

Demand Side Management

2020 Report Docket 4991

Pascoag Utility District 253 Pascoag Main Street Pascoag, RI 02859 401-568-6222 ddolan@pud-ri.org www.pud-ri.org

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November 7, 2019

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

Re: RIPUC Docket No. 4991

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 2020. This submission includes Pascoag's Executive Summary, Program Details for 2020, reconciliation of 2019 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

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Cc: Mr. William Bernstein, Esquire

Schedule A-1: Proposed Budget for 2020 DSM Program

Pascoaq Utility District Demand Side Management Programs - 2020 Proposed Budget

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Estimated carry over from 2019	s	5,867	
Estimated sales for 2020	S	110,262	
RGGI Funds	S	64,700	
RGGI Fund Carryover 2019	S	19,000	
Net 2019 budget	<u>S</u>	199,829	

	Estimated DSM 2020 Budget/ Expenses/ Balance	5	199,829	
	Net Community Outreach, Marketing & Education	5	23,600	
DC2005	Energy Efficiency Management continuing education	S	2,500	Tuition, hotel, meals, mileage, NEEP 2 day conference, and webinars.
DC2004		S	9,000	
DC2003	· ·	S	3,600	The second secon
DC2002		S	7,500	Billing inserts, conservation promotional items, and advertisements,
DC2001		s	1,000	
		-	02,000	
	Net Administrative	s	31,500	
DA2003	Program Research and Development	s	500	Funds for future development of programs.
DA2002	Energy Consultant	S	10,000	Energy Consultant to provide guidance and reccomendations on DSM program.
DA2001	Administrative	s	21,000	
	Administrative			
	Net Industrial/Commercial	s	62,914	
DI2005	LED Street Light Incentive	\$	10,000	Public Street Lighting Project
DI2004	Potential 2020 Lighting & EE Projects	S		Projects that may arise as a result of energy audits.
DI2003	Committed Funds - Lighting & EE Projects	S		Ashton Court Interior Lighting Project
D12002	Burrillville School Department	S	Transfer of the state of the st	Burrillville High School Lighting Projects (RGGI Funded)
DI2001	Industrial/Commercial Small Business ENERGY STAR Offerings	s	1,200	ENERGY STAR Office Equipment and Commercial Appliances
	Net Residential	S	81,815	
DR2005	Committed for 2019 Programs	S	1,500	To accommodate programs with depleted funds from 2019
DR2004		s	1,000	LED lightbulbs, ENERGY STAR lighting fixtures and ceiling fans
DR2003	the company of the contract of	S	7,000	Central AC, Central Heat Pump, Mini-Split Heat Pumps and Heat Pump Water Heaters
DR2002	Residential ENERGY STAR Offerings		7,315	The control of the co
DR2001	A STATE OF THE PARTY OF THE PAR	S S	65,000	120 audits and weatherization incentives Energy Star Appliances, Refrigerator/Freezer Buyback and Home Office/Electronics Equipment
	Residential Program	_	c= 000	
		Budget		
		2020 Pr	oposed	
			Property of the Indian	Programme and the second secon

Schedule A-2: 2019/2020 Comparison

<u>Pascoaq Utility District</u> <u>Demand Side Management Programs - 2019/2020 Comparison</u>

		2019		2020
Actual/Estimated carry over from 2019/2020	\$	8,331	\$	5,867
Estimated sales for 2019/2020	\$	108,640	\$	110,262
RGGI Funds	\$	65,000	\$	64,700
RGGI Carryover Funds	\$		1 \$	19,000
Net 2019/2020 budget	-\$	181,971	5	199,829

	2019 Budg		2020 Bude	Proposed get	<u>c</u>	hange in 8	% Change
Residential Program							701
Home Energy Audits with Weatherization Incentives	\$	65,000	\$	65,000	\$	-	0%
Residential ENERGY STAR Offerings (Former Appliances, Refrigerator/Freezer Buyback, Home Office Equipment Program)	\$	6,898	\$	7,315	\$	417.00	6%
HVAC & Water Heating Program (Former Central AC & Water Heaters) Change a Light Program (includes Lighting Fixture	\$	3,300	\$	7,000	\$	3,700.00	112%
Program)	\$	1.050	\$	1.000	\$	(50.00)	-5%
Committed for 2019/2020 Programs		1,500		1,500		(50.00)	0%
Energy Efficient Windows/Doors	\$	1,500		1,500	\$	(1,500.00)	
	Ð				\$	(1,500.00)	
Heating System Incentive	5	1,500					
New Construction	\$	1,000	\$	•	\$	(1,000.00)	-100%
Net Residential	S	81,748	s	81,815	5	67.00	0.08%
Industrial/Commercial Smal Business ENERGY STAR Offerings (Former							
		1,200	•	1 200	\$		0%
Office Equipment & Appliances)	\$ \$ \$ \$			1,200	\$	0.400.00	101%
Burrillville School Department	Þ	9,300	\$	18,700		9,400.00	
Committed Funds- Lighting & EE Projects	\$	20,400	\$	22,764	\$	2,364.00	12%
Potential Lighting & EE Projects	\$	-	\$	10,250	\$	10,250.00	0%
Consultation Fees		250	\$		\$	(250.00)	
LED Street Light Incentive	\$	7,225	\$	10,000	\$	2,775,00	38%
Net Industrial/Commercial	\$	38,375	\$	62,914	S	24,539.00	64%
Administrative							
Administrative	\$	21,000	\$	21,000	\$	-	036
Energy Consultant	\$	10,000	\$	10,000	\$	•	0%6
URI Energy Fellow Intern	\$	9,000	\$	-	\$	9,000.00	-100%
Program Research and Development	\$	500	\$	500	\$		0%
Net Administrative	S	40,500	5	31,500	s	9,000.00	-22%
Community Outreach, Marketing & Education							
Funds for Follow-up to Successful Programs	\$	1,000	\$	1,000	\$		0%
Outreach/Education	\$	6,500		7,500	\$	1.000.00	15%
Jesse Smith Library Partnership	\$	3,523		3,600		77.00	2%
Community Events	\$	8,000		9,000	5	1,000,00	13%
Energy Efficiency Management continuing education	\$	2,325		2,500	\$	175.00	8%
Net Community Outreach, Marketing & Education	s	21,348	\$	23,600	s	2,252.00	11%
Estimated DSM Budgets/Change S/Change%	-5	181,971	5	199,829	-5	(17,858.00)	10%

Schedule B: Executive Summary Submitted by Desarae Dolan

Pascoag Utility District's (PUD) 2020 Demand Side Management Program reflects a unique opportunity to enhance the utility's energy efficiency offerings to its customers. Working in partnership with the Rhode Island Office of Energy Resources (OER) and with their Energy Consultant-Optimal Energy, PUD is committed to implementing a series of strategies that PUD believes 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, PUD has worked closely with OER staff to begin advancing two recommendations and six strategies as a pathway for the future of the utility's demand side management program (the full strategy document is contained in Schedule I). These recommendations and strategies are described below, with details on progress made in 2019 and proposed program enhancements in 2020.

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 demand side management program spending with system benefit charge collections from each sector. PUD proposes to keep the funding level at \$65,000 for residential energy audits and weatherization incentives, bringing the proportion of program spend closer to our 50% target.

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 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 2020, PUD hired Optimal Energy as its energy efficiency consultant to help quide data collection, cost-benefit analysis, and program development.

^[1] OER has committed a portion of the proceeds from Rhode Island's participation in the Regional Greenhouse Gas Initiative (2018-A and 2018-B) to promote the accelerated adoption of cost-effective energy efficiency measures by customers within the Pascoag Utility District and support the delivery of cost-effective energy programs and incentives to electric utility customers in the Pascoag Utility District over 2019-2021.

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

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 the schools is a priority strategy, with benefits that extend to students, staff, and the community.

The Burrillville School Department has completed major 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 a lighting project at the Levy Rink. They would like to begin work on a lighting project for the Burrillville High School in 2020. This is the last school that the Burrillville School Department would need to complete in Pascoag's territory.

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

Effective incentives are those that encourage energy efficient choices that would not have occurred in the absence of the incentive. There is concern that the incentive levels may be too low in some categories to encourage customers to take advantage of the program. PUD has reviewed rebate incentive levels with its energy efficiency consultant and proposed changes to some programs for 2020. PUD would like to focus its efforts this year on educating and incentivizing customers on energy efficient heat pump technology in the heating and cooling sector, while continuing to promote the energy audit/weatherization program.

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

Energy efficiency workforce development trainings, 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 will be reaching out to facilities managers in 2020 to gauge interest.

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 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. 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 chose to not move forward with this program at this time.

PUD and OER plans to meet with local banks in 2020 to determine if they may be able to offer a product that will help fill this need.

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 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. As of October, we've completed 96 audits. We are proposing to maintain funding at \$65,000 in 2020, in order to complete another 120 energy audits with weatherization incentives.

We hope to explore a weatherization program for low-income residents that we can propose for 2021. We will be working on setting up a meeting with Tri-Town Community Action in early 2020 to determine ways we can assist each other in outreach efforts.

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 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. In 2020, PUD will work with OER and Optimal Energy to map out incentives for renters/landlords. These program enhancements will be proposed in PUD's 2021 DSM plan.

Battery Storage as a Non-Wires Alternative to Substation/Feeder-line Upgrade

As part of its overall focus on the most cost-effective solutions to needed infrastructure for its customers, Pascoag Utility District is pursuing a "non-wires alternative" to enhance its ability to deliver electricity across its distribution system from its connection to the outside world through National Grid. The non-wires alternative combines the splitting of its customer load across the two feeder circuits from National Grid by dividing such load across an addition to Pascoag's substation, together with a battery-storage solution that will be able to deliver needed circuit relief during line-out contingencies on the highest load days of the year. This combination of infrastructure enhancements is centered around reliability of supply, and will allow Pascoag to avoid the alternative of a very expensive upgrade to the two feeder circuits from National Grid.

Existing Programs Not Covered Above

We have made several changes to the DSM program this year. We have reviewed and proposed changes to incentive levels and the way some programs are structured. We have recommended consolidating a number of programs for administrative reasons and to have more freedom to allocate funds to more successful programs. These changes are based on an extensive review conducted by Optimal Energy and Pascoag Utility, in conjunction with OER over the last year.

Pascoag Utility is excited about the proposed changes and is looking forward to restructuring our Demand Side Management program. Pascoag's proposed budget is based on a forecast of Sales for 2020 of 55,131,000 kwhrs (\$110,262). The District anticipates a \$5,867 carryover fund from 2019, \$19,000 from 2019 RGGI carryover funds and \$64,700 from 2020 RGGI funds, which would bring the total 2020 budget to \$199,829.

2020 Program Details- Residential, Commercial and Industrial, Administrative and Customer Education and Community Outreach, Marketing & Education

Residential Programs

In an effort to ensure that our program offerings more efficiently utilize ratepayer dollars we have made several adjustments in our 2020 DSM Plan. One major change from previous years is that we have streamlined the programs by combining some of the existing programs with similar attributes. In doing so, we can be more flexible with our budget so that we can focus on providing benefits to customers where demand is at its highest. We have also retired several incentive offerings for products that provide minimal claimable energy savings. By doing this, we have been able to reallocate portions of the budget that were previously tied to these products to products that provide greater energy savings for our customers. This summary will detail the programs proposed for 2020 and will review the success of the 2019 programs.

Audits with Follow-Up Incentives-\$65,000:

Residential energy assessments with no-cost direct install measures are critical for households to 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. In 2019 due to being awarded Regional Greenhouse Gas Initiative (RGGI) funding, 81 residential energy audits were conducted through September with another 14 scheduled in October. The goal is to complete 120 energy audits during the year and we're confident we'll be able to meet our target.

Rebates for insulation, air sealing and programmable thermostats have been trickling in. Three customers have completed air sealing and insulation projects and we've rebated five programmable thermostats. We're currently conducting a survey of customers who received an energy audit to help us determine some of the barriers they face when making weatherization and energy efficiency improvements to their home. We're hoping the results of the survey will help us find a better path forward to assist customers in the weatherization of their homes. Very preliminary results of the survey have pointed to time as being a major factor in proceeding with improvements. It takes time to get estimates and schedule the appointment. We're in the beginning stages of working with ENE

to see if they can coordinate with a subcontractor to establish set pricing so they can provide an actual estimate during the audit and a number to call to schedule insulation/air sealing.

In 2020, we are continuing to fund this line item with \$65,000 in funding from RGGI (2018-B). This will fund energy audits and weatherization incentives such as insulation, air sealing and programmable thermostats. We are also proposing to expand the direct-install component of the program to include low-flow aerators and shower heads for customers that heat with electric, oil and propane. We would also like to remove the cap on direct installs for LED lightbulbs. In 2019, we imposed a cap of twelve LED lightbulbs per customer. In 2020, we would like the auditor to install as many lightbulbs as is needed within the home. We would like to take advantage of lighting savings as much as possible before our ability to claim those savings through the program ceases to exist. Our goal will be to complete 120 energy audits, representing 3% of our residential customers.

This would allow for the following:

- 120- Audits \$32,700
- Direct Installs (LED Lightbulbs, smart strips, aerators and shower heads) \$10,000
- Insulation: 75% up to \$800
- Air Sealing: 75% up to \$500
- Programmable Thermostat
 - o Wireless \$100
 - Non-wireless \$25

PUD would be able to devote an estimated \$32,700 to residential energy audits, \$10,000 for direct installs and \$22,300 to rebate insulation, air sealing and programmable thermostats. Only customers who received an energy audit that recommended the products above, would qualify for the rebates. Air sealing and insulation would also need to be installed by a licensed contractor to qualify for rebates.

Residential ENERGY STAR Offerings: \$7,315

Pascoag would like to make several modest changes to this program. First, we'd like to consolidate our former Energy Star Appliances, Refrigerator/Freezer Buyback Program and Home Office/Electronics Program under the umbrella of Residential ENERGY STAR Offerings. From an

administrative perspective, it will help to streamline management of the program by keeping similar programs together and it will allow for more freedom to allocate funds to products that are performing better. Second, we'd like to propose a flat rate for incentives instead of a percentage of the cost. This will help speed up the processing of rebates and also make it easier to market to customers.

Lastly, Pascoag would like to retire dishwashers from the rebate program due to minimal claimable energy savings. We'd also like to only rebate new refrigerators and freezers if they are also recycling the refrigerator or freezer through our buyback program. Refrigerator/freezer savings have been reduced in recent years but if we combine the rebate with the buyback of the old refrigerator/freezer it will increase savings by preventing a second older, inefficient refrigerator/freezer from being installed in a basement or garage. This program encourages our customers to reduce their electric bills by removing an old inefficient refrigerator or freezer from their house. The Energy Star website estimates there are more than 60 million refrigerators over ten years old that cost consumers \$4.7 billion dollars a year in energy costs. Pascoag Utility increased the incentive from \$50 to \$69 to offset the recycling charge in 2015 which increased the activity for this program.

In order to qualify for the program, the customer must contact the Pascoag Utility office so we can verify the following requirements for a second refrigerator or freezer:

- It must be between 10 to 30 cubic feet using inside measurements.
- The refrigerator or freezer must be in working order.
- The customer must fill out a form with the model and make of the refrigerator/freezer and give the approximate age.

Once the criteria are met, the customer will be instructed to call Waste Management at 1-800-972-4545 to schedule an appointment to pick up the appliance. After the pickup is verified, the customer will receive a \$69 rebate which will be applied to their electric account.

Pascoag would like to include televisions, computers, displays and printers from the Home Office Equipment & Electronics program into the Residential ENERGY STAR program. We'd like to retire imagining equipment, uninterruptible power supplies, audio/video equipment, cordless phones, set-top and cable boxes, battery chargers, handheld vacuums with qualified

chargers, power tools with qualified chargers, and yard tools with qualified chargers due to minimal claimable savings.

Pascoag proposes the following incentives for this program:

2020 Proposed Residential ENERGY STAR Program	Proposed Incentive
Refrigerator/Freezer Purchase &	\$75 purchase of new refrigerator or freezer
Buyback Program	\$50 buyback plus the cost of removal \$19
Clothes Washer and Dryers	\$75.00
Air Purifiers and Air	\$40.00
Conditioners	
Dehumidifiers	\$30.00
Televisions and Computers	\$50.00
Displays	\$30.00
Printers	\$25.00

The total of these three programs in 2019 was \$6,898. PUD would like to increase this line item by \$417 to \$7,315.

ENERGY STAR Windows/Skylights and Doors Incentive: \$0

Pascoag would like to discontinue this program in 2020. While windows and doors offer some energy savings, it is difficult to estimate the savings resulting from these measures without having access to modeling tools that use site specific inputs for factors such as home type, existing window type and orientation, existing insulation and air leakage, and heating and cooling types and fuels. We'd like to focus on programs where we can more accurately determine energy savings and benefits.

Heating System Incentive-\$0

Rhode Island is pledging to reduce its carbon emissions by 80% by 2050. In order to achieve this goal, a majority of Rhode Islanders will need to start converting from inefficient oil boilers and furnaces to more efficient heat pump technology. The life of an oil boiler or furnace is typically twenty years. If we keep providing incentives to customers for oil boilers and furnaces, they will be waiting that much longer to invest in more efficient heating systems.

Pascoag would like to discontinue the Heating System Incentive program and move the funds it has historically allotted to it, to support the HVAC and Water Heater Program. We'd like to focus our efforts in educating and incentivizing our customers to transition to heat pump technology in 2020.

HVAC and Water Heater Program-\$7,000

PUD is proposing several modifications to this program. First, we'd like to consolidate our former Central Air Conditioning and ENERGY STAR Qualified Water Heater program under the umbrella of HVAC and Water Heating Program. From an administrative perspective, it will help to restructure the program by keeping related programs together and it will allow for more freedom to allocate funds to products that are in demand. We're also proposing a change to the rebate level by basing the incentive on a per ton basis instead of a flat rate. With this new rate structure we'll be able to provide more of an incentive to products that offer more savings potential.

2020 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			
*Rebate not to exceed \$700 per customer for this program.							

We propose removing solar water heaters from the Heat Pump Water Heater (HPWH) portion of this program as we've never rebated any to date despite our best attempts at marketing them. We've also updated the efficiency levels of electric HPWHs to reflect the industry standard for measuring water heater efficiency by using the uniform energy factor (UEF) as opposed to the energy factor (EF). We've increased the rebate offering from 5% of the cost (not to exceed \$100) to a flat rate of \$300 for \leq 55 gallon electric HPWHs with a minimum UEF of 2.0 and \$150 for electric HPWHs that are > 55 gallons with a minimum UEF of 2.7.

ENERGY STAR Heat Pump Water Heaters can save the average household \$330 per year and 2,690 kwh compared to a standard electric hot water heater. We're proposing the following incentives and ratings for Heat Pump Water Heaters:

2020 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	\$300
	ENERGY STAR > 55 gallons should have a minimum UEF of 2.70	\$150

The total of these two programs in 2019 was \$3,300. PUD would like to increase this line item by \$3,700 to \$7,000 in 2020, as we have raised rebate levels across this program.

Change A Light Program: \$1,000

Pascoag would like to make a few slight changes to this program. First, we'd like to combine our Change A Light Program that consisted of rebating LED lightbulbs with our Energy Star Lighting Fixtures Program. From an administrative perspective, it will assist in updating the program by keeping comparable programs together and it will allow for more freedom to allocate funds to products that are performing better.

Last year the Public Utilities Commission asked us to consider the possibility that Pascoag customers were being rebated twice for the purchase of LED lightbulbs. National Grid is responsible for many upstream rebates at local stores in the area and if Pascoag customers buy from these retailers they are getting the benefit of both National Grid and Pascoag's incentive programs. This in turn doesn't accurately represent energy savings, as the savings are claimed twice. After researching this issue, it was found that the only store in Pascoag's territory that National Grid does not have an upstream incentive program is with Lawrence Brothers. Pascoag is proposing to only rebate LED lightbulbs purchased at Lawrence Brothers store. Pascoag will try to monitor which stores National Grid is working with to provide upstream incentives on fixtures and rebate accordingly.

Pascoag would also like to discontinue ventilation fans from the lighting fixture program due to minimal claimable energy savings.

The ENERGY STAR label on lighting means you are getting a product that is superior in energy efficiency. ENERGY STAR qualified light bulbs use 70%-90% less energy than traditional incandescent bulbs. The ENERGY STAR qualified decorative light strings that feature LED technology are 90% more efficient. The electricity used by just one 7-watt incandescent bulb, can power 140 LEDs or enough to power a 25 foot string of LEDs.

ENERGY STAR qualified lighting fixtures use 90% less energy and 70-90% less heat than incandescent lighting. They distribute light more efficiently and more evenly than the standard fixture. They come in hundreds of decorative styles including portable fixtures like table, desk and floor lamps, and hard-wired fixture options like front porch, dining room, kitchen ceiling and under-cabinet, hallway ceiling and wall bathroom vanity fixtures and ceiling fan lighting fixtures. Many fixtures have convenient features such as dimming on some indoor models and automatic daylight shut-off and motion sensors on outdoor models.

ENERGY STAR ceiling fans/light combination units are 40% more efficient than standard models. They operate with less noise, have high performance motors, and improved blade design that provides better performance.

The incentive would remain at 50%, with a cap of \$50. The total of these two programs in 2019 was \$1,050. PUD would like to slightly decrease this line item by \$50 to \$1,000.

New Construction Rebates: \$0

Pascoag Utility would like to discontinue this program in 2020. The budget for this program is usually capped at \$500 per home and includes rebates for items they can take advantage of in other programs we offer. This is a pretty limited budget in terms of incentivizing customers to make significant changes to their new construction. We'd like to take some time to reconceptualize how we can create a program that would encourage customers to make the changes necessary to achieve deeper energy savings.

Committed for 2019 Programs: \$1,500

Pascoag Utility is estimating a carryover of funds from 2019 in the amount of \$5,867. PUD would like to use \$4,367 of these funds in the 2020 budget and use \$1,500 to satisfy 2019 qualified rebates for customers who do not receive a rebate because the funds for a particular program had been depleted in 2019 or for rebates that are turned in after the books are closed for 2019; the cutoff date for 2019 rebates would be March 13, 2020.

Commercial and Industrial Programs

Small Business ENERGY STAR Offerings: \$1200

Pascoag would like to consolidate our former ENERGY STAR Office Equipment and ENERGY STAR Commercial Appliance program under the umbrella of Small Business ENERGY STAR Offerings. From an administrative perspective, it will help to streamline managing the program by keeping similar programs together and it will allow for more freedom to allocate funds to products that are performing better. PUD would like to mirror the incentives offered under the Residential ENERGY STAR program, for office equipment and 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 35% 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 15% percent more energy efficient and 23% more water efficient than standard models.

Commercial Hot Food Holding Cabinets that have earned the ENERGY STAR rating are 65% 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.

Commercial Griddles that earn the ENERGY STAR rating are about 10% more energy-efficient than standard models. A qualified grill can save 1,200 kWh annually.

Commercial Ovens that earn the ENERGY STAR rating are 20% more energy-efficient than standard models. These ovens can save 1,870 kWh annually.

Commercial Refrigerators & Freezers that meet the ENERGY STAR specifications will be 40% 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 50% more energy-efficient than standard models. They can save 11,500 kWh annually.

Pascoag has provided incentives for three appliance rebates in 2019. By rebranding the program as Small Business ENERGY STAR Offerings, we're hoping to encourage local businesses to take advantage of some of the rebates we offer. Small businesses in town struggle to update their facilities with energy efficient equipment. We are working to find additional ways to promote this program including looking into affordable financing options for local businesses. Unfortunately, the Town of Burrillville decided to not implement the CPACE program in 2019. Pascoag plans on meeting with local banks in 2020 to see what options for financing might be available to business owners to reduce the financial burden to their small businesses.

The total of these two programs in 2019 was \$1,200. PUD would like to maintain this level of funding in 2020.

Industrial and Commercial Projects 2019: Burrillville School Department:

The Burrillville School Department has completed a lighting project at the Levy Rink. The total project cost \$30,469. Pascoag Utility District provided a rebate of \$9,300. The project will save 41,145 kwhrs per year and reduce their kW by 9.33. The Burrillville School Department wants to

continue the success of its energy efficiency efforts by completing its last lighting project at the Burrillville High School in 2020. The project would save 258,578 kwhrs annually. PUD would like to fund this program with \$18,700 from carryover RGGI funds in 2020.

Committed Funds-Lighting and Energy Efficiency Projects:

Pascoag Utility has completed two lighting projects this year and a third is almost complete. Ashton Court completed an exterior lighting project that cost \$19,929 and was rebated \$7,636. They will save 18,151 kwhrs annually and reduce their kW by 4.14. The Jesse Smith Library also completed a lighting project that cost \$44,475 and was rebated \$9,319 by Pascoag Utility. They will save 56,694 kwhrs and reduce their kW by 20.75. The Burrillville Assembly Theatre lighting project in currently underway. The project will cost \$9,129 with Pascoag providing a \$3,177 rebate. They will save 6,494 kwhrs annually and reduce their kW by 6.49. In addition, seven commercial and industrial energy audits were completed in 2019.

Committed Funds 2020- Lighting and Energy Efficiency Projects: \$22,764

PUD would like to allocate \$22,764 in funds to this line item in order to accommodate identified projects for 2020.

PUD would like to keep the rebates for lighting projects at 60% on retrofit projects and 40% on new lighting projects in 2019. These incentives have enticed customers to make the necessary changes to increase their energy efficiencies.

PUD has identified the following project for 2020:

• Ashton Court (provides safe, affordable housing for the elderly and disabled)-has completed phase 1 of their lighting project and is looking to complete phase 2. Phase 1 was the exterior lighting project that was completed in 2019 and phase 2 is an interior lighting project that they would like to begin in 2020. The interior lighting project would cost \$58,981 with Pascoag providing a rebate of \$22,764. They would reduce their kwh by 55,798 and their kW by 24.77.

Potential 2020 Lighting and Energy Efficiency Projects: \$10,250

Pascoag would like to create a new line item for projects that may come up throughout the year. 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.

Consultation fees: \$0

PUD would like to discontinue this program because we feel it is unnecessary at this time. We are currently working with Optimal Energy as our consultant for energy efficiency and conservation programs. Rhode Island Office of Energy Resources has also been an invaluable resource to us when we have questions on energy efficiency matters.

2020 LED Street Light Incentive: \$10,000

In 2019, the DSM Program rebated Pascoag Utility District \$7,225 for the LED Street Light Project that was completed in 2016 in which PUD purchased and installed 610 LED Street Lights. In 2020, we'd like to increase this line item to \$10,000. This money will be used to reduce the Account Receivable from the DSM Program from \$73,096 to \$63,096.

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 the customers, taking the 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 that are submitted, reconciling the DSM programs, and updating existing programs as well as creating new programs for the next year and requesting reallocation of funds. In addition, the Assistant General Manager works with the commercial and industrial customers on various C & I projects and performs site visits.

Pascoag Utility would also like to hold a training session with the Customer Service Representatives and include a luncheon again this year to train them on the latest criteria regarding DSM rebates for 2020. The District would like to fund this line item at \$21,000 in 2020.

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 hired 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 this year and has helped shape the DSM plan for 2020. We'd like to continue working with Optimal Energy in 2020 to review and improve our DSM program. The District would like to fund this line item at \$10,000 in 2020.

URI Energy Fellow Intern: \$0

PUD hired a URI Energy Fellow intern in 2019. Ms. Rodriguez worked on many projects this year. She was responsible for the marketing of our energy efficiency content for our Facebook page. Her posts and information were well received by our customers. She has updated all our energy efficiency handout materials with better graphics and information. We've been able to provide these handouts at all our community events. She's assisted with residential energy audit outreach by developing advertisements, letters to customers and a post audit survey. She was also an active member of our Green Festival committee and helped with the preparation leading up to the event. She has done an amazing job and has been a wonderful addition to the DSM team.

Although we'd like to continue this program in 2020, budget constraints have made this not possible. We'd like to bring this program back in future years.

Program Research and Development: \$500

Pascoag Utility would like to fund this line item with \$500 to have a source of funds to help develop future energy efficiency programs.

Community Outreach, Marketing & Education

Follow-Up to Successful Programs: \$1,000

PUD is requesting a line item to allow some flexibility in transferring funds up to ten percent to other programs with a high customer demand. If the carry over funds exceed our estimate, Pascoag Utility is proposing to move these funds to the Funds for Follow-up to Successful Programs line item in the 2020 budget.

Outreach/Education Program: \$7,500

Pascoag Utility took several opportunities to educate the public on energy efficiency matters this year. We attended and helped with some of the planning aspects of the Burrillville Family Fair. Customers received energy efficient information and products at the Family Fair and Green Festival. Over 1,000 people attended the Family Fair and 600 attended the Green Festival. We incorporated Burrillville Prevention Action Coalition into our partnership with the Town, to host this year's annual Green Festival. The Burrillville Prevention Action Coalition (BPAC) is a volunteer, working task force comprised of individuals who are interested in substance abuse prevention issues in the Burrillville community. BPAC contacted us last year and asked if there was a way for them to participate by bringing health and wellness vendors to the Green Festival. PUD believes the topics of health/wellness and energy efficiency/conservation go hand in hand. This was a welcome addition to our present work with Burrillville Recycling.

The District also had the opportunity to host a field trip for Steere Farm Elementary School's fourth grade. The children got a tour of the facility, learned about the role of the electric company in their community and worked on energy conservation posters while they were here. We also did a follow-up visit to their classroom to talk more about energy related topics.

Pascoag Utility has also become a committee member of Burrillville Aging Stronger. Burrillville Aging Stronger is a town-wide and town-supported effort to develop and coordinate programs which improve the health and well-being of Burrillville's aging community. The District was asked to participate as a vendor at their first Lunch & Learn event in May. After speaking with attendees at the event, we realized this age group tends to not benefit as much from some of our past outreach efforts. Many did not have Facebook pages or attend the Family Fair or Green Festival. We were able to speak

to many customers over the age of 55 and make them aware of the home energy audit program and rebates that we offer. We asked to join the committee and will now be helping with quarterly events in an effort to promote our DSM programs more effectively to this segment of our customer base.

As always, we will continue to distribute information at our office for our many walk in customers.

PUD would like to increase the budget from \$6,500 to \$7,500, as we are now including the quarterly Burrillville Aging Stronger Luncheons in our effort to provide better outreach to our elder community. We'd also use some of these funds to update the website in 2020, process bill inserts promoting the various programs, and to run advertisements in the local paper and through social media. We'd also like to purchase fulfillment materials, such as night lights, refrigerator thermostats and other conservation materials which will be given away at PUD's customer outreach events.

Jesse Smith Library Partnership - \$3,600

Pascoag Utility partnered with the Jesse Smith Library and Burrillville Recycling for an Earth Day Contest which encouraged students in grades K-8 to create posters on why recycling and energy conservation was important. The top twelve posters were chosen and will be included in a 2020 calendar with recycling and conservation messages. An awards ceremony was held at the library and each participant received a certificate issued by the Town Council.

In 2020, 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 and allow us to create calendars with the posters that will hang in customers' homes for twelve months.

Community Events: \$9,000

Burrillville is a small, tight-knit community. Pascoag Utility District's presence at community events is imperative to promote our DSM programs, establish trust within the community and communicate with our customers face to face. It gives us an opportunity to interact with our customers outside of the office and answer questions they may have, that they didn't have time to call us about. The community events we attend in 2020 will allow us to promote our expanded home energy audit program and weatherization incentives, as well as our other offerings.

In 2019, funds were used to purchase supplies, create and distribute flyers for the Green Festival, change date/time on banners and signs and to pay for labor at community events that promoted energy efficiency. Many hours were also dedicated to the preparation of the Green Festival event.

The Pascoag Utility District partnered with the Town of Burrillville's Parks & Recreation Department and hosted the event at the Stillwater Mill Center at 100 Tinkham Lane. This partnership continues to be very rewarding. The Festival had something for everyone and is a family friendly event. Over 600 festival goers learned about local products and ideas from 40 local vendors, to help them conserve energy and create a more sustainable lifestyle. There were free crafts, face painting, games, and bucket truck rides for the children. The event was very successful at raising funds from a raffle for a local nonprofit agency called the Backpack Project.

In addition, Green Consumers Energy Alliance hosted an electric car show at the Green Festival. One dealership and several electric vehicle owners/ambassadors displayed their cars and were present to answer questions about their electric cars. PUD received many positive comments about the electric car show and it's something staff would like to do again, in the future.

In March 2019, the entire 4th grade from Steere Farm Elementary School visited PUD on a field trip. The children learned about public power, energy efficiency and the operation of an electrical company. They played energy efficiency games and worked on energy efficiency posters for the annual calendar contest. They were also given a tour of the facilities and had lunch at our office. The staff and the children had a lot of fun and it's something PUD hopes to continue in 2020.

As previously mentioned, we've also joined the Burrillville Aging Stronger Committee and have attended three quarterly luncheons where we've provided energy efficiency and home energy audit information to our elderly customers. This has been a great opportunity and we've been able to speak to many customers that we don't normally get to see.

Additionally, we've been asked to participate at several events by the Burrillville PTA. This has been a great opportunity to speak to young families that may not know what programs we offer.

Pascoag Utility would like to continue the line item for Community Events. PUD will continue the partnership with the Town of Burrillville Parks and Recreation Department in hosting the Green Festival again next year. This will allow us to attend other events in the community, where we can promote the DSM programs that are available to our customers.

Pascoag Utility would like to increase this line item from \$8,000 to \$9,000 in 2020 as we've expanded our community events to include an onsite field trip, PTA events and quarterly Burrillville Aging Stronger Luncheons.

Energy Efficiency Management Continuing Education funds: \$2,500

In 2019, the main focus for the DSM Coordinator was to work with Optimal Energy on reviewing and revamping the DSM Program. Unfortunately between expanding our outreach efforts and revising the program, it left little time to attend conferences. The DSM Coordinator was able to attend the Massachusetts Sustainable Communities Conference over the summer. It was a great opportunity to see what other communities were working on.

Pascoag Utility would like to fund this line item to \$2,500 in 2020 so the DSM coordinator can attend various workshops and other learning opportunities.

Schedule D-1: 2019 Expenses & Balances

Pascoaq Utility District Demand Side Management Programs - 2019 Approved Budget

	E	Actual	 Difference		
Estimated/Actual carry over from 2018	\$ -	9,106	\$	8,331.36	\$ 775
Estimated sales for 2019	\$	108,640	\$	108,640.00	\$
RGGI Funds	\$	65,000	\$	65,000.00	\$ -
Net 2019 budget	\$	182,746	\$	181,971.36	\$ 775

		2019 Ap	prove d	Expe	nses	Balance	
	Residential Program				21.411	*	22.500
DR1901	Home Energy Audits with Weatherization Incentives	\$	65,000	\$	31,411	\$	33,589
DR1902		\$	5,838	\$	4,023 560	\$	1,815
	Refrigerators/Freezer Buy Back	\$	560	\$			
	Energy Efficient Windows/Doors	\$	1,500	\$	1,500	\$	(250)
	Heating System Incentive		1,500		1,750		(250)
	ENERGY STAR qualified Water Heaters	\$ \$	600	\$	200	\$	400 333
DR1907			650	\$	317		
DR1908		\$ \$ \$	500	\$	153	\$	347
	New Construction	5	1,000	\$	500	\$	500
	Central Air Conditioning		2,700	\$	2,742	\$	(42)
	Change a Light Campaign	\$	400	\$	117	\$	283
DR1912	Committed for 2018 Programs	\$	1,500	\$	1,486	\$	14
	Net Residential	\$	81,748	\$	44,759	S	36,989
	Industrial/Commercial						
DI1901	Energy Star Incentive - Office Equipment	\$	500	\$	-	\$	500
DI1902	Burrillville School Department	\$	9,300	\$	9,300	\$	
DI1903	Committed Funds- Lighting & EE Projects		20,400	\$	17,027	\$	3,373
DI1904	Consultation Fees	\$ \$ \$	250	\$		\$	250
DI1905	Energy Star Commercial Appliance	\$	700	\$	375	\$	325
DI1906	LED Street Light Incentive	\$	7,225	\$	7,225	\$	-
	Net Industrial/Commercial	\$	38,375	s	33,927	\$	4,448
	Administrative						
DA1901	Administrative	\$	21,000	\$	14,120	\$	6,880
	Energy Consultant	\$	10,000		8,710	\$	1,290
DA1903	URI Energy Fellow Intern	\$	9,000		8,470	\$	531
DA1904	Program Research and Development	\$	500	\$		\$	500
	Net Administrative	\$	40,500	\$	31,300	5	9,200
	Community Outreach, Marketing & Education						
	Funds for Follow-up to Successful Programs	\$	1,000		1,000	\$	
	Outreach/Education	\$	6,500		5,449		1.051
DC1903	Jesse Smith Library Partnership	\$	3,523	100	1,321		2,202
DC1904	Community Events	\$	8,000		7,564		436
DC1905	Energy Efficiency Management continuing education	\$	2,325	\$	772	\$	1,553
	No Community Outroom Nation 1 5 to 100	5	21,348	s	16 100	s	5,242
	Net Community Outreach, Marketing & Education	3			16,106		
	Estimated DSM 2019 Budget/ Expenses/ Balance	5	181,971	>	126,092.13	5	55,879

Schedule D-2: 2019 Projected Expenses & Balances

Pascoag Utility District Demand Side Management Programs - 2019 Projected Expenses and Balances

Actual carry over from 2018	\$ 8,331.36	
Estimated sales for 2019	\$ 108,640.00	
RGGI Funds	\$ 65,000.00	
Net 2019 budget	\$ 181,971.36	

		2019 Ap	proved		ected nses	Proje	cted Balance
	Residential Program				45.000		10.000
DR1901	Home Energy Audits with Weatherization Incentives	\$	65,000	\$	46,000	\$	19,000
DR1902	Energy Star Appliance Rebates	\$	5,838	\$	5,000	\$	838
DR1903		\$	560		560	\$	*
DR1904		5	1,500		1,500 1,750	\$	(750)
	Heating System Incentive	3	1,500	\$			(250)
	ENERGY STAR qualified Water Heaters	\$	600	\$	200 400	\$	400 250
DR1907		\$\$\$\$\$\$\$	650			\$	
DR1908		3	500	_	200		300
	New Construction	5	1,000		500	\$	500
	Central Air Conditioning	5	2,700	30	2,742	\$	(42)
DR1911			400	\$	200	\$	200
DR1912	Committed for 2018 Programs	\$	1,500	\$	1,486	\$	14
	Net Residential	S	81,748	\$	60,538	\$	21,210
	Industrial/Commercial						
DI1901	Energy Star Incentive - Office Equipment	\$	500	\$	-	\$	500
DI1902	Burrillville School Department	\$	9.300		9,300	\$	-
DI1903	Committed Funds- Lighting & EE Projects		20,400		20,400	\$	
DI1904	Consultation Fees	\$	250		-	\$	250
DI1905	Energy Star Commercial Appliance	\$	700	\$	300	\$	400
DI1905	LED Street Light Incentive	\$	7,225		7,225	\$	
	Net Industrial/Commercial	5	38,375	\$	37,225	\$	1,150
100000000000000000000000000000000000000	<u>Administrative</u>						
	Administrative	\$	21,000		21,000	\$	•
	Energy Consultant	\$	10,000		10,000	\$	
	URI Energy Fellow Intern	\$	9,000		9,000	\$	
DA1904	Program Research and Development	\$	500	\$	-	\$	500
	Net Administrative	\$	40,500	\$	40,000	5	500
	Community Outreach, Marketing & Education						
	Funds for Follow-up to Successful Programs	\$ \$	1,000		1,000	\$	
DC1902	Outreach/Education	\$	6,500		6,277		223
DC1903	Jesse Smith Library Partnership	\$	3,523		3,523		
DC1904		\$	8,000		7,769	100	231
DC1905	Energy Efficiency Management continuing education	\$	2,325	\$	772	\$	1,553
			01.010		10.044		2 007
	Net Community Outreach, Marketing & Education	5	21,348		19,341		2,007
	Estimated DSM 2019 Budget/ Expenses/ Balance	5	181,971	. 5	157,104.15	5	24,867

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).

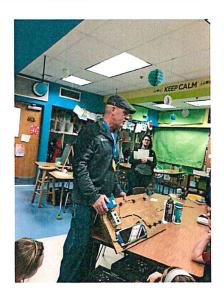
The District proposes to include a charge of 2.3 mills per kilowatt-hour delivered to fund a demand side management program and renewable energy resources. The allocation of this revenue between demand side management programs and renewable energy resources shall be determined by the Commission.

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





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Burrillville Family Fair



Jesse Smith Library Earth Day Calendar Contest





Burrillvillle Aging Stronger Luncheon





13th Annual Green Festival





Burrillville PTA Trunk or Treat



Pascoag Utility District and the Town of Burrillville's Parks and Recreation Department are teaming up to hold the 13th Annual Green Festival on **Saturday, September 7, 2019** from **10:00-2:00pm** at the Stillwater Mill Center -100 Tinkham Lane, Harrisville RI 02830. The event is free to the public!

The Festival has something for everyone! Learn about local products and ideas that will help you conserve energy and create a more sustainable lifestyle with our green and health/wellness vendors! There will be free crafts, games, face painting and bucket truck rides for children.

This year the Jesse Smith Memorial Library will be holding two free workshops on composting and electric cars in their community room.

Composting Workshop 11:00AM

This workshop will give you all the information you need to start composting in your backyard. Topics covered include:

- A review of different ways to compost, what goes (and does not go!) in your compost bin.
- · Getting started with a basic leaf bin.
- Best practices for managing your bin, and for harvesting, applying, and supplementing your finished compost.

Drive Green Workshop 12:00pm

Have you ever thought about purchasing or leasing an electric vehicle (EV) but have so many questions, you don't know where to begin? Maybe you're starting to see electric charging stations popping up everywhere and think this might be the time to switch from gas to electric?

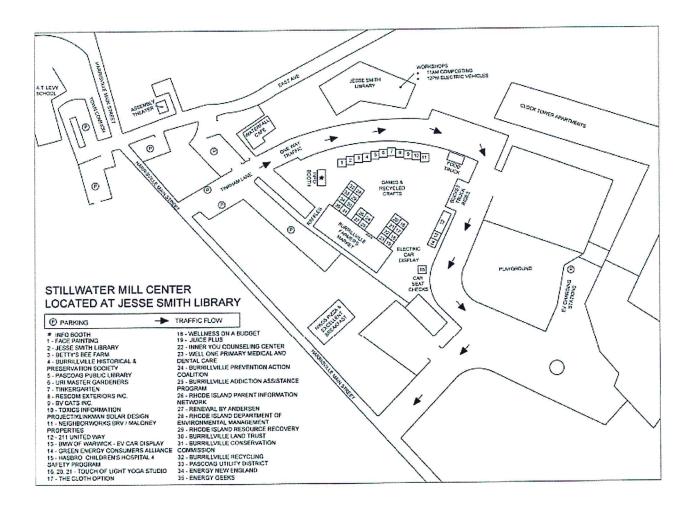
Join us for a free, brief 30 minute workshop where Green Energy Consumers Alliance will be on-hand to let you know how you can save on an electric vehicle with their group discount, dispel some of those EV myths and more! After the presentation, make sure you check out the Electric Car display that will be going on outside! Feel free to ask questions and take a look! Don't miss out!

The Burrillville Farmers Market will be under the Pavilion selling their amazing vegetables. baked goods and other fine products. Stop by and see all the great things they have to offer!

GottaQ BBQ food truck will be on site offering lunch and snacks for sale! The very talented, singer-song-writer, Charlie Marie will perform as well!

And in addition to all the great vendors, workshops, and activities, we'll have giant yard size Checkers, Twister, Connect 4 and many other fun games to play!!! Best of all, it's free!

First 500 attendees get free reusable bags packed with information and goodies! Save the Date!



2019 Green Festival Map with Vendors

Schedule G: Customer Information





Getting ready for spring? Installing new lighting fixtures, ceiling or ventilation

Pascoag Utility District







Pascoag Utility District Energy Audit & Energy Efficiency Facebook Posts

Schedule G: Customer Information



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



FALL INTO SAVINGS

with a free Home Energy Assessment



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 LED lightbulbs, smart strips and grounded power switches on hand, to install for free 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 Incentive: 75% up to \$800
- Air Sealing Incentive: 75% up to \$500
- Programmable Thermostat Incentive: Wireless \$100 Non-wireless \$25

Appointments are filling up fast, as the end of the year approaches! 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.

Bargain Buyer Advertisement

Schedule G: Customer Information



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
 - Clothes washers
 - Vending Machines
 - Water Coolers
 - Kitchen Packages
 - o Dishwashers
 - o Fryers
 - o Griddles
 - Hot Food Holding Cabinets
 - o Ice Machines
 - Refrigerators/Freezers
 - Steam Cookers
- Office Equipment and Electronics
 - o Computers
 - Displays
 - Imaging Equipment
 - Uninterruptible Power Supplies
 - Audio/Video Equipment
 - o Cordless Phones
 - Televisions
 - o And more!

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 G: Customer Information



New for 2019!

Free Home Energy Audits for Pascoag Utility Customers-Now 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 LED lightbulbs, smart strips and grounded power switches 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 Incentive: 75% up to \$800
- Air Sealing Incentive: 75% up to \$500
- Programmable Thermostat Incentive: Wireless \$100 Non-wireless \$25

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.

Energy Star Rebates

We also offer rebates on Energy Star rated:

- Appliances
- Central Air Conditioning
- Electric Heat Pump Hot Water Heaters and Solar Water Heaters used in combination with an Electric Tank Water Heater
- Heating System or Burner Replacement

- Home Office Equipment and Electronics
- LED Light Bulbs
- Lighting Fixtures, Ceiling and Ventilation Fans
- New Construction
- Windows and Doors

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

Billing Insert for Residential Customers

Schedule H: Lighting Project Information for 2020

Efficiency Energized.





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

Ashton Court - Interior Lighting 10-28-2018

Financial Summary	
Total Project Cost	\$ 58,981
Estimated PUD Incentive	\$ (22,764)
Customer Net Cost	\$ 36,217
Estimated Energy Cost Savings Annually	\$ 7,254
Estimated Maintenance Savings	\$ 1,850
Return on Investment (ROI)	25%
Simple Payback in Years	4.0

Energ	gy Savings	
kW Reduction	kWh Reduction	
24.77	55,798	

	Pollution Savings			
CO2 Reduction (lbs)	NOx Reduction (lbs)	SO2 Reduction (lbs)		
53,566	13.9	1.7		

Ashton Court Interior Lighting Project

Schedule H: Lighting Project Information for 2020

PROJECT SUMMARY

WENERGY

Existing

After Retrofit 3,639

Number of Fixtures

1,810

Lighting System Energy Consumption

430,142 kWh

171,564 kWh

SAVING SUMMARY

(Energy Rate S0.1500 /kWh)

Energy Reduction

Energy Savings

Maintenance Savings

Carbon Savings



REDUCED

258,578 kWh



\$38,786 SAVED



SAVED



182,506 kgCO2e **GASES REDUCED**

FINANCIAL SUMMARY

(10 Year Analysis Period)

Project Cost

\$148,153

Less Rebates and Incentives

\$(29,551)

\$118,602





PAYBACK 2.92



ROI 34.24%



NPV \$188,961



IRR 38.90%

COST OF WAITING

Postpone for one month Postpone for six months Postpone for one year

53,384 \$20,303 \$40,606

2

Burrillville High School Lighting Project

Schedule I: 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). 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.

Phase 1 Programmatic Strategies

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/2018-4%20Items/2018-4%

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 audits * \$500 per audit = \$60,000 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/burrillvilletownprovidencecountyrhodeisland/PST045216

	Strategy	Pilot/Research Timeframe		nitial Inding	Initial Funding Source	Year of Full Scale Implementat ion	Sector	Ann	roposed ual Budget rom SBC	Incr	remental SBC	
	Administrative Recommendations											
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	
		Pho	ise 1 P	rogramm	atic Strategies							
#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	\$	B	Implicit in EERMC workforce development initiative	2019	Non-Res	\$	9,000	\$	0.00016	
		Pho	ise 2 F	rogramm	atic Strategies							
#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	
		Pho	ise 3 F	Programn	atic Strategies							
#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	\$	9	?	2022	Both			\$	-	
#9	Develop a demand response initiative for businesses, possibly through a third part vendor	2020	\$?	2022	Non-Res			\$	=	

	Administrative Recommendations and Pro	grammatic	Strategies	Timeline		
	-	2018	2019	2020	2021	2022
AR#1	Align energy efficiency funding more closely with sector SBC contributions					
AR#2	Account for and report on full costs and benefits as defined in the Rhode Island Cost-Effectiveness Test					
#1	Decrease energy burden and address energy- related school construction priorities Burrillville Public Schools located within the Pascoag District					
#2	Enhance incentive levels, especially for measures that go beyond lighting (e.g. weatherization)					
#3	Subsidize Building Operator Certification for facility managers					
#4	Facilitate commercial financing options either through a third-party bank and/or enable					
#5	Increase the number of residential energy assessments and no-cost direct install measures, with increased outreach to low-income residents					
#6	Continue to improve residential offerings by developing specific incentives for low-income customers					
#7	Automate benchmarking through EnergyStar Portfolio Manager					
#8	Develop a program for new construction that includes a zero-energy related incentive					
#9	Develop a demand response initiative for businesses, possibly through a third-party vendor					
	Administrative Pilot Full-Scale					

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 <u>Response to Comments</u>.

- 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.
- 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.
- 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.
- 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.
- 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



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

Auctions Held March 18, 2018 & June 13, 2018

August 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 July 17, 2018. A copy of the Notice is attached hereto. A public comment hearing was held on August 16, 2018 at the Department of Administration, One Capitol Hill, Providence, Rhode Island. The public was allowed additional time to submit written comments until August 26, 2018.

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