

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-1. Referencing Table 2.1, please provide a more detailed budget showing the assumed costs and participations rates for each of the categories. For example, under the Residential Assessments and Weatherization category, what is the expected breakout of expense for Energy Assessments and for Weatherization. The District included \$45,350 for 36 energy assessments and 8 weatherization. Please include the assumptions for each category.

RESPONSE:

Please see Attachment NC_1-1 for a budget table with a more detailed breakdown of budget numbers and underlying assumptions.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-2. Referencing Table 3.2, the direct install measures for the residential customers, will the estimated quantities be limits on the 36 expected assessments? If not, how will the District ensure it stays within budget?

RESPONSE:

The estimated quantities listed in Table 3.2 are not limits on the expected 36 assessments. The District and its vendor will be tracking the installation of these measures on an ongoing basis and will judge if assessments are on track to under or over spend this budget in real time. If expenses are tracking over the anticipated budget the District will look to allocate money from another section of the program budget to cover those overages. If budget reallocations are inappropriate due to high demand or high costs in other budget categories, then the District will look to curtail the number of assessments by reducing marketing and/or limiting the number of assessments scheduled. Should assessments need to be limited in a given program year, the District will keep a waiting list in order to serve interested customers as soon as additional funding becomes available. The District will also be using data from year 1 of the program to inform allocations of funding in future program years that best meets demand.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-3. What was the underlying assumption that each assessment would result in 1.5 aerator faucets, on average?

RESPONSE:

The estimated quantities shown in Table 3.2 were based on the number of units installed in each assessment, on average, during the *Block Island Saves* pilot program conducted by OER in 2016. By taking an average, the number of aerators came out as 1.5 rather than a whole number, and the District used this number to develop its estimated budget. It is likely that some customers will want/need one or none, whereas others may want/need 2 or 3 aerators but in total approximately 50 aerators are expected to be deployed in 2020.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-4. The report states that “weatherization benefits include increased comfort to occupants year round.” Has a value been placed on increased comfort? If so, how has it been quantified?

RESPONSE:

A monetary value has not been placed on increased comfort. Customers taking advantage of weatherization will experience year round energy savings as a result of the improved building envelope. Increased comfort resulting from weatherization work is considered as a qualitative benefit. The energy savings for weathrization have been quantified and indicate a benefit-cost ratio above 1.0, and including a qualitative benefits of increased comfort still yields a benefit-cost ratio above 1.0.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-5. What are the incremental energy and/or other power system savings associated with the \$250 weatherization bonus? If such analysis has not been performed, what quantitative or qualitative analysis is the District relying on for both the offering of the bonus and for the size of the bonus?

RESPONSE:

The weatherization bonus - given to customers who undertake both a heat pump installation and weatherization work – incentivizes best practice for heat pump installations by ensuring a tight building envelope before sizing an HVAC system. Improved weatherization potentially reduces the heat pump unit size and up-front cost for customers. Additionally, an improved building envelope is expected to reduce the electricity demand of a heat pump system, which is beneficial for the grid compared to a heat pump installed in a non-weatherized building. Thus the bonus is intended to provide a small financial incentive to customers who take on both of these measures and whose systems will be sized and operate more efficiently. A formal analysis quantifying the economic value of these benefits has not been performed, but the value of the bonus and the rationale for offering it is based on a comparison of other 2019 utility offerings in the Northeast (NH Electric Co-Op¹; Vermont Public Power Supply Authority²; Burlington Electric Department³) offering similar bonuses to drive customer adoption of these measures in tandem. The District hopes to obtain more data (both qualitative and quantitative) on the adoption of heat pumps with weatherization measures through program implementation and further research into other program evaluation results.

Prepared by Nathan Cleveland

¹ <https://www.nhec.com/wp-content/uploads/2019/01/2019-Commercial-Municipal-Heat-Pump-Equipment-Incentive-Program.pdf>

² <https://vppsa.com/cold-climate-heat-pump-rebate/>

³ <https://burlingtonelectric.com/sites/default/files/inline-files/ccHPRebateForm.pdf>

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-6. How many customers of the District currently heat with electric resistance heating? Will the District target those customers for heat pumps first?

RESPONSE:

Although the District does not have any data to quantify the number of members who heat with resistance heating, we believe that number is small. Historic rates have traditionally driven customers to heat with the most cost-effective method possible which would not have been electric resistance heating, at least in the past 40 years.

OER is recommending we prioritize people who are looking to install AC first - there are clear grid benefits to a heat pump versus other less efficient AC units.

Those who heat with electric resistance are likely to be enticed to heat pumps because of the cost savings so they should also be prioritized, but their grid benefits will be less than capturing AC installers. OER makes this assumption because Block Island is summer peaking and it is expected that there is plenty of capacity on the grid for winter electric heating.

Prepared by Jeffery M. Wright and Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-7. Is the design of the District's proposed heat pump initiative similar to Pascoag Utility District's approved program? Please explain any differences.

RESPONSE:

The District's proposed heat pump program is similar in design to Pascoag Utility District's program approved in Docket #4991.

The primary difference is in the incentive levels for central heat pumps and ducted or mixed-ducted mini-split heat pumps. Pascoag Utility District's program incentivizes that equipment at \$350/ton and the Block Island Utility District has proposed to incentivize that equipment at \$250/ton instead.

The District's rationale, informed by feedback from residents and the Board, was that a lower incentive would allow more customers to have access to the limited funds available. The District is committed to monitoring customer adoption and feedback and adjusting incentive levels or budget allocations to better meet demand in future program years.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-8. Does the District expect the conversion of heat pumps to result in higher electric usage? If not, why not? If so, how has the Company accounted for this in its rate case?

RESPONSE:

The District does anticipate that conversions to heat pumps will result in higher electric usage for most customers who install them. However, the overall impact to the grid is currently unclear and is expected to be too small to affect the rate case. First, the number of heat pumps able to be installed through the efficiency program is small (10 or fewer) and therefore grid-wide impacts are expected to be negligible. Second, heat pump systems operate more efficiently for cooling than other options, like window A/C units. And since more homes and businesses are installing A/C on the Island, incentives for heat pumps may reduce overall electric demand growth in the summer. Lastly, it is believed that some Islanders currently heat using electric resistance. In these cases, converting to a heat pump would lower electric demand in the winter. If heat pumps become a popular measure through the energy efficiency program, then the District is likely to incorporate assumptions about this technology change into future electric demand projections.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-9. Does the District expect customers who install heat pumps to have a back-up heat source? If so, how has that been accounted for in the expected energy savings/cost savings?

RESPONSE:

The District does not have an expectation that customers who install heat pumps will have a back-up heat source and there is no program requirement regarding back-up heating systems as part of this plan. As such, it has not been accounted for in expected energy/cost savings. The District notes that modern, cold-climate heat pump systems are able to efficiently and cost-effectively operate as a sole heating source should the customer choose that type of system.

The few members that have discussed the potential heat pump programs are either replacing an older electric heat pump system that is under sized or they wish to replace an existing propane or oil furnace due to age and condition.

Prepared by Jeffery M. Wright and Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-10. Referencing Tables 3.4 and 3.6, the Heat Pump Water Heaters, is the “should have a minimum UEF” a suggestion or a requirement?

RESPONSE:

The word “should” in both Table 3.4 and Table 3.8 describing Heat Pump Water heating measures for residential and business customers was unclear. However, in the supporting text below Table 3.4 it is made clear that “Qualifying units will have a minimum UEF of 2.0 for the smaller units and a minimum UEF of 2.7 for the larger units” (second paragraph of page 12 below table 3.4). It was intended that those minimum values would be a requirement for the program. Rebate forms and other program documentation will also make clear that those minimum levels are requirements for eligibility.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-11. The programmable thermostat rebate is \$25. Does a customer receive a rebate of \$25 even if the thermostat is less than \$25, or should the rebate level be \$25 or the cost of the thermostat, whichever is less?

RESPONSE:

The rebate is not intended to exceed the cost of the unit, so it should be written as “\$25 or the cost of the unit, whichever is less” and rebate forms and other program documentation will make this structure clear to customers.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-12. Referencing Table 3.6, how will the District control costs where the incentive levels are “Free” and 75% of costs?

RESPONSE:

Costs for the free screw-in LED bulbs provided to business customers during the energy assessment are determined by both the number of assessments conducted and the number of bulbs per assessment installed. Based on the number of bulbs installed in businesses during the *Block Island Saves* pilot, the overall number and size of businesses on the island, and the low-cost of these bulbs, the District is comfortable with its estimates and does not expect deviations from its estimates to significantly impact the budget.

No limit was placed on the 75% of costs offering because no customers took advantage of this offering during the *Block Island Saves* pilot. Therefore, the District plans on offering this incentive level on a first-come, first-serve basis and will use program results to better tailor budget and incentive levels next year.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-13. Referencing Tables 3.4 and 3.8, the maximum rebate for residential customers is \$750 and for business customers, \$1,000.
- Why are there different maximum rebate levels for each group of customers?
 - What assumptions did the District use to come up with the caps for each group of customers (ex: assumed usage, cost of measures, etc.?)
 - What is the average annual usage for each class of District residential customers?
 - What is the average annual usage for each class of District business customers?
 - What is the average bill for District residential customers (based on the Rate Year in the pending rate case)?
 - What is the average bill for each class of District business customers (based on the Rate Year in the pending rate case)?

RESPONSE:

- Maximum rebate levels for residential and commercial customers are set differently because the District anticipates business customers, on average, would need larger systems with higher upfront costs.
- The District based the caps on the assumed system size and up-front costs that would be incurred by business and residential customers, with the determination being that business customers will, on average, need larger systems to handle bigger spaces and/or longer run-times and those systems will have a higher up-front cost. The District also compared these caps to other efficiency programs, as it did with the weatherization bonus, and these caps are similar to those offered in other programs.
- The annual usage for our 1,427 Residential Customers in the Rate Year is expected to be 3,931 kWh per year.
- The annual usage for our 316 Commercial General and 199 Commercial Demand Customers in the Rate Year is expected to be 14,652 kWh per year.

Data from Block Island Utility District Rate Change Application – Docket 4975, David Bebyn’s schedules DGB-RY-2a1 and DGB-RY-2b1 were used to calculate the answers to questions c. and d.

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

e. Due to the proposed three tier seasonal rate structure we have calculated the average bill for a typical month from all three periods (Off-Peak, Shoulder and Peak). The average bill for a Residential customer in February, May and July is shown below.

	<u>February</u>	<u>May</u>	<u>July</u>
Residential	\$276.25	\$360.41	\$819.11

f. Due to the proposed three tier seasonal rate structure we have calculated the average bill for a typical month from all three periods (Off-Peak, Shoulder and Peak). The average bill for a Commercial General and a Commercial Demand customer in February, May and July is shown below.

	<u>February</u>	<u>May</u>	<u>July</u>
General	\$367.37	\$748.39	\$1,004.40
Demand	\$1,711.22	\$3,172.78	\$7,164.08

Data from Block Island Utility District Rate Change Application – Docket 4975, David Bebyn’s schedules DGB-RP-2, DGB-RP-3 and DGB-RP-4 were used to calculate the answers to questions e. and f. The Excel file used to calculate the average bills is included as Attachment JMW1-13.

Prepared by Jeffery M. Wright and Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

1-14. How many thermostat rebates does the District expect to process?

RESPONSE:

The District built a budget with a baseline assumption of 1 programmable thermostat per energy assessment. Therefore, the District expects to process approximately 45 rebates between residential and business customers. Exact numbers for this measure are hard to predict though, as numbers will depend on customer need and adoption rates – e.g. some customers may already have programmable thermostats installed, or may not opt to pursue one, whereas other customers may have multiple heating/cooling zones for which they would like one. The District hopes to refine thermostat rebate estimates for future energy efficiency program budgets based on the District’s experience in 2020-2021.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-15. How many thermostats can a customer receive a rebate for? Can a hotel receive a rebate for a thermostat in every room?

RESPONSE:

The District does not intend for customers to be able to receive an unlimited number of rebates for programmable thermostats. The District's intent is to set a clear limit on the rebate forms and other program documentation making clear to customers the maximum number of thermostat rebates a customer can receive is two (2).

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

1-16. Please provide a copy of the Requests for Proposals for the vendors.

RESPONSE:

At this time the RFP for the vendors has not been drafted. The District is working on these now and the intent is to have them ready to post, if the plan is approved in May.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

1-17. What is the expected lead time and startup costs for the first year of the program?

RESPONSE:

The District is working diligently to have as many program elements as possible in place in advance to reduce lead time – for example, having vendor RFPs ready to release and having rebate forms and other materials created and ready to deploy as soon as the plan is approved. Based on typical RFP timelines, the District anticipates only having a lead-time of approximately 5 weeks after Plan approval. The District will note, however, that given the uncertainty presented by the current COVID-19 epidemic, it is possible that there may be unavoidable delays caused by public health considerations.

Additionally, in year one, OER staff time will help reduce BIUD start-up costs by supporting the development of RFPs and other program materials that otherwise would have been done by District staff.

The District staff is, although limited to two, prepared to focus on promoting and deploying the program as soon as possible.

Prepared by Jeffery M. Wright and Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

1-18. Does BIUD expect administrative costs to go down after the first year? Please explain.

RESPONSE:

BIUD anticipates that as the program matures there will be an opportunity to reduce administrative costs through increased operating efficiencies with vendors and increased staff knowledge and skills as it relates to program management and oversight. One current high program administration expense is the need to get mainland vendors out to the island to perform services. As such, administrative expenses may go down considerably should qualified local vendors be available.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-19. Please provide the minutes from the October 2019 meeting referenced on page 5 of Mr. Wright's testimony. Please also explain what changes were made to the DSM proposal as a result of the meeting.

RESPONSE:

The draft efficiency plan was presented by District President Jeffery Wright in the October 2019 Board of Commissioner's meeting at which feedback was obtained and provided to OER. The plan was edited based on that feedback and was presented in person in the December 2019 Board of Commissioner's meeting.

As a result of the public meeting in December 2019 attended by Mr. Cleveland from the Office of Energy Resources, several adjustments to the DSM plan were made in response to public feedback and BIUD Board input. Those include: incentivizing programmable thermostats at a lower dollar level than the proposed Wi-Fi enabled thermostats; allocating a larger percentage of funds towards residential customers rather than business customers; and emphasizing additional low or no-cost advertising channels available on the island to promote the program, such as the Community Bulletin and the BIUD Facebook page.

The approved minutes from the October and December Board of Commissioners Meeting are attached in Attachment JMW1-19.

Prepared by Jeffery M. Wright and Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-20. Are all electric customers eligible to receive weatherization rebates, energy assessments, and programmable thermostats?

RESPONSE:

Yes, all electric customers would be eligible to receive energy assessments, weatherization rebates, and programmable thermostat rebates as described in the proposed Plan.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-21. Please explain how the electric system will benefit from the heat pump water heater rebates. Has the District attempted any quantification of the benefit?

RESPONSE:

The electric system will benefit from the installation of heat pump water heaters because they operate much more efficiently than traditional electric water heaters. By replacing an older, less efficient electric water heater with a newer, high-efficiency heat pump water heater, less energy will be needed to heat water in homes/businesses.

For homes and businesses with oil or propane hot water, the District expects that customers will benefit from reduced water heating costs by switching to a heat pump water heater. The District also expects that increased kWh sales not coincident with the system's summer peak will, if adopted at a scale larger than what is proposed in this first Plan, help to drive down electric rates for customers and will allow the grid's capacity to be better utilized. It is assumed by the District that the electric demand from heat pump hot water heaters is rarely coincident with summer peak. However, the District plans to research this further with support from OER and/or its efficiency consultant. No specific quantification of these benefits has been undertaken by the District yet.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-22. Please explain how the electric system will benefit from the heat pump heating systems? Has the District attempted any quantification of the benefit? If not, going forward, how will the District assess the benefits and costs of the installations?

RESPONSE:

The electric system will benefit from installing heat pump systems because they are more efficient for heating, as compared to electric resistance, and more efficient for cooling, as compared to window or central A/C units. As electric resistance and older A/C equipment is replaced with heat pumps the overall usage of electricity will decrease from those users, benefitting the grid.

Furthermore, customers that are looking to install A/C will minimize their impact on the grid by choosing a heat pump. And those currently heating with delivered fuels will help to increase kWh sales during off-peak periods by converting to heat pumps. This will increase the utilization of the grid's capacity during the off-season and will increase kWh sales which may help to drive down kWh rates if there is substantial uptake in heat pump installations.

Currently, only the qualitative description provided above has been completed by the District. Moving forward, the District plans on having a program consultant explore the impacts of heat pumps further.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-23. Has the District considered whether the installation of heat pump systems might affect the District's peak energy usage? Please explain.

RESPONSE:

The District's peak energy usage occurs during the summer. Installation of heat pump systems in buildings with existing A/C is not anticipated to increase peak usage because the cooling they provide is more efficient than a standard window A/C unit or other central A/C system. In contrast, if a heat pump system is installed and used where existing cooling was not present, then energy usage for cooling would increase from zero. However, as more buildings on the Island look to install air conditioning, the District would prefer that heat pumps be installed over less efficient A/C equipment to help mitigate an increase in peak.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-24. Are all electric customers eligible to receive the low-flow showerheads and aerator faucets? What is the justification for providing them to customers with oil/propane hot water?

RESPONSE:

The Plan proposes that all electric customers be eligible to receive the low-flow showerheads and aerator faucets. Providing this equipment to customers with oil/propane heated hot water provides energy and cost savings to those customers, which is a goal of BIUD. Additionally, by reducing the run-time of water heating systems and the amount of hot water used, there are small electric savings through reduced electric pump use and reduced electric fuel firing.

Lastly, showerheads and aerators are part of the direct install measures provided at no-cost to customers through the energy assessment, thus the budget impact to BIUD is minimal and makes administering the program easier by not having to differentiate between customers with and without delivered fuels. By being more inclusive it also proactively addresses a potential area for customer dissatisfaction were the District to offer these measures to some customers as part of the audit, but not others.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

1-25. Who is eligible for pipe insulation? Is there an electric system benefit?

RESPONSE:

The Plan proposes that, all customers be eligible for pipe insulation, regardless of fuel type. Pipe insulation is expected to provide cost savings to customers regardless of their fuel, which BIUD feels is important. In addition, most modern water heaters and heating systems use electricity. If a system burns delivered fuels, it usually has an electric firing mechanism and at least one electrically powered pump. Therefore, by helping to reduce a system's runtime, pipe insulation is expected to reduce overall electricity use. For customers with fully electric systems, the electricity savings is substantially larger than those that use delivered fuels.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-26. In the event there is an over or under subscription within any given budget category during the program year:
- a. What is the process for transferring funds between budget categories?
 - b. Who will determine which transfers between budget categories are appropriate?
 - c. What approvals will be required for the transfers?

RESPONSE:

- a. Budget categories have been designed to be broad such that money within a given budget category can be used to best meet customer demand. Should a transfer of funds between categories be necessary, the District would seek the advice of its efficiency consultant, OER, and others as appropriate, to determine from where in the program money could be reallocated. The District would document where the money was coming from, where it was going, and to the best of its ability, determine why that budget category was exceeded in order to inform future planning and avoid future transfers.
- b. The District will provide monthly program updates at each Board of Commissioners meeting and any transfers of funds between categories will be communicated at that time.
- c. The Board of Directors would need to vote to approve any transfer requests in a given program year if it resulted in an increase of the overall budget. If the program budget is unaffected and it is just a transfer of funds among categories, then it only requires management approval by President Jeffery Wright. Any transfers will be accounted for and reported in the program's regulatory reporting requirements.

Prepared by Jeffery M. Wright and Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-27. Is it anticipated that OER will author the BIUD DSM plans for calendar years 2021 and 2022?

RESPONSE:

While OER was involved in supporting the District in creating the 2020 DSM Plan, authorship and ownership of the document resides with the District, both for this Plan and subsequent DSM Plans. It is anticipated that the District, in collaboration with the proposed energy consultant, will author the DSM plans in calendar years 2021 and 2022. OER staff that assisted the District with the 2020 plan will be available to provide input or clarification, if needed, during future plan development, but authorship will continue to reside with the District, as it did for 2020.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-28. What, if anything, is BIUD doing to plan for and/or encourage additional Electric Vehicle penetration on the island?

RESPONSE:

The District has done preliminary thinking about where and how to deploy EV charging infrastructure on the island in conjunction with informal conversations with residents and businesses about the interest/demand for such equipment. At this time the District does not have a formal plan for rolling out EV charging equipment but will continually be evaluating cost-effective opportunities to install charging stations and remains supportive of electric vehicles increasing in prevalence on the island.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

1-29. Please indicate whether BIUD has included a rate for the renewable energy fund charge.

RESPONSE:

The District has not incorporated the Renewable Energy Fund charge of 0.3 mills per kWh delivered into the DSM plan or surcharge, nor was it contemplated in the rate case. The District plans to bill the Renewable Energy Surcharge as a separate line item on the monthly electric bills and it will be identified in a footnote on the DSM Tariff. The estimated charge based on the Rate Year kWh sales of 12,895,398 kWh is \$3,869. It is planned to be billed per/kWh during each month.

Prepared by Jeffery M. Wright

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-30. What is the \$60,000 rate revenues being used for and what is the \$60,000 RGGI funds being used for?

RESPONSE:

RGGI funds are supporting up to \$60,000 in rebates for energy saving measures while it is requested that all other costs and remaining rebates are covered by ratepayer funds.

Should a transfer of funds be needed within a given program year, RGGI funds are not eligible to be utilized for administrative, marketing, or other non-energy savings budget categories and the District will adhere to these guidelines when considering any funding transfers.

Prepared by Nathan Cleveland

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

- 1-31. Referencing page 4 of Mr. Wright's testimony, what is the rationale for only collecting the energy efficiency surcharge in the summer and shoulder months?

The rationale for only collecting the efficiency surcharge in the summer and shoulder months is that those represent the highest usage months of the year for the District and based on forecasted usage would result in the collection of the \$60,000 funding level from the District for year one of the DSM program. Additionally, by not having the surcharge collected in the off-peak months, year-round residents benefit from lower electric rates than currently available.

- a. Please explain whether the Company applied any cost-causation principles to this rate design proposal and explain the analysis used.
- b. Please show the expected level of benefits for year-round residents (residential and nonresidential) compared to customers whose primary usage is between May and September.

RESPONSE:

- a. The District chose the Shoulder and Peak Rate Periods to charge the DSM Surcharge which is intended to further incentivize conservation during the peak periods which has multiple benefits. The District's summer-time peak results in an extreme load profile that the District continually strives to reduce with a goal of flattening the curve to provide a more efficient system.
- b. Although we have not quantified the expected level of benefits to our members by time of usage or done a residential/non-residential benefit analysis, we believe everyone will benefit equally from the annual savings achieved by the program. In addition to the direct cost savings from reduced usage during this period, there will be transmission and capacity savings that will benefit everyone.

Prepared by Jeffery M. Wright

BLOCK ISLAND UTILITY DISTRICT

Docket No. 5013

Demand Side Management Plan

First Set of Data Requests of the

Public Utilities Commission

April 10, 2020

1-32. What percentage of the planned budget is being directed toward heating related measures?

RESPONSE:

\$7,700 is budgeted for residential HVAC measures and \$5,000 is budgeted for business HVAC measures, for a total of \$12,700 directed toward heating measures. This represents 10.5% of the planned budget.

Prepared by Nathan Cleveland