



PASCOAG
UTILITY DISTRICT

Demand Side Management

2022 Report

Docket 5195

Pascoag Utility District
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November 8, 2021

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

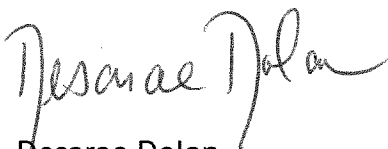
Re: RIPUC Docket No. 5195

Dear Ms. Massaro:

On behalf of Pascoag Utility District ("Pascoag" or the "District"), we herewith file an original and nine copies of Pascoag's proposed Demand Side Management Program for 2022. This submission includes Pascoag's Executive Summary, Program Details for 2022, reconciliation of 2021 DSM activities and budget, and other schedules that support this docket.

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

Very truly yours,



Desarae Dolan
DSM Coordinator

Cc: Mr. William Bernstein, Esquire

Schedule A-1: Proposed Budget for 2022 DSM Program

Pascoag Utility District
Demand Side Management Programs - 2022 Proposed Budget

Estimated carry over from 2021	\$ 38,373
Estimated sales for 2022	\$ 107,456
RGGI Funds	\$ 75,000
Estimated RGGI Fund Carryover 2021	\$ -
Net 2021 budget	\$ 220,829

2022 Proposed Budget

Residential Program

DR2201	Home Energy Audits with Weatherization Incentives	\$ 60,000	60 audits and weatherization incentives-RGGI Funds
DR2202	Residential ENERGY STAR Offerings	\$ 8,000	Energy Star Appliances and Refrigerator/Freezer Purchase & Buyback Program
DR2203	HVAC & Water Heating Program	\$ 8,000	Central AC, Central Heat Pump, Mini-Split Heat Pumps and Heat Pump Water Heaters
DR2204	Enhanced Incentive HVAC Program	\$ 10,000	4 rebates for electric resistant heat customers who have had an energy audit and weatherized their home
DR2204	Committed for 2021 Programs	\$ 1,500	To accommodate programs with depleted funds from 2021
DR2205	Pilot Program: Landlord/Renter Weatherization Incentives	\$ 30,000	Energy Audits and Weatherization for Rental Units. \$15,000 will come from RGGI Funds
	Net Residential	\$ 117,500	

Industrial/Commercial

DI2201	Small Business ENERGY STAR Offerings	\$ 1,200	ENERGY STAR Equipment and Commercial Appliances
DI2202	Committed Funds- Lighting & EE Projects	\$ 8,576	Ashton Court Mini-Split Project and Wallum Lake Rod & Gun Club LED Lighting Project
DI2203	Potential 2022 Lighting & EE Projects	\$ 32,953	
DI2204	LED Street Light Incentive	\$ 10,000	Public Street Lighting Project
	Net Industrial/Commercial	\$ 52,729	

Administrative

DA2201	Administrative	\$ 21,000	Administrative labor, mileage and supplies.
DA2202	Energy Consultant	\$ 10,000	Energy Consultant to provide guidance and recommendations on DSM program.
DA2203	Program Research and Development	\$ 500	Funds for future development of programs.
	Net Administrative	\$ 31,500	

Community Outreach, Marketing & Education

DC2201	Community Outreach and Education	\$ 14,000	Billing inserts, conservation promotional items, advertisements, community events and EE education
DC2202	Jesse Smith Library Partnership	\$ 3,600	To partner with the Jesse Smith Library on an Energy Efficiency Project.
	Community Events	\$ -	Combined Community Events with Outreach and Education
DC2203	Energy Efficiency Management continuing education	\$ 1,500	Workshops and Conferences related to the DSM program

Net Community Outreach, Marketing & Education	\$ 19,100
Estimated DSM 2022 Budget/ Expenses/ Balance	\$ 220,829

Schedule A-2: 2021/2022 Comparison

Pascoag Utility District
Demand Side Management Programs - 2021/2022 Comparison

	<u>2021</u>	<u>2022</u>
Actual/Estimated carry over from 2020/2021	\$ 21,424	\$ 38,373
Estimated sales for 2021/2022	\$ 108,026	\$ 107,456
RGGI Funds	\$ 75,345	\$ 75,000
RGGI Carryover Funds	\$ 48,553	\$ -
Net 2021/2022 budget	\$ 253,348	\$ 220,829

	<u>2021 Proposed</u>	<u>2022 Proposed</u>		
	<u>Budget</u>	<u>Budget</u>	<u>Change in \$</u>	<u>% Change</u>
<u>Residential Program</u>				
Home Energy Audits with Weatherization Incentives	\$ 108,898	\$ 60,000	\$ (48,897.92)	-45%
Residential ENERGY STAR Offerings	\$ 8,000	\$ 8,000	\$ -	0%
HVAC & Water Heating Program	\$ 7,000	\$ 8,000	\$ 1,000.00	14%
Enhanced Incentive HVAC Program	\$ -	\$ 10,000	\$ 10,000.00	
Change a Light Program	\$ 1,750	\$ -	\$ (1,750.00)	-100%
Committed for 2020/2021 Programs	\$ 1,500	\$ 1,500	\$ -	0%
Pilot Program: Landlord/Renter Weatherization Incentives	\$ 30,000	\$ 30,000	\$ -	0%
Net Residential	\$ 157,148	\$ 117,500	\$ (39,647.92)	-25%
<u>Industrial/Commercial</u>				
Small Business ENERGY STAR Offerings	\$ 1,200	\$ 1,200	\$ -	0%
Committed Funds- Lighting & EE Projects	\$ 5,437	\$ 8,576	\$ 3,139.00	58%
Potential Lighting & EE Projects	\$ 28,055	\$ 32,953	\$ 4,898.11	17%
LED Street Light Incentive	\$ 10,000	\$ 10,000	\$ -	0%
Net Industrial/Commercial	\$ 44,692	\$ 52,729	\$ 8,037.11	18%
<u>Administrative</u>				
Administrative	\$ 21,000	\$ 21,000	\$ -	0%
Energy Consultant	\$ 10,000	\$ 10,000	\$ -	0%
Program Research and Development	\$ 500	\$ 500	\$ -	0%
Net Administrative	\$ 31,500	\$ 31,500	\$ -	0%
<u>Community Outreach, Marketing & Education</u>				
Community Outreach/Education	\$ 7,500	\$ 14,000	\$ 6,500.00	87%
Jesse Smith Library Partnership	\$ 3,600	\$ 3,600	\$ -	0%
Community Events	\$ 7,408	\$ -	\$ (7,408.00)	-100%
Energy Efficiency Management continuing education	\$ 1,500	\$ 1,500	\$ -	0%
Net Community Outreach, Marketing & Education	\$ 20,008	\$ 19,100	\$ (908.00)	-5%
Estimated DSM Budgets/Change \$/Change%	\$ 253,348	\$ 220,829	\$ 32,518.81	-13%

Schedule B: Executive Summary

Submitted by Desarae Dolan

For over 100 years, Pascoag Utility District (PUD) has been serving customers within the rural Northern Rhode Island community of Burrillville. As one of two public power utilities in Rhode Island, we maintain a historically close relationship with our 4,900 business and residential customers, while maintaining a modest staff of 18 employees. We pride ourselves on our ability to deliver low rates, rapid response to outages, and face to face engagement with the local community.

As a not-for-profit organization, we are also fully committed to the shared goals of clean energy, electrification of the grid, and demand side management. While COVID-19 has necessitated adjustments to our program in the last two years, the following report will detail our findings, commitments and requests for the coming year.

In regard to electrification, we are also preparing our customers, facilities and grid for several evolving scenarios. The 2021 Heating Electric Forecast from ISO-New England recently projected that an increase in electric heat pumps could potentially increase wintertime peak demand by 7.4%. With the simultaneous addition of electric vehicles to the grid, this increased demand may add to concern about electricity supply during extreme cold or weather events. The American Council for an Energy-Efficient Economy recently reported on the possibility that New England's peak electric loads could shift from summer to winter-should adoption levels continue to increase for electric vehicles and heat pumps.

In 2018, PUD began exploring battery storage as a cost-effective, non-wires alternative to a costly feeder-line upgrade. This project was based on the developing need to deliver circuit relief during the highest load days of the year. PUD's load typically peaks in July each year as the cooling season ramps up, which makes the summer months challenging for a small utility. The battery storage project with Agilitas (formerly New England Battery Storage) is on track for a commercial operation date by June 30, 2022. Site preparation will begin in December 2021. National Grid completed its System Impact Study (SIS) for the battery project, but has not yet issued the Interconnection Agreement related to the SIS. Our substation expansion, which was part of the overall non-wires alternative project, was completed and went operational in May of 2021. This expansion now splits PUD's load between the two National Grid feeder lines, instead of only one line providing our total load with the 2nd line used as a back-up. This change reduced the

Schedule B: Executive Summary

thermal loading of the primary feeder line.

Additionally, this year PUD has been researching Advanced Metering Infrastructure (AMI) technology. It will be critical for PUD staff to have an in-depth view of its electrical system in order to anticipate and mitigate potential power issues. The system will also give us the capability to offer time of use rates and demand response programs in the future, to help lower demand as more heat pumps and electric vehicles come on line.

In our engagement with rural Northeast RI customers around weatherization and energy conservation, we are seeking to manage our present demand while preparing for the potentially aggressive adoption of electrification in the near future.

We believe PUD's 2022 Demand Side Management Program reflects an opportunity to enhance our energy efficiency offerings while continuing to learn about customer's current and future energy efficiency needs in a changing environment.

Working in partnership with the Rhode Island Office of Energy Resources (OER) and with our energy consultant, Optimal Energy, PUD is committed to implementing a series of strategies that will enhance and expand ratepayer access to important energy-cost saving measures, with the added benefit of reducing the community's greenhouse gas emissions. Through financial and technical assistance offerings, we've worked closely with OER staff to begin advancing two recommendations and six strategies as a pathway for the future of the utility's DSM program (full strategy document contained in Schedule H). These recommendations and strategies are described herein, with details on progress made in 2021 and proposed program enhancements in 2022.

Administrative Recommendation #1:

Align energy efficiency funding more closely with sector SBC contributions.

To ensure equity among customer segments, PUD will endeavor to more closely align DSM program spending with system benefit charge collections from each sector. Residential sales account for 60% of total sales while non-residential sales make up the remaining 40%.

Schedule B: Executive Summary

In 2021, 76% of the budget was devoted to residential programs and 24% of the budget was dedicated to commercial programs. PUD proposes to decrease the funding level for residential energy audits to \$117,500, as we will not have any carryover of RGGI funds from 2021. This would bring the residential portion of the budget to 69%.

The commercial portion of the budget currently represents 31%. PUD has reached out to local businesses, but there is still some hesitancy to commit to new projects due to pandemic related business concerns. We have several businesses who are contemplating lighting projects in 2022. We have allocated funds for the Potential 2022 Lighting & EE Projects line items and will continue to provide outreach to our commercial and industrial customers about this program.

Administrative Recommendation #2:

Account for and report on full costs and benefits as defined in the Rhode Island Cost-Effectiveness Test.

PUD recognizes the importance of accurately tracking energy and cost savings data, as well as appropriately accounting for all benefits of DSM. However, staff constraints have historically prevented more detailed analysis than has been filed through the DSM plan and year-end report.

In 2019, PUD retained Optimal Energy as its energy efficiency consultant to help guide data collection, cost-benefit analysis, and program development moving forward. PUD now has the ability to submit a comprehensive data overview in the mid and year end reports that includes metrics such as annual/lifetime savings, peak savings, participants, cost-to-achieve, and carbon reductions.

Strategy #1: Decrease energy burden and address energy-related school construction priorities in Burrillville Public Schools located within PUD's territory.

Reducing energy use and costs through efficiency improvements in schools would allow schools to reallocate cost savings to other projects, and comprehensive energy efficiency has additional benefits for health and education outcomes. Helping our schools is a priority strategy, with benefits that extend to students, staff, and the community.

Schedule B: Executive Summary

The Burrillville School Department completed major LED lighting projects in three of its five schools in 2018. In 2019, the Burrillville School Department continued the success of its energy efficiency efforts by completing an LED lighting project at the Levy Rink. The school had proposed a lighting project for the Burrillville High School (BHS) in 2020, but due to budgetary constraints had to table the project. Unfortunately, the Burrillville School Department will not be able to move forward with this project in 2022 due to ongoing budget concerns. Currently, BHS is the last school in the District awaiting transition to LED lighting. In 2022, PUD will continue to seek a path forward for this project, including OER consulting to identify additional means of supporting this important work.

Strategy #2: Enhance incentive levels, especially for measures that go beyond lighting (e.g. weatherization).

Effective incentives are those that encourage energy efficient choices, especially those that would not have occurred in absence of the incentive. There has been concern that the incentive levels may be too low in some categories to encourage customers to take advantage of the program. PUD reviewed rebate incentive levels with its energy efficiency consultant, and proposed minor changes to some programs for 2022. PUD would like to increase the heat pump hot water heater rebate level. PUD is also proposing a pilot program for an enhanced heat pump rebate that will target electric heat customers who have already weatherized their homes.

Strategy #3: Subsidize energy-efficient workforce development training for facilities managers.

Energy efficiency workforce development training, like the Building Operator Certification (BOC), provide essential information for how to effectively maintain buildings, including specific processes to ensure optimal energy use and proper energy management. Such opportunities also connect facilities managers to each other, fostering a professional network for sharing best practices and answering specific questions. We are going to be working closely with RISE Engineering in 2022 to get feedback from our commercial and industrial customers on what energy efficiency improvements and training would be helpful to their businesses. PUD will take the information we receive from customers, and propose changes to the commercial and industrial program in 2023, as appropriate.

Schedule B: Executive Summary

Strategy #4: Facilitate commercial financing options either through a third-party bank and/or enable Commercial Property Assessed Clean Energy.

For small businesses, energy efficiency measures can not only reduce energy costs, but help companies absorb shocks from increased energy prices or use due to extreme weather. However, small businesses often struggle with finding the up-front capital needed for these projects, regardless of the long-term benefit from reduced energy bills.

PUD has identified several energy efficiency projects in small, local businesses, but has noted the barrier upfront costs play in preventing businesses from realizing benefits of energy efficiency. One possible finance product that could alleviate the upfront cost hurdle is Commercial Property Assessed Clean Energy (C-PACE), a product offered through a third-party institution that does not place any additional burden on ratepayers. Unfortunately, the Town of Burrillville was not supportive of the C-PACE program when it was voted on in 2018 and remains unsupportive of this financing program.

PUD and OER had preliminary conversations with local banks in 2020, to determine if they were able to offer a product that would help fill this need. After speaking with several banks, we determined that most were unable to offer a PUD specific financing product that would fit our needs at this time. One of the main barriers being the time and resources needed to develop a program specific to PUD customers. At this time, the banks didn't feel that they would get enough loan volume to justify the creation of a new product. There was also concern that our current budget would not allow us to pay down the interest on enough loans to make the investment worthwhile. We plan on revisiting financing options in the future, should opportunities present themselves. PUD will be including a list of local banks and their contact information with energy audit reports in 2022 in order to provide a first step for customers interested in financing energy efficiency upgrades using traditional loan products.

Strategy #5: Increase the number of residential energy assessments and no-cost direct install measures, with increased outreach to low-income residents.

Residential energy assessments with no-cost direct install measures are critical for households to

Schedule B: Executive Summary

reduce energy use and lower their energy bills. PUD has historically contracted with Energy New England (ENE) to conduct home energy assessments. Previously, ENE conducted 10-20 assessments annually within PUD territory. The assessments provided limited no-cost direct install measures (i.e. up to three LED bulbs per home) and did not include tests of ventilation or insulation.

In 2019, we increased the line item for energy audits to \$65,000 with funding from the Regional Greenhouse Gas Initiative (2018-B). This funded energy audits and weatherization incentives such as insulation, air sealing and programmable thermostats. 115 home energy audits were performed during that year with 5 customers taking advantage of weatherization rebates and 9 customers installing programmable thermostats.

In 2020, PUD saw a sharp decline in energy audits due to COVID-19. Customers were slow to participate in the remote home energy audit program that was offered in place of in-person assessments for a portion of the year. In July 2020, PUD petitioned the Rhode Island Public Utilities Commission to increase the weatherization and air sealing rebate percentage from 75% to 100% as well as raise the maximum rebate caps from \$800 for insulation and \$500 for air sealing to a combined total of \$3,000 per customer. The rebate level was raised in October and new audits and weatherization projects started to trickle in.

In 2021, due in large part to the increased weatherization incentive and lessening impacts of the COVID-19 pandemic, PUD was able to complete 78 energy audits and weatherize 27 homes.

Strategy #6: Continue to improve residential offerings by developing specific incentives for renters/landlords.

Renters and landlords face a split-incentive when it comes to energy efficiency improvements, and resolving this problem is a current challenge that efficiency programs are tackling across the country. Renters are often low-income residents who face a significantly higher energy burden than other residents, and are hit particularly hard by price volatility. Furthermore, solving this problem would lead to better health and productivity outcomes, especially for vulnerable populations.

Schedule B: Executive Summary

Due to an abnormally large carryover of funds from 2020, PUD created a focused pilot program in 2021 to address weatherization needs in rental units. PUD was able to conduct audits and provide weatherization rebates for 4 duplex rental properties. PUD would like to continue gathering data and extend the pilot program into 2022.

Additional and Existing Programs Not Covered Above

We have kept programs largely the same this year, with the exception of the enhanced heat pump rebate for electric heat customers. Although savings may not be as favorable as that of an electric heat resistant customer converting to heat pump technology, we believe offering rebates to customers purchasing efficient HVAC products to be a worthy investment for several reasons.

We have found providing a modest incentive for energy efficient HVAC equipment creates an opportunity to engage customers about energy efficiency guidelines. To the extent these HVAC products impact our present and future demand, guiding our customers to the most efficient cooling equipment possible is a priority in managing it.

PUD is acutely aware that as a small utility, we need to prepare for electrification. The more customers we educate about energy conservation/efficiency and outfit with energy efficient technology, the better. For this reason we have continued popular community outreach and education projects, including our annual Green Festival and energy conservation poster/calendar projects.

In conclusion, PUD feels that the proposed plan has been developed to not only address the current needs of our customers but to support future needs as well.

PUD is looking forward to continuing its work on the DSM Program. Pascoag's proposed budget is based on a forecast of Sales for 2022 of 53,728,000 kWh (\$107,455). The District anticipates a \$38,373 carryover fund from 2021, \$0 from 2021 RGGI carryover funds and \$75,000 from 2022 RGGI funds, which would bring the total 2022 budget to \$220,829.

Schedule C: Program Details 2022

2022 Program Details- Residential, Commercial and Industrial, Administrative and Customer Education, Community Outreach, Marketing & Education

Residential Programs

In the 2022 DSM program, Pascoag has elected to keep our popular residential program mostly unchanged, with the addition of a pilot program focused on an enhanced heat pump incentive for electric heat customers. This summary will detail the programs proposed for 2022 and will review performance of the 2021 programs.

Audits with Follow-Up Incentives-\$60,000:

Residential energy assessments with no-cost direct install measures are critical for households to reduce energy use, lower their energy bills, and understand and plan for future energy improvements. PUD has historically contracted with Energy New England (ENE) to conduct home energy assessments.

Before 2019, ENE conducted 10-20 assessments annually within PUD territory. In the last three years, upon being awarded Regional Greenhouse Gas Initiative (RGGI) funding from the Office of Energy Resources, 221 residential energy audits were conducted and 43 weatherization projects were completed. Since 2019, an average participating customer has saved approximately 317 kWh per year.

Through October 2021, we have conducted 78 energy audits, weatherized 27 homes and provided rebates for two programmable thermostats.

In 2022, we would like to decrease this line item from \$108,897 to \$60,000 with funds from RGGI (2021B). The reason for the sharp decrease is due to the 2021 Audit and Weatherization budget having a large carryover from 2020 RGGI funds that went unspent due in large part to reduced program activity during the height of the pandemic. Pascoag does not anticipate there will be any carryover from RGGI funds in this year's budget. Pascoag also plans to reduce the weatherization incentive from "100% up to \$3,000" to "100% up to \$2,250", in order to more equitably distribute rebates and control costs. Our goal in doing so was to maintain a strong incentive (coverage for for most customers at or above 75% of total project costs), while helping to fund more

Schedule C: Program Details 2022

weatherization projects in response to increasingly high demand.

The \$60,000 in the 2022 budget will fund energy audits and weatherization incentives such as insulation, air sealing and programmable thermostats. The energy audits will also include direct-installs such as LED light bulbs and smart strips. Low-flow aerators/shower heads are also available for customers that heat with electric, oil and propane.

The program would consist of the following:

60- Audits	\$17,400
Direct Installs (LED Lightbulbs, smart strips, aerators and shower heads)	\$8,000
Insulation and Air Sealing Measures	100% up to \$2,250
Programmable Thermostat Incentives	
Wireless	\$100
Non-wireless	\$25

PUD would be able to devote an estimated \$17,400 to residential energy audits, \$8,000 for direct installs and \$34,600 to rebate insulation, air sealing and programmable thermostats. Only customers who received an energy audit recommendation for the products above, would qualify for the rebates. Additionally air sealing and insulation must be installed by a licensed contractor to qualify for rebates.

Residential ENERGY STAR Offerings: \$8,000

Pascoag Utility District would like to keep the bulk of this program at its current incentive levels. However, PUD plans to remove televisions, computers, displays and printers from the 2022 program due to the low claimable savings these products provide. Additionally PUD has only processed one television and two printer rebates in 2021 which demonstrates low program participation for these products.

PUD intends to continue the following incentives for this program:

Schedule C: Program Details 2022

2022 Proposed Residential ENERGY STAR Program	Proposed Incentive
Refrigerator/Freezer Purchase & Buyback Program	\$75 purchase of new refrigerator or freezer \$50 buyback plus the cost of removal \$19
Clothes Washer and Dryers	\$75.00
Air Purifiers and Air Conditioners	\$40.00
Dehumidifiers	\$30.00

PUD would like to maintain funding at \$8,000 in 2022.

HVAC and Water Heater Program-\$8,000

PUD would like to maintain the same rebate levels as proposed in 2021, with the exception of heat pump hot water heaters. The District would like to increase the incentives for smaller heat pump water heaters. The new rebate structure for HVAC products developed in 2020 seems to be working well and we've noticed a significant increase in customer interest in mini-splits. In 2021, we've processed 14 mini-split rebates but only one heat pump hot water heater. We'd like to increase the heat pump hot water heater rebate from \$300 to \$450 for \leq 55 gallon heat pump water heaters. We believe that increasing the incentive to this amount will result in increased participation. PUD would like the $>$ 55 gallon water heater to remain at the \$150 rebate due to less savings potential with these larger systems.

2022 Proposed HVAC and Water Heater Program	SEER	EER	HSPF	Proposed Rebate
Central Air Conditioning	≥ 16	≥ 13		\$50 per ton
Central Heat Pump	≥ 15		≥ 9	\$350 per ton
Ducted or Mixed Ducted Mini-Split Heat Pump	≥ 15		≥ 9	\$350 per ton
Ductless Mini-Split Heat Pump	≥ 15		≥ 10	\$150 per ton

Schedule C: Program Details 2022

2022 Proposed HVAC and Water Heater Program	Rating	Proposed Rebate
Heat Pump Water Heater	ENERGY STAR ≤ 55 gallon should have a minimum UEF of 2.00	\$450
	ENERGY STAR > 55 gallons should have a minimum UEF of 2.70	\$150

PUD would like to increase the level of funding from \$7,000 to \$8,000 due to increased demand from customers purchasing mini-splits.

Pilot Program-Enhanced Incentive Heat Pump Program: \$10,000

Pascoag would like to create a pilot program to offer an enhanced incentive to electric heat customers who receive an energy audit and have weatherized their home. Pascoag estimates it has 40 electric heat customers and would like to assist them in transitioning from electric resistant heating to more efficient means of heating. The increased rebate for the enhanced incentive would allow us to target customers that maximize the amount of electric savings achieved from upgrading to heat pumps while also delivering significant energy savings to the customer as well.

2022 Proposed Enhanced Heat Pump Program	SEER	EER	HSPF	Proposed Rebate
Central Heat Pump	≥15		≥9	\$1250 per ton
Ducted or Mixed Ducted Mini-Split Heat Pump	≥15		≥9	\$1250 per ton
*Rebate not to exceed \$2500 per customer for this program.				

Schedule C: Program Details 2022

Change a Light Program: \$0

In 2021, PUD delivered lighting kits to income-eligible customers to provide outreach about our programs and energy efficiency information. The lighting kits contained LED light bulbs, an LED nightlight, energy efficiency information and outreach material from Tri County Community Action agency. PUD utilized an internal database of customers who have applied for Financial Hardship or Infant Protection to create a more targeted approach of outreach.

Although PUD believes this was a necessary outreach approach during the pandemic, and an important way to engage with vulnerable populations specifically, we would like to discontinue this program as more in-person opportunities are available to reach these customers.

Pilot Program: Landlord/Renter Weatherization Program: \$30,000

In 2021, Pascoag Utility District created a weatherization pilot program focused on rental properties. The program conducts energy audits for 1-4 unit dwellings and will also include direct-installs such as LED light bulbs and smart strips. Low-flow aerators/shower heads are also available for customers that heat with electric, oil and propane. A rebate of 100% up to \$5,000 is provided for qualified air sealing and insulation measures.

PUD was able to rebate 4 duplex rental properties for their audit and weatherization efforts this year. Although, Pascoag only spent a little more than half of the funds allocated to this program in 2021, it would like to keep funding at the same level. Pascoag has only worked on weatherization projects for duplexes and anticipates higher costs if working with larger rental units in 2022.

The District would like to mirror the program from 2021 and commit \$30,000 to fund this program, with RGGI funds again providing half of financial support. This would allow for:

4 rental property energy audits with up to 4 units each	\$3,760
Direct Installs (LED Lightbulbs, smart strips, aerators and shower heads)	\$6,240
Insulation and Air Sealing Measures- 100% up to \$5000	\$20,000

Schedule C: Program Details 2022

Committed for 2021 Programs: \$1,500

Pascoag Utility is estimating a carryover of funds from 2021 in the amount of \$38,373. PUD would like to use \$36,873 of these funds in the 2022 budget and use \$1,500 to satisfy 2021 qualified rebates for customers who do not receive a rebate because the funds for a particular program had been depleted in 2021 or for rebates that are turned in after the books are closed for 2021; the cutoff date for 2021 rebates would be March 31, 2022.

Commercial and Industrial Programs

Small Business ENERGY STAR Offerings: \$1200

Pascoag would like to maintain the same program as was approved in 2021 for Small Business ENERGY STAR Offerings. PUD would like to mirror the incentives offered under the Residential ENERGY STAR program, for non-commercial grade appliance equipment. Pascoag proposes that the commercial appliances listed below would qualify for a rebate of 10% with a cap of \$350.

Commercial Dishwashers that earn the ENERGY STAR rating on average are 40% more energy efficient and 40% more water efficient than standard models.

Commercial Fryers that earn the ENERGY STAR rating are up to 30% more energy efficient than standard models. They also offer shorter cook times and higher production rates through advanced burner and heat exchanger designs.

Commercial Ice Machines that earn the ENERGY STAR rating are on average 10% percent more energy efficient and 20% more water efficient than standard models.

Commercial Hot Food Holding Cabinets that have earned the ENERGY STAR rating are 70% more efficient than standard models. Models that meet the requirements incorporate better insulation, reducing heat loss, and may also offer additional energy saving devices such as magnetic door gaskets, auto-door closures, or Dutch doors.

Schedule C: Program Details 2022

Commercial Griddles that earn the ENERGY STAR rating are about 11% more energy-efficient than standard models. A qualified grill can save 1,300 kWh annually.

Commercial Ovens that earn the ENERGY STAR rating are 20% more energy-efficient than standard models. These ovens can save 650 kWh annually.

Commercial Refrigerators & Freezers that meet the ENERGY STAR specifications will be 25% more energy efficient than a standard option because they are designed with components such as high efficiency compressors and improved coil design, electronically commutated motors, variable speed fans, and efficient interior lighting.

Commercial Steam Cookers, also known as compartment steamers that meet the ENERGY STAR qualifications are up to 60% more energy-efficient than standard models. They can save 11,500 kWh annually.

Pascoag has provided an incentive for one appliance rebate in 2021. This program continues to be underutilized by our commercial and industrial customers. PUD will be working closely with RISE Engineering in 2022 to engage small businesses in order to promote this program and get feedback on what types of energy savings programs would be most helpful in their day to day operations. RISE currently provides free energy audits for PUD's commercial and industrial customers.

PUD would like to maintain this level of funding at \$1200 in 2022.

Industrial and Commercial Projects 2021 and 2022:

Committed Funds-Lighting and Energy Efficiency Projects 2021:

Pascoag Library has completed the first phase of a three phase LED lighting project this year. The first phase completed the front room and exterior lighting. The project cost \$2,761, with Pascoag Utility providing a rebate of \$886.00. This project will reduce their kWh by 1,618 and kW by .87 annually. Phase two will upgrade lighting of the rear book area and phase 3 will update basement lighting. Both are projected to be finished by the end of the year. Once the project is completed it will reduce the library's kWh by 40,344 over the life of the project.

Schedule C: Program Details 2022

Potential 2021 Lighting and Energy Efficiency Projects:

Pascoag Utility was able to work with three commercial and industrial customers on lighting projects in 2021.

- GS Inc. completed an LED lighting project that cost \$30,314, with Pascoag Utility providing a \$9,958 rebate. The project will reduce kWh by 357,888 and reduce kW by 12.45 over the life of the project.
- St. Joseph's Church completed an LED lighting project that cost \$7,227, with Pascoag Utility providing a \$2,242 rebate. The project will reduce kWh by 41,088 and kW by 3.42 over the life of the project.
- Crystal Lake Rehabilitation Center completed an LED lighting project for their entire facility that cost \$90,906, with Pascoag providing a \$15,000 rebate. The project will reduce kWh by 1,798,488 and kW by 30.56 over the life of the project.

Committed Funds 2022- Lighting and Energy Efficiency Projects: \$8,576

Ashton Court was unable to complete the anticipated mini-split project this year and anticipates beginning work on it in 2022. Ashton Court is diligently working to upgrade their facilities and make their elderly, affordable housing units as energy efficient as possible. In 2022, they would like to install mini-splits in the common entryways of all their units. Currently there is no way to effectively regulate the heating in these common areas so they would like to install mini-splits to be able to adjust and program the heating in the entryways. This project will install 14 mini-splits within the units for a potential rebate of \$2,100.

Wallum Lake Rod & Gun Club would like to do an LED lighting project of the skeet and trap fields. The project would cost \$20,356, with PUD providing an incentive of \$6,476. The project will reduce kWh by 274,560 and kW by 11.44 over the life of the project.

Schedule C: Program Details 2022

Potential 2022 Lighting and Energy Efficiency Projects: \$32,953

PUD would like to fund Potential 2022 Lighting and Energy Efficiency Projects with \$36,329. Often, businesses will approach Pascoag Utility after the file date, and ask whether a project they are considering, will qualify for any type of financial assistance through rebates. This line item gives PUD a source of funds to work from, so we do not miss out on an opportunity to work with our business customers on energy efficiency projects.

Crystal Lake Golf club is considering an LED lighting project at their facility next year and is currently working with RISE on the estimate.

2022 LED Street Light Incentive: \$10,000

In 2021, the DSM Program rebated Pascoag Utility District \$10,000 for the LED Street Light Project completed in 2016 in which PUD purchased and installed 610 LED Street Lights. In 2022, we'd like to maintain this line item at \$10,000. This money will be used to reduce the Account Receivable from the DSM Program from \$53,096 to \$43,096. The District is keeping this funding level, consistent with previous years, to balance the rate at which the streetlight work is paid down with the funding needs of other areas of the program.

Administrative Programs

Administrative Expenses: \$21,000

The funds from this line item will be used to pay for staff time, supplies, and reimbursement of mileage when employees use their private vehicles for DSM related activities.

Pascoag has three Customer Service Representatives who devote many hours to the DSM programs by working with customers, taking applications for rebates on the various programs and answering questions over the phone and in person. The DSM Coordinator spends many hours researching the compliance of the various rebates submitted,

Schedule C: Program Details 2022

reconciling DSM programs, updating existing programs, creating new programs for the next year, responding to data requests, participating in regulatory proceedings and requesting reallocation of funds. In addition, the Assistant General Manager works with commercial and industrial customers on various C & I projects and performs site visits.

The District would like to maintain funding of this line item at \$21,000 in 2022.

Energy Efficiency Consultant: \$10,000

PUD recognizes the importance of accurately tracking energy and cost savings data, as well as appropriately accounting for all benefits of demand side management. However, staff constraints have historically prevented more detailed analysis than has been filed through the demand side management plan and year-end report. In 2019, PUD retained Optimal Energy as an energy efficiency consultant to help guide data collection, cost-benefit analysis, and program development. Their assistance has been integral in the success of the program and has continually helped shape the DSM program. We'd like to continue working with Optimal Energy in 2022 to review and improve our DSM program. The District would like to fund this line item at \$10,000 in 2022.

Program Research and Development: \$500

Pascoag Utility would like to fund this line item with \$500, as a source of funds to develop future energy efficient programs. These funds would be used to research and review other successful DSM programs that comparable utilities are participating in.

Community Outreach, Marketing & Education

Community Outreach/Education Program: \$14,000

Pascoag Utility would like to combine Community Outreach and Education and Community Events into one program-Community Outreach/Education. It is more efficient administratively to track the information together because the two categories typically overlap. Due to the lingering

Schedule C: Program Details 2022

effects of the pandemic, Pascoag has struggled with in-person outreach efforts this year. Pascoag spent \$1,459.88 in outreach and education costs for bill inserts and advertisements in 2021. Pascoag did not spend any funds for Community Events. We did not purchase any fulfillment materials due to the uncertainty of events being held in 2021 which is why expenses were minimal. We did distribute information at our office for walk in customers but office traffic has been low since the start of the pandemic.

In Docket No. 4991, the Commission ordered Pascoag to provide robust evidence to support its continued involvement in community events and to explore alternative sources of funding like vendor participation fees. Unfortunately, due to the pandemic Pascoag was unable to attend any community events this year and gather evidence to support its continued involvement.

Pascoag did send out a survey to Green Festival vendors, to gauge their comfort level should the Green Festival be held in 2021 and to obtain feedback on vendor participation fees. The majority of vendors were not comfortable with the Green Festival being held in 2021. When asked if they were willing to pay a \$25 vendor fee for booth space, 44% responded no and 24% were unsure. When asked if they were less likely to participate as a vendor if we began charging a \$25 vendor fee 50% responded yes and 20.8% responded unsure.

Pascoag believes the reason our vendors are opposed to participation fees is that many represent nonprofits or small businesses. Pascoag is a rural community, which necessitates many vendors driving close to an hour or longer to participate. Facing the cost to attend and travel, a remote four-hour event will struggle to attract independent and not-for-profit vendors.

As directed by the Commission in Docket No. 4991, PUD has conducted research on grant opportunities that would support community programs and found grant opportunities were limited due to the District's tax classification. Additionally, most grants would require a fiscal sponsor and application forms are lengthy. Unfortunately, at this time, PUD does not have sufficient staff available to engage in consistent grant writing and many of the other grant opportunities we are not eligible for.

Pascoag proposes using 2022 (permitting events will be running as scheduled) to gather evidence to support its continued involvement in community programs and seek ways to lessen expenses

Schedule C: Program Details 2022

for community events. PUD is open to reducing expenses for fulfillment materials and the reduction of staff at events.

Historically, PUD is a public power utility that has prioritized a physical presence at community events, to establish trust and communicate with customers face to face about our DSM programs. In our continued experience, this makes a lasting impression on our customers. As a result, we find they are more inclined to reach out to us for information when purchasing products or planning energy investments in their homes or businesses.

These events provide an opportunity to interact outside of the office and answer questions customers may have, which they haven't had time to call about. Face to face interactions are what often sets us apart. Pascoag Utility is deeply ingrained into the Burrillville community. Our customers know we care and know we are interested in what they have to say. Our attendance at community events speaks volumes to them.

Our Community Outreach and Education Program creates an exchange of information with customers, and helps us to identify their changing needs. Simultaneously, it gives us a sense of topics we might better educate our customers about.

The Community Outreach and Education program and the Jesse Smith Library program represents 8% of our total DSM budget. These initiatives solidify our trusted relationships with the residents and businesses we serve and PUD believes that money provides considerable returns.

Jesse Smith Library Partnership - \$3,600

Pascoag Utility partnered with the Jesse Smith Library and Burrillville Recycling for our popular Earth Day Contest which encouraged students grades K -5 to create posters on the importance of recycling and energy conservation. The top twelve posters chosen were included in a 2022 calendar with recycling and conservation messages that are distributed at the PUD office.

Pascoag reached out to local businesses with advertising opportunities within the calendar. Five local businesses bought ads totaling \$200.00. Unfortunately, it cost the District \$151.60 to advertise said offering, through an ad in a local paper and bill insert costs. As this was our first year offering advertisements to businesses, we'd like to see if there is a way to develop the advertisement offering

Schedule C: Program Details 2022

more effectively in 2022.

In 2022, PUD would again like to partner with the Jesse Smith Library and Burrillville Recycling. This would allow us to continue the partnership for an Earth Day Poster contest for both energy efficiency and recycling. A budget of \$3,600 is requested and would be used to help fund prizes, materials, labor, and refreshments for the awards ceremony. It also allows us to create calendars with the posters and energy efficiency messages that will hang in customers' homes for the rest of the year.

Energy Efficiency Management Continuing Education funds: \$1,500

In 2021, the DSM Coordinator was not able to travel to conferences due to most events being held virtually. The DSM Coordinator was able to participate in many free virtual workshops and trainings through American Public Power and Association of Energy Professionals. Pascoag Utility would like to maintain funding at \$1,500 in 2022 with the hope that more in-person training opportunities will be held.

Schedule D-1: 2021 Expenses & 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	\$ 108,026.00	\$ -
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	\$ 253,347.81	\$ 14,977.81

	<u>2021 Approved Budget</u>	<u>Expenses Oct</u>	<u>Jan-Balance</u>
<u>Residential Program</u>			
DR2101 Home Energy Audits with Weatherization Incentives	\$ 108,897.92	\$ 94,327.31	\$ 14,570.61
DR2102 Residential ENERGY STAR Offerings	\$ 8,000.00	\$ 3,930.00	\$ 4,070.00
DR2103 HVAC & Water Heating Program	\$ 7,000.00	\$ 5,087.50	\$ 1,912.50
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	\$ 7,129.81	\$ 22,870.19
Net Residential	\$ 157,147.92	\$ 112,599.62	\$ 44,548.30
<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	\$ 12,669.68	\$ 8,330
DA2102 Energy Consultant	\$ 10,000.00	\$ 2,535.00	\$ 7,465
DA2103 Program Research and Development	\$ 500.00	\$ -	\$ 500
Net Administrative	\$ 31,500.00	\$ 15,205	\$ 16,295
<u>Community Outreach, Marketing & Education</u>			
DC2101 Outreach/Education	\$ 7,500.00	\$ 1,459.88	\$ 6,040
DC2102 Jesse Smith Library Partnership	\$ 3,600.00	\$ 445.20	\$ 3,155
DC2103 Community Events	\$ 7,408.00	\$ -	\$ 7,408
DC2104 Energy Efficiency Management continuing education	\$ 1,500.00	\$ 25	\$ 1,475
Net Community Outreach, Marketing & Education	\$ 20,008.00	\$ 1,930.08	\$ 18,078
Estimated DSM 2021 Budget/ Expenses/ Balance	\$ 253,347.81	\$ 168,120.38	\$ 85,227

Schedule D-2: 2021 Projected Expenses & Balances

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

Actual carryover 2020	\$ 21,423.89
Estimated Sales	\$ 108,026.00
RGGI Funds	\$ 75,345.02
RGGI Fund Carryover 2020	\$ 48,552.90
Net 2021 budget	\$ 253,347.81

	2021 Approved Budget	Projected Expenses	Projected Balance
<u>Residential Program</u>			
DR2101 Home Energy Audits with Weatherization Incentives	\$ 108,897.92	\$ 108,897.92	\$ -
DR2102 Residential ENERGY STAR Offerings	\$ 8,000.00	\$ 4,930.00	\$ 3,070.00
DR2103 HVAC & Water Heating Program	\$ 7,000.00	\$ 6,087.50	\$ 912.50
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	\$ 138,364.24	\$ 18,783.68
<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	\$ 3,405.00	\$ 2,032.00
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	\$ 40,905.00	\$ 3,787
<u>Administrative</u>			
DA2101 Administrative	\$ 21,000.00	\$ 21,000.00	\$ -
DA2102 Energy Consultant	\$ 10,000.00	\$ 10,000.00	\$ -
DA2103 Program Research and Development	\$ 500.00	\$ -	\$ 500
Net Administrative	\$ 31,500.00	\$ 31,000	\$ 500
<u>Community Outreach, Marketing & Education</u>			
DC2101 Outreach/Education	\$ 7,500.00	\$ 1,709.88	\$ 5,790
DC2102 Jesse Smith Library Partnership	\$ 3,600.00	\$ 2,970.20	\$ 630
DC2103 Community Events	\$ 7,408.00	\$ -	\$ 7,408
DC2104 Energy Efficiency Management continuing education	\$ 1,500.00	\$ 25	\$ 1,475
Net Community Outreach, Marketing & Education	\$ 20,008.00	\$ 4,705.08	\$ 15,303
Estimated DSM 2021 Budget/ Expenses/ Balance	\$ 253,347.81	\$ 214,974.32	\$ 38,373

Schedule E: Demand Side Management Tariff

Pascoag Utility District- Electric Department (“Department”) Demand Side Management Charge

The following provisions will be apply to reflect charges collected under the Demand Side Management Program, pursuant to “An Act Relating to the Utility Restructuring Act of 1996”, #96-H 8124 Substitute B, Section 39-2-1.2(b).

The District proposes to include a charge of 2.3 mills per kilowatt-hour delivered to fund a demand side management program and renewable energy resources. The allocation of this revenue between demand side management programs and renewable energy resources shall be determined by the Commission.

The District will submit semi-annual reports to the Commission documenting funds collected and expended. In the event that revenue collected over or under anticipated revenue, the Department shall apply to the Commission for an annual “true-up”.

Approval Issued:

Requested Effective Date: January 1, 1998

Approval Date: March 20, 1998

Schedule F: Highlights of Pascoag's 2021 Program & Customer Outreach



Jesse Smith Library Earth Day Calendar Contest



Lighting Outreach Kits

TIME IS RUNNING OUT TO APPLY FOR 2021 ENERGY STAR REBATES AT PASCOAG UTILITY DISTRICT!


Funds are still **available** for rebates on ENERGY STAR rated:

- Clothes Washers
- Clothes Dryers
- Air Purifiers
- Air Conditioners
- Dehumidifiers
- Televisions
- Computers
- Monitors/Displays
- Printers
- Central AC, Mini-Splits, Central Heat Pumps & Heat Pump Water Heaters



For more info visit: www.pud-ri.org/conservation or call 401-567-1262 today!

NRI NOW News Ad



PASCOAG UTILITY DISTRICT

Pascoag Electric • Pascoag Water

253 Pascoag Main Street
P.O. Box 107
Pascoag, RI 02859
Phone: 401-568-6222
Fax: 401-568-0066
www.pud-ri.org

Pascoag Utility District is offering free home energy audits, conducted by Energy New England. The energy audit will include a full home assessment, including all appliance, mechanical systems and building envelope. In addition, the auditor will have free LED lightbulbs, smart strips, grounded power switches, low-flow shower heads and aerators on hand, to install if needed. If the home energy auditor recommends insulation, air sealing or programmable thermostats, PUD has incentives for each that customers can take advantage of.

- Insulation and Air Sealing-100% up to \$3,000 (needs to be installed by a BPI certified contractor)
- Programmable Thermostat Incentive: Wireless \$100 Non-wireless \$25

Energy New England offers in-person and remote home energy audits! Appointments are filling up fast, so make yours today! Please call 1-888-772-4242 for more details and to schedule and audit. This offer is for a limited time only and is subject to the availability of funding.

Bargain Buyer Ad

Schedule F: Highlights of Pascoag's 2021 Program & Customer Outreach

SAVE MONEY THIS SUMMER!

Want to take advantage of PUD's \$3000 weatherization rebate? Schedule your free home energy audit today by calling 1-888-772-4242 to determine if your home qualifies for insulation and air sealing rebates. Funds for this program are quickly depleting and may run out by the Fall. Don't miss out on this amazing opportunity!

FOR MORE INFORMATION PLEASE CALL OUR OFFICE AT 567-1262.



NRI NOW News & Bargain Buyer Ad

Pascoag Utility District
January 8 · 🌐



Pascoag Utility District
January 12 · 🌐

Did you buy any Energy Star products in 2020? Check here to see if you qualified for a rebate: <https://www.pud-ni.org/conservation/download-rebate-forms> Time is running out to get your 2020 Energy Star rebates in, don't miss out!



PUD Facebook Posts

Schedule F: Highlights of Pascoag's 2021 Program & Customer Outreach



Pascoag Utility District

May 12 · 🌐

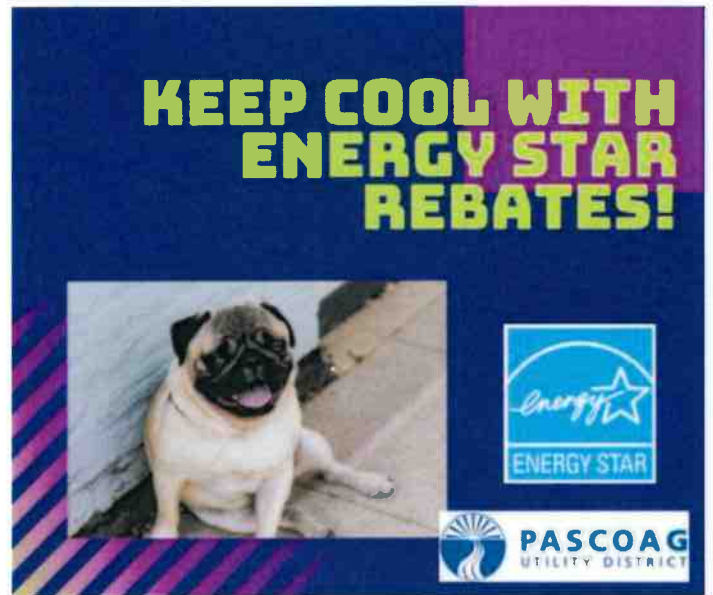
Summer is almost here! Are you upgrading your cooling system? We offer rebates on Central AC, Central Heat Pumps and Mini-Splits. Call us at 568-6222 before you purchase it and we'll check to make sure your system **qualifies** for our rebate program. Pass this info along to your **neighbor!**



Pascoag Utility District

June 16 · 🌐

Visit <https://www.pud-n.org/conservation/download-rebate-forms> for more **information** on our Energy Star Rebate Program! Save money today!



Pascoag Utility District

June 23 · 🌐

Want to take advantage of PUD's \$3000 **weatherization rebate**? Schedule your home energy audit today by calling 1-888-772-4242 to **determine** if your home needs **insulation** and air sealing. Funds for this program are quickly depleting and may run out by the Fall. Don't miss out on this amazing **opportunity!** Please pass this along to your neighbor 😊

1,124
People Reached

156
Engagements

Boost Unavailable

Pascoag Utility District Energy Audit & Energy Star Rebate Facebook Posts

Schedule F: Highlights of Pascoag's 2021 Program & Customer Outreach



Energy Star Products Help You Save!

Do you know you could be getting a rebate for the Energy Star products you buy?

It's easy! Fill out an Energy Star rebate form by picking one up at Pascoag Utility District office or downloading it from our website. Mail or drop off the form with proof of purchase and proof of the Energy Star label. The rebate then gets credited to your electric account.

We offer rebates on Energy Star rated:

- Commercial Appliances-10% of the cost up to a maximum of \$350
 - Clothes washers
 - Vending Machines
 - Water Coolers
 - Kitchen Packages
 - Dishwashers
 - Fryers
 - Griddles
 - Hot Food Holding Cabinets
 - Ice Machines
 - Refrigerators/Freezers
 - Steam Cookers
- Residential Products for your business-rebates listed below
 - Clothes Washers & Dryers-\$75
 - Air Purifiers-\$40
 - Room Air Conditioners-\$40
 - Dehumidifiers-\$30
 - Televisions-\$50
 - Computers-\$50
 - Monitor/Displays-\$30
 - Printers-\$25

We also provide:

- Free business energy audits! Call 401-567-1262 to schedule yours today!
- Incentives for qualified lighting and energy efficiency projects.

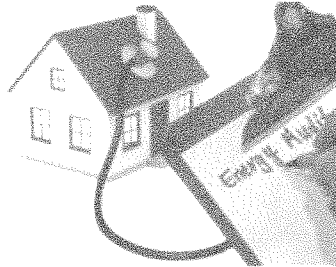
For more information on how to qualify for an Energy Star rebate, please visit us on the web at:

<http://www.pud-ri.org/conservation/download-rebate-forms>

This offer is for a limited time only, subject to availability of funding.

Billing Insert for Commercial and Industrial Customers

Schedule F: Highlights of Pascoag's 2021 Program & Customer Outreach



Free Home Energy Audits for Pascoag Utility Customers- Includes Insulation, Air Sealing & Programmable Thermostat Incentives!

Pascoag Utility District is offering free home energy audits, conducted by Energy New England. The energy audit will include a full home assessment, including all appliance, mechanical systems and building envelope. In addition, the auditor will have free LED lightbulbs, smart strips, grounded power switches, low-flow shower heads and aerators on hand, to install if needed. If the home energy auditor recommends insulation, air sealing or programmable thermostats; PUD has incentives for each that customers can take advantage of.

- Insulation and Air Sealing-100% up to \$3,000
- Programmable Thermostat Incentive: Wireless \$100 Non-wireless \$25

Energy New England offers in-person and remote home energy audits! Appointments are filling up fast, so make yours today! Please call 1-888-772-4242 for more details and to schedule an audit. This offer is for a limited time only and is subject to the availability of funding. Please call the office before beginning your weatherization project to ensure that funds are still available.

Energy Star Rebates

We also offer rebates on the following Energy Star rated products:

- Clothes Washer and Dryer-\$75
- Air Purifier-\$40
- Air Conditioner-\$40
- Dehumidifier-\$30
- Television-\$50
- Computer-\$50
- Monitor/Display-\$30
- Printer-\$25
- Central AC, Mini-split Heat Pump & Heat Pump Water Heaters- price/ton
- Refrigerator/Freezer Buyback-\$50

For more information on how to qualify for an Energy Star rebate, please visit us on the web at:

<http://www.pud-ri.org/conservation/download-rebate-forms>

Schedule G: Lighting Project Information for 2022

Efficiency Energized.



Division of Thielsch Engineering, Inc
1341 Elmwood Avenue
Cranston, Rhode Island 02910



Wallum Lake Rod & Gun Club - Skeet and Trap Fields LED Lighting Update

Financial Summary

Total Project Cost	\$ 20,356
Estimated Electric Incentive	\$ (6,476)
Customer Net Cost	\$ 13,880
Estimated Energy Cost Savings Annually	\$ 3,890
Estimated Maintenance Savings	\$ 128
Return on Investment (ROI)	29%
Simple Payback in Years	3.5

Energy Savings

kW Reduction	kWh Reduction
11.44	22,880

Pollution Savings

CO2 Reduction (lbs)	NOx Reduction (lbs)	SO2 Reduction (lbs)
21,965	5.7	0.7

Wallum Lake Rod & Gun Club LED Lighting Project

Schedule H: Supporting Documentation

Contents:

- Strategies to Enhance Energy Efficiency in Pascoag Utility District
- 2018-A Plan for the Allocation and Distribution of Regional Greenhouse Gas Initiative Auction Proceeds
- 2018-B Plan for the Allocation and Distribution of Regional Greenhouse Gas Initiative Auction Proceeds



Strategies to Enhance Energy Efficiency in Pascoag Utility District

Rhode Island Office of Energy Resources & Pascoag Utility District

2018.5.1

Existing Energy Efficiency Successes in Pascoag

Pascoag Utility District (PUD) has a record of investing in energy efficiency programs to help their customers save energy and lower utility bills. Despite limited administrative resources dedicated to energy efficiency program management, an impressive 300 residential customers and one-dozen non-residential customers participate in incentive and rebate programs annually.

Currently, PUD customers pay a Systems Benefit Charge (SBC; also called an Energy Efficiency Charge) of 2.3 mills. This charge allows for an energy efficiency program budget of roughly \$130,000 and results in average monthly (annual) ratepayer costs of \$1.15 (\$13.80).¹ For investments across all customer types, annual energy savings in the District have ranged between 50,000 and 190,000 kWh between 2015 and 2017.

Framework for Program Development

The Rhode Island Office of Energy Resources (OER) is Rhode Island's lead state agency on energy policy and programs. The mission of OER is to lead Rhode Island to a secure, cost-effective, and sustainable energy future. To do so, OER works closely with stakeholders, ratepayers, and utilities to leverage, coordinate, and align clean energy efforts. OER's familiarity with energy efficiency programs and initiatives within the state and across the region provides a strong foundation for technical assistance and program development support.

The purpose of this document is to identify strategies for enhancing and expanding access to PUD's energy efficiency programs. OER has a history of partnering with Rhode Island's local utilities on clean energy projects. For example, OER developed and implemented a pilot energy efficiency program in the Town of New Shoreham in 2015-2017.² OER has also recently partnered with PUD to support

¹ Based on monthly electricity consumption of 500 kWh.

² Full report is available here: <http://www.energy.ri.gov/reports-publications/>

investments in high-efficiency LED streetlighting.³ OER is interested in establishing a multi-year partnership with PUD to strengthen energy efficiency programs and institutional capacity within the District and help the local utility to foster substantial energy savings and other system benefits for its customers. To support this effort, along with providing staff and technical support, OER recently allocated \$100,000 in state Regional Greenhouse Gas Initiative (RGGI) proceeds to spur cost-effective efficiency investments in 2018-2019.

The following strategies were identified collaboratively through discussions with the PUD management team. Strategy elements are prioritized based on need, available funding, ease and timing of implementation, and impact to the community. Most strategies rely on a pilot program to understand challenges unique to PUD and thoughtfully develop a full-scale program, if appropriate. OER proposes to leverage state Regional Greenhouse Gas Initiative (RGGI) funds to support pilot implementation.

In developing these strategies, PUD and OER follow three guiding principles to enhance or expand existing energy efficiency programs and ensure long-term sustainability. First, we recognize the substantial benefits that cost-effective energy efficiency can provide to ratepayers, our economy and environment, and the utility. Energy efficiency not only lowers utility bills for participating customers, but also reduces greenhouse gas emissions, supports job creation and other economic development benefits, and is a powerful tool for long-term distribution infrastructure planning.

Second, we consider the historical context of energy efficiency program funding by PUD customers and PUD's commitment to keeping energy costs as low as possible for all customers. Budget requirements of any full-scale program enhancement or expansion must be financially sustainable. If long-term funding were to come through SBC collections, changes should be relatively small and gradual to avoid perceived volatility or customer bill shock.

Third, we recognize PUD management's limited bandwidth. PUD operates efficiently on a small staff, which minimizes administrative cost burdens on local consumers. PUD and OER are careful to propose strategies that do not substantially increase the workload for PUD staff. For each proposed strategy, we outline how to scale the initiative into a full program with sustainable implementation and how to build out institutional capacity or relationships with third-party vendors, as needed.

We present both administrative recommendations and programmatic strategies. We organize programmatic strategies into three phases, based on timing and scale.

Phase 1 Programmatic Strategies are the low-hanging fruit that can make a sizeable impact with relatively little upfront research or funding. Phase 1 Programmatic Strategies can begin in 2018 as pilots or research, with full-scale implementation in 2019.

Phase 2 Programmatic Strategies require more substantial program development and, in most cases, would require additional sustainable funding to cover the costs of full-scale implementation. We anticipate Phase 2 Programmatic Strategies could grow to full-scale implementation in 2020.

Phase 3 Ideas cover more innovative energy efficiency program development ideas and rely on external dependencies for full-scale implementation. We anticipate these ideas could come to fruition in 2021-2022.

³ See allocations of state Regional Greenhouse Gas Initiative (RGGI) proceeds outlined in the 2015 RGGI Allocation Plan: <http://www.energy.ri.gov/documents/rggi/2015%20Plan%20Items/2015%20RGGI%20Allocation%20Plan.pdf>

All figures in this document are estimates for illustrative purposes only, and are subject to change pending further research and analysis.

Administrative Recommendations

Administrative Recommendation #1: Align energy efficiency funding more closely with sector SBC contributions

Timeframe and Funding Considerations: Alignment could begin in 2019. No additional funding required.

Explanation: We recommend aligning residential and non-residential program budgets more closely with SBC collections to ensure equity among these segments. Retail sales in 2018 for residential and non-residential sectors are forecasted to be 34,180 MWh and 22,786 MWh, respectively. Residential sales account for 60% of total sales while non-residential sales make up the remaining 40%. All customers incur a uniform SBC of 2.3 mills per kWh. Of the \$130,000 in 2018 program funding, residential programs receive roughly one-third (32.3%) the total budget while non-residential programs receive two-thirds (67.7%). Relative to sales and resulting SBC collections, residential customers are underserved while non-residential customers are proportionally overserved.

Administrative Recommendation #2: Account for and report on full costs and benefits as defined in the Rhode Island Cost-Effectiveness Test

Timeframe and Funding Considerations: Suggest incorporating benefit-cost analysis into 2019 filing. Consulting experts can assist, but it may require an increase in administrative budget costs.

Explanation: PUD currently tracks program costs and energy savings. While a solid foundation for program development and evaluation, there are other costs and benefits that should be included in the decision-making process. These costs and benefits are outlined through the Rhode Island Test, and include benefits and costs to the utility system, customers, and society (e.g. environmental benefits of reduced greenhouse gas emissions and economic development impacts).⁴

Understanding the full costs and benefits of programmatic decisions can help PUD optimize its portfolio of energy efficiency offerings and ensure PUD's energy efficiency programs are cost-effective. We also recommend developing a method to determine optimal incentive levels using benefit-cost data and market research as appropriate.

We recognize that tracking these costs and benefits and reporting on cost-effectiveness is administratively burdensome. Therefore, we recommend hiring a consulting firm that has prior expertise in cost-effectiveness testing and best practices for energy efficiency portfolio optimization and program development. Through its close work with the Energy Efficiency and Resource Management Council (EERMC) and its consultant team, OER is well-positioned to advise on best practices and consultant needs. OER can provide technical expertise with drafting a Request for Proposals, including a scope of work, and reviewing consultant proposals with PUD staff.

⁴ For more information, see Rhode Island Public Utilities Commission Docket 4600.

Strategy #1: Decrease energy burden and address energy-related school construction priorities Burrillville Public Schools located within the Pascoag District

Timeframe and Funding Considerations: Funding from 2018 RGGI Allocation Plan A (Q2/Q3 2018) could assist school projects beginning in summer 2018.

Motivation: Rhode Island Department of Education School Building Authority identified serious school construction priorities across Rhode Island. These priorities were echoed by the Schools Task Force in their recommendations to the Governor in December 2017. Reducing energy use and costs through efficiency improvements in schools is one element of school construction priorities and would allow schools to reallocate cost savings to other projects. Comprehensive energy efficiency has additional benefits for health and education outcomes.

Burrillville Schools have received energy assessments within the past several years and have a clear idea of the energy efficiency measures needed. The schools have recently started to work with PUD on upgrading lighting in all school buildings within PUD service territory. Upgrading lighting is a substantial first step to reducing school energy costs, the savings from which can help pay for more additional energy efficiency projects, other construction priorities, or other school needs.

The total cost of previously-identified lighting projects for Burrillville schools in PUD territory is nearly \$400,000, not including costs of additional comprehensive energy efficiency improvements. PUD is able to provide \$130,000 in incentives over a multiyear period to reduce the net cost to Burrillville schools to roughly \$270,000 for efficient lighting upgrades. If the 2018 state budget legislation allows Housing Aid to be combined with financing through the Efficient Buildings Fund, the schools will be in a good position to finance the costs of their lighting projects.

However, we want to encourage the schools to undertake additional, more comprehensive energy efficiency measures, such as the measures identified in their Efficient Buildings Fund (EBF) application in 2016 for Burrillville High School and Steere Farm Elementary School. Doing so will have a more significant long-term impact on reducing school energy use, cost, and greenhouse gas emissions, among other benefits like improved comfort, indoor air quality, etc. Therefore, a further offsetting costs with additional support may be warranted.

Action: OER has allocated \$100,000 of RGGI funding to enhance energy efficiency opportunities in the PUD community.⁵ Some portion of this funding allocation could help further offset the cost of lighting upgrades and encourage the schools to consider additional comprehensive energy efficiency measures.

Impact: The lighting upgrades are estimated to save over 400 MWh in annual electricity use⁶ and over \$50,000 in annual utility bill costs. Over the 20-year life of the high-efficiency lighting upgrades, Burrillville schools will see a savings of over \$1,000,000.

⁵ Proposed 2018-A Plan for the Allocation and Distribution of Regional Greenhouse Gas Initiative Auction Proceeds, 5.4.2.f: <http://www.energy.ri.gov/documents/rggi/2018%20Plan%20Items/2018-A%20Proposed%20RGGI%20Allocation%20Plan%202-21-18.pdf>

⁶ 400 MWh savings represent a roughly 17% reduction in aggregate annual energy use for Callahan School, Levy School, Steere Farm School, and the High School and Rink.

From Burrillville School's EBF application in January 2016, there were twenty energy efficiency measures identified for the High School and Steere Farm Elementary School (including the lighting upgrades for these schools). The total cost of these measures was just over \$2.3 million, resulting in \$215,000 in annual energy cost savings. This suite of energy efficiency measures was cost-effective, with an estimated positive annual cash flow of \$2,500 over the term of the EBF loan.

Sustainable Implementation: Ongoing initiatives specific to schools should be considered, such as subsidizing the cost of energy efficiency training and energy management resources for facilities managers (see Strategy #3).

Strategy #2: Enhance incentive levels, especially for measures that go beyond lighting (e.g. weatherization)

Timeframe and Funding Considerations: Begin research in 2018 and pilot program expansion in 2019, leveraging RGGI funding. If successful, implement full-scale program in 2020.

Motivation: PUD budgeted \$18,400 (residential) and \$1,200 (business) for rebates on efficient appliances and equipment in 2018. These rebates reach roughly 250-350 residential customers and 10 business customers annually. There is concern these incentive levels may be too low to encourage true market transformation, leading to low participation levels and unspent budgets. Furthermore, there are currently no incentives for weatherization measures, like insulation and air sealing. We propose enhancing rebate levels to both increase participation and encourage comprehensive energy efficiency projects.

There are several possibilities for program enhancement:

1. Increase the level of all existing rebates – Increasing rebate levels would likely increase participation, and would be instrumental in encouraging customers to choose energy efficient alternatives when they would otherwise choose a base alternative.
2. Increase the rebate level for one appliance for a one-year period – Having a specific campaign could focus energy efficient efforts on that product, and the limited-time offer could encourage increased participation
3. Provide an additional rebate for customers who complete a defined set of energy efficiency upgrades – Incentivizing packages of multiple measures would encourage customers to look beyond lighting for energy savings.
4. Develop an incentive structure for weatherization measures.

These options should be considered in tandem with a benefit-cost analysis and development of a method to determine incentives (see Administrative Recommendation #2), and with input from best practices across New England.

Action: OER can work with PUD to develop an enhanced incentive package that is aligned with PUD's grid management priorities, works with PUD's management structure, and can be sustainably maintained for future program years.

Impact: Claimable savings from lighting is attenuating quickly. Therefore, incentivizing non-lighting measures and comprehensive projects will ensure PUD is positively affecting the market in a cost-effective manner.

Sustainable Implementation: After determining incentive levels and structure, implementation should be largely similar to current program implementation. Assuming an aggregate annual budget of \$50,000,

sector-specific budgets can be split to ensure equity and cost-effectiveness based on findings from the pilot.

Strategy #3: Subsidize Building Operator Certification for facilities managers

Timeframe and Funding Considerations: Pilot in 2018; Full scale implementation in 2019. Pilot funding coincides with the EERMC workforce development initiative.

Motivation: Building Operator Certification (BOC) training provides essential information for how to effectively maintain buildings, including specific processes to ensure optimal energy use and proper energy management. BOC courses also connect facilities managers to each other, fostering a professional network for sharing best practices and answering specific questions.

We recommend providing a reimbursement for facilities managers that obtain a BOC. To align with reimbursement levels elsewhere in the state, we recommend reimbursing 50% of the cost (\$900) for each facilities manager that manages a facility that either meets some square footage criteria (e.g. manages facility over some square footage) or some energy consumption criteria (e.g. consumes over some MWh per year or has peak demand over some kW).

The EERMC has allocated funding for facilities managers workforce development in 2018. This initiative possibly includes subsidizing BOC training, developing energy efficiency modules specific for Rhode Island that are publicly available, and disseminating free resources to facilities managers. This existing initiative would be a timely way to start developing reimbursement criteria, conducting outreach about BOC, and getting at least one Pascoag facilities manager trained.

Action: OER can work with PUD to garner initial interest among facilities managers to attend a BOC training in 2018. OER can continue to work with PUD to define reimbursement criteria and process, and connect interested facilities managers with training opportunities after full-scale implementation of this strategy.

Impact: 10 facilities managers per year representing 10 community businesses or public entities can be trained each year, leading to an estimated total annual savings of 1,000 MWh.⁷

Sustainable Implementation: 50% reimbursement (\$900) for 10 facilities managers per year requires an annual budget of \$9,000.

Phase 2 Programmatic Strategies

Strategy #4: Facilitate commercial financing options either through a third-party bank and/or enable Commercial Property Assessed Clean Energy

Timeframe and Funding Considerations: Research in 2018 with implementation in 2019. No funding necessary, though creating a loan loss reserve could lower interest rates for borrowers.

⁷ Based on 100 MWh annual savings per BOC-credentialed building operator: <http://www.theboc.info/wp-content/uploads/2017/02/BOC-Energy-Savings-FAQ-2.0-web.pdf>

Motivation: For small businesses, energy efficiency measures can not only reduce energy costs but can help the business absorb shocks from increasing energy prices or use due to colder-than-normal winters and hotter-than-normal summers. However, small businesses often struggle with finding the up-front capital needed for energy efficiency projects, preventing these businesses from benefiting from reduced energy bills. PUD has identified several energy efficiency projects in small, local businesses, but has noted the barrier upfront costs play in preventing businesses from realizing benefits of energy efficiency.

We recommend facilitating financing options for cost-effective energy efficiency investments through partnership with a local, third-party bank. Ideally, energy auditors and contractors could recommend the bank and include the cost of financing directly in their recommendations report. Ideally, too, the length of the loan should be flexibly structured so the overall financing is cash-flow positive. A loan loss reserve is one tool that could lower interest rates for energy efficiency projects.

Commercial Property Assessed Clean Energy (C-PACE) is another financing option that would eliminate the barrier of upfront capital. C-PACE finances cost-effective clean energy projects with repayment through municipal property assessments. The Town of Burrillville would need to pass an ordinance to allow C-PACE financing.

If successful, later work could explore financial products for residential customers. Public entities already have access to the Efficient Buildings Fund for low-interest rate financing.

Action: OER and PUD can work to explore the potential for financial relationships with local third-party banks. OER can additionally work with RIIB and the Town of Burrillville to facilitate acceptance of C-PACE financing, and liaise with PUD as needed.

Impact: Financing availability could assist at least three small businesses annually, based on typical energy efficiency project implementation levels in PUD. Annual energy savings impact could be roughly 100-200 MWh.

Sustainable Implementation: PUD staff do not have the bandwidth to administer and manage a financing program in house. Therefore, the sustainable implementation of this strategy lies in identifying a third-party bank to oversee financing, and/or enacting C-PACE in the Town of Burrillville.

Strategy #5: Increase the number of residential energy assessments and no-cost direct install measures, with increased outreach to low-income residents

Timeframe: Begin pilot planning in 2018 and identify a funding source. If successful, implement a full-scale program in 2020.

Motivation: Residential energy assessments with no-cost direct install measures are critical for households to reduce energy use and lower their energy bills. PUD contracts with Energy New England (ENE) to conduct home energy assessments. ENE conducts 10-20 assessments annually within PUD territory. The assessments provide limited no-cost direct install measures (i.e. up to three LED bulbs per home) and do not include tests of ventilation or insulation.

In contrast, other Rhode Island residents can receive a more comprehensive assessment with a larger number of no-cost direct install measures. These additional benefits lead to participation rates that are an order of magnitude higher.

We recommend scaling up the residential energy assessment program. Ideally, PUD should target 120 home energy audits annually, with an increased number of direct-install measures and a more comprehensive assessment that includes ventilation and insulation.

OER can provide technical assistance with issuing a Request for Proposals, reviewing or revising scopes of work, and including best practices for residential home energy assessments.

Action: OER can provide technical assistance to PUD to build out a more comprehensive home energy assessment program pilot.

Impact: A more robust home energy assessment program would reach nearly 110 more households, and would increase energy and cost savings from direct install measures. In total, we aim for an annual participation rate of 3% (equals 120 audits/4,074 residential customers). Over ten years, nearly one in three PUD homes would have received a home energy assessment.

Sustainable Implementation: PUD budgeted for 12 audits at \$235 each in 2018. The proposed pilot will aim to increase participation ten-fold in addition to increasing the depth of the energy assessment (assume a roughly two-fold increase in unit cost, subject to further research and cost-benefit analysis of the aggregate residential program).

$$120 \text{ audits} * \$500 \text{ per audit} = \$60,000 \text{ annual program budget}$$

OER can provide technical assistance for modifying the contract with Energy New England or for developing an RFP to solicit a new vendor. OER can also provide ongoing technical assistance as needed. The vendor would be responsible for program administration and would be required to provide monthly reports to PUD.

Strategy #6: Continue to improve residential offerings by developing specific incentives for renters/landlords

Timeframe: Develop pilot-scale program in 2019 to test program elements. Suggested allocation of \$25,000 in RGGI funding. If successful, implement full scale program in 2020.

Motivation: Renters and landlords face a split-incentive when it comes to energy efficiency improvements, and resolving this agency problem is a current challenge efficiency programs are tackling across the country. Renters are also often low-income residents, who face a significantly higher energy burden than other residents, and are hit particularly hard by price volatility. Furthermore, energy efficiency often leads to better health and productivity outcomes, especially for vulnerable populations.

Renter/landlord-specific energy efficiency offerings are key to addressing this important need. Examples include programs designed specifically for renters and special outreach to affordable housing developers to encourage energy efficient designs. PUD could also enhance outreach about federal programs like WAP and LIHEAP.

PUD has offered a program specific for low-income residents in the past but without much success in participation. This experience should inform a pilot program in 2019 aimed instead at renters and landlords. If successful, the 2019 pilot should inform development of a full-scale program to be implemented in 2020.

Action: OER can work with PUD to develop an outreach strategy to the renter community about energy efficiency opportunities. OER can support PUD in developing a pilot program and full-scale program based on best practices.

Impact: Approximately 1,700 housing units are not owner-occupied in the Town of Burrillville.⁸ This program should aim to reach five percent of households that rent (85 households) in its first year, scaling up as appropriate.

Sustainable Implementation: Budget to be determined by scope of program and demand.

Phase 3 Ideas

We do not include specific descriptions or actions for Phase 3 Ideas at this point. These ideas can be developed and evolve as we learn from Phase 1 and Phase 2 Programmatic Strategies.

Strategy #7: Automate benchmarking through EnergyStar Portfolio Manager, with appropriate support, training, and resources

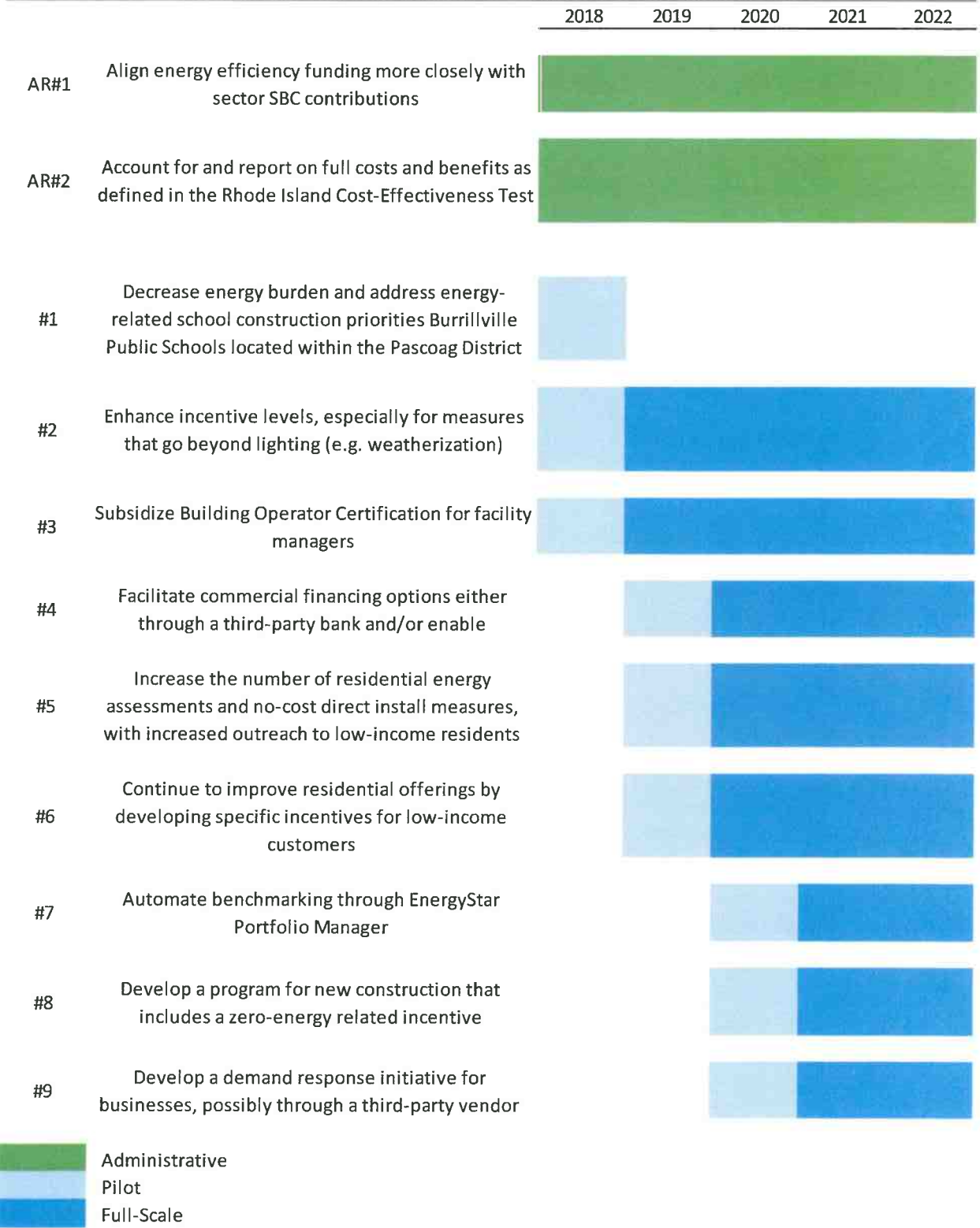
Strategy #8: Develop a program for new construction that includes a zero-energy related incentive

Strategy #9: Develop a demand response initiative for businesses, possibly through a third part vendor

⁸ <https://www.census.gov/quickfacts/fact/table/burrillvilletownprovidencountyrhodeisland/PST045216>

Strategy	Pilot/Research Timeframe	Initial Funding	Initial Funding Source	Year of Full Scale Implementation	Sector	Proposed Annual Budget from SBC	Incremental SBC
<i>Administrative Recommendations</i>							
AR#1	Evenly distribute energy efficiency funding by sector based on SBC contribution	2018	\$ -	N/A	2019	Admin	\$ - \$ -
AR#2	Account for and report on full costs and benefits as defined in the Rhode Island Cost-Effectiveness Test	2018	\$ -	N/A	2019	Admin	\$ 10,000 \$ 0.00018
<i>Phase 1 Programmatic Strategies</i>							
#1	Decrease energy burden and address energy-related school construction priorities Burrillville Public Schools located within the Pascoag District	2018	\$ 100,000	RGGI 2018 A	2018	Non-Res	\$ - \$ -
						Res	\$ 25,000 \$ 0.00044
#2	Enhance incentive levels, especially for measures that go beyond lighting (e.g. weatherization)	2018	\$ 100,000	RGGI 2018 B	2019	Non-Res	\$ 25,000 \$ 0.00044
#3	Subsidize Building Operator Certification for facility managers	2018	\$ -	Implicit in EERMC workforce development initiative	2019	Non-Res	\$ 9,000 \$ 0.00016
<i>Phase 2 Programmatic Strategies</i>							
#4	Facilitate commercial financing options either through a third-party bank and/or enable Commercial Property Assessed Clean Energy	2018	\$ -	N/A	2019	Non-Res	\$ - \$ -
#5	Increase the number of residential energy assessments and no-cost direct install measures, with increased outreach to low-income residents	2019	\$ 120,000	RGGI 2018 B	2020	Res	\$ 60,000 \$ 0.00105
#6	Continue to improve residential offerings by developing specific incentives for low-income customers	2019	\$ 25,000	RGGI 2018 B	2020	Res	\$ 25,000 \$ 0.00044
<i>Phase 3 Programmatic Strategies</i>							
#7	Automate benchmarking through EnergyStar Portfolio Manager	2020	\$ -	?	2021	Both	\$ -
#8	Develop a program for new construction that includes a zero-energy related incentive	2020	\$ -	?	2022	Both	\$ -
#9	Develop a demand response initiative for businesses, possibly through a third part vendor	2020	\$ -	?	2022	Non-Res	\$ -

Administrative Recommendations and Programmatic Strategies Timeline



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ADMINISTRATION
OFFICE OF ENERGY RESOURCES



PROPOSED
2018-A PLAN FOR THE ALLOCATION AND DISTRIBUTION OF REGIONAL
GREENHOUSE GAS INITIATIVE AUCTION PROCEEDS

Auctions Held September 6, 2017 & December 6, 2017

February 2018

1.0 Authority

The 2018-A Plan for the Allocation and Distribution of Regional Greenhouse Gas Initiative Auction Proceeds (Plan) is authorized by Rhode Island General Laws (RIGL) §23-82-1 et seq. and 42-140-9 and the “Rules and Regulations for the Allocation and Distribution of Regional Greenhouse Gas Initiative Proceeds,” effective August 2011.

2.0 Definitions

For the purposes of this Plan, the terms defined in RIGL §23-82-1 et seq. and the “Rules and Regulations for the Allocation and Distribution of Regional Greenhouse Gas Initiative Proceeds,” effective August 2011 shall be given the same meaning as provided in the statute and regulations.

3.0 Auction Proceeds included in this Plan

3.1 RGGI, Inc. conducted auctions on behalf of the State of Rhode Island on September 6, 2017 (Auction #37) and December 6, 2017 (Auction #38).

3.2 These auctions resulted in the following Auction Proceeds for the State of Rhode Island:

Auction #37	\$1,078,639.05
Auction #38	\$942,263.20
Total	\$2,020,902.25

4.0 Adoption of the Plan for the Allocation and Distribution of Regional Greenhouse Gas Initiative Auction Proceeds

4.1 The Rhode Island Regional Greenhouse Gas Initiative Act provides for the use of Auction Proceeds. RIGL §23-82-6 requires that the Auction Proceeds be used for the benefit of energy consumers through investment in the most cost-effective available projects that can

reduce long-term consumer energy demands and costs. The annual auction proceeds proposal shall be designed to augment and coordinate with existing energy efficiency and renewable energy programs, and shall not propose use of auction proceeds for projects already fully funded under other programs.

4.2. The Rhode Island Office of Energy Resources (OER) is authorized to allocate the auction proceeds for the following purposes, in a proportion to be determined annually by OER in consultation with the Rhode Island Department of Environmental Management (DEM) and the Rhode Island Energy Efficiency and Resources Management Council (EERMC):

- (1) Promotion of cost-effective energy efficiency and conservation in order to achieve the purposes of section 39-1-27.7;
- (2) Promotion of cost-effective renewable non-carbon emitting energy technologies in Rhode Island as defined in RIGL §39-26-5 and to achieve the purposes of chapter 39-26 entitled “Renewable Energy Standard”;
- (3) Cost-effective direct rate relief for consumers;
- (4) Direct rate relief for low-income consumers;
- (5) Reasonable compensation to RGGI, Inc.; and
- (6) Reasonable costs of the OER and the Department of Environmental Management (DEM) in administering this program.

4.3 OER concludes that this Plan is consistent with the applicable statutes and regulations. Public notice of the proposed Plan was provided on xx 2018. A copy of the Notice is attached hereto. A public comment hearing was held on xx 2018 at the Department of Administration, One Capitol Hill, Providence, Rhode Island. The public was allowed additional time to submit written comments until xx 2018.

4.4 OER has responded to all substantive comments received on the Plan and are provided in the attached document entitled Response to Comments.

4.5 OER and DEM agree that the Plan was adopted in accordance with RIGL §23-82-6; “Rules and Regulations for the Allocation and Distribution of Regional Greenhouse Gas Initiative Proceeds” and Chapter 42-35, the Administrative Procedures Act.

5.0 Allocation of Auction Proceeds

5.1 Compensation to RGGI, Inc.

5.1.1 RIGL §23-82-6(a)(5) authorizes the reasonable compensation of an entity to administer the auction on behalf of the State of Rhode Island. RGGI, Inc. is the entity that conducted the auctions listed in Section 3.0.

5.1.2 RGGI Inc. was not compensated from Auction 37 or Auction 38 proceeds.

5.2 Administrative expenses

5.2.1 RIGL §23-82-6(a)(6) authorizes the reasonable costs of OER and DEM in administering the RGGI program. The total reimbursement to both entities shall not in any year exceed Three Hundred Thousand Dollars (\$300,000.00) or ten percent (10.0%) of the proceeds, whichever is greater.

5.2.2 Ten percent (10.0%) of total auction proceeds from Auctions 37 and 38 total \$202,090.22. Therefore, as specified in RIGL §23-82-6(a)(6), OER and DEM shall each be reimbursed a total of \$101,045.11.

5.3 Interest Accrued on RGGI Proceeds

5.3.1 OER has identified \$76,298.49 of unallocated accrued interest payments on state RGGI auction proceeds as of December 31, 2017.

5.4 Allocation of Net RGGI Proceeds

5.4.1 After accounting for compensation for RGGI Inc., administrative expense reimbursement to OER and DEM, and unallocated interest payments, the net balance available for programmatic allocation is **\$1,895,110.52 (One Million Eight Hundred Ninety-Five Thousand One Hundred and Ten Dollars and Fifty-Two Cents)**.

5.4.2 OER finds that allocating the balance of the Auction Proceeds set forth in Paragraph 5.4.1 herein for the promotion of cost-effective energy efficiency and conservation; and the promotion of cost-effective renewable non-carbon emitting energy technologies in an integrated manner shall be best accomplished by disbursements as follows:

5.4.2.a **\$500,000.00 (Five Hundred Thousand Dollars)** shall be allocated to support residential, commercial, and/or public sector energy efficiency and/or renewable energy financing transactions through the Rhode Island Infrastructure Bank, as established under Rhode Island General Laws Sections 39-26.5 and 46-12.2-4.2.

5.4.2.b **\$110,000.00 (One Hundred and Ten Thousand Dollars)** shall be allocated to support the Rhode Island Department of Environmental Management's (DEM) Energy-Saving Trees Program, which helps homeowners conserve energy and reduce their utility costs. Trees play an important role in cooling streets and homes, filtering air, and reducing stormwater pollution. DEM's program is operated in coordination with the Arbor Day Foundation and the Rhode Island Tree Council.

5.4.2.c **\$250,000.00 (Two Hundred and Fifty Thousand Dollars)** shall be allocated to DEM to support the Rhode Island Agricultural Energy Grant Program, a collaborative project of DEM, OER, and the Rhode Island Resource Conservation & Development Area Council (RI RC&D). This program, which is implemented through RI RC&D's Farm Energy Program, helps local farmers "green" their operations and benefit from the related energy and cost savings achieved through energy efficiency and renewable energy projects. OER will coordinate with DEM on future implementation of this program to support alignment with other existing clean energy initiatives available to Rhode Island's agricultural community. RGGI funds may be leveraged with other sources of capital to help local farmers implement clean energy projects. Such sources include, but are not limited to, the Rhode Island Renewable Energy Fund, USDA's Rural Energy for America Program (REAP), and utility-administered energy efficiency incentives.

5.4.2.d **\$350,000.00 (Three Hundred and Fifty Thousand Dollars)** shall be allocated for use by Rhode Island municipalities to support the installation of LED streetlights and associated control technologies. This program will be administered by OER.

5.4.2.e **\$585,110.52 (Five Hundred Eighty-Five Thousand One Hundred and Ten Dollars and Fifty-Two Cents)** shall be allocated to the Rhode Island Commerce Corporation's Renewable Energy Fund (REF), which is dedicated to increasing the role of renewable energy throughout the state. REF provides grants for renewable energy projects with the potential to make electricity in a cleaner, more sustainable manner, while stimulating job growth in the green technology and energy sectors of Rhode Island's economy.

5.4.2.f **\$100,000.00 (One Hundred Thousand Dollars)** shall be allocated to support the accelerated adoption of cost-effective energy efficiency measures by customers located in the Pascoag Utility District (PUD). OER will work in coordination with PUD management

to leverage existing system benefit charge funding, enhance incentive and program offerings, and identify cost-effective investment opportunities in the community.

- 6.0 Reallocation of RGGI funds from the 2012, 2013, 2014 and 2015 Plans for the Allocation and Distribution of Regional Greenhouse Gas Initiative Auction Proceeds.
- 6.1 OER finds that **\$69,802.97 (Sixty-Nine Thousand Eight Hundred and Two Dollars and Ninety-Seven Cents)** of funds allocated pursuant to Section 5.4.2.c of the 2012 Plan (SRP) shall be reallocated to achieve the purposes of Section 5.4.2.e (REF) of the 2018-A Plan.
- 6.2 OER finds that **\$41,427.00 (Forty-One Thousand Four Hundred and Twenty-Seven Dollars)** of funds allocated pursuant to Section 5.3.2.b of the 2013 Plan (Thermal WG) shall be reallocated to achieve the purposes of Section 5.4.2.e (REF) of the 2018-A Plan.
- 6.3 OER finds that **\$1,894.28 (One Thousand Eight Hundred and Ninety-Four Dollars and Twenty-Eight Cents)** of funds allocated pursuant to Section 5.3.2.c of the 2014 Plan (DOT EE) shall be reallocated to achieve the purposes of Section 5.4.2.e (REF) of the 2018-A Plan.
- 6.4 OER finds that **\$101,765.23 (One Hundred One Thousand Seven Hundred and Sixty-Five Dollars and Twenty-Three Cents)** of funds allocated pursuant to Section 5.3.2.f of the 2015 Plan (Solarize) shall be reallocated to achieve the purposes of Section 5.4.2.e (REF) of the 2018-A Plan.
- 7.0 Tracking and Reporting
- 7.1 Consistent with OER's reporting requirement under RIGL §23-82-6(d), all recipients of RGGI funding are required to comply with OER data and reporting requests, including, but

not limited to, those reporting requirements specified in procurement documents and/or any memoranda of understanding.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ADMINISTRATION
OFFICE OF ENERGY RESOURCES



PROPOSED
2018-B PLAN FOR THE ALLOCATION AND DISTRIBUTION OF
REGIONAL GREENHOUSE GAS INITIATIVE AUCTION PROCEEDS

Auctions Held March 18, 2018 & June 13, 2018

July 2018

1.0 Authority

The 2018-B Plan for the Allocation and Distribution of Regional Greenhouse Gas Initiative Auction Proceeds (Plan) is authorized by Rhode Island General Laws (RIGL) §23-82-1 et seq. and 42-140-9 and the “Rules and Regulations for the Allocation and Distribution of Regional Greenhouse Gas Initiative Proceeds,” effective August 2011.

2.0 Definitions

For the purposes of this Plan, the terms defined in RIGL §23-82-1 et seq. and the “Rules and Regulations for the Allocation and Distribution of Regional Greenhouse Gas Initiative Proceeds,” effective August 2011 shall be given the same meaning as provided in the statute and regulations.

3.0 Auction Proceeds included in this Plan

3.1 RGGI, Inc. conducted auctions on behalf of the State of Rhode Island on March 18, 2018 (Auction #39) and June 13, 2018 (Auction #40).

3.2 These auctions resulted in the following Auction Proceeds for the State of Rhode Island:

Auction #39	\$907,939.98
Auction #40	\$963,039.24
Total	\$1,870,979.22

4.0 Adoption of the Plan for the Allocation and Distribution of Regional Greenhouse Gas Initiative Auction Proceeds

4.1 The Rhode Island Regional Greenhouse Gas Initiative Act provides for the use of Auction Proceeds. RIGL §23-82-6 requires that the Auction Proceeds be used for the

benefit of energy consumers through investment in the most cost-effective available projects that can reduce long-term consumer energy demands and costs. The annual auction proceeds proposal shall be designed to augment and coordinate with existing energy efficiency and renewable energy programs, and shall not propose use of auction proceeds for projects already fully funded under other programs.

- 4.2. The Rhode Island Office of Energy Resources (OER) is authorized to allocate the auction proceeds for the following purposes, in a proportion to be determined annually by OER in consultation with the Rhode Island Department of Environmental Management (DEM) and the Rhode Island Energy Efficiency and Resources Management Council (EERMC):
- (1) Promotion of cost-effective energy efficiency and conservation in order to achieve the purposes of section 39-1-27.7;
 - (2) Promotion of cost-effective renewable non-carbon emitting energy technologies in Rhode Island as defined in RIGL §39-26-5 and to achieve the purposes of chapter 39-26 entitled “Renewable Energy Standard”;
 - (3) Cost-effective direct rate relief for consumers;
 - (4) Direct rate relief for low-income consumers;
 - (5) Reasonable compensation to RGGI, Inc.; and
 - (6) Reasonable costs of the OER and the Department of Environmental Management (DEM) in administering this program.

4.3 OER concludes that this Plan is consistent with applicable statutes and regulations. Public notice of the proposed Plan was provided on TBD. A copy of the Notice is attached hereto. A public comment hearing was held on TBD at the Department of Administration, One Capitol Hill, Providence, Rhode Island. The public was allowed additional time to submit written comments until TBD.

- 4.4 OER has responded to all substantive comments received on the Plan and are provided in the attached document entitled Response to Comments.
- 4.5 OER and DEM agree that the Plan was adopted in accordance with RIGL §23-82-6; “Rules and Regulations for the Allocation and Distribution of Regional Greenhouse Gas Initiative Proceeds” and Chapter 42-35, the Administrative Procedures Act.
- 5.0 Allocation of Auction Proceeds
- 5.1 Compensation to RGGI, Inc.
- 5.1.1 RIGL §23-82-6(a)(5) authorizes the reasonable compensation of an entity to administer the auction on behalf of the State of Rhode Island. RGGI, Inc. is the entity that conducted the auctions listed in Section 3.0.
- 5.1.2 RGGI Inc. was compensated \$33,329.33 from Auction 39 proceeds.
- 5.2 Administrative expenses
- 5.2.1 RIGL §23-82-6(a)(6) authorizes the reasonable costs of OER and DEM in administering the RGGI program. The total reimbursement to both entities shall not in any year exceed \$300,000.00 or 10.0% of the proceeds, whichever is greater.
- 5.2.2 Ten percent (10.0%) of total auction proceeds from Auctions 39 and 40 total \$187,097.92. Therefore, as specified in RIGL §23-82-6(a)(6), OER and DEM shall each be reimbursed a total of \$93,548.96.

5.3 Allocation of Net RGGI Proceeds

5.3.1 After accounting for compensation for RGGI Inc. and administrative expense reimbursement to OER and DEM, the net balance available for programmatic allocation is **\$1,650,551.97 (One Million Six Hundred Fifty Thousand Five Hundred Fifty-One Dollars and Ninety-Seven Cents)**.

5.3.2 OER finds that allocating the balance of the Auction Proceeds set forth in Paragraph 5.3.1 herein for the promotion of cost-effective energy efficiency and conservation; and the promotion of cost-effective renewable non-carbon emitting energy technologies in an integrated manner shall be best accomplished by disbursements as follows:

5.3.2.a **\$1,388,521.60 (One Million Three Hundred Eighty-Eight Thousand Five Hundred Twenty-One Dollars and Sixty Cents)** shall be allocated to the Rhode Island Commerce Corporation's Renewable Energy Fund (REF), which is dedicated to increasing the role of renewable energy throughout the state. REF provides grants for renewable energy projects with the potential to make electricity in a cleaner, more sustainable manner, while stimulating job growth in the green technology and energy sectors of Rhode Island's economy. A portion of these funds shall be used to establish a pilot incentive program to facilitate solar development on brownfields. All funds allocated through this section shall be administered in coordination with OER.

5.3.2.b **\$200,000.00 (Two Hundred Thousand Dollars)** shall be allocated to support the delivery of cost-effective energy efficiency programs and incentives to electric utility customers in the Pascoag Utility District (PUD). OER will work in coordination with PUD management to leverage existing system benefit charge funding, enhance incentive

and program offerings, and identify cost-effective investment opportunities in the community.

5.3.2.c **\$62,030.37 (Sixty-Two Thousand Thirty Dollars and Thirty-Seven Cents)** shall be allocated to support the delivery of cost-effective energy efficiency programs and incentives to electric utility customers of the Block Island Power Company (BIPCo). OER will work in coordination with BIPCo management to leverage existing utility funds and identify cost-effective investment opportunities in the community of New Shoreham.

6.0 Reallocation of RGGI funds from the 2013 and 2016-A Plans for the Allocation and Distribution of Regional Greenhouse Gas Initiative Auction Proceeds.

6.1 OER finds that **\$100,995.00 (One Hundred Thousand Nine Hundred and Ninety-Five Dollars)** of funds allocated pursuant to Section 5.3.2.f of the 2013 Plan (Grid Mod WG) shall be reallocated to achieve the purposes of Section 5.3.2.a (REF) of the 2018-B Plan.

6.2 OER finds that **\$500,000.00 (Five Hundred Thousand Dollars)** of funds allocated pursuant to Section 5.2.2.e of the 2016-A Plan (Microgrid) shall be reallocated to achieve the purposes of Section 5.3.2.a (REF) of the 2018-B Plan.

7.0 Tracking and Reporting

7.1 Consistent with OER's reporting requirement under RIGL §23-82-6(d), all recipients of RGGI funding are required to comply with OER data and reporting requests, including, but not limited to, those reporting requirements specified in procurement documents and/or any memoranda of understanding.