



PASCOAG
UTILITY DISTRICT

2019 Demand Side Management

Reconciled Full Year Budget Docket 4894

Pascoag Utility District
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March 10, 2020

Ms. Luly Massaro
Clerk of the Commission
Rhode Island Public Utilities Commission
89 Jefferson Blvd.
Warwick, RI 02888

Re: Docket 4894

Dear Ms. Massaro,

On behalf of Pascoag Utility District (Pascoag or the District), enclosed are an original and nine copies of Pascoag's Reconciled Demand Side Management Full Year Budget for 2019. These submissions include a complete summary of the DSM Budget for 2019 including the activities and expenses, and the approximate energy savings to the District.

This filing is submitted under the terms of the District's Demand Side Management Tariff, currently on file with the commission.

If you have any questions please do not hesitate to contact me.

Very truly yours,



Desarae Dolan
DSM Coordinator

Cc: William Bernstein, Esquire

Highlights of the 2019 DSM Program

Residential Conservation Program:

Home Energy Audits with Incentives - A total of 115 home energy audits were performed by Energy New England from January-December. There have been 978 LED light bulbs and 108 Smart strips directly installed into homes that had an energy audit. 5 customers took advantage of insulation and air sealing rebates. 9 customers installed programmable thermostats through the rebate program. \$44,916.98 was paid for this program to date, funded by Regional Greenhouse Gas Initiative (2018-B). In addition, seven commercial and industrial energy audits have been performed by RISE at no cost.

Energy Star Appliance Rebates– The District processed 102 appliance rebates comprised of 19 refrigerators, 2 freezers, 18 clothes washers, 15 clothes dryers, 18 dishwashers, 19 AC's, and 11 dehumidifiers. The District issued a total of \$5,220.00 in rebates.

Appliance Buy Back Refrigerators/Freezers-The District bought back 7 old, working refrigerators and 2 freezers. The District issued a total of \$560.00 in rebates.

Energy Star Efficient Windows/Doors – The District processed rebates on 9 doors and 85 windows and issued \$1500.00 in rebates.

Heating System Incentives-7 customers took advantage of the heating system replacement program in 2019 and the District issued \$1750.00 in rebates.

ENERGY STAR qualified Electric Hot Water Heaters- The District processed two rebates for electric heat pump hot water heaters in the amount of \$200.00.

Energy Star Lighting fixtures and fans- The District processed rebates for 8 customers for ceiling fans, recessed light fixtures, shop light fixtures and issued a total of \$317.00 in rebates.

Highlights of the 2019 DSM Program

Home Energy Equipment/Home Electronics- A total of 6 incentives were issued in 2019 for 3 televisions, 1 tablet, 1 cordless phone and 1 router. The rebate totals for this program was \$203.00.

New Construction Incentive- Two rebate applications were submitted for new construction for gas boilers. The rebate total for this program was \$500.00.

Central Air Incentives-The District processed 7 air source heat pump systems and 2 central air conditioning rebates for a total of \$2742.00 in rebates.

Change a Light – The District processed rebates for 98 LED light bulbs. The total amount issued in rebates was \$246.00.

Committed for 2018 Programs- The District processed 14 incentives from 2018 that qualified for rebates totaling \$1,486.00. The rebates were for 1 refrigerator, 2 dishwashers, 1 clothes dryer, 2 clothes washers, 1 television, 1 computer monitor, 1 gas furnace, 1 air source heat pump system, 1 ductless AC system, 29 LED lightbulbs and 1 refrigerator buyback.

Industrial/ Commercial

Energy Star office equipment- There is no activity to report.

Burrillville School Department-The District has worked with the School Department on several energy efficiency projects over the years. The School Department completed a LED lighting project at the Levy Rink in 2019. They replaces 44 fixtures in the rink with LED lighting. The project cost \$30,468, with the District providing a rebate of \$9,300.00. The project will save the Burrillville School Department 31,046 kWhrs annually.

Committed Funds- The District has completed three projects this year. The Jesse Smith Library completed a LED lighting project that cost \$37,364.00. The District was able to process a rebate for \$9,391.00 for this project. They will save 68,534 kWhrs and reduce their kW by 26.61. Ashton Court also did a LED lighting project for its exterior lighting. The project cost \$19,929.00 and the District was able to process a rebate for \$7,636. The project will save 18,151 kWhrs and reduce their kW by 4.14. The Assembly Theatre completed a LED lighting

Highlights of the 2019 DSM Program

project in late fall that cost \$9,955, with the District providing a rebate of \$3,373. The project will save 6,494 kWhrs and reduce their kW by 6.49. The District spent \$20,400.00 on Committed Funds.

Consultation fee- There is no activity to report.

Energy Star Commercial Appliances-The District processed three rebates for a refrigerator, electric heat pump water heater and an air source heat pump system. The total amount issued in rebates was \$375.00.

LED Street Light Incentive- Initially this program was funded at \$8,000. We reduced this line item to \$7,225 due to overestimating the carryover from 2018. The DSM Program rebated Pascoag Utility District \$7,225 for the LED Street Light Project that was completed in 2016 in which the District purchased and installed 610 LED Street Lights. This money will be used to reduce the Account Receivable from the DSM Program from \$90,321 to \$73,096.

Administrative

Administrative- The District spent \$20,994.90 on administrative labor, supplies and mileage associated with the various DSM projects.

Energy Consultant- The District spent \$8,710.00 on Optimal Energy Consultants in 2019. Optimal Energy has provided guidance and recommendations on annual Demand Side Management programming and worked on estimating energy and demand savings from each program.

URI Energy Fellow Intern- The District has spent \$8,595.50 on the labor for an Energy Fellow Intern. Ms. Rodriguez has worked on many projects this year. She created energy efficiency content for our Facebook page that was well received. She updated all our energy efficiency handout materials with better graphics and information. She helped with residential energy audit outreach by developing advertisements, letters to customers and a post audit survey. She was also actively involved in preparation for our annual Green Festival. She has done an amazing job and has been invaluable to the success of our DSM program this year.

Highlights of the 2019 DSM Program

Program Research and Development- There is no activity to report.

Community Outreach, Marketing & Education

Funds for Follow-up to Successful Programs- The District has processed 12 rebates for 48 windows, 3 doors, 1 air source heat pump and 1 refrigerator buyback as the funds for these programs were depleted. The total amount issued in rebates was \$1,000.00.

Outreach/Education-The District has spent \$6,017.49 on conservation promotional items, advertisements and billing inserts to promote the energy efficiency programs we offer.

Jesse Smith Library Partnership- the Jesse Smith Memorial Library in conjunction with the Public Works Department and the Pascoag Utility District encourages students in grades K-6 to create Earth Day Posters depicting why it is important to recycle and conserve energy in Burrillville. A total of twelve winning posters were chosen to be included in the 2020 calendar which also contained energy conservation and recycling tips. The students received Energy Conservation lunch bags filled with items from the Town on recycling and items related to energy conservation from the District. The award ceremony was held on May 8, 2019 to recognize the winners of the contest. The calendars were distributed in November. The District has spent a total of \$3,509.57 on this project to date for prizes, materials and labor.

Community Events-the District participated in many community events in 2019. The District attended the Burrillville Family Fair in June. The District gave away a variety of energy conservation materials at this event. The District also had the opportunity to host a field trip for Steere Farm Elementary School's fourth grade. The children got a tour of the facility, learned about the role of the electric company in their community and worked on energy conservation posters while they were here.

Pascoag Utility is also a committee member of Burrillville Aging Strong. Burrillville Aging Strong is a town-wide and town-supported effort to develop and coordinate programs which improve the health and well-being of Burrillville's aging community. The District was asked to participate as a vendor at their first Lunch & Learn event in May. After speaking with attendees at the event, we realized this age group tends to not benefit as much from some of our past outreach efforts. Many did not have Facebook pages or attend the Family Fair or Green Festival. We were able to speak to many customers over the age of 55 and make them aware of the home energy audit program and rebates that we offer. We asked to join the committee and will now be helping with quarterly events

Highlights of the 2019 DSM Program

in an effort to promote our DSM programs more effectively.

The District also held its annual Green Festival on September 7th. The event was well attended and had over 30 green vendors. Attendees received a bag filled with energy conservation materials and recycling tips.

The District has spent \$7,655.90 on labor and materials for Community Events.

Energy Efficiency Management Continuing Education- Staff attended the Massachusetts Sustainable Communities Conference in March to get ideas from other communities and vendors that attended. The District also purchased an Association of Energy Service Professionals membership as they offer many webinars and training opportunities that would benefit the DSM program. The District has spent \$967.15 on Continuing Education.

Overall, Pascoag's 2019 DSM Program has been a success. We've encouraged our customers to take advantage of the energy rebates we offer by advertising our rebate programs on SmartHub (PUD's online bill pay site), by billing insert and attaching energy conservation material to give away items, such as pens or keychain flashlights, when they come into the office. We've also increased our outreach through social media. We hope this will continue to increase the amount of people taking advantage of our programs. The total actual budget for 2019 was \$181,194.75; with \$107,863.39 collected from customer billing plus the actual carry over funds from 2018 of \$8,331.36 and \$65,000 in RGGI funds. The total expenses for 2019 were \$154,391.49. This leaves a carryover of \$26,803.26 with \$20,083.02 of this total coming from RGGI funds.

Exhibit I: 2019 Approved Budget

Pascoag Utility District
Demand Side Management Programs - 2019 Approved Budget

Estimated carry over from 2018	\$ 9,106
Estimated sales for 2019	\$ 108,640
RGGI Funds	\$ 65,000
Net 2019 budget	<u>\$ 182,746</u>

		<u>2019 Approved Budget</u>	
<u>Residential Program</u>			
DR1901	Home Energy Audits with Weatherization Incentives	\$ 65,000	120 audits and weatherization incentives
DR1902	Energy Star Appliance Rebates	\$ 5,838	Up to 77 incentives
DR1903	Refrigerators/Freezer Buy Back	\$ 560	\$50 incentive & \$20 removal fee for a Refrigerator or Freezer; up to 8 rebates
DR1904	Energy Efficient Windows/Doors	\$ 1,500	Up to 100 windows at \$15 or up to 37 doors at \$40
DR1905	Heating System Incentive	\$ 1,500	6 Rebates at \$250
DR1906	ENERGY STAR qualified Water Heaters	\$ 600	4 Rebates at \$150
DR1907	Energy Star Lighting fixtures& ceiling/ventilation fans	\$ 650	Up to 13 rebates at \$50 maximum
DR1908	Home Office Equipment/Home Electronics	\$ 500	10 Rebates at \$50
DR1909	New Construction	\$ 1,000	2 Rebates up to \$500 maximum
DR1910	Central Air Conditioning	\$ 2,700	9 Rebates up to \$300 maximum
DR1911	Change a Light Campaign	\$ 400	8 Rebates up to \$50 maximum
DR1912	Committed for 2018 Programs	\$ 1,500	To accommodate programs with depleted funds from 2018
Net Residential		\$ 81,748	
<u>Industrial/Commercial</u>			
DI1901	Energy Star Incentive - Office Equipment	\$ 500	10 Rebates up to \$50 maximum
DI1902	Burrilville School Department	\$ 9,300	Lighting Project-Burrilville Skating Rink
DI1903	Committed Funds- Lighting & EE Projects	\$ 20,400	Burrilville Library Lighting Project & Ashton Court Lighting Project
DI1904	Consultation Fees	\$ 250	To consult with RISE, National Grid, & ENE
DI1905	Energy Star Commercial Appliance	\$ 700	2 Appliances up to a maximum of \$350
DI1906	LED Street Light Incentive	\$ 8,000	Public Street Lighting Project
Net Industrial/Commercial		\$ 39,150	
<u>Administrative</u>			
DA1901	Administrative	\$ 21,000	Administrative labor, mileage and supplies.
DA1902	Energy Consultant	\$ 10,000	Energy Consultant to provide guidance and recommendations on DSM program.
DA1903	URI Energy Fellow Intern	\$ 9,000	Intern to assist with anticipated increased workload.
DA1904	Program Research and Development	\$ 500	Funds for future development of programs
Net Administrative		\$ 40,500	
<u>Community Outreach, Marketing & Education</u>			
DC1901	Funds for Follow-up to Successful Programs	\$ 1,000	To be used on more successful programs.
DC1902	Outreach/Education	\$ 6,500	Billing inserts, conservation promotional items, and the DEED membership.
DC1903	Jesse Smith Library Partnership	\$ 3,523	To partner with the Jesse Smith Library on an Energy Efficiency Project.
DC1904	Community Events	\$ 8,000	To promote Energy Efficiency @ Community Events (Green Festival, Family Fair, ...)
DC1905	Energy Efficiency Management continuing education	\$ 2,325	Tuition, hotel, meals, mileage, NEEP 2 day conference, and webinars
Net Community Outreach, Marketing & Education		\$ 21,348	
Approved DSM 2019 Budget		<u>\$ 182,746</u>	

Exhibit II: 2019 Expenses and Balances

Pascoag Utility District
Demand Side Management Programs - 2019 Approved Budget

	<u>Estimated</u>	<u>Actual</u>	<u>Difference</u>
Estimated/Actual carry over from 2018	\$ 9,106	\$ 8,331	\$ 775
Estimated sales for 2019	\$ 108,640	\$ 107,863	\$ 777
RGGI Funds	\$ 65,000	\$ 65,000	\$ -
Net 2019 budget	\$ 182,746	\$ 181,195	\$ 1,551

		2019 Approved		
		<u>Budget</u>	<u>Expenses</u>	<u>Balance</u>
<u>Residential Program</u>				
DR1901	Home Energy Audits with Weatherization Incentives	\$ 65,000	\$ 44,917	\$ 20,083
DR1902	Energy Star Appliance Rebates	\$ 5,838	\$ 5,220	\$ 618
DR1903	Refrigerators/Freezer Buy Back	\$ 560	\$ 560	\$ -
DR1904	Energy Efficient Windows/Doors	\$ 1,500	\$ 1,500	\$ -
DR1905	Heating System Incentive	\$ 1,500	\$ 1,750	\$ (250)
DR1906	ENERGY STAR qualified Water Heaters	\$ 600	\$ 200	\$ 400
DR1907	Energy Star Lighting fixtures & ceiling/ventilation fans	\$ 650	\$ 317	\$ 333
DR1908	Home Office Equipment/Home Electronics	\$ 500	\$ 203	\$ 297
DR1909	New Construction	\$ 1,000	\$ 500	\$ 500
DR1910	Central Air Conditioning	\$ 2,700	\$ 2,742	\$ (42)
DR1911	Change a Light Campaign	\$ 400	\$ 246	\$ 154
DR1912	Committed for 2018 Programs	\$ 1,500	\$ 1,486	\$ 14
	Net Residential	\$ 81,748	\$ 59,641	\$ 22,107
<u>Industrial/Commercial</u>				
DI1901	Energy Star Incentive - Office Equipment	\$ 500	\$ -	\$ 500
DI1902	Burrillville School Department	\$ 9,300	\$ 9,300	\$ -
DI1903	Committed Funds- Lighting & EE Projects	\$ 20,400	\$ 20,400	\$ -
DI1904	Consultation Fees	\$ 250	\$ -	\$ 250
DI1905	Energy Star Commercial Appliance	\$ 700	\$ 375	\$ 325
DI1906	LED Street Light Incentive	\$ 7,225	\$ 7,225	\$ -
	Net Industrial/Commercial	\$ 38,375	\$ 37,300	\$ 1,075
<u>Administrative</u>				
DA1901	Administrative	\$ 21,000	\$ 20,995	\$ 5
DA1902	Energy Consultant	\$ 10,000	\$ 8,710	\$ 1,290
DA1903	URI Energy Fellow Intern	\$ 9,000	\$ 8,596	\$ 405
DA1904	Program Research and Development	\$ 500	\$ -	\$ 500
	Net Administrative	\$ 40,500	\$ 38,300	\$ 2,200
<u>Community Outreach, Marketing & Education</u>				
DC1901	Funds for Follow-up to Successful Programs	\$ 1,000	\$ 1,000	\$ -
DC1902	Outreach/Education	\$ 6,500	\$ 6,017	\$ 483
DC1903	Jesse Smith Library Partnership	\$ 3,523	\$ 3,510	\$ 13
DC1904	Community Events	\$ 8,000	\$ 7,656	\$ 344
DC1905	Energy Efficiency Management continuing education	\$ 2,325	\$ 967	\$ 1,358
	Net Community Outreach, Marketing & Education	\$ 21,348	\$ 19,150	\$ 2,198
	Estimated DSM 2019 Budget/ Expenses/ Balance	\$ 181,971.00	\$ 154,391.49	\$ 27,579.51

Exhibit III: Savings Associated with DSM Projects

Residential Programs Totals	
Program Expenses	\$59,641
Annual kWh Electric Savings	63,233
Lifetime kWh Electric Savings	450,436
Summer Peak kW Savings	12.20
Participants	304
Lifetime kWh Electric Savings per Participant	1,482
Cost/Lifetime kWh Electric Savings	\$0.13
Lifetime Carbon Reductions (Short Tons)	430

DR1901: Home Energy Audits with Weatherization Incentives	
Program Expenses	\$44,917
Annual kWh Electric Savings	35,396
Lifetime kWh Electric Savings	126,577
Summer Peak kW Savings	6.31
Participants	115
Lifetime kWh Electric Savings per Participant	1,101
Cost/Lifetime kWh Electric Savings	\$0.35

DR1902: Energy Star Appliance Rebates	
Program Expenses	\$5,220
Annual kWh Electric Savings	10,099
Lifetime kWh Electric Savings	119,299
Summer Peak kW Savings	3.09
Participants	104
Lifetime kWh Electric Savings per Participant	1,147
Cost/Lifetime kWh Electric Savings	\$0.04

DR1903: Refrigerators/Freezer Buy Back	
Program Expenses	\$560
Annual kWh Electric Savings	3,431
Lifetime kWh Electric Savings	27,449
Summer Peak kW Savings	0.47
Participants	8
Lifetime kWh Electric Savings per Participant	3,431
Cost/Lifetime kWh Electric Savings	\$0.02

DR1904: Energy Efficient Windows/Doors	
Program Expenses	\$1,500
Participants	17

DR1905: Heating System Incentive	
Program Expenses	\$1,750
Annual MMBtu Gas Savings	61
Lifetime MMBtu Gas Savings	1,031
Participants	7
Lifetime MMBtu Gas Savings per Participant	147
Cost/Lifetime MMBtu Gas Savings	\$1.70

DR1906: ENERGY STAR Qualified Water Heaters	
Program Expenses	\$200
Annual kWh Electric Savings	2,014
Lifetime kWh Electric Savings	26,187
Summer Peak kW Savings	0.27
Participants	2
Lifetime kWh Electric Savings per Participant	13,094
Cost/Lifetime kWh Electric Savings	\$0.008

DR1907: ENERGY STAR Lighting Fixtures & Ceiling/Ventilation Fans	
Program Expenses	\$317
Annual kWh Electric Savings	504
Lifetime kWh Electric Savings	3,828
Summer Peak kW Savings	0.03
Participants	6
Lifetime kWh Electric Savings per Participant	638
Cost/Lifetime kWh Electric Savings	\$0.08

DR1908: Home Office Equipment/Home Electronics	
Program Expenses	\$203
Annual kWh Electric Savings	125
Lifetime kWh Electric Savings	751
Summer Peak kW Savings	0
Participants	6
Lifetime kWh Electric Savings per Participant	125
Cost/Lifetime kWh Electric Savings	\$0.27

DR1909: New Construction	
Program Expenses	\$500
Annual MMBtu Gas Savings	20
Lifetime MMBtu Gas Savings	344
Participants	2
Lifetime MMBtu Gas Savings per Participant	172
Cost/Lifetime MMBtu Gas Savings	\$1.45

DR1910: Central Air Conditioning	
Program Expenses	\$2,742
Annual kWh Electric Savings	3,483
Lifetime kWh Electric Savings	62,398
Summer Peak kW Savings	1.20
Participants	11
Lifetime kWh Electric Savings per Participant	5,673
Cost/Lifetime kWh Electric Savings	\$0.04

Exhibit III: Savings Associated with DSM Projects

DR1911: Change a Light Campaign

Program Expenses	\$246
Annual kWh Electric Savings	1,891
Lifetime kWh Electric Savings	10,809
Summer Peak kW Savings	0.26
Participants	8
Lifetime kWh Electric Savings per Participant	1,351
Cost/Lifetime kWh Electric Savings	\$0.02

DR1912: Committed for 2018 Programs

Total Program Expenses	\$1,486
Electric Expenses	\$1,236
Annual kWh Electric Savings	2,721
Lifetime kWh Electric Savings	32,449
Summer Peak kW Savings	0.57
Participants	17
Lifetime kWh Electric Savings per Participant	1,909
Cost/Lifetime kWh Electric Savings	\$0.05
Gas Expenses	\$250
Annual MMBtu Gas Savings	6
Lifetime MMBtu Gas Savings	105
Participants	1
Lifetime MMBtu Gas Savings per Participant	105
Cost/Lifetime MMBtu Gas Savings	\$2.39

Commercial & Industrial Programs

Program Expenses	\$37,300
Annual kWh Electric Savings	118,992
Lifetime kWh Electric Savings	1,548,782
Summer Peak kW Savings	18.70
Participants	7
Lifetime kWh Electric Savings per Participant	221,255
Cost/Lifetime kWh Electric Savings	\$0.02
Lifetime Carbon Reductions (Short Tons)	707

DI1902: Burrillville School Department

Program Expenses	\$9,300
Annual kWh Electric Savings	35,800
Lifetime kWh Electric Savings	465,396
Summer Peak kW Savings	7.38
Participants	1
Lifetime kWh Electric Savings per Participant	465,396
Cost/Lifetime kWh Electric Savings	\$0.02

DI1903: Committed Funds - Lighting & EE Projects

Program Expenses	\$20,400
Annual kWh Electric Savings	81,090
Lifetime kWh Electric Savings	1,054,165
Summer Peak kW Savings	11.02
Participants	3
Lifetime kWh Electric Savings per Participant	351,388
Cost/Lifetime kWh Electric Savings	\$0.02

DI1905: ENERGY STAR Commercial Appliance

Program Expenses	\$375
Annual kWh Electric Savings	2,103
Lifetime kWh Electric Savings	29,221
Summer Peak kW Savings	0.30
Participants	3
Lifetime kWh Electric Savings per Participant	9,740
Cost/Lifetime kWh Electric Savings	\$0.01