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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.

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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.

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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.

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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.

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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-Op<sup>1</sup>; Vermont Public Power Supply Authority<sup>2</sup>; Burlington Electric Department<sup>3</sup>) 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.

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

<sup>&</sup>lt;sup>2</sup> <u>https://vppsa.com/cold-climate-heat-pump-rebate/</u>

<sup>&</sup>lt;sup>3</sup> <u>https://burlingtonelectric.com/sites/default/files/inline-files/ccHPRebateForm.pdf</u>

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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

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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.

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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.

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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

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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 <u>will</u> 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.

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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.

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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.

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

# **RESPONSE:**

a. 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.

b. 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 runtimes 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.

c. The annual usage for our 1,427 Residential Customers in the Rate Year is expected to be 3,931 kWh per year.

d. 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.

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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>	May	July
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>	May	<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

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# 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.

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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).

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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.

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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

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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.

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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

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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.

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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 it's efficiency consultant. No specific quantification of these benefits has been undertaken by the District yet.

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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.

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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.

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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.

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# 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.

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- 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

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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.

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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.

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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

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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.

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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

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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.

Costs		Unit Cost	Dimension	Units	Total Cost	Notes		
Assessment & Installation Residential								
Direct Install Measures		\$600.00	cost per DI	36	\$22,550.00	Estimated using 2016 actual costs during pilot, with adjustments made for a competitive RFP and increased volume delivering better pricing and comparisons to other jurisdictions to estimate cost		
DI Travel		\$200.00	cost per DI travel	36	\$7,200.00	Estimated using 2016 actual costs for vendor travel to/from Block Island and the batching of audits to reduce unneeded trips (3/day)		
Weatherization		\$1,600.00	cost per Wx	8	\$12,800.00	Estimated using 2016 actual costs and 1 job/day - cost reduction possible if multiple jobs feasible in one day		
Wx Travel		\$350.00	cost per Wx travel	8	\$2,800.00 <b>\$45,350.00</b>	Estimated using 2016 actual costs and 1 job/day - cost reduction possible if multiple jobs feasible in one day		
HVAC Incentives Programmable Thermostats		\$25.00	Rebate per device	36	\$900.00	Assumed 1 per audit @ \$25/ea.		
HP Water Heaters		\$300.00	Rebate per device	6	\$1,800.00	Based on ~15% adoption rate from audits performed, in line with similar size efficiency programs; 6 systems of < 55 gallons		
Heat Pumps		\$250.00	Rebate per ton of system size	18	\$4,500.00	Based on ~15% adoption rate from audits performed. For example: 18 tons of systems @ \$250/ton or 6 Max incentives of \$750; based on housing stock most systems likely		
Wx Bonus		\$250.00	flat rate per customer	2	\$500.00 <b>\$7,700.00</b>	to be 2-3 tons in size Assumed 2 of 6 Wx customers do both to get bonus		
Business Audit/Direct Install/Lighting		\$3,400.00	cost per audit/DI	6	\$20,400.00	Estimated from 2016 actual invoices, with adjustments for better pricing with competitive bid process and comparisons to other jurisdictions		
DI Travel		\$300.00	cost per DI travel	6	\$1,800.00	Estimated from 2016 actual costs and assumption that 2 jobs/day can be completed, which requires coordination to achieve.		
Weatherization		\$2,000.00	cost per Wx	2	\$4,000.00	Based on residential cost assumptions from above (no 2016 data) and included 33% increase due to higher value caps for labor (\$1200 bus vs \$800 res)		
Wx Travel		\$700.00	cost per Wx travel	2	\$1,400.00	Estimated based on 2016 travel costs for vendors and assumption that business weatherization takes 2 days - cost reduction possible if jobs complete in one day		
					\$27,600.00			
HVAC Incentives Programmable Thermostats	\$25.00	rebate per device	6	\$150.00	Assume 1 per audit @\$25 each Assume 5 > 55 gal systems installed @ \$150/ea. as business often has larger water			
HP Water Heaters	\$150.00	rebate per device	5	\$750.00	heating needs but budget can also accommodate 2 smaller systems < 55 gal @ \$300, which is a 33% uptake rate - aggressive but feasible Assume 16 tons of system size @ \$250/ton,			
Heat Pumps		\$250.00	Rebate per ton of system size	16	\$4,000.00	or 4 systems at \$1k max; based on building stock most systems likely to be 3-5 tons in size		
Total Assessment & Installation Budget					\$4,900.00 <i>\$85,550.00</i>			
nspection omprehensive Inspection Services (Business Residential, including travel)		\$1,200.00	cost per inspection	16	\$19,200.00	Estimated from 2016 costs. Each business audit and weatherization, and all residential weatherization are inspected. Cost reductions possible if multiple inspections completed in one day		
rogram Administration Consultant Services		\$10,000.00			\$10,000.00	Estimate, actual costs depend on RFP		
Total Inspection & Program Administratio	n Budaet	÷10,000.00			\$10,000.00 \$29,200.00	response and scope of work		
ustomer Outreach	-				,,_00.00			
Bill Inserts	Once in September, October, February, March	\$0.24	cost per handout	7600	\$1,884.00	Based on full year of program operation - 2020 costs would be 50% of this		
Block Island Times Ad	Quarter page during ad peak (June - October) - 3x/month in September and October	\$314.00	cost per ad	6	\$1,884.00	Based on 2019 ad costs and fall advertising based on pilot feedback and targeting year- round customers		
Block Island Times Ad	Quarter page during off-peak (Nov - May) - 3x/month in February and	\$247.00	cost per ad	6	\$1,482.00	Based on 2019 ad costs and spring advertising to target business customers and others busy during peak island usage in advance - 2020 costs would be zero		
Internal Island Marketing Channels (i.e. Community Bulletin/Facebook Page	March Bi-Monthly Advertising, year- round	\$0.00	cost per post	24	\$0.00	Promote the programming using free, community oriented channels with seasonally appropriate messaging.		
Total Program Administration & Marketin	g Budget				\$5,250.00	Attachment N		
otal Budget					\$120,000.00			

	Total Average Bill	\$276.25	\$367.37	\$1,711.22		Total Average Bill	\$360.41	\$748.39	\$3,172.78			Total Average Bill	\$819.11	\$1,004.40	\$7,164.08	
	Renewable Energy Fund	\$0.0003	\$0.0003	\$0.0003		Renewable Energy Fund	\$0.0003	\$0.0003	\$0.0003			Renewable Energy Fund	\$0.0003	\$0.0003	\$0.003	
	Efficiency Charge	\$0.0000	\$0.0040	\$0.0100		Efficiency Charge	\$0.000	\$0.0040	\$0.0100			Efficiency Charge	\$0.000	\$0.0040	\$0.0100	
	DSI	\$0.00	\$0.00	\$0.00		DSI	\$0.00	\$0.00	\$0.00			DSI	\$0.01	\$0.01	\$0.01	
	Transmission	\$0.0762	\$0.0762	\$0.0762		Transmission	\$0.0762	\$0.0762	\$0.0762			Transmission	\$0.0762	\$0.0762	\$0.0762	
	Standard Offer	\$0.0914	\$0.0914	\$0.0914		Standard Offer	\$0.0914	\$0.0914	\$0.0914			Standard Offer	\$0.0914	\$0.0914	\$0.0914	
FEBRUARY	Ave Demand Charge	\$0.00	\$0.00	\$141.50	MAY	Ave Demand Charge	\$0.00	\$0.00	\$141.50	JULY	Ave Demand Charge	\$0.00	\$0.00	\$141.50		
	Ave System Charge	\$0.00	\$0.00	\$0.00		Ave System Charge	\$0.00	\$0.00	\$0.00			Ave System Charge	\$15.45	\$13.76	00.0\$	
	Plant & Distribution Rate	\$0.0895	\$0.1070	\$0.0800		Plant & Distribution Rate	\$0.1425	\$0.1710	\$0.1200			Plant & Distribution Rate	\$0.2850	\$0.3410	\$0.2500	
	Customer Charge	\$10.00	\$10.00	\$32.00		Customer Charge	\$10.00	\$10.00	\$32.00			Customer Charge	\$10.00	\$10.00	\$32.00	
	Ave Usage	212	280	1,232		Ave Usage	267	551	2,329			Ave Usage	543	646	4,896	
	Usage	302,164	88,578	245,215		Usage	381,594	174,271	463,433			Usage	774,185	204,017	974,244	
	Count	1,427	316	199		Count	1,427	316	199			Count	1,427	316	199	
		Residential	General	Demand			Residential	General	Demand				Residential	General	Demand	

<u>July</u> \$819.11 \$1,004.40 \$7,164.08

<u>Mav</u> \$360.41 \$748.39 \$3,172.78

<u>February</u> \$276.25 \$367.37 \$1,711.22

> Residential General Demand

Attachment JMW1-13

# Block Island Utility District October 22, 2019 Town Hall, Old Town Road 3:30 PM

#### Minutes

Present: Barbara MacMullan, Everett Shorey, William Penn, Mary Jane Balser, Elliot Taubman Also, Present: Jeff Wright, Christine Grele, a representative from the Block Island Times, and several members of the public

Barbara MacMullan called the meeting to order at 3:28 PM.

#### 1. Public Input

• Chris Warfel extended an invitation from an EcoRI representative to speak with anyone about net metering. Jeff Wright and several board members were open to being contacted and suggested that such requests can go through the clerk who can distribute them to the board.

• Tony Pappas reported that he appreciated the cooperation of the Board and BIPCO staff in exploring a new solar initiative that he presented to the public recently.

#### 2. Commissioner's Report

• Barbara MacMullan welcomed Elliot Taubman to the board and congratulated Mary Jane Balser on her re-election to the board. Taubman and Balser serve four-year terms.

#### 3. Approve Minutes of July 31, August 24 3:30, and August 24 Annual Meeting, 2019

• Barbara MacMullan noted that there were insubstantial typos and errors in the minutes that members of the board can send to the clerk.

• Elliot Taubman requested clarification on a response to a question he asked the Energy New England Representative at the Annual Meeting.

• Barbara MacMullan requested to add the descriptor "Verizon modem bill" to clarify the savings realized from connecting to broadband reported in the Annual Meeting.

Barbara MacMullan moved to accept the July 31, 2019 minutes subject to the above, seconded by Everett Shorey. Ayes 4: (MacMullan, Shorey, Penn, and Balser). Recused 1: Taubman

Everett Shorey moved to accept the minutes from the August 24, 2019, 3:30 meeting subject to the above, seconded by Mary Jane Balser. Ayes 4: (MacMullan, Shorey, Penn, and Balser). Recused 1: Taubman

Barbara MacMullan moved to accept August 24, 2019, Annual Meeting minutes subject to the above, seconded by Mary Jane Balser. Ayes 4: (MacMullan, Shorey, Penn, and Balser). Recused 1: Taubman

#### 4. Receive and Act on Treasurers Report

• William Penn presented the Treasurer's Report (on file), noting that all accounts complied with all policies. He recommended paying off the line of credit which has a balance of \$365,000, and Jeff Wright reported that he was planning to do so and will this week.

Barbara MacMullan moved to accept the Treasurer's Report, seconded by Mary Jane Balser. Ayes 5: (MacMullan, Shorey, Penn, Balser, and Taubman).

#### a. Review and Act on Audit RFP

• William Penn requested to be the second contact for inquiries.

• The board discussed the drafted schedule and timeline, and it was agreed to move the dates ahead, drafts due March 15, final Audit due April 1, leaving time for the board to review and approve the Audit before the April 30 filing deadline.

• William Penn asked if the request for a three-year commitment was appropriate, and the board agreed that this was reasonable.

William Penn moved to accept the RFP with the above corrections, seconded by Everett Shorey. Ayes 5: (MacMullan, Shorey, Penn, Balser, and Taubman).

#### 5. Receive and Act on Presidents Report

• Jeff Wright presented the President's Report (on file)

• Everett Shorey asked about a decrease in commercial customers. Jeff Wright reported that is was due to the shift to commercial from residential due to demand trigger being hit.

• Jeff Wright reported that he is working with DEM to close out the BIPCO site. They require testing and removal of any contamination in the front of the plant. He scheduled a contractor for November 1, 2019 to do boring samples which will be the basis of a remediation plan.

William Penn moved to accept the President's Report, seconded by Mary Jane Balser. Ayes 5: (MacMullan, Shorey, Penn, Balser, and Taubman).

#### 6. Receive an update on Rate Case Filing

• Everett Shorey reported that the filing of the application is complete.

• Jeff Wright reported that they had responded to the first round of discovery questions from the Division.

• William Penn asked when the new rates take effect. Jeff Wright reported June 1, 2020, following public hearings at PUC and public meetings on Block Island.

• Elliot Taubman asked about data from smart meters, and Jeff Wright reported that the meters have not been in place long enough to have reliable data for this rate filing.

• Chris Warfel asked why net metering was not in this rate case. Barbara MacMullan explained that the time needed to gather data and to restructure a net metering tariff would delay the rate filing and that the board wanted to realize savings in the new rate schedule as soon as possible.

• Tony Pappas asked if rate filings were on a mandated schedule. Barbara MacMullan and Jeff Wright reported that they are not, but that they take time, and there are costs associated with each filing.

• Mary Jane Balser asked if the new schedule shifts more costs to commercial customers than residential. Jeff Wright reported that costs are applied evenly across categories.

No Action Taken

#### 7. Receive an efficiency program presentation and draft efficiency program for future discussion

• Barbara MacMullan reported that the board is considering an energy efficiency program that would cost \$360,000 over three years, 50% of which is shared by the state. More details should be available at the November board meeting. Jeff Wright added that the program builds on the BI Saves program that ran about five years ago.

• Chris Warfel talked about submetering, and Everett Shorey, Barbara MacMullan, and Jeff Wright responded that submetering is expensive to implement.

• Chris Warfel asked to have a copy of the draft program, and the board discussed how to make documents approved for public distribution more accessible. Jeff Wright reported that the web site is 95% complete. Until then, send requests to the clerk.

• Mary Jane Balser pointed out that we do know that the summer rentals drive up consumption significantly.

#### No Action Taken

#### 8. Discuss Net Metering: Receive Public Input and Discuss (Respond to Warfel Correspondence)

• Barbara MacMullan reported that the board has been discussing the need to address Net Metering for some time as the utility has reached it is 3% cap, and the new private solar initiative increases the demand for solar projects.

• Jeff Wright explained the utility and customer costs of Net Metering versus the PURPA program. Adding that there is an opportunity for the utility to purchase large scale solar on the market that would make renewables less expensive for everyone. He then reported that a consultant had been hired to collect and analyze the data to prepare the board to consider revenue-neutral options.

• Chris Warfel reported that he had looked at the calculations and found several data errors that overreported current net metering use, indicating that there may be an additional 18 kWh available for net metering. Jeff Wright reported that in the past month, a small waiting list has developed, and if the recalculations are correct, individuals can be approved now. There followed a discussion on developing criteria for the waiting list, especially if a property owner is not ready to install a project when they become eligible.

• Socha Cohen asked if the board could make the technical details more accessible to interested persons by creating materials that explain the context of an issue, how a public utility works, relevant regulations, and a list of vocabulary. Mary Jane Balser pointed out how helpful, concise statements are, such as the current estimate that for every 1% of net metering, the utility endures of cost of \$20,000, an expense that is then passed on to all ratepayers.

• Elliot Taubman asked to include an analysis of net metering versus avoided costs. There was a discussion about avoided costs and the energy efficiency program.

• Chris Warfel asked if some of the current assets can be used to develop energy storage at BIPCO. Barbara MacMullan indicated that that would be a possibility, and the analysis should include the capital and social costs associated with sea-level rise when estimating the cost-benefits of replacing fossil fuels with renewables.

• Tony Pappas expressed concern that a delay in the new tariff may impact the new private solar initiative he is helping promote. Barbara MacMullan thought that there might not be a need to delay the new program.

• Chris Warfel noted that 40% of the costs of installing solar on the island now remain in the island economy.

• Barbara MacMullan suggested the board hold a meeting dedicated to just this topic after the board has received the necessary data.

No Action Taken

#### 9. Discuss and Act on Draft Conflict of Interest and Record Retention Policies

• Barbara MacMullan asked if the COI policy language referencing mandated recusal could be simplified. Christine Grele responded that the language came from the state ethics guidelines. Kim Gaffett questioned if this board needed to follow the state guidelines. Christine Grele reported that she would follow up on the question at the town ethics training scheduled for the next day. Bill Penn asked for more clarification on whether board members can receive meals while fulfilling their duties. Barbara MacMullan said she wanted to check in with legal counsel on the interpretation of the ban on compensation for board members to clarify if reimbursements for training and travel are considered compensation.

Tabled until more information is available

#### 10. Review potential items for future agenda and confirm next meeting times

• Tony Pappas asked when the next meeting was. Barbara MacMullan reported that it is usually the fourth Tuesday of the month, but the November meeting falls close to Thanksgiving so that the board may reschedule, and they may add a meeting if the net metering data is available sooner.

No Action Taken

At 5:23 PM, Barbara MacMullan moved to go into closed session, seconded by William Penn. Ayes 5: (MacMullan, Shorey, Penn, Balser, and Taubman).

#### 11. Review and Act on a Long-Term Solar Purchase Power Agreement\*

12. Discuss and Act on Litigation\*

#### 13. Discuss and Act on President's Job Description, Performance Review and Salary\*

\*These items may be held in Closed Session pursuant to RIGL 42-46-5 (litigation: Sara McGinnes v. Town of New Shoreham & Howell Conant v. Block Island Power Company)

At 5:40 PM, Barbara MacMullan moved to go out of closed session, seconded by Everett Shorey. Ayes 5: (MacMullan, Shorey, Penn, Balser, and Taubman).

Barbara MacMullan moved to seal the minutes of the closed session, seconded by Everett Shorey. Ayes 5: (MacMullan, Shorey, Penn, Balser, and Taubman).

At 5:41, Barbara MacMullan moved to adjourn, seconded by Everett Shorey. Ayes 5: (MacMullan, Shorey, Penn, Balser, and Taubman).

Approved 12/3/2019

Block Island Utility District

# December 3, 2019 Town Hall, Old Town Road 11:30 AM

#### Minutes

Present: Barbara MacMullan, Everett Shorey, William Penn, Mary Jane Balser, Elliot Taubman Also, Present: Jeff Wright, Nathan Cleveland (RI-OER), a representative from the Block Island Times, and several members of the public

Barbara MacMullan called the meeting to order at 11:45 AM.

#### 1. Commissioner's Report

- Board Chair MacMullan requested that the election of officers be postponed until everyone was present at the next meeting. There was no objection.
- Board Chair MacMullan reported that Christine Grele had resigned for personal reasons and that we would be seeking a replacement soon.

#### 2. Public Input

• There was no public comment.

#### 3. Approve Minutes of October 23, 2019 Regular Meeting

William Penn moved to accept the October 23, 2019 minutes, seconded by Mary Jane Balser. There was no discussion. The motion was approved unanimously.

#### 4. Receive and Act on Treasurers Report

- Treasurer William Penn presented the Treasurer's Report, noting that had reviewed the disbursement report, payroll summary and credit card statements for the month of October and all was in order.
- He also reviewed the October month end financials noting that the Utility Districts equity ration had improved to nearly 14%.

Elliot Taubman moved to accept the Treasurers Report, seconded by Mary Jane Balser. The motion was approved unanimously.

#### 4a. Review and Act on Audit Proposals

• William Penn reported that they had received only one proposal from Marcum Accountants and Advisors. Penn reported that the firm had met all of the qualifications and schedules but that the price was higher than expected. A lengthy discussion was had.

Board Chair MacMullan moved to accept the proposal subject to two conditions; that the contract award period be limited to one year and that the proposal cost was a "price not to exceed". William Penn seconded the motion and the motion passed unanimously.

#### 5. Receive and Act on Presidents Report

• Jeff Wright presented the President's Report (on file) and discussion was had.

William Penn moved to accept the President's Report. Elliot Taubman seconded the motion and the motion passed unanimously.

#### 6. Receive an Energy Efficiency Program Presentation by RI-OER

• Rhode Island Office of Energy's Nathan Cleveland (Programming Services Officer, Energy Efficiency) presented a draft Block Island Saves Efficiency Plan for consideration and solicited comments and feedback. A lengthy discussion was had and many comments were made from the attending Utility District membership, particularly about programmable thermostats, heat pump and AC technology and lighting. Member Chris Warfel informed the RI-OER that head sent comments via e-mail to them.

No action was taken. Nathan Cleveland left the meeting following his presentation.

#### 7. Receive an Update on the Rate Case Filing

• Jeff Wright provided a quick overview of the schedule.

#### 8. Receive an Act on Net Metering Proposal

- Jeff Wright provided a draft net metering tariff proposal (on file). A lengthy discussion was had and many comments were provided by the attending membership.
- Jeff Wright committed to researching the billing and metering requirements to minimize the second meter can installation by locating it in series instead of direct connected to the utility grid. This will involve some research by the billing software company NISC.
- Member Chris Warfel requested that the Board take no cation so that he could have time to digest that proposal.

No action was taken.

#### Mary Jane Balser left the meeting at 2:25 PM.

#### 9. Receive an Act on the 2020 Operating and Capital Budgets

- Jeff Wright provided a proposed 2020 Revenue, Operating and Capital Budget in both summary format and provided the full detail by cost code as was presented in the recent rate filing.
- Jeff Wright further explained two additional Capital budget line items that were not included in the rate case; the spare transformer and employee housing. He explained that if they were approved with the 2020 capital budget that he would present a CFC loan agreement for approval in the next regular meeting which would then be followed by a debt filing.
- Board Chair MacMullan explained that she considered power supply procurement part of the 2020 operating budget and informed the Board that Jeff would be soliciting bids for and executing a power supply contract for 3-5 years in length as long as it was within a reasonable range of the amount budgeted for 2020.
- William Penn offered his suggestion that the BOD approve the summary budget to hold Jeff accountable to.

# Board Treasurer William Penn moved to approve the proposed 2020 Operating and Capital Budgets. Barbara MacMullan seconded the motion and the motion passed unanimously.

#### 10. Receive an Act on EEI Master Agreement for BP Power Purchase Agreement

• Jeff Wright informed the Board that he would be executing the agreement (on file) in preparation for the upcoming power supply solicitation. There was no objection to Jeff Wright executing the agreement under his authority as President.

#### 11. Discuss and Act on Draft Conflict of Interest Policy

• This item was deferred until the next regular meeting.

#### 12. Discuss and Act on the 2020 Calendar for BIUD Regular and Annual Meetings

• This item was deferred until the next regular meeting when everyone was present.

#### **13.** Discuss and Act on Litigation.

• This item was deferred until the next regular meeting.

William Penn moved to adjourn the meeting at 3:50 PM. Barbara MacMullan seconded the motion and it passed unanimously.

Approved: January 16, 2020