
7,977 1,937,977	64,995	3.4%				
7,356 1,957,356	75,276	3.8%				
6,930 1,976,930	85,557	4.3%				
6,699 1,996,699	95,838	4.8%				
6,666 2,016,666	106,119	5.3%				
9 8 7 6 6	791 1,899,791 789 1,918,789 977 1,937,977 ,356 1,957,356 ,930 1,976,930 ,699 1,996,699	791     1,899,791     44,433       ,789     1,918,789     54,714       ,977     1,937,977     64,995       ,356     1,957,356     75,276       ,930     1,976,930     85,557       ,699     1,996,699     95,838	791       1,899,791       44,433       2.3%         ,789       1,918,789       54,714       2.9%         ,977       1,937,977       64,995       3.4%         ,356       1,957,356       75,276       3.8%         ,930       1,976,930       85,557       4.3%         ,699       1,996,699       95,838       4.8%	791       1,899,791       44,433       2.3%         ,789       1,918,789       54,714       2.9%         ,977       1,937,977       64,995       3.4%         ,356       1,957,356       75,276       3.8%         ,930       1,976,930       85,557       4.3%         ,699       1,996,699       95,838       4.8%	791       1,899,791       44,433       2.3%         ,789       1,918,789       54,714       2.9%         ,977       1,937,977       64,995       3.4%         ,356       1,957,356       75,276       3.8%         ,930       1,976,930       85,557       4.3%         ,699       1,996,699       95,838       4.8%	791       1,899,791       44,433       2.3%         ,789       1,918,789       54,714       2.9%         ,977       1,937,977       64,995       3.4%         ,356       1,957,356       75,276       3.8%         ,930       1,976,930       85,557       4.3%         ,699       1,996,699       95,838       4.8%

Estimated Annual Demand and Energy Savings	Per Inst	allation	Program Total		
	@meter	@generator	@meter	@generator	
Summer kW Reduction	0.066	0.069	803.0	835.9	
Winter kW Reduction	0.089	0.092	1,080.4	1,124.7	
kWH Reduction	810.2	843.5	9,858,190	10,262,376	

<sup>\*</sup>Customers & eligible participants are equivalent to the number of DSM measures per customer

REEP

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

Program Start Date Reporting Period:

а

2006 **2010** 

С

Period: 201

b

	Total Number of	Total Number of Eligible	Projected Cumulative Number of Program	*Projected Cumulative Penatration Level %	Actual Annual Number of Program	Actual Cumulative Number of Program	*Actual Cumulative Penatration Level %	Actual Participation Over (Under) Projected Participants
<u>Year</u>	<u>Customers</u>	<u>Customers</u>	Participants	(d/cx100)	<u>Participants</u>	<u>Participants</u>	(g/cx100)	<u>(q-d)</u>
2010	368,783	3,688	350	9.5%	363	363	9.8%	13
2011	372,471	3,725	700	9.4%				
2012	376,196	3,762	1,050	9.3%				
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%				

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Annual Demand and Energy Savings	Per Inst	allation	Program Total		
_	@meter	@generator	@meter	@generator	
Summer kW Reduction	0.510	0.531	185.1	192.7	
Winter kW Reduction	0.750	0.781	272.3	283.4	
kWH Reduction	2,021	2,104	733,623	763,702	

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

2/28/2011 GBHF

RSWH: Residential Solar Water Heating

Program Name: Program Start Date: Reporting Period:

2002 **2010** 

а	b	С	d	е	f	g	h	1

								Actual
			Projected	Projected	Actual	Actual	Actual	Participation
		Total	Cumulative	Cumulative	Annual	Cumulative	Cumulative	Over (Under)
	Total	Number of	Number of	Penatration	Number of	Number of	Penatration	Projected
	Number of	Eligible	Program	Level %	Program	Program	Level %	Participants
<u>Year</u>	<u>Customers</u>	<u>Customers</u>	<u>Participants</u>	(d/cx100)	<u>Participants</u>	<u>Participants</u>	(g/cx100)	<u>(g-d)</u>
2010	368,783	368,783	250	0.1%	138	138	0.0%	-112
2011	372,471	372,471	500	0.1%				
2012	376,196	376,196	750	0.2%				
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%		<b>&gt;</b>		
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 Insta	allation	Program Total	
	@meter	@generator	@meter	@generator
Summer kW Reduction	0.420	0.437	58	60
Winter kW Reduction	0.475	0.494	66	68
kWH Reduction	2,322	2,417	320,472	333,611

**RSWH** 2/28/2011

Program Name:

ESNM: Residential Solar Net Metering

Program Start Date: Reporting Period:

2009 **2010** 

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								Actual
			Projected	Projected	Actual	Actual	Actual	Participation
		Total	Cumulative	Cumulative	Annual	Cumulative	Cumulative	Over (Under)
	Total	Number of	Number of	Penatration	Number of	Number of	Penatration	Projected
	Number of	Eligible	Program	Level %	Program	Program	Level %	Participants
<u>Year</u>	<u>Customers</u>	<u>Customers</u>	<u>Participants</u>	(d/cx100)	<u>Participants</u>	<u>Participants</u>	(g/cx100)	<u>(g-d)</u>
2010	368,783	368,783	38	0.01%	29	29	0.01%	-9
2011	372,471	372,471	76	0.02%				
2012	376,196	376,196	114	0.03%				
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 Inst	allation	Program Total		
	@meter	@generator	@meter	@generator	
Summer kW Reduction	0.70	0.73	20.3	21.1	
Winter kW Reduction	0.00	0.00	0.0	0.0	
kWH Reduction	5,900	6,142	171,100	178,115	

2/28/2011 RSNM

JEA.

Program Name: Program Start Date:

Winter kW Reduction

kWH Reduction

NEE: Neighborhood Energy Efficiency 2008

Reporting Period:

2010

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								Actual
			Projected	Projected	Actual	Actual	Actual	Participation
		Total	Cumulative	Cumulative	Annual	Cumulative	Cumulative	Over (Under)
	Total	Number of	Number of	Penatration	Number of	Number of	Penatration	Projected
	Number of	Eligible	Program	Level %	Program	Program	Level %	Participants
<u>Year</u>	<u>Customers</u>	<u>Customers</u>	<u>Participants</u>	(d/cx100)	<u>Participants</u>	<u>Participants</u>	(g/cx100)	<u>(g-d)</u>
2010	368,783	110,635	1,350	1.2%	1,564	1,564	1.41%	214
2011	372,471	111,741	2,700	2.4%				
2012	376,196	112,859	4,050	3.6%				
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 Ann	ual Demand and	Energy Savings	<b>,</b>	Per Ins	tallation	Progra	m Total	
		J. •		@meter	@generator	@meter	@generator	
Summer kW R	teduction			0.359	0.374		584	

0.359

817

0.374

850

561

1,277,788

584

1,330,177

NEE 2/28/2011

CEA: Commercial Energy Audits

Program Name: Program Start Date: Reporting Period:

1978 **2010** 

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					_			Actual
			Projected	Projected	Actual	Actual	Actual	Participation
		Total	Cumulative	Cumulative	Annual	Cumulative	Cumulative	Over (Under)
	Total	Number of	Number of	Penatration	Number of	Number of	Penatration	Projected
	Number of	Eligible	Program	Level %	Program	Program	Level %	Participants
<u>Year</u>	Customers	<u>Customers</u>	<u>Participants</u>	(d/cx100)	<u>Participants</u>	<u>Participants</u>	(g/cx100)	<u>(q-d)</u>
2010	45,925	45,925	410	0.9%	171	171	0.4%	-239
2011	46,383	46,383	820	1.8%				
2012	46,848	46,848	1,230	2.6%				
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 Inst	allation	Program Total		
•	@meter	@generator	@meter	@generator	
Summer kW Reduction	0.120	0.125	20.5	21.4	
Winter kW Reduction	0.120	0.125	20.5	21.4	
kWH Reduction	540	562	92,340	96,126	

CEA 2/28/2011

Program Name: Program Start Date: **CEEP: Commercial Energy Efficient Products** 

January 2007

Reporting Period:

2010

a	U	· ·	u	C	•	9	11	•	
								Actual	
			*Projected	Projected	. Actual	Actual	Actual	<b>Participation</b>	
		*Total	Cumulative	Cumulative	Annual	Cumulative	Cumulative	Over (Under)	
	*Total	Number of	Number of	Penatration	Number of	Number of	Penatration	Projected	
	Number of	Eligible	Program	Level %	Program	Program	Level %	Participants	
<u>Year</u>	<u>Customers</u>	Customers	<b>Participants</b>	(d/cx100)	<u>Participants</u>	<u>Participants</u>	(g/cx100)	(g-d)	
2010	229,623	229,623	17,297	7.5%	15,485	15,485	6.7%	-1,812	
2011	231,919	231,919	30,382	13.1%					
2012	234,238	234,238	40,663	17.4%					
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 Inst	allation	Program Total		
	@meter @generator		@meter	@generator	
Summer kW Reduction	0.066	0.069	1,022.0	1,063.9	
Winter kW Reduction	0.089	0.092	1,375.1	1,431.4	
kWH Reduction	810.2	843.5	12,546,566	13,060,976	

<sup>\*</sup>Customers & eligible participants are equivalent to the number of DSM measures per customer

2/28/2011 CEEP

Program Name: Program Start Date: Reporting Period:

DCW: District Chilled Water

January 2002

2010

а	ь	С	d	е	f	g	h	ı
								Actual
			Projected	Projected	Actual	Actual	Actual	Participation
		Total	Cumulative	Cumulative	Annual	Cumulative	Cumulative	Over (Under)
	Total	Number of	Number of	Penatration	Number of	Number of	Penatration	Projected
	Number of	Eligible	Program	Level %	Program	Program	Level %	Participants
<u>Year</u>	<u>Customers</u>	Customers	<u>Participants</u>	(d/cx100)	<u>Participants</u>	<u>Participants</u>	(g/cx100)	<u>(g-d)</u>
2010	45,925	455	0	0.0%	0	0	0.00%	0
2011	40,400	400	0	0.0%				
2012	40,800	404	1	0.2%				
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 Inst	allation	Program Total		
	@meter	@generator	@meter	@generator	
Summer kW Reduction	240.0	249.8	0	0	
Winter kW Reduction	72.0	75.0	0	0	
kWH Reduction	840,000	874,440	0	0	

DCW 2/28/2011

CSNM: Commercial Solar Net Metering

Program Name: Program Start Date: Reporting Period:

2009 2010

;	a	b	С	а	е	l	y	11	•
									Actual
				Projected	Projected	Actual	Actual	Actual	Participation
			Total	Cumulative	Cumulative	Annual	Cumulative	Cumulative	Over (Under)
		Total	Number of	Number of	Penatration	Number of	Number of	Penatration	Projected
		Number of	Eligible	Program	Level %	Program	Program	Level %	Participants
Ye	ear	Customers	Customers	<u>Participants</u>	(d/cx100)	<u>Participants</u>	<u>Participants</u>	(g/cx100)	<u>(g-d)</u>
	010	45,925	45,925	8	0.02%	5	5	0.01%	-3
20	011	46,383	46,383	16	0.03%				
20	)12	46,848	46,848	24	0.05%				
20	013	47,316	47,316	32	0.07%				
20	14	47,789	47,789	40	0.08%				
20	015	48,267	48,267	48	0.10%				
20	016	48,750	48,750	56	0.11%				
20	017	49,237	49,237	64	0.13%				
20	018	49,730	49,730	72	0.14%				
20	019	50,227	50,227	80	0.16%				

Estimated Annual Demand and Energy Savings	Per Inst	allation	Program Total		
	@meter	@generator	@meter	@generator	
Summer kW Reduction	1.50	1.562	7.5	7.8	
Winter kW Reduction	0.00	0.000	0.0	0.0	
kWH Reduction	10,000	10,410	50,000	52,050	

CSNM