

BEFORE THE PUBLIC SERVICE COMMISSION

In re: Petition of JEA for approval of demand side management plan.

DOCKET NO. _____

FILED: March 16, 2015

JEA’S PETITION FOR APPROVAL OF DEMAND SIDE MANAGEMENT PLAN

Pursuant to Sections 366.81 and 366.82, Florida Statutes (“F.S.”), and Rule 25-17.0021, Florida Administrative Code (“F.A.C.”), JEA petitions the Florida Public Service Commission to approve the demand side management plan provided as Exhibit “A” to this Petition and incorporated by reference herein. In support of this Petition, JEA states:

1. The name and address of the affected agency are: Florida Public Service Commission, 4075 Esplanade Way, Tallahassee, Florida, 32399-0850.
2. The name and address of the petitioner are: JEA, 21 West Church Street, Jacksonville, Florida, 32202.
3. The persons to whom orders, notices, pleadings, motions and other documents for JEA should be served are:

Richard J. Vento
Director of Corporate
Data Integration
21 West Church Street
Jacksonville, FL 32202
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4. JEA is a utility within the meaning of Section 366.82(1), Florida Statutes, and is therefore subject to the Commission's jurisdiction under to the Florida Energy Efficiency and Conservation Act (“FEECA”).
5. Pursuant to Section 366.82(6), F.S., the Commission must review the conservation goals of each utility subject to FEECA at least every five years. In accordance with

that requirement, the Commission established JEA's residential and commercial/industrial numeric conservation goals for the 2015 through 2024 period in Order Nos. PSC-13-0645-PAA-EU and PSC-14-0696-FOF-EU issued in Docket No. 130203-EM.

6. Rule 25-17.0021(4), F.A.C., requires each FEECA utility to submit a demand side management plan designed to meet the utility's approved goals within 90 days of a final order establishing the goals. The demand side management plan provided as Exhibit "A" to this Petition includes the information required in Rule 25-17.0021(4), F.A.C.

7. JEA is not aware of any disputed issues of material fact.

8. JEA is entitled to relief pursuant to Sections 366.82, F.S., and Rule 25-17.0021, F.A.C.

WHEREFORE, JEA respectfully requests that the Commission approve the demand side management plan provided as Exhibit "A" to this Petition.

RESPECTFULLY SUBMITTED this 16th day of March, 2015.

HOPPING GREEN & SAMS, P.A.

By: /s/ Gary V. Perko
Gary V. Perko
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Attorneys for JEA

CERTIFICATE OF SERVICE

I hereby certify that the foregoing Petition for Approval of Demand Side Management Plan was filed with the Clerk of the Florida Public Service Commission and that a true and correct copy was served upon the following by hand delivery on this 16th day of March 2015:

Lee Eng Tan Esq.
Office of General Counsel
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

/s/ Gary V. Perko _____
Attorney

**I. PROGRAM GOALS
AND
IMPACT**

BACKGROUND: The Florida Energy Efficiency and Conservation Act (FEECA) requires the Florida Public Service Commission (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. Pursuant to Section 366.82(6), F.S., the PSC must review the conservation goals of each utility subject to FEECA at least every five years. Pursuant to that requirement, the Commission has established JEA's residential and commercial/industrial numeric conservation goals for the 2015 through 2024 period. As stated in Order No. PSC-14-0696-FOF-EU issued December 16, 2014; the PSC chose to establish goals for JEA based upon the savings associated with core measures JEA intends to offer its electric customers. In accordance with this order, JEA's final PSC-established annual goals, along with JEA's projected annual DSM peak demand and energy reductions (corresponding to the programs discussed in subsequent sections of this document) are presented in Tables I-1, I-2 and I-3. The rate impact for a typical residential customer is shown in Table I-4.

A. GOALS & IMPACT

Table I-1
Residential Market Segment Demand and Energy Data

YEAR	WINTER PEAK MW REDUCTION			SUMMER PEAK MW REDUCTION			GWH ENERGY REDUCTION		
	PROPOSED PLAN	COMMISSION APPROVED GOAL	% VARIANCE	PROPOSED PLAN	COMMISSION APPROVED GOAL	% VARIANCE	PROPOSED PLAN	COMMISSION APPROVED GOAL	% VARIANCE
2015	1.03	0.96	7.7%	1.2	0.94	23.8%	2.67	2.50	6.6%
2016	1.03	0.96	7.7%	1.2	0.94	23.8%	2.67	2.50	6.6%
2017	1.03	0.96	7.7%	1.2	0.94	23.8%	2.67	2.50	6.6%
2018	1.03	0.96	7.7%	1.2	0.94	23.8%	2.67	2.50	6.6%
2019	1.03	0.96	7.7%	1.2	0.94	23.8%	2.67	2.50	6.6%
2020	1.03	0.96	7.7%	1.2	0.94	23.8%	2.67	2.50	6.6%
2021	1.03	0.96	7.7%	1.2	0.94	23.8%	2.67	2.50	6.6%
2022	1.03	0.96	7.7%	1.2	0.94	23.8%	2.67	2.50	6.6%
2023	1.03	0.96	7.7%	1.2	0.94	23.8%	2.67	2.50	6.6%
2024	1.03	0.96	7.7%	1.2	0.94	23.8%	2.67	2.50	6.6%
Total	10.34	9.60	7.7%	11.6	9.40	23.8%	26.65	25.00	6.6%

Note: Variance calculated utilizing the formula: (Actual -Goal) / Goal, and is based on unrounded values

Table I-2
Commercial Market Segment Demand and Energy Data

YEAR	WINTER PEAK MW REDUCTION			SUMMER PEAK MW REDUCTION			GWH ENERGY REDUCTION		
	PROPOSED PLAN	COMMISSION APPROVED GOAL	% VARIANCE	PROPOSED PLAN	COMMISSION APPROVED GOAL	% VARIANCE	PROPOSED PLAN	COMMISSION APPROVED GOAL	% VARIANCE
2015	0.025	0.007	258.3%	0.144	0.140	3.1%	0.44	0.08	452.3%
2016	0.025	0.007	258.3%	0.144	0.140	3.1%	0.44	0.08	452.3%
2017	0.025	0.007	258.3%	0.144	0.140	3.1%	0.44	0.08	452.3%
2018	0.025	0.007	258.3%	0.144	0.140	3.1%	0.44	0.08	452.3%
2019	0.025	0.007	258.3%	0.144	0.140	3.1%	0.44	0.08	452.3%
2020	0.025	0.007	258.3%	0.144	0.140	3.1%	0.44	0.08	452.3%
2021	0.025	0.007	258.3%	0.144	0.140	3.1%	0.44	0.08	452.3%
2022	0.025	0.007	258.3%	0.144	0.140	3.1%	0.44	0.08	452.3%
2023	0.025	0.007	258.3%	0.144	0.140	3.1%	0.44	0.08	452.3%
2024	0.025	0.007	258.3%	0.144	0.140	3.1%	0.44	0.08	452.3%
Total	0.251	0.070	258.3%	1.444	1.400	3.1%	4.42	0.80	452.3%

Note: Variance calculated utilizing the formula: (Actual -Goal) / Goal, and is based on unrounded values

Table I-3
Total FEECA Demand and Energy Data

YEAR	WINTER PEAK MW REDUCTION			SUMMER PEAK MW REDUCTION			GWH ENERGY REDUCTION		
	PROPOSED TARGET	COMMISSION APPROVED GOAL	% VARIANCE	PROPOSED TARGET	COMMISSION APPROVED GOAL	% VARIANCE	PROPOSED TARGET	COMMISSION APPROVED GOAL	% VARIANCE
2015	1.059	0.967	9.5%	1.308	1.080	21.1%	3.11	2.58	20.4%
2016	1.059	0.967	9.5%	1.308	1.080	21.1%	3.11	2.58	20.4%
2017	1.059	0.967	9.5%	1.308	1.080	21.1%	3.11	2.58	20.4%
2018	1.059	0.967	9.5%	1.308	1.080	21.1%	3.11	2.58	20.4%
2019	1.059	0.967	9.5%	1.308	1.080	21.1%	3.11	2.58	20.4%
2020	1.059	0.967	9.5%	1.308	1.080	21.1%	3.11	2.58	20.4%
2021	1.059	0.967	9.5%	1.308	1.080	21.1%	3.11	2.58	20.4%
2022	1.059	0.967	9.5%	1.308	1.080	21.1%	3.11	2.58	20.4%
2023	1.059	0.967	9.5%	1.308	1.080	21.1%	3.11	2.58	20.4%
2024	1.059	0.967	9.5%	1.308	1.080	21.1%	3.11	2.58	20.4%
Total	10.589	9.670	9.5%	13.080	10.800	21.1%	31.07	25.80	20.4%

Note: Variance calculated utilizing the formula: (Actual -Goal) / Goal, and is based on unrounded values

Table I-4
Residential Rate Impact

Estimated Impact for a Residential Customer Using 1,200 kWh/month	
Calendar year	2015-2024
Percent Increase	0.18%
Current Monthly Cost	\$154.80
Monthly Impact	\$0.27
Current Annual Cost	\$1,857.60
Annual Impact	\$3.25

Rule 25-17.0021, F.A.C. requires each FEECA utility to submit a demand side management plan designed to meet the utilities approved goals within 90 days of a final order establishing the utility's goals. JEA's demand side management plan is provided in the following sections.

II. PROGRAM INTRODUCTION

II. PROGRAM INTRODUCTION

JEA's proposed Demand Side Management (DSM) Portfolio consists of four (4) residential programs, two (2) commercial programs:

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 Solar Water Heating** pays a financial incentive to customers to encourage the use of solar water heating technology.
- **Residential 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 business, educate customers and make recommendations on low-cost or no-cost energy-saving practices and measures.
- **Commercial Net Metering** promotes the use of solar photovoltaic systems by purchasing excessive power from commercial customers implementing these systems.

C. ECONOMIC PERFORMANCE OF DEMAND SIDE MANAGEMENT PROGRAMS

Table II-1
 Summary of DSM Programs
 Included in Proposed Plan
 Period 2015-2024

DSM PROGRAM	Rate Impact Measure Test			Participant Test			Total Resource Cost Test		
	PV Total Benefits (\$000)	PV Total Costs (\$000)	B / C Ratio	PV Total Benefits (\$000)	PV Total Costs (\$000)	**B / C Ratio	PV Total Benefits (\$000)	PV Total Costs (\$000)	B / C Ratio
Residential Energy Audits	\$4,081	\$8,924	0.46	\$5,230	\$33	160.38	\$4,081	\$3,783	1.08
Residential Solar Water Heating	\$306	\$428	0.72	\$360	\$558	0.65	\$306	\$612	0.50
Residential Net Metering	\$2,754	\$3,154	0.87	\$2,771	\$6,968	0.40	\$2,754	\$7,114	0.39
Neighborhood Efficiency Program	\$5,835	\$11,409	0.51	\$7,478	\$11	687.91	\$5,835	\$4,024	1.45
Business Energy Audits	\$537	\$738	0.73	\$441	\$1	304.34	\$537	\$358	1.50
Commercial Net Metering	\$2,921	\$3,207	0.91	\$1,884	\$6,737	0.28	\$2,921	\$8,159	0.36

** >99 B/C Ratio, participants do not pay for these measures

D. PROGRAM MONITORING AND EVALUATION

JEA will determine on a program-by-program basis the most cost effective evaluation method based on factors such as cost, participation levels, program performance, dollars invested, the level of uncertainty of measure performance, etc.

III. RESIDENTIAL CONSERVATION PROGRAMS

III. RESIDENTIAL CONSERVATION PROGRAMS

JEA's DSM Plan includes four (4) residential programs:

- A. Residential Energy Audits**
- B. Residential Solar Water Heating**
- C. Residential Net Metering**
- D. Neighborhood Efficiency Program - (low income homes)**

Each program is described in detail in the following sections.

A. RESIDENTIAL ENERGY AUDIT PROGRAM

Program Start Date: Originally started in 1978 and continuing from 2015 thru 2024

Policies and Procedures

JEA offers a home energy audit for all residential customers in the JEA service territory. This service is offered at no charge to our customers. A JEA representative will survey the home and then offer cost-effective ideas designed to help lower energy costs. Areas of the customers home that are inspected include: attic insulation, windows and caulking, weather stripping, water heaters, water temperature, air conditioning and heating system visual inspections, supply air & return air temperature readings, and refrigerator/freezer inspection. JEA representatives also use a wide variety of tools and literature for customer education during the inspection. No cost measures such as air conditioning & heating thermostat temperature settings, proper use of ceiling fans, water heater settings, refrigeration temperature settings, management of plug (vampire) loads, management of computer, monitor & printer loads, management of lighting systems and cleaning surfaces of heat exchangers are encouraged. In addition to the energy audit, we also offer free water management evaluations. The services listed above are available to JEA customers by contacting the JEA business office by phone or email.

Participation Estimates for the Program

Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level (%) Calculated
2015	390,376	390,376	4,500	1.2%
2016	397,057	397,057	4,500	2.3%
2017	403,655	403,655	4,500	3.3%
2018	409,756	409,756	4,500	4.4%
2019	415,662	415,662	4,500	5.4%
2020	421,331	421,331	4,500	6.4%
2021	426,984	426,984	4,500	7.4%
2022	432,669	432,669	4,500	8.3%
2023	438,312	438,312	4,500	9.2%
2024	443,879	443,879	4,500	10.1%

Savings Estimates

At the Meter						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
2015	200	0.100	0.100	900,000	450.0	450.0
2016	200	0.100	0.100	900,000	450.0	450.0
2017	200	0.100	0.100	900,000	450.0	450.0
2018	200	0.100	0.100	900,000	450.0	450.0
2019	200	0.100	0.100	900,000	450.0	450.0
2020	200	0.100	0.100	900,000	450.0	450.0
2021	200	0.100	0.100	900,000	450.0	450.0
2022	200	0.100	0.100	900,000	450.0	450.0
2023	200	0.100	0.100	900,000	450.0	450.0
2024	200	0.100	0.100	900,000	450.0	450.0

At the Generator						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
2015	208	0.105	0.106	936,900	470.3	474.8
2016	208	0.105	0.106	936,900	470.3	474.8
2017	208	0.105	0.106	936,900	470.3	474.8
2018	208	0.105	0.106	936,900	470.3	474.8
2019	208	0.105	0.106	936,900	470.3	474.8
2020	208	0.105	0.106	936,900	470.3	474.8
2021	208	0.105	0.106	936,900	470.3	474.8
2022	208	0.105	0.106	936,900	470.3	474.8
2023	208	0.105	0.106	936,900	470.3	474.8
2024	208	0.105	0.106	936,900	470.3	474.8

Impact Evaluation Plan

The home energy survey covers a wide range of cost-saving opportunities, including various behavioral and technological recommendations that may be implemented by the customer. A follow-up survey of participants would support the determination of what actions have been specifically implemented as a result of the energy audit. Using these results in conjunction with site-specific engineering estimates would likely be the most cost-effective method for evaluating program impacts. Alternatively, a statistically based analysis may be considered, depending on program participation levels actually experienced.

B. RESIDENTIAL SOLAR WATER HEATING

Program Start Date: Originally started in 2002 and continuing from 2015 thru 2024

Policies and Procedures

For the purposes of these procedures, “Participant” means any person or company that installs, fabricates, designs, constructs or otherwise supplies products and services to JEA customers under the Solar Incentive Program.

- All Participants must be pre-qualified by JEA. There is no provision for “retro-active” qualification. Completely fill-out the “Incentive Payment Request Form” and fax to 665-7386 for pre-approval. Approval or denial will be faxed back as soon as possible.
- JEA considers satisfaction of its customers to be of paramount importance. JEA will monitor the performance of all Participants for quality customer service and workmanship. If it is deemed that a Participant is not performing at a level JEA judges to be in its best interest, the Participant may be disqualified from participation in the program.
- JEA will only provide incentive payments for systems accepted by the customer as complete, in accordance with what they purchased from Participant, and in compliance with the requirements of the incentive program. JEA only provides incentives for customers who are switching from JEA electric water heating to solar water heating.
- The program will operate on a trust basis, so far as determining the percentage of local value in a project. JEA will trust that the Participants will honestly assess this parameter when submitting jobs for JEA acceptance. JEA will perform random audits of the percentage local value on all projects. Any Participant not accurately assessing local value may be disqualified from the solar incentive program.
- JEA must be notified by the Participant when a proposal is submitted to a customer for any Commercial project. JEA is to receive a copy of the technical aspects of the proposal. JEA must receive the commercial proposal within 5 business days of the customer placing an order.
- All customer proposals must clearly show the Full price of the system, the JEA Incentive and the Net price to the customer. The customer pays the Net price of the system to the Participant.
- The Participant is responsible to maintain any licenses, permits, inspections, and insurance required to perform work under this program. Licensed solar installers under Florida Statue 489.105 (3) (o) must install any solar energy system under this program¹. It is the Participant’s responsibility to ensure they adhere to all laws, rules, and regulations that apply to the promotion, purchase, and installation of their solar energy systems.

¹ See “Exception for Installation of Solar Systems”

- JEA does not warrant or guarantee any system sold by Participant under this program. JEA is not liable for any representation or warranty made by Participant to customers concerning quality of materials, workmanship or any projected energy savings. Participant further understands that JEA makes no warranties concerning materials and installation, expressed or implied, including warranties of merchantability or fitness for a particular purpose. Participant shall make no statements, representations or claims to customers inconsistent with this paragraph.
- Participant's representation of the program shall conform to this document. Participant shall have no right to use any JEA trademark, Service Mark or logo for advertising, marketing, or identification purposes except as JEA may provide on documents and materials JEA develops to support this program. All communication materials using or referring to JEA or the JEA Solar Incentive Program must be reviewed prior to use to ensure consistency of the JEA Brand. (Please allow 5 business days for review and approval of any submitted materials.)
- Participants may identify themselves as: "JEA Authorized Solar Participant" This language may only be used when accompanied by the clear identification of Participant's business name, in type at least as large as the language above.
- All medium temperature solar hot water systems/equipment must:
 - Be FSEC approved
 - Comply with all local building and electrical codes
 - Be installed by properly licensed and qualified personnel under Florida Statute 489.105 (3) (o).
 - Operate at not less than 700 BTU/ft²
 - Operate with a solar fraction not to exceed 80%
- JEA retains all Green Attributes associated with projects installed under this program.
- Complete paperwork must be submitted for timely incentive payments. Incomplete incentive forms and/or incomplete or missing supporting documentation may result in payment delays.

Documentation requirements are:

- Solar Hot Water Systems
 - Invoice to JEA
 - Copy of customer invoice
 - Completed Solar Certificate
 - Photographs of installation (collector and water heater)
 - Copy of approved Incentive Fund Request form
- It is the Participant's responsibility to ensure they adhere to all laws, rules, and regulations that apply to the promotion, purchase, and installation of their solar energy systems. Requirements for incentive payments do not supersede any of these laws, rules, or regulations.

Incentives

JEA Solar Power Incentives	Local Vendor	Non-local Vendor
New Solar Residential Water Heating System (medium temp collector)	\$800 per install	\$800 per install
Restoration of Existing Solar Water Heating System to Working Order ¹	30% of total installed cost up to \$500	15% of total installed cost up to \$250
<p>Notes:</p> <ol style="list-style-type: none"> 1. For systems installed before April 22, 1997; Retrofits apply to solar hot water systems and exclude the hot water heater tank. 2. There is a \$5,000 maximum incentive per project. This maximum may be waived by JEA based on business conditions, availability of funds, and projected residual funds required to fund the Program for the balance of the year. This potential waiver does not guarantee that 100% of the incentive will be available. 3. If other incentives (rebates, grants, etc.) are used to fund a solar system, these funds combined with JEA funds cannot exceed the cost of the system. JEA requires the disclosure of other incentives at the time the Incentive Fund Request form and Solar Certificate are submitted. 4. If a solar system is moved from its installed location JEA is to be notified prior to relocation. These systems are not eligible for additional solar incentive dollars. 5. JEA does not provide incentives for gas water heaters. 		

Exception for Installation of Solar Systems

The Solar Incentive Program Participant Guidelines indicated a solar license, under Florida Statute 489.105 (3) (o), as required for installing solar thermal systems. JEA will also accept installations by a licensed plumbing contractor, provided the contractor:

1. Obtain 3 continuing education units for the installation of solar thermal systems during each biennium. Or
2. Complete a training program through a manufacturer of solar thermal systems. Or
3. Complete a training program from a licensed solar contractor to install solar thermal systems.

JEA would prefer that the contractor be licensed under Florida Statute 489.105 (3) (o) and reserve the right to remove this provisional exception upon reasonable notice.

Incentives to Third Parties

Effective immediately, all Solar Certificates must be signed by the JEA electric customer receiving the incentive.

For example:

If a JEA electric customer is installing a solar water heating system that is purchased as part of a package through a 3rd party, the incentive form must be signed by the JEA electric customer and NOT the 3rd party offering the package. As always, ALL INFORMATION must be on the incentive form prior to customer signature. All customer proposals must clearly show the Full price of the system, the JEA Incentive and the Net price to the customer. The customer pays the Net price of the system to the Participant (or 3rd party in this case). The customer receives the pink certificate copy.

For situations where the final JEA electric customer is unknown (builder spec houses for example), the 3rd party may be considered the customer for purpose of paying incentives.

Participation Estimates for the Program

Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level (%) Calculated
2015	390,376	390,376	20	0.01%
2016	397,057	397,057	20	0.01%
2017	403,655	403,655	20	0.01%
2018	409,756	409,756	20	0.02%
2019	415,662	415,662	20	0.02%
2020	421,331	421,331	20	0.03%
2021	426,984	426,984	20	0.03%
2022	432,669	432,669	20	0.04%
2023	438,312	438,312	20	0.04%
2024	443,879	443,879	20	0.05%

Savings Estimates

At the Meter						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
2015	2,322	0.475	0.420	46,445	9.5	8.4
2016	2,322	0.475	0.420	46,445	9.5	8.4
2017	2,322	0.475	0.420	46,445	9.5	8.4
2018	2,322	0.475	0.420	46,445	9.5	8.4
2019	2,322	0.475	0.420	46,445	9.5	8.4
2020	2,322	0.475	0.420	46,445	9.5	8.4
2021	2,322	0.475	0.420	46,445	9.5	8.4
2022	2,322	0.475	0.420	46,445	9.5	8.4
2023	2,322	0.475	0.420	46,445	9.5	8.4
2024	2,322	0.475	0.420	46,445	9.5	8.4

At the Generator						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
2015	2,417	0.496	0.443	48,349	9.9	8.9
2016	2,417	0.496	0.443	48,349	9.9	8.9
2017	2,417	0.496	0.443	48,349	9.9	8.9
2018	2,417	0.496	0.443	48,349	9.9	8.9
2019	2,417	0.496	0.443	48,349	9.9	8.9
2020	2,417	0.496	0.443	48,349	9.9	8.9
2021	2,417	0.496	0.443	48,349	9.9	8.9
2022	2,417	0.496	0.443	48,349	9.9	8.9
2023	2,417	0.496	0.443	48,349	9.9	8.9
2024	2,417	0.496	0.443	48,349	9.9	8.9

Impact Evaluation Plan

Utilizing participant pre-project and post-installation energy consumption data to conduct a statistical analysis to assess the program impacts will be the most cost effective evaluation method. Additional data such as weather data, building occupancy, operating hours, major equipment purchases and other data would be used with this methodology. Site specific engineering estimates will be considered as an alternative to statistical analysis if it is cost effective to develop them.

C. RESIDENTIAL NET METERING PROGRAM

Program Start Date: Originally started in 2009 and continuing from 2015 thru 2024

Policies and Procedures

JEA allows customer-owned renewable generation up to 2 MW under its Net Metering Policy. Proposed installations which are greater than 2 MW in capacity will be outside of this policy and would need a specific Purchased Power Agreement with JEA which will be based on avoided cost principles. The JEA net metering policy is primarily intended to facilitate generation from renewable energy sources to offset part or all of the customer's energy requirements.

Net metering customers will be charged for the metered kWh received from JEA during each month and credited for the metered sent to JEA each month in accordance with Net Metering Policy Rates:

Net Metering Policy Rates Summary

Generation Range	Energy (kWh) Received (Purchased) from JEA	Energy (kWh) Delivered (Sold) to JEA
Tier 1 - 10 kW or less	Retail Rate	Retail Rate
Tier 2 – over 10 kW and less than 50 kW	Retail Rate	Retail Rate
Tier 2 - 50 kW up to 100 kW	SS-1 Retail Rate	Retail Rate
Tier 3 – over 100 kW up to 2 MW	SS-1 Retail Rate	Fuel Rate

The billed kWh consumption for each billing period will be the amount of kWh received from JEA measured at the meter at the end of the billing period. Customers will be charged using the customer's Retail Rate for energy, demand, fuel, environmental and conservation charges per kWh for the metered kWh received from JEA during each billing cycle. The customer will always pay the monthly customer charge and the Retail Rate plus taxes and fees based on the kWh that customer receives from JEA even if there is net zero consumption or net excess kWh exported to the grid during the billing cycle. Monetary credits for each billing period will be based on the kWh sent to JEA measured at the meter at the end of the billing period and the rate applicable to the customer's system. If the credit for a billing period is larger than the charges for the kWh received from JEA, JEA will carry over the credit balance, less any included taxes, to the next billing period. JEA will not distribute a monthly payment for the credit balance. JEA will apply the credit balance to the electric service balance each billing period through the end of the calendar year. If at the end of the calendar year the customer has a credit balance on the customer's JEA account related to their net metering service, the credit balance will be applied to any outstanding balance on the combined JEA customer account. JEA will then pay the customer the remaining account credit balance. JEA will also apply any credit balance to the final bill at the time the service agreement, or account, is closed and final billed. At the end of each year JEA will issue an IRS 1099-MISC tax form totalizing all monthly credits for the previous year to customers with total credits of \$600 or greater.

JEA reserves the right to monitor the aggregate load of all Net Metering connected to the JEA grid and at management's sole discretion institute aggregate load limits in the future that will limit the net metering customers by total MWs connected, date or other aggregate characteristics. Currently, an aggregate JEA system load limit of 10 MW is in place for Tier 1 – 3 Net Metering. JEA also reserves the right to develop specific rate classifications in the future that may have different cost recovery based rate structures than implied through net metering practices under this JEA Net Metering Policy.

In order to qualify for a net metered interconnection to JEA's distribution grid the customer's generation system must have a gross power rating that:

1. Does not exceed 90% of the customer's utility distribution service rating; and
2. Falls into one of the following ranges:
 - Tier 1 - 10 kW or less;
 - Tier 2 – greater than 10 kW and less than or equal to 100 kW;
 - Tier 3 – greater than 100 kW and less than or equal to 2 MW.
3. Does not result in annual energy (kWh) sent to the JEA grid that exceeds the customer's annual energy (kWh) obtained from the JEA grid.

The customer will retain any Renewable Energy Certificates (REC) associated with a customer's renewable generation. The customer will be required to install the system in accordance with JEA Rules and Regulations section 2.16 and Engineering & Construction Services Procedure ECS20202 902, as appropriate. The system must pass a JEA inspection prior to connection and operation. JEA will furnish, install, own and maintain metering equipment at the installation point capable of monitoring the flow of power from JEA to the customer and from the customer to JEA.

Participation Estimates for the Program

Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level (%) Calculated
2015	390,376	390,376	41	0.01%
2016	397,057	397,057	41	0.02%
2017	403,655	403,655	41	0.03%
2018	409,756	409,756	41	0.04%
2019	415,662	415,662	41	0.05%
2020	421,331	421,331	41	0.06%
2021	426,984	426,984	41	0.07%
2022	432,669	432,669	41	0.08%
2023	438,312	438,312	41	0.08%
2024	443,879	443,879	41	0.09%

Savings Estimates

At the Meter						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
2015	7,982	0.00	2.80	327,262	0.0	114.8
2016	7,982	0.00	2.80	327,262	0.0	114.8
2017	7,982	0.00	2.80	327,262	0.0	114.8
2018	7,982	0.00	2.80	327,262	0.0	114.8
2019	7,982	0.00	2.80	327,262	0.0	114.8
2020	7,982	0.00	2.80	327,262	0.0	114.8
2021	7,982	0.00	2.80	327,262	0.0	114.8
2022	7,982	0.00	2.80	327,262	0.0	114.8
2023	7,982	0.00	2.80	327,262	0.0	114.8
2024	7,982	0.00	2.80	327,262	0.0	114.8

At the Generator						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
2015	8,309	0.00	2.95	340,680	0.0	121.1
2016	8,309	0.00	2.95	340,680	0.0	121.1
2017	8,309	0.00	2.95	340,680	0.0	121.1
2018	8,309	0.00	2.95	340,680	0.0	121.1
2019	8,309	0.00	2.95	340,680	0.0	121.1
2020	8,309	0.00	2.95	340,680	0.0	121.1
2021	8,309	0.00	2.95	340,680	0.0	121.1
2022	8,309	0.00	2.95	340,680	0.0	121.1
2023	8,309	0.00	2.95	340,680	0.0	121.1
2024	8,309	0.00	2.95	340,680	0.0	121.1

Impact Evaluation Plan

Because the metering set-up determines net effects it is difficult to determine exact contributions from customer installed systems. As a result, utilizing solar net metering participant pre-project and post-installation energy consumption data to conduct a statistical analysis to assess the program impacts may be the most cost effective evaluation method. Additional data such as weather data, building occupancy, operating hours, major equipment purchases and other data would be used with this methodology. Site specific engineering estimates will be considered as an alternative to statistical analysis if it is cost effective to develop them.

D. NEIGHBORHOOD ENERGY EFFICIENCY PROGRAM

Program Start Date: Originally started in 2008 and continuing from 2015 thru 2024

Policies and Procedures

JEA offers a two-phase program for low income customers. Phase 1 provides installation of 15 electric and water conservation products as well as the energy education package of printed material and consultation with an energy audit on a door-to-door basis in targeted neighborhoods identified by the City as having more than 50% of the neighborhood population at or below 150% of the Federal Poverty Guidelines, and further identified by JEA as having high winter peak consumption. Approximately 1,000 homes are completed per year.

Phase 2 provides an Energy Efficient Home Maintenance kit of 12 electric and water conservation products for participants in a Housing Counseling workshop required for first time home buyers involved in the City's loan assistance programs for low to moderate income residents. Approximately 500 kits are provided annually.

Participation Estimates for the Program

Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level (%) Calculated
2015	390,376	117,113	1,500	1.3%
2016	397,057	119,117	1,500	2.5%
2017	403,655	121,097	1,500	3.7%
2018	409,756	122,927	1,500	4.9%
2019	415,662	124,699	1,500	6.0%
2020	421,331	126,399	1,500	7.1%
2021	426,984	128,095	1,500	8.2%
2022	432,669	129,801	1,500	9.2%
2023	438,312	131,494	1,500	10.3%
2024	443,879	133,164	1,500	11.3%

Savings Estimates

At the Meter						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
2015	858	0.353	0.353	1,286,562	529.8	529.8
2016	858	0.353	0.353	1,286,562	529.8	529.8
2017	858	0.353	0.353	1,286,562	529.8	529.8
2018	858	0.353	0.353	1,286,562	529.8	529.8
2019	858	0.353	0.353	1,286,562	529.8	529.8
2020	858	0.353	0.353	1,286,562	529.8	529.8
2021	858	0.353	0.353	1,286,562	529.8	529.8
2022	858	0.353	0.353	1,286,562	529.8	529.8
2023	858	0.353	0.353	1,286,562	529.8	529.8
2024	858	0.353	0.353	1,286,562	529.8	529.8

At the Generator						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
2015	893	0.369	0.373	1,339,311	553.6	558.9
2016	893	0.369	0.373	1,339,311	553.6	558.9
2017	893	0.369	0.373	1,339,311	553.6	558.9
2018	893	0.369	0.373	1,339,311	553.6	558.9
2019	893	0.369	0.373	1,339,311	553.6	558.9
2020	893	0.369	0.373	1,339,311	553.6	558.9
2021	893	0.369	0.373	1,339,311	553.6	558.9
2022	893	0.369	0.373	1,339,311	553.6	558.9
2023	893	0.369	0.373	1,339,311	553.6	558.9
2024	893	0.369	0.373	1,339,311	553.6	558.9

Impact Evaluation Plan

The neighborhood energy efficiency program includes a wide range of cost-saving measures, including various behavioral and technological recommendations that may be implemented by the customer. Using readily available direct installation data in conjunction with site-specific engineering estimates would likely be the most cost-effective method for evaluating program impacts.

IV. COMMERCIAL CONSERVATION PROGRAMS

IV. COMMERCIAL CONSERVATION PROGRAMS

JEA's DSM Plan includes two (2) commercial programs:

- A. Commercial Energy Audits**
- B. Commercial Net Metering**

Each program is described in detail in the following sections.

A. COMMERCIAL ENERGY AUDITS

Program Start Date: Originally started in 1978 and continuing from 2015 thru 2024

Policies and Procedures

JEA offers a business energy audit for all commercial customers located in the JEA service territory. This service is offered at no charge to our customers and is available for all commercial rate classifications. As a part of this service a JEA representative will perform a rate evaluation, discuss demand strategies if relevant, and inspect the customers business and then offer cost-effective ideas designed to help lower energy costs. Areas of the customers business that are inspected include: insulation, windows, tinting, and caulking, weather stripping, water heating systems and water temperature, HVAC visual inspections, equipment and their controls, and refrigeration. JEA representatives also use a wide variety of tools and literature for customer education during the inspection. No cost measures such as air conditioning & heating thermostat temperature settings, water heater settings, refrigeration temperature settings, management of plug (vampire) loads, management of computer, monitor & printer loads, management of lighting systems and cleaning surfaces of heat exchangers are encouraged. In addition to the energy audit, we also offer free water management evaluations. The services listed above are available to JEA customers by contacting the JEA business office by phone or email. Online business energy audit services are also available online at <http://www.jea.com>

Participation Estimates for the Program

Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level (%) Calculated
2015	50,506	50,506	200	0.4%
2016	51,136	51,136	200	0.8%
2017	51,698	51,698	200	1.2%
2018	52,187	52,187	200	1.5%
2019	52,639	52,639	200	1.9%
2020	53,069	53,069	200	2.3%
2021	53,492	53,492	200	2.6%
2022	53,908	53,908	200	3.0%
2023	54,321	54,321	200	3.3%
2024	54,735	54,735	200	3.7%

Savings Estimates

At the Meter						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
2015	540	0.120	0.120	108,000	24.0	24.0
2016	540	0.120	0.120	108,000	24.0	24.0
2017	540	0.120	0.120	108,000	24.0	24.0
2018	540	0.120	0.120	108,000	24.0	24.0
2019	540	0.120	0.120	108,000	24.0	24.0
2020	540	0.120	0.120	108,000	24.0	24.0
2021	540	0.120	0.120	108,000	24.0	24.0
2022	540	0.120	0.120	108,000	24.0	24.0
2023	540	0.120	0.120	108,000	24.0	24.0
2024	540	0.120	0.120	108,000	24.0	24.0

At the Generator						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
2015	562	0.125	0.127	112,428	25.1	25.3
2016	562	0.125	0.127	112,428	25.1	25.3
2017	562	0.125	0.127	112,428	25.1	25.3
2018	562	0.125	0.127	112,428	25.1	25.3
2019	562	0.125	0.127	112,428	25.1	25.3
2020	562	0.125	0.127	112,428	25.1	25.3
2021	562	0.125	0.127	112,428	25.1	25.3
2022	562	0.125	0.127	112,428	25.1	25.3
2023	562	0.125	0.127	112,428	25.1	25.3
2024	562	0.125	0.127	112,428	25.1	25.3

Impact Evaluation Plan

The commercial energy audit program covers a wide range of cost-saving opportunities, including various behavioral and technological recommendations that may be implemented by the customer. A follow-up survey to participants would support the determination of what actions have been specifically implemented as a result of the energy audit. JEA anticipates combining these results in conjunction with deemed savings estimates as the most cost effective methodology. Site-specific engineering estimates will be considered if its cost effectiveness is warranted.

B. COMMERCIAL NET METERING PROGRAM

Program Start Date: Originally started in 2009 and continuing from 2015 thru 2024

Policies and Procedures

JEA allows customer-owned renewable generation up to 2 MW under its Net Metering Policy. Proposed installations which are greater than 2 MW in capacity will be outside of this policy and would need a specific Purchased Power Agreement with JEA which will be based on avoided cost principles. The JEA net metering policy is primarily intended to facilitate generation from renewable energy sources to offset part or all of the customer's energy requirements.

Net metering customers will be charged for the metered kWh received from JEA during each month and credited for the metered kWh sent to JEA each month in accordance with Net Metering Policy Rates:

Net Metering Policy Rates Summary

Generation Range	Energy (kWh) Received (Purchased) from JEA	Energy (kWh) Delivered (Sold) to JEA
Tier 1 - 10 kW or less	Retail Rate	Retail Rate
Tier 2 – over 10 kW and less than 50 kW	Retail Rate	Retail Rate
Tier 2 - 50 kW up to 100 kW	SS-1 Retail Rate	Retail Rate
Tier 3 – over 100 kW up to 2 MW	SS-1 Retail Rate	Fuel Rate

- The billed kWh consumption for each billing period will be the amount of kWh received from JEA measured at the meter at the end of the billing period. Customers will be charged using the customer's Retail Rate for energy, demand, fuel, environmental and conservation charges per kWh for the metered kWh received from JEA during each billing cycle. The customer will always pay the monthly customer charge and the Retail Rate plus taxes and fees based on the kWh that customer receives from JEA even if there is net zero consumption or net excess kWh exported to the grid during the billing cycle. Monetary credits for each billing period will be based on the kWh sent to JEA measured at the meter at the end of the billing period and the rate applicable to the customer's system. If the credit for a billing period is larger than the charges for the kWh received from JEA, JEA will carry over the credit balance, less any included taxes, to the next billing period. JEA will not distribute a monthly payment for the credit balance. JEA will apply the credit balance to the electric service balance each billing period through the end of the calendar year. If at the end of the calendar year the customer has a credit balance on the customer's JEA account related to their net metering service, the credit balance will be applied to any outstanding balance on the combined JEA customer account. JEA will then pay the customer the remaining account credit balance. JEA will also apply any credit balance to the final bill at the time the service agreement, or account, is closed and final billed. At the end of each year JEA will issue an IRS 1099-MISC tax form totalizing all monthly credits for the previous year to customers with total credits of \$600 or greater.

JEA reserves the right to monitor the aggregate load of all Net Metering connected to the JEA grid and at management's sole discretion institute aggregate load limits in the future that will limit the net metering customers by total MWs connected, date or other aggregate characteristics. Currently, an aggregate JEA system load limit of 10 MW is in place for Tier 1 – 3 Net Metering. JEA also reserves the right to develop specific rate classifications in the future that may have different cost recovery based rate structures than implied through net metering practices under this JEA Net Metering Policy.

In order to qualify for a net metered interconnection to JEA's distribution grid the customer's generation system must have a gross power rating that:

1. Does not exceed 90% of the customer's utility distribution service rating; and
2. Falls into one of the following ranges:
 - Tier 1 - 10 kW or less;
 - Tier 2 – greater than 10 kW and less than or equal to 100 kW;
 - Tier 3 – greater than 100 kW and less than or equal to 2 MW.
3. Does not result in annual energy (kWh) sent to the JEA grid that exceeds the customer's annual energy (kWh) obtained from the JEA grid.

The customer will retain any Renewable Energy Certificates (REC) associated with a customer's renewable generation. The customer will be required to install the system in accordance with JEA Rules and Regulations section 2.16 and Engineering & Construction Services Procedure ECS20202 902, as appropriate. The system must pass a JEA inspection prior to connection and operation. JEA will furnish, install, own and maintain metering equipment at the installation point capable of monitoring the flow of power from JEA to the customer and from the customer to JEA.

Participation Estimates for the Program

Year	Total Number of Customers	Total Number of Eligible Customers	Annual Number of Program Participants	Cumulative Penetration Level (%) Calculated
2015	50,506	50,506	8	0.02%
2016	51,136	51,136	8	0.03%
2017	51,698	51,698	8	0.05%
2018	52,187	52,187	8	0.06%
2019	52,639	52,639	8	0.08%
2020	53,069	53,069	8	0.09%
2021	53,492	53,492	8	0.10%
2022	53,908	53,908	8	0.12%
2023	54,321	54,321	8	0.13%
2024	54,735	54,735	8	0.15%

Savings Estimates

At the Meter						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
2015	39,553	0.0	14.1	316,425	0.0	112.9
2016	39,553	0.0	14.1	316,425	0.0	112.9
2017	39,553	0.0	14.1	316,425	0.0	112.9
2018	39,553	0.0	14.1	316,425	0.0	112.9
2019	39,553	0.0	14.1	316,425	0.0	112.9
2020	39,553	0.0	14.1	316,425	0.0	112.9
2021	39,553	0.0	14.1	316,425	0.0	112.9
2022	39,553	0.0	14.1	316,425	0.0	112.9
2023	39,553	0.0	14.1	316,425	0.0	112.9
2024	39,553	0.0	14.1	316,425	0.0	112.9

At the Generator						
Year	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
2015	41,175	0.0	14.9	329,399	0.0	119.1
2016	41,175	0.0	14.9	329,399	0.0	119.1
2017	41,175	0.0	14.9	329,399	0.0	119.1
2018	41,175	0.0	14.9	329,399	0.0	119.1
2019	41,175	0.0	14.9	329,399	0.0	119.1
2020	41,175	0.0	14.9	329,399	0.0	119.1
2021	41,175	0.0	14.9	329,399	0.0	119.1
2022	41,175	0.0	14.9	329,399	0.0	119.1
2023	41,175	0.0	14.9	329,399	0.0	119.1
2024	41,175	0.0	14.9	329,399	0.0	119.1

Impact Evaluation Plan

Because the metering set-up determines net effects it is difficult to determine exact contributions from customer installed systems. As a result, utilizing solar net metering participant pre-project and post-installation energy consumption data to conduct a statistical analysis to assess the program impacts may be the most cost effective evaluation method. Additional data such as weather data, building occupancy, operating hours, major equipment purchases or construction during the pre/post period would be used with this methodology. Site specific engineering estimates will be considered as an alternative method to statistical analysis if it is cost effective to develop them.