



PASCOAG
UTILITY DISTRICT

2021 Demand Side Management

Reconciled Full Year Budget Docket 5084

Pascoag Utility District
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March 25, 2022

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

Re: Docket 5084

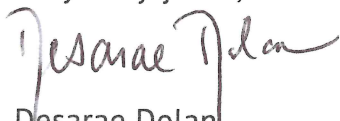
Dear Ms. Massaro,

On behalf of Pascoag Utility District (Pascoag or the District), enclosed are an original and nine copies of Pascoag's Reconciled Demand Side Management Reconciled Full Year Budget for 2021. These submissions include a complete summary of the DSM Budget for 2021 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 2021 DSM Program

Residential Conservation Program:

Home Energy Audits with Weatherization Incentives – A total of 70 home energy audits were performed by Energy New England from January-December. Due to both the growing pipeline of customers developed in recent years and the increased rebate incentive of \$3,000 for weatherization, customer interest has been high. 30 residential weatherization projects have been completed. There have been 725 LED lightbulbs, 64 smart strips, 78 faucet aerators, and 44 low-flow showerheads that were directly installed into homes that completed an energy audit. \$108,652.31 was paid for this program in 2021, funded by Regional Greenhouse Gas Initiative (2018-B). The program has provided our customers with 331,604 lifetime kWh electric savings since it began in 2019.

Residential Energy Star Offerings – The District processed 61 appliance rebates comprised of 6 refrigerator buybacks, 9 refrigerator buybacks & purchases, 15 clothes washers, 7 clothes dryers, 14 room air conditioners, 11 dehumidifiers, 2 printers and 1 television. The District issued a total of \$4,554 in rebates.

HVAC & Water Heating Program- Interest in the District's HVAC & Water Heating Program has also increased this year. The District rebated 12 mini-splits, 4 ducted mini-splits, 1 central air conditioning unit and 1 heat pump water heater, and the District is pleased to see customer interest and adoption of these measures growing alongside the audit and weatherization program. The District issued \$5,437.50 in rebates.

Change a Light Program – The District purchased 175 lighting kits from Project Energy Savers to distribute to income eligible customers. 65 kits were distributed in 2021 with the remainder to be distributed on an as needed basis. The kits contain 2 LED lightbulbs, 1 LED nightlight and an energy guide to lighting. \$1,750 were spent on lighting kits. The energy savings table in Exhibit III only allocates savings for kits that have been distributed thus far. 6.32 lifetime MWhs will be saved once all kits are distributed.

Committed for 2020 Programs- The District processed 2 incentives from 2020 that qualified for rebates totaling \$375.00. The rebates were for a mini-split and a washing machine.

Highlights of the 2021 DSM Program

Pilot Program: Landlord/Renter Weatherization Incentives-We enrolled 4 rental properties and 8 tenants into the program. There have been 81 LED lightbulbs, 7 smart strips, 12 faucet aerators, and 4 low-flow showerheads that were directly installed into the apartments that completed an energy audit. All four rental properties completed weatherization projects and both the landlords and tenants seemed pleased with the process and the results. \$15,000 of RGGI funds were used toward this program, with the District's DSM funds providing \$1,323.82. The total cost for this program was \$16,323.82.

Industrial/ Commercial

Small Business Energy Star Offerings: The District processed one rebate for a heat pump water heater in the amount of \$300.00.

Committed Funds-Lighting & EE Projects- Pascoag Library has completed the first phase of their lighting project. The front room and exterior LED lighting project has been completed. The project will reduce their kWh by 1,618 and their kW by .87. The project cost \$2,761 with the District providing a rebate of \$886.00. Pascoag Library was scheduled to begin working on their rear rooms and basement lighting by the fall of 2021 but had to wait for grant funding to come in and several items were backordered as well. The work for these projects will be completed in early 2022.

Potential 2021 Lighting & EE Projects-The District completed three commercial projects with GS Incorporated, St. Joseph's Church and Crystal Lake Rehabilitation Center. GS Incorporated's lighting project cost \$30,314 with the District providing a rebate of \$9,958. The project will save 29,824 kWh and reduce kW by 12.45. St. Joseph's Church lighting project cost \$7,227 with the District providing a rebate of \$2,242. The project will save 3,424 kWh and reduce kW by 3.42. Crystal Lake Rehab's lighting project cost \$90,906 with the District providing a rebate of \$15,000. The project will save 149,874 kWh and reduce kW by 30.56. The District provided a total of \$27,200 in rebates for these commercial projects which will yield over 390,000 lifetime kWh savings.

LED Street Light Incentive- The DSM Program rebated Pascoag Utility District \$10,000 for the LED Street Light Project that was completed in 2016 in which the District purchased and installed 610 LED Street Lights. This money reduces the Account Receivable from the DSM Program from \$63,096 to \$53,096.

Highlights of the 2021 DSM Program

Administrative

Administrative- The District spent \$22,085.20 on administrative labor, supplies and mileage associated with the various DSM projects.

Energy Consultant-The District spent \$9,783 on consulting services provided by Optimal Energy. Optimal Energy provides the District with guidance and recommendations for both the planning and oversight on the DSM program as well as estimates of the realized energy and demand savings from programs.

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

Community Outreach, Marketing & Education

Outreach/Education-The District has spent \$1,709.68 on advertisements and billing inserts to promote the various energy efficiency programs and incentives 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-5 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 a 2022 calendar which also contained energy conservation and recycling tips. The calendars were distributed in December 2021. The District has also created space for advertisers in this year's calendars to offset some of the expense. Letters regarding the advertisement offer were sent out to local businesses at the beginning of August. The District spent \$2,995.20 on this project and collected \$440 from advertisers, for a total project cost of \$2,555.20.

Community Events- The District's community event participation has been virtually nonexistent since the pandemic began in early 2020. The Town of Burrillville's Family Fair was cancelled again this year. In addition, the District made the decision to once again cancel the Green Festival after sending out a survey to vendors and receiving feedback that most were uncomfortable attending a large event at this time. The District is hopeful that community events will be held in 2022. There is no financial activity to report.

Highlights of the 2021 DSM Program

Energy Efficiency Management Continuing Education- Staff have attended several free virtual meetings/conferences but has not participated in any offsite meetings at this time. The District spent \$270.00 on an AESP energy efficiency program membership that allow staff to participate in energy efficiency trainings at low or no cost.

The total budget for 2021 was \$252,848.31; with \$107,526.50 collected from customer billing, \$48,552.90 from carry over 2020 RGGI Funds, \$75,345.02 from 2021 RGGI Funds and the actual carry over funds from 2020 of \$21,423.89. The total expenses to date for 2021 were \$211,881.71.

Exhibit I: 2021 Approved Budget

**Pascoag Utility District
Demand Side Management Programs - 2021 Approved Budget**

	<u>Estimated</u>	<u>Actual</u>
Carryover from 2020	\$ 20,931.00	\$ 21,423.89
Estimated Sales	\$ 108,026.00	\$ 108,026.00
RGGI Funds	\$ 71,383.00	\$ 75,345.02
Estimated RGGI Fund Carryover 2020	\$ 38,030.00	\$ 48,552.90
Net 2021 budget	\$ 238,370.00	\$ 253,347.81

**2021 Approved
Budget**

<u>Residential Program</u>		
DR2101	Home Energy Audits with Weatherization Incentives	\$ 108,897.92 120 audits and weatherization incentives-RGGI Funds
DR2102	Residential ENERGY STAR Offerings	\$ 8,000.00 Energy Star Appliances, Refrigerator/Freezer Buyback and Home Office/Electronics Equipment
DR2103	HVAC & Water Heating Program	\$ 7,000.00 Central AC, Central Heat Pump, Mini-Split Heat Pumps and Heat Pump Water Heaters
DR2104	Change a Light Program	\$ 1,750.00 Lighting outreach kits for income eligible customers
DR2105	Committed for 2020 Programs	\$ 1,500.00 To accommodate programs with depleted funds from 2019
DR2106	Pilot Program: Landlord/Renter Weatherization Incentives	\$ 30,000.00 Energy Audits and Weatherization for Rental Units. \$15,000 will come from RGGI Funds
	Net Residential	\$ 157,147.92
<u>Industrial/Commercial</u>		
DI2101	Small Business ENERGY STAR Offerings	\$ 1,200.00 ENERGY STAR Office Equipment and Commercial Appliances
DI2102	Committed Funds- Lighting & EE Projects	\$ 5,437.00 Pascoag Public Library Lighting Project and Ashton Court Mini-Split Project
DI2103	Potential 2021 Lighting & EE Projects	\$ 28,054.89
DI2104	LED Street Light Incentive	\$ 10,000.00 Public Street Lighting Project
	Net Industrial/Commercial	\$ 44,691.89
<u>Administrative</u>		
DA2101	Administrative	\$ 21,000.00 Administrative labor, mileage and supplies.
DA2102	Energy Consultant	\$ 10,000.00 Energy Consultant to provide guidance and recommendations on DSM program.
DA2103	Program Research and Development	\$ 500.00 Funds for future development of programs.
	Net Administrative	\$ 31,500.00
<u>Community Outreach, Marketing & Education</u>		
DC2101	Outreach/Education	\$ 7,500.00 Billing inserts, conservation promotional items, and advertisements.
DC2102	Jesse Smith Library Partnership	\$ 3,600.00 To partner with the Jesse Smith Library on an Energy Efficiency Project.
DC2103	Community Events	\$ 7,408.00
DC2104	Energy Efficiency Management continuing education	\$ 1,500.00 Workshops and Conferences related to the DSM program
	Net Community Outreach, Marketing & Education	\$ 20,008.00
	Estimated DSM 2021 Budget/ Expenses/ Balance	\$ 253,347.81

Exhibit II: 2021 Expenses and Balances

Pascoag Utility District
Demand Side Management Programs - 2021 Expenses and Balances

	<u>Estimated</u>	<u>Actual</u>	<u>Difference</u>
Carryover 2020	\$ 20,931	\$ 21,423.89	\$ 492.89
Estimated Sales	\$ 108,026	\$ 107,526.50	\$ (499.50)
RGGI Funds	\$ 71,383	\$ 75,345.02	\$ 3,962.02
RGGI Fund Carryover 2020	\$ 38,030	\$ 48,552.90	\$ 10,522.90
Net 2021 budget	\$ 238,370	\$ 252,848.31	\$ 14,478.31

	<u>2021 Approved Budget</u>	<u>Expenses Dec</u>	<u>Jan-Balance</u>
<u>Residential Program</u>			
DR2101 Home Energy Audits with Weatherization Incentives	\$ 108,897.92	\$ 108,652.31	\$ 245.61
DR2102 Residential ENERGY STAR Offerings	\$ 8,000.00	\$ 4,554.00	\$ 3,446.00
DR2103 HVAC & Water Heating Program	\$ 7,000.00	\$ 5,437.50	\$ 1,562.50
DR2104 Change a Light Program	\$ 1,750.00	\$ 1,750.00	\$ -
DR2105 Committed for 2020 Programs	\$ 1,500.00	\$ 375.00	\$ 1,125.00
DR2106 Pilot Program: Landlord/Renter Weatherization Incentives	\$ 30,000.00	\$ 16,323.82	\$ 13,676.18
Net Residential	\$ 157,147.92	\$ 137,092.63	\$ 20,055.29
<u>Industrial/Commercial</u>			
DI2101 Small Business ENERGY STAR Offerings	\$ 1,200.00	\$ 300.00	\$ 900.00
DI2102 Committed Funds- Lighting & EE Projects	\$ 5,437.00	\$ 886.00	\$ 4,551.00
DI2103 Potential 2021 Lighting & EE Projects	\$ 28,054.89	\$ 27,200.00	\$ 854.89
DI2104 LED Street Light Incentive	\$ 10,000.00	\$ 10,000.00	\$ -
Net Industrial/Commercial	\$ 44,691.89	\$ 38,386.00	\$ 6,306
<u>Administrative</u>			
DA2101 Administrative	\$ 21,000.00	\$ 22,085.20	\$ (1,085)
DA2102 Energy Consultant	\$ 10,000.00	\$ 9,783.00	\$ 217
DA2103 Program Research and Development	\$ 500.00	\$ -	\$ 500
Net Administrative	\$ 31,500.00	\$ 31,868	\$ (368)
<u>Community Outreach, Marketing & Education</u>			
DC2101 Outreach/Education	\$ 7,500.00	\$ 1,709.68	\$ 5,790
DC2102 Jesse Smith Library Partnership	\$ 3,600.00	\$ 2,555.20	\$ 1,045
DC2103 Community Events	\$ 7,408.00	\$ -	\$ 7,408
DC2104 Energy Efficiency Management continuing education	\$ 1,500.00	\$ 270	\$ 1,230
Actual Sales Adjustment	\$ (499.50)	\$ -	\$ (499.50)
Net Community Outreach, Marketing & Education	\$ 20,008.00	\$ 4,534.88	\$ 14,974
Actual DSM 2021 Budget/ Expenses/ Balance	\$ 252,848.31	\$ 211,881.71	\$ 40,966.60

Exhibit III: Savings Associated with DSM Projects

Residential Programs Totals

Program Expenses	\$137,093
Annual kWh Electric Savings	48,984
Lifetime kWh Electric Savings	451,912
Summer Peak kW Savings	9.9
Participants	234
Lifetime kWh Electric Savings per Participant	1,931
Cost/Lifetime kWh Electric Savings	\$0.30
Lifetime Carbon Reductions (Short Tons)	676

DR2101: Home Energy Audits with Weatherization Incentives

Program Expenses	\$108,652
Annual kWh Electric Savings	21,066
Lifetime kWh Electric Savings	118,157
Summer Peak kW Savings	5.64
Participants	85
Lifetime kWh Electric Savings per Participant	1390
Cost/Lifetime kWh Electric Savings	\$0.92

DR2102: Residential ENERGY STAR Offerings

Program Expenses	\$4,554
Annual kWh Electric Savings	15,881
Lifetime kWh Electric Savings	171,275
Summer Peak kW Savings	2.50
Participants	57
Lifetime kWh Electric Savings per Participant	3,005
Cost/Lifetime kWh Electric Savings	\$0.03

DR2103: HVAC & Water Heating Program

Program Expenses	\$5,438
Annual kWh Electric Savings	7,352
Lifetime kWh Electric Savings	125,864
Summer Peak kW Savings	0.78
Participants	17
Lifetime kWh Electric Savings per Participant	7,404
Cost/Lifetime kWh Electric Savings	\$0.04

DR2104: Change a Light Program

Program Expenses	\$1,750
Annual kWh Electric Savings	1,174
Lifetime kWh Electric Savings	2,349
Summer Peak kW Savings	0.18
Participants	65
Lifetime kWh Electric Savings per Participant	36
Cost/Lifetime kWh Electric Savings	\$0.75

DR2105: Committed for 2020 Programs

Program Expenses	\$375
Annual kWh Electric Savings	403
Lifetime kWh Electric Savings	7,026
Summer Peak kW Savings	0.05
Participants	2
Lifetime kWh Electric Savings per Participant	3,513
Cost/Lifetime kWh Electric Savings	\$0.05

DR2106: Pilot Program - Landlord/Renter Weatherization Incentives

Program Expenses	\$16,324
Annual kWh Electric Savings	3,108
Lifetime kWh Electric Savings	27,240
Summer Peak kW Savings	0.78
Participants	8
Lifetime kWh Electric Savings per Participant	3,405
Cost/Lifetime kWh Electric Savings	\$0.60

Commercial & Industrial Programs

Program Expenses	\$38,386
Annual kWh Electric Savings	33,297
Lifetime kWh Electric Savings	423,546
Summer Peak kW Savings	26.6
Participants	5
Lifetime kWh Electric Savings per Participant	84,709
Cost/Lifetime kWh Electric Savings	\$0.09
Lifetime Carbon Reductions (Short Tons)	199

DI2101: Small Business ENERGY STAR Offerings

Program Expenses	\$900
Annual kWh Electric Savings	1,258
Lifetime kWh Electric Savings	16,358
Summer Peak kW Savings	0.12
Participants	1
Lifetime kWh Electric Savings per Participant	16,358
Cost/Lifetime kWh Electric Savings	\$0.02

DI2102: Committed Funds - Lighting & EE Projects

Program Expenses	\$886
Annual kWh Electric Savings	1,495
Lifetime kWh Electric Savings	16,445
Summer Peak kW Savings	0.4
Participants	1
Lifetime kWh Electric Savings per Participant	16,445
Cost/Lifetime kWh Electric Savings	\$0.05

DI2103: Potential 2021 Lighting & EE Projects

Program Expenses	\$27,200
Annual kWh Electric Savings	30,544
Lifetime kWh Electric Savings	390,743
Summer Peak kW Savings	26.1
Participants	3
Lifetime kWh Electric Savings per Participant	130,248
Cost/Lifetime kWh Electric Savings	\$0.07

DI2104: LED Street Light Incentive

Program Expenses	\$10,000
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