JEA Demand Side Management (DSM) FEECA Annual Report for 2020

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. 20190020, ORDER NO. PSC-2019-0509-FOF-EG, ISSUED November 26, 2019.

DSM Plan 2020 - 2024

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 February 24, 2020. Subsequently, JEA's plan was approved on June 24, 2020 under docket number: 20200057.

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 by 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.

2020 Total Actual Achieved Results

JEA exceeded all of the PSC goals as established in the above mentioned docket.

Additionally, JEA achieves additional savings from for its non-RIM (i.e. not part of FEECA) DSM programs consistent with data filed on form EIA-861 as required by the U.S. Energy Information Administration (EIA). This information has not been finalized for the filing year, but will be available on the EIA website when posted. As a not-for-profit, community-owned utility, JEA will continue to review and adjust its investment in demand side programs.

JEA's DSM FEECA Portfolio

JEA's FEECA portfolio consists of four (3) residential programs, two (2) commercial programs as described below. Achieved kW and kWh reductions are on page 5.

A. Residential FEECA Programs

- <u>Residential Energy Audit Program</u> uses auditors to examine homes, educate customers and make recommendations on low-cost or no-cost energy-saving practices and measures.
- **<u>Residential Solar Water Heating</u>** pays a financial incentive to customers to encourage the use of solar water heating technology.
- <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 FEECA Programs

- <u>Commercial Energy Audit Program</u> uses auditors to examine businesses, educate customers and make recommendations on low-cost or no-cost energy- saving practices and measures.
- <u>Commercial Prescriptive Lighting Program</u> pays a financial incentive to customers to encourage the use of high efficiency lighting technology

JEA's DSM Non-RIM Portfolio

JEA's non-RIM portfolio consists of three (5) residential programs, three (4) commercial programs as described below. Achieved kW and kWh reductions are summarized on page 4.

A. Residential Non-RIM Programs

- **<u>Residential Efficiency Upgrade</u>** pays a financial incentive to encourage the use of high efficiency HVAC and water heating products and services.
- <u>Energy Efficient Products</u> pays a financial incentive to encourage the use of high efficiency lighting and appliance products.
- **<u>Residential New Build</u>** promotes the use high efficiency HVAC, water heating, lighting and appliances in the new construction market.
- <u>MyWay Prepaid Program</u> offers an option for all customers, especially those who prefer to prepay for services vs being billed monthly. It is consumer-focused experience for environmentally conscious consumers who like to keep their consumption in mind.
- **<u>Residential Distributed Generation & Battery Rebate Program</u>** pays a financial incentive to encourage the use of battery storage when purchasing a new solar voltaic systems.

B. Commercial Non-RIM Programs

- <u>Commercial Prescriptive Program</u> pays a financial incentive to encourage the use of high efficiency HVACR, cooking and water heating products and services.
- <u>Small Business Direct Install Program</u> promotes the use high efficiency HVAC, water heating, lighting and appliances in the small business sector.
- <u>Custom Commercial Program</u> promotes the use of custom efficiency measures based on specific applications for each customer
- **<u>Commercial Distributed Generation & Battery Rebate Program</u>** pays a financial incentive to encourage the use of battery storage when purchasing a new solar voltaic systems.

JEA

Comparison of Achieved kW and kWH Reductions with Annual Target Included in Public Service Commission Approved Goals Report Period: **2020**

	Total											
	Winte	Winter Peak MW Reduction			Summer Peak MW Reduction			GWh Energy Reduction				
	Commission			Commission				Commission				
	Total	Approved	%	Total	Approved	%	Total	Approved	%			
<u>Year</u>	<u>Achieved</u>	<u>Goal</u>	Variance**	<u>Achieved</u>	<u>Goal</u>	Variance**	Achieved	<u>Goal</u>	Variance**			
2020	2.376	0.967	146%	3.192	1.080	196%	10.18	2.58	294.8%			
2021		0.967			1.080			2.58				
2022		0.967			1.080			2.58				
2023		0.967			1.080			2.58				
2024		0.967			1.080			2.58				

Residential

_	TCS/dCfflidi										
Γ		Winte	r Peak MW Red	luction	Summ	er Peak MW Re	duction	GWh Energy Reduction			
		Commission			Commission				Commission		
		Total	Approved	%	Total	Approved	%	Total	Approved	%	
	Year	<u>Achieved</u>	<u>Goal</u>	Variance**	Achieved	<u>Goal</u>	Variance**	<u>Achieved</u>	<u>Goal</u>	Variance**	
	2020	1.794	0.960	87%	2.004	0.940	113%	3.94	2.50	57.7%	
	2021		0.960			0.940			2.50		
	2022		0.960			0.940			2.50		
	2023		0.960			0.940			2.50		
	2024		0.960			0.940			2.50		

Commercial/Industrial

	Winte	er Peak MW Red	luction	Summ	er Peak MW Re	duction	GWh Energy Reduction		
	Commission				Commission			Commission	
	Total	Approved	%	Total	Approved	%	Total	Approved	%
Year	Achieved	Goal	Variance**	<u>Achieved</u>	Goal	Variance**	Achieved	Goal	Variance**
2020	0.582	0.007	8211%	1.188	0.140	749%	6.24	0.08	7701.9%
2021		0.007			0.140			0.08	
2022		0.007			0.140			0.08	
2023		0.007			0.140			0.08	
2024		0.007			0.140			0.08	

** - Variance calculated based on unrounded values

Program Name: Program Start Date: Reporting Period:		JEA REA: Residential Energy Audits 1978 2020								
а	b	С	d	е	f	g	h	I		
								Actual		
			Projected	Projected	Actual	Actual	Actual	Participation		
		Total	Cumulative	Cumulative	Annual	Cumulative	Cumulative	Over (Under)		
	Total	Number of	Number of	Penetration	Number of	Number of	Penetration	Projected		
	Number of	Eligible	Program	Level %	Program	Program	Level %	Participants		
Year	<u>Customers</u>	<u>Customers</u>	Participants	<u>(d/cx100)</u>	Participants	Participants	<u>(g/cx100)</u>	<u>(g-d)</u>		
2020	424,939	424,939	5,200	1.2%	13,111	13,111	3.1%	7,911		
2021	431,420	431,420	10,400	2.4%						
2022	437,973	437,973	15,600	3.6%						
2023	444,544	444,544	20,800	4.7%						
2024	450,901	450,901	26,000	5.8%						

Estimated Annual Demand and Energy Savings	Per Ins	stallation	Progra	m Total	_
-	@meter	@generator	<u>@meter</u>	@generator	•
Summer kW Reduction	0.100	0.104	1,311.1	1,363.5	
Winter kW Reduction	0.100	0.104	1,311.1	1,363.5	
kWH Reduction	200	208	2,622,200.0	2,727,088.0	
Utility Cost per Installation Total Program Cost of the Utility (Administration and Incentives) Net Benefits of Measures Installed During Reporting Period					\$ 102.80 \$ 1,347,811 \$ (156,676)

Program Name: Program Start Date: Reporting Period:		JEA RSWH: Residential Solar Water Heating 2002 2020									
а	b	С	d	е	f	g	h	I			
	Total Number of	Total Number of Eligible	Projected Cumulative Number of Program	Projected Cumulative Penetration Level %	Actual Annual Number of Program	Actual Cumulative Number of Program	Actual Cumulative Penetration Level %	Actual Participation Over (Under) Projected Participants			
<u>Year</u>	<u>Customers</u>	<u>Customers</u>	Participants	<u>(d/cx100)</u>	Participants	Participants	<u>(g/cx100)</u>	<u>(g-d)</u>			
2020	424,939	424,939	2	0.000%	0	0	0.0%	(2)			
2021	431,420	431,420	4	0.001%							
2022	437,973	437,973	6	0.001%							
2023	444,544	444,544	8	0.002%							
2024	450,901	450,901	10	0.002%							

Estimated Annual Demand and Energy Savings	Per Ins	stallation	Progra	ım Total	_	
_	<u>@meter</u>	@generator	<u>@meter</u>	@generator	-	
Summer kW Reduction	0.420	0.436	0.0	0.0		
Winter kW Reduction	0.475	0.493	0.0	0.0		
kWH Reduction	2,322	2,410	0.0	0.0		
Utility Cost per Installation					\$	1,130
Total Program Cost of the Utility (Administration and Incentives)					\$	-
Net Benefits of Measures Installed During Reporting Period					\$	-

Program Name Program Start Reporting Perio	Date:	JEA NEE: Neighborhood Energy Efficiency 2008 2020								
а	b	с	d	е	f	g	h	I		
	Total Number of	Total Number of Eligible	Projected Cumulative Number of Program	Projected Cumulative Penetration Level %	Actual Annual Number of Program	Actual Cumulative Number of Program	Actual Cumulative Penetration Level %	Actual Participation Over (Under) Projected Participants		
Year	<u>Customers</u>	<u>Customers</u>	Participants	<u>(d/cx100)</u>	Participants	Participants	<u>(g/cx100)</u>	<u>(g-d)</u>		
2020	424,939	127,482	1,350	1.1%	1,122	1,122	0.9%	(228)		
2021	431,420	129,426	2,700	2.1%						
2022	437,973	131,392	4,050	3.1%						
2023	444,544	133,363	5,400	4.0%						
2024	450,901	135,270	6,750	5.0%						

Estimated Annual Demand and Energy Savings	Per Ins	stallation	Program Total			
_	<u>@meter</u>	@generator	<u>@meter</u>	@generator	-	
Summer kW Reduction	0.55	0.571	617.1	640.7		
Winter kW Reduction	0.37	0.384	415.1	430.8		
kWH Reduction	1,044	1,084	1,171,368.0	1,216,248.0		
Utility Cost per Installation Total Program Cost of the Utility (Administration and Incentives) Net Benefits of Measures Installed During Reporting Period					\$ \$ \$	518 581,308 (10,508)

Program Name Program Start Reporting Perio	Date:	JEA CEA: Commercial Energy Audits 1978 2020								
а	b	С	d	е	f	g	h	I		
			Projected	Projected	Actual	Actual	Actual	Actual Participation		
		Total	Cumulative	Cumulative	Annual	Cumulative	Cumulative	Over (Under)		
	Total	Number of	Number of	Penetration	Number of	Number of	Penetration	Projected		
	Number of	Eligible	Program	Level %	Program	Program	Level %	Participants		
Year	Customers	Customers	Participants	<u>(d/cx100)</u>	Participants	Participants	<u>(g/cx100)</u>	<u>(g-d)</u>		
2020	54,298	54,298	100	0.2%	142	142	0.3%	42		
2021	54,932	54,932	200	0.4%						
2022	55,557	55,557	300	0.5%						
2023	56,173	56,173	400	0.7%						
2024	56,784	56,784	500	0.9%						

Estimated Annual Demand and Energy Savings	Per Ins	stallation	Program Total			
_	@meter	@generator	<u>@meter</u>	@generator	•	
Summer kW Reduction	0.120	0.125	17.0	17.8		
Winter kW Reduction	0.120	0.125	17.0	17.8		
kWH Reduction	540	562	76,680.0	79,804.0		
Utility Cost per Installation					\$	221
Total Program Cost of the Utility (Administration and Incentives)					\$	31,382
Net Benefits of Measures Installed During Reporting Period					\$	186

Program Nam Program Start Reporting Peri	Date:	JEA CPL: Commercial Prescriptive Lighting 2009 2020								
а	b	С	d	е	f	g	h	I		
	Total Number of	Total Number of Eligible	Projected Cumulative Number of Program	Projected Cumulative Penetration Level %	Actual Annual Number of Program	Actual Cumulative Number of Program	Actual Cumulative Penetration Level %	Actual Participation Over (Under) Projected Participants		
<u>Year</u>	<u>Customers</u>	Customers	Participants	<u>(d/cx100)</u>	Participants **	Participants	<u>(g/cx100)</u>	<u>(g-d)</u>		
2020	54,298	54,298	20	0.04%	141	141	0.26%	121		
2021	54,932	54,932	40	0.07%						
2022	55,557	55,557	60	0.11%						
2023	56,173	56,173	80	0.14%						
2024	56,784	56,784	100	0.18%						

Estimated Annual Demand and Energy Savings	Per Installation		Program Total		_	
_	@meter	@generator	<u>@meter</u>	@generator		
Summer kW Reduction	8.0	8.3	1,128.0	1,170.3		
Winter kW Reduction	3.9	4.0	549.9	564.0		
kWH Reduction	42,100	43,700	5,936,100.0	6,161,700.0		
Utility Cost per Installation					\$	1,900
Total Program Cost of the Utility (Administration and Incentives)					\$	267,900
Net Benefits of Measures Installed During Reporting Period					\$	(100,743)

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