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Also admitted in Massachusetts

November 4, 2022

VIA HAND DELIVERY & ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

**RE: Docket No. 22-33-EE - 2023 Annual Energy Efficiency Plan
Responses to Public Utilities Commission's First Set of Data Requests**

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a Rhode Island Energy ("Rhode Island Energy" or the "Company"), I have enclosed a full set of the Company's responses to the Public Utilities Commission's First Set of Data Requests in the above-referenced docket. Please note that Attachments PUC 1-29, PUC 1-54, PUC 1-63 and PUC 1-64 are excel files that are being produced electronically.

Thank you for your attention to this matter. If you have any questions, please contact me at (401) 709-3359.

Sincerely,



Steven J. Boyajian

Enclosure

cc: Docket 22-33-EE Service List

Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate were electronically transmitted to the individuals listed below.

The paper copies of this filing are being hand delivered to the Rhode Island Public Utilities Commission and to the Rhode Island Division of Public Utilities and Carriers.



Heidi J. Seddon

November 4, 2022

Date

Docket No. 22-33-EE – Rhode Island Energy’s Energy Efficiency Plan 2023 Service list updated 10/24/22

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PUC 1-1
Budgets: Fund Balance, Alternative Funding Sources

Request:

Please provide a detailed explanation of the reasons for the variances in year-end projected fund balances between the 1st and final drafts of the 2023 EE plan for each of the following sectors. If any of the variances are a result of differences between forecast and actual sales, please be sure to identify.

- a. Electric Income Eligible
- b. Electric Non-Income Eligible
- c. Electric C&I
- d. Gas Income Eligible
- e. Gas Non-Income Eligible
- f. Gas C&I

Projected Year End 2022 Fund Balance				
\$(000)				
Electric				
From Table E-1 Line 3				
	Income Eligible	Non-Income Eligible	C&I	Total
Final Draft	\$0.0	(\$299.4)	\$32,557.7	\$32,258.3
1st Draft	(\$14,184.1)	\$2,157.9	\$40,082.7	\$28,056.5
Variance	\$14,184.1	(\$2,457.3)	(\$7,525.0)	\$4,201.8
Gas				
From Table G-1 Line 2				
	Income Eligible	Non-Income Eligible	C&I	Total
Final Draft	\$0.0	(\$4,057.0)	\$5,804.7	\$1,747.7
1st Draft	(\$7,642.5)	\$935.1	\$11,484.2	\$4,776.8
Variance	\$7,642.5	(\$4,992.1)	(\$5,679.5)	(\$3,029.1)

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-33-EE
In Re: 2023 Annual Energy Efficiency Plan
Responses to the Commission's First Set of Data Requests
Issued on October 17, 2022

PUC 1-1, Page 2
Budgets: Fund Balance, Alternative Funding Sources

Response:

Please see the tables below.

Differences: Final Draft vs. First Draft

		ELECTRIC			GAS		
		Non-Income Eligible	C&I	Income Eligible	Non-Income Eligible	C&I	Income Eligible
A	Start Of Period Balance	\$410,399	(\$3,748,967)	\$0	\$440,167	(\$951,312)	\$0
B	Revenue	\$926,099	(\$1,112,775)	\$330,706 (\$4,061,657)	(\$4,108,488)	(\$1,843,302)	(\$94,522)
C	Monthly EE Expenses	\$358,089	(\$1,970,472))	(\$799,383)	(\$241,307)	(\$2,134,076)
D	Interest	\$25,112	\$543,568	(\$51,780)	(\$79,157)	\$197,737	(\$60,395)
E	2022 Forecasted Incentive	(\$274,794)	(\$429,447)	(\$235,378)	(\$15,318)	(\$64,253)	(\$9,751)
F	2022 Forecasted Incentive - formula error in 1st Draft	(\$71,046)	\$0	\$0	(\$206,322)		
G	Out of Period Penalty - formula error in Final Draft Income Eligible	(\$32,948)	(\$152,623)	(\$9,213)	\$4,671	(\$3,038)	(\$1,632)
H	Subsidization	(\$3,839,557)	(\$5,759,335)	\$9,598,891	(\$2,260,803)	(\$3,391,204)	\$5,652,007
I	Total (A + B - C + D - E - F - G + H)	(\$2,457,248)	(\$7,524,967)	\$14,184,066	(\$4,991,929)	(\$5,679,484)	\$7,642,549

Explanations of Differences: Final Draft vs. First Draft

A	Start Of Period Balance	The First Draft used the 2021 Ending Balance as known in early January 2022. The Final Draft used the 2021 Ending Balances as calculated in May 2022.
B	Revenue	The First Draft used older 2022 Revenue Projections as calculated in 2021. The Final Draft used the latest Revenue Projections from 2022.
C	Monthly EE Expenses	The Forecasted Year End Expenses for the Final Draft had changed significantly in the quarter of year since the First Draft.
D	Interest	The above changes led to these fluctuations in the calculated interest.

Prepared by or under the supervision of: Brett Feldman

PUC 1-1, Page 3
Budgets: Fund Balance, Alternative Funding Sources

E 2022 Forecasted Incentive	The forecasted 2022 Incentive for the Final Draft had changed significantly in the quarter of year since the First Draft.
F 2022 Forecasted Incentive - formula error in First Draft	The First Draft had a manual formula error that only affected the Non-Income Eligible Programs (negative forecasted incentives were inadvertently added to the balance instead of subtracted).
G Out of Period Penalty - formula error in Final Draft	In the Final Draft, there was an error in a formula that applied this penalty. This will be explained in detail in the Company’s response to Division 3-20 in Docket No. 5189.
H Income Eligible Subsidization	The First Draft did not include the Income Eligible Subsidization by the Non-Income Eligible and Commercial Fund Balances - that brings the Income Eligible’s 2022 Ending Balance to zero.

Differences between forecast and actual sales between the first and final drafts:

Electric

The First Draft used the forecasted kwh sales as developed in September 2021, which were used for the entire 2022 year and did not include any January to May actual electric revenue. The Final Draft used actual revenues from January to July and subsequently used an updated forecast for revenues for August to December. The January to July actual revenues came in at 19%, 15%, and 30% higher than originally forecasted for Non-Income Eligible, C&I, and Income Eligible, respectively. The updated forecast used for August to December came in at 19%, 13%, and 25% higher than the initial forecast for Non-Income Eligible, C&I, and Income Eligible, respectively.

Gas

The First Draft used the forecasted therm sales as developed in September 2021, which were used it for the entire 2022 year. Similar to electric, the First Draft for gas also did not include any January to May actual electric revenue. The Final Draft used January to July actual revenues that came in at 22%, 22%, and 5% lower than that original forecast for Non-Income Eligible, C&I, and Income Eligible, respectively. Although the forecasted therms used for August to December were the same used in both Drafts, the revenue for the Final Draft for those forecasted months was 2.2% lower for both Income Eligible and Non-Income Eligible and 3.8% higher for C&I because an updated surcharge rate per therm was used.

PUC 1-2
Budgets: Fund Balance, Alternative Funding Sources

Request:

On page 12 of the pre-filed testimony, the Company writes “these investments (e.g. advanced metering) and funding streams (e.g. Inflation Reduction Act) are complementary to the energy efficiency program and may provide additional resources for customers to leverage.” Regarding this reference to federal funding, please explain the following:

- a. Are there federal funding streams available to help offset the ratepayer funding required for the proposed 2023 Plan? If so, please detail which specific measures and/or programs could be funded by which specific federal funding streams. At a minimum, please describe any relevant federal funding streams available through the Inflation Reduction Act and the Infrastructure Investment and Jobs Act.
- b. For each of the federal funding streams (and associated efficiency measures/programs) described in part a, who is the funding recipient (e.g. utility, the participant, etc.)?
- c. For each of the federal funding streams (and associated efficiency measures/programs) identified in part b as available to the utility, please describe the Company's plan to secure such funding. In your response, note whether the Company believes it will be able to secure such funding in time to offset ratepayer funding for the 2023 Plan.
- d. For each of the federal funding streams (and associated efficiency measures/programs) identified in part b as available to the participant, please explain how the Company adjusted the incentive levels proposed in the 2023 Plan to account for such funding.

Response:

- a. No. Although there are federal funding streams available to support energy efficiency, they would not offset the customer funding required for the proposed 2023 Plan. To allow federal funding streams to offset the System Benefit Charge collected from customers in 2023, those federal funding streams would need to (1) have the Company as an eligible recipient or have a workaround that allows money to flow to the Company and (2) be already secured with a known timeline for receipt such that funds can be used in 2023. At this time, there is no federal funding to the Company's knowledge that meets these criteria. Below is a more detailed explanation of what each federal funding stream can or cannot accomplish.

PUC 1-2, Page 2

Budgets: Fund Balance, Alternative Funding Sources

Inflation Reduction Act

The Inflation Reduction Act provides incentives for energy decarbonization technologies in the form of tax credits available to the appropriate owner of that equipment.

The Inflation Reduction Act is not able to offset the customer funding required for the proposed 2023 Plan. Although the Company can access the tax credit incentives for projects located on its own facilities, the Company cannot use the tax credit incentives to substitute for customer funding in the 2023 Plan.

Infrastructure Investment and Jobs Act – Competitive Grants

The Infrastructure Investment and Jobs Act (formally named the Bipartisan Infrastructure Law) provides competitive funding through a range of funding mechanisms via distinct opportunities. Utilities are eligible recipients for a subset of competitive grants. As of October 21, 2022, there have been no funding opportunities for competitive grants related to the measures in the 2023 Plan where a utility is an eligible recipient.

Competitive grants that cite energy efficiency as an eligible use but that are not available to utilities are listed below. The Company would be open to exploring opportunities to collaborate with eligible recipients if such opportunities and interest arise.

- Energy Efficiency and Renewable Energy Improvements at Public School Facilities – eligible recipients are listed¹ as “Consortium of One Local Education Agency and one or more Schools, Non-Profits, For-Profits, and Community Partners”
- Industrial Emission Demonstration Projects – eligible recipients are listed as “Technology Developers, Industry, Manufacturers, Universities, National Laboratories, Engineering and Construction firms, State and Local Governments, Environmental Groups, and Community Based Organizations”

¹ Eligible recipients and funding opportunities throughout this response are sourced from the Bipartisan Infrastructure Law’s Guidebook published by the White House: https://www.whitehouse.gov/wp-content/uploads/2022/01/BUILDING-A-BETTER-AMERICA_FINAL.pdf

PUC 1-2, Page 3

Budgets: Fund Balance, Alternative Funding Sources

- Industrial Research and Assessment Centers – eligible recipients are listed as “Institutions of Higher Education, Community College, Trade School, Or Union Training Program”
- Industrial Research and Assessment Center Implementation Grants – eligible recipients are listed as “Small- and Medium-Sized Manufacturers”
- Energy Efficiency Materials Pilot Program – eligible recipients are listed as “Non-Profit Organizations”
- Building, Training, and Assessment Centers – eligible recipients are listed as “Institutions of Higher Education”

Infrastructure Investment and Jobs Act – Formula Funding

There are several formula funds directed to the state administration that include energy efficiency as an eligible use. These formula funds are listed below. How to access and use the funding is the prerogative of the state administration subject to compliance with federal and state rules and regulations. At this time, there have been no opportunities for collaboration (such as using formula funding to offset ratepayer funding for the 2023 Plan) proposed to the Company. The Company, however, would be open to exploring opportunities to collaborate with eligible recipients if such opportunities and interest arise.

- Energy Efficiency and Conservation Block Grant
- State Energy Program
- Energy Efficiency Revolving Loan Fund Capitalization Grant Program
- Weatherization Assistance Program

- b. Please see the Company’s response to part a., above.
- c. Please see the Company’s response to part a., above.
- d. Please see the Company’s response to part a., above. The Company did not adjust incentives levels proposed in the 2023 Plan to account for such funding available to participants.

Eligible recipients of federal funding may also be eligible to participate in the Company’s energy efficiency program. The Company did not adjust incentive levels for these pending streams because it does not have sufficient information

PUC 1-2, Page 4

Budgets: Fund Balance, Alternative Funding Sources

about uptake of such funding by participants. The Company does not know (1) what proportion of participants plan to apply for this funding, (2) what is the likelihood of successful applications, (3) what specific measures are likely to be funded, (4) and what is the level of funding. If more information becomes available, the Company will then consider how to adjust incentive levels most appropriately.

PUC 1-3
Budgets: Fund Balance, Alternative Funding Sources

Request:

On Bates page 126, the Company writes “conversations with DHS indicate an additional \$3 million of federal funds available for [low income] weatherization in 2023.” Regarding this additional federal funding, please explain the following:

- a. How does the Company believe the additional \$3 million will impact demand for weatherizations in the single-family and multi-family Income Eligible programs during the 2023 program year?
- b. Based on your answer to part a, how did the Company adjust the proposed budgets for the single-family and multi-family Income Eligible programs to account for the impact of the additional \$3 million?
- c. Is the Company proposing to collect \$3 million less from ratepayers to offset the additional \$3 million in federal funding?

Response:

- a. Rhode Island Energy's (“RI Energy”) understanding is that the federal weatherization dollars will only be available to single family (1-4) unit housing and not multifamily housing. Therefore, RI Energy does not anticipate federal weatherization funding having any impact on demand for the multi-family income eligible program during the 2023 program year.

While the dollars will allow more customers to potentially be served, there may not be a direct impact in customer demand through the single-family income eligible program. In conversations with staff at DHS, RI Energy's understanding is that staff will spend the first year (2023) of their federal funding cycle preparing their organization to meet the potential demand, including planning, workforce development, and training. Therefore, RI Energy does not anticipate substantial change in demand for 2023.

- b. RI Energy did not adjust proposed budgets for single-family and multi-family income eligible programs because RI Energy does not anticipate this federal funding having a substantial impact on program demand in 2023 (see reasoning in part a).
- c. No, RI Energy does not propose to decrease funding collected in 2023 due to the federal weatherization funding. This federal weatherization funding is directed to

PUC 1-3, Page 2

Budgets: Fund Balance, Alternative Funding Sources

a state agency rather than to a utility, so this funding stream is at the discretion of DHS. RI Energy does not have the authority to use this funding as a substitute for ratepayer funding.

PUC 1-4
Budgets: program spending

Request:

In response to PUC 3-13 in Docket No. 5076 (regarding the gas overspend), the Company explained to the Commission that “the 100% [gas weatherization] incentive was also initiated to protect customers from scope changes from the newly rolled out virtual home energy assessments (VHEA). Due to COVID, the VHEA was instituted to minimize in-person contact with customers. The program did not have any information that could forecast the size and scale of weatherization scope changes due to issues not identified during the VHEA. The 100% incentive was a way of protecting customers and not making the customer feel like they were offered one scope of work only to have another, larger, customer contribution when the weatherization crew arrived.” How has the Company improved the Virtual Home Energy Assessments to minimize the “scope changes” issue raised in its response to PUC 3-13?

Response:

Due to experience gained with VHEA weatherization projects during 2020 and 2021, Rhode Island Energy was able to compare the VHEA weatherization scope changes with scope changes that occur during weatherization work performed with an in-person assessment. The data showed that while there tended to be more scope changes with the VHEAs, the upward increase in costs due to a scope change was only a few percentage points more than in-person scope changes that were increased. The biggest difference was evidenced in the decrease in costs with scope changes. VHEAs had an 18% larger decrease in final project price as compared to in-person assessment scopes.

PUC 1-5
Budgets: program spending

Request:

Please provide the following information regarding Virtual Home Energy Assessments:

- a. 2023 Electric budget for Virtual Home Energy Assessments. Please break down the budget into fixed and volumetric costs.
- b. 2023 Gas budget for Virtual Home Energy Assessments. Please break down the budget into fixed and volumetric costs.
- c. Per-assessment cost for a Virtual Home Energy Assessment in the Electric program
- d. Per-assessment cost for an in-person Home Energy Assessment in the Electric program
- e. Per-assessment cost for a Virtual Home Energy Assessment in the Gas program
- f. Per-assessment cost for an in-person Home Energy Assessment in the Gas program

Response:

- a. There is no specific budget allocated for electric VHEAs.
- b. Home Energy Assessments, both virtual and in person, are budgeted within the Energywise electric budget. There is no specific budget allocated for gas VHEAs.
- c. \$150 per assessment for a VHEA.
- d. \$170 per assessment for the in-person assessments.
- e. VHEAs for gas heated homes are budgeted in the electric budget and are the same price as in c.
- f. In-person assessments for gas heat homes are budgeted in the electric budget and are the same price as in d.

PUC 1-6
Budgets: program spending

Request:

The 2022 approved electric budget for Income Eligible Multifamily program was \$3.54 million. For 2023, the Company is proposing a budget of \$4.26 million. Is the increase primarily attributable to the new heat pump replacement program proposed for 2023? If not, please explain the drivers of the budget increase.

Response:

The increase in the Income Eligible Multifamily program is driven by an increase in the cost of custom measures planned for 2023 as compared to 2022. This includes a large heat pump project from deliverable fuel as well as electric resistance to electric heat pumps.

PUC 1-7
Budgets: program spending

Request:

On Bates page 155, the Company writes “this phenomenon [i.e. inflationary pressures] is likely to continue for the foreseeable future. Several customers that have historically been active in the program have scaled back spending on energy efficiency and capital measures.” In response to this decrease in C&I customer demand for energy efficiency and capital measures, how did the Company adjust its proposed 2023 C&I sector budgets?

Response:

Reduced customer demand was one of many factors the Company considered when developing its proposed 2023 C&I sector budget, and the Company cannot isolate the effects of inflationary pressures on the proposed budget. The Company assumed that program activity in 2023 would be consistent with activity observed in 2021 and 2022. Net lifetime savings, adjusted for Monitoring and Verification (“M&V”) impacts, is the metric that best approximates program activity. The Company proposed incrementally greater incentives per unit of M&V-adjusted net lifetime savings to offset reduced demand. In addition to the projected reduction in customer demand there are other factors influencing the budget including, but not limited to, new initiatives, updates to initiatives, market trends, and adjusted measure mix.

The Company’s approach resulted in total decreases of 5% to the 2023 C&I sector Electric budget (excluding ConnectedSolutions) and 3% to the 2023 C&I Gas Sector budget relative to the budgets shown in the Company’s 2022 compliance filing.

PUC 1-8
Budgets: program spending

Request:

On Bates page 184, the Company writes “the Company will revisit burdensome data collection practices that can discourage customers from pursuing custom projects. The objective is to strike a better balance between the need for accurate savings calculations and the need to minimize the time required by customers and their contractors to participate in the EE program.” Regarding this statement, please explain the following:

- a. What specific work does the Company plan to undertake in 2023 relative to this, and what will be the resulting work products?
- b. What evidence does the Company have that burdensome data collection practices discourage customers from pursuing custom projects?

Response:

- a. The Company is revisiting burdensome data collection processes designed to ensure accurate savings calculations for commercial and industrial projects. This work began in 2022 and will continue in 2023. This is an ongoing process, and specific work products are yet to be determined but may include streamlined approaches to technical review, standardized engineering guidance for specific measures, and additional training for program engineers on best practices.

One specific approach the Company is considering is a streamlined process for evaluating savings from small custom projects below a certain expected savings threshold. This approach would be established on a case-by-case basis, but in general it would reduce the burden on customers, for example, by requiring fewer projects to capture energy monitoring data prior to installation of custom measures.

A specific area of focus is energy management systems (“EMS”), a measure found in most commercial buildings with extensive savings potential. Because of the complexity of calculating savings achieved through an EMS, an extensive volume of data is often collected to estimate savings. The Company is exploring methods to estimate savings that require less time from customers and vendors. If a method can be established that provides sufficiently accurate savings calculations, the Company believes it will encourage greater participation from EMS vendors and a broader swath of customers.

PUC 1-8, Page 2

Budgets: program spending

- b. The Company has received anecdotal evidence of frustration from customers and contractors seeking program incentives that, although the data requirements are shared in advance, in some cases, the data collection process proves to be burdensome because it:
- Requires extensive time commitments from customers or contractors to receive program incentives, especially relative to the incentive amounts;
 - Is inconsistent depending upon among different projects, customers, Company engineering staff, and technical assistance vendors;
 - Delays project development timelines; and
 - Imposes additional analysis-related costs on the programs (which are passed to customers) and on customers.

Some customers and vendors have stated that, as a result of their experiences working through the Company's technical review process for their projects, they may choose not to participate in the program in the future.

PUC 1-9
Budgets: program spending

Request:

Table E-5 Primary from the Second Compliance Filing in Docket No. 5189 indicates the cost-per-savings for the 2022 EnergyWise program was 119.4 cents/lifetime kWh. Table E-5 Primary in Docket No. 22-33-EE indicates the cost-per-savings for the 2023 EnergyWise program is 109 cents/lifetime kWh. The EnergyWise program budget appears to have stayed relatively flat from 2022 to 2023, increasing slightly from \$15.5 million to \$15.6 million. Please explain why the EnergyWise cost-per-savings decreased by almost 10% from 2022 to 2023 while the budget remained relatively flat.

Response:

In 2022, the program planned for the same incentives regardless of a customer's heating fuel. In 2023, deliverable fuel customers, which are funded by electric ratepayers, will receive a lower incentive. This change resulted in the cents/lifetime kWh decreasing in 2023.

PUC 1-10
Budgets: program spending

Request:

Table E-5 Primary from the Second Compliance Filing in Docket No. 5189 indicates the budget for the 2022 Income Eligible Residential sector was \$16.8 million. Table E-5 Primary in Docket No. 22-33-EE indicates the budget for the 2023 Income Eligible Residential sector decreased slightly to \$16.3 million. However, the cost-per-savings for the whole Income Eligible Residential sector appears to have increased from 26.8 cents/lifetime kWh to 42 cents/lifetime kWh. Please explain why the Income Eligible cost-per-savings increased so significantly from 2022 to 2023 while the budget remained relatively flat.

Response:

The allocation of planned measures for the Income Eligible Residential sector was redistributed to focus on the longer life measures. Shorter lifetime measures, such as lighting, were decreased or removed. On the single-family income eligible side, projected weatherization customers increased by 20%. The Company plans on communicating to CAP agencies and vendors that support the weatherization program that weatherization will be a growing area of focus. Total resource costs for weatherization increased by 10% in 2023 as compared to 2022. With income eligible multifamily, much of the 2023 costs are associated with HVAC and custom measures which have longer lifetimes than lighting, but also cost more on a cents/lifetime kWh basis.

PUC 1-11
Budgets: program spending

Request:

Table G-5 Primary from the Second Compliance Filing in Docket No. 5189 indicates the cost-per-savings for the 2022 gas Energy Star HVAC program was \$17.34/lifetime MMBtu. Table G-5 Primary in Docket No. 22-33-EE indicates the cost-per-savings for the 2023 gas Energy Star HVAC program is \$14.13/lifetime MMBtu. Please explain why the gas Energy Star HVAC cost-per-savings decreased by almost 20% from 2022 to 2023.

Response:

The cost/lifetime MMBTU decreased because the planned number of Wi-Fi thermostats increased by over 60% over the 2022 planned number of Wi-Fi thermostats. The cost per lifetime MMBTU for this measure is on the lower end of measures offered in this program, so the larger percentage of savings coming from this measure contributed to the cost decline. There were also small reductions in some of the most expensive measures in 2023, such as boilers and furnaces, which also contributed to a reduction in costs.

PUC 1-12
Budgets: program spending

Request:

Please explain why the \$/lifetime MMBtu for the gas Commercial and Industrial Multifamily program increased from \$7.94 to \$18.6 between 2022 and 2023.

Response:

The 2023 C&I Multifamily program planning assumptions were updated based on actual program activity, particularly in the custom measures. The actual activity indicates that a higher value for \$/lifetime MMBtu would more accurately reflect the mix of measures that customers adopted in the 2021 program year and in the beginning of the 2022 program year. Data from the 2021 year-end report further supports this increase, indicating a cost/lifetime MMBtu of \$16.46. The \$18.6 value was extrapolated from the 2021 data and includes updated information from 2022 program activities, as well as anticipated prices increases from inflation.

PUC 1-13

Budgets: program spending

Request:

Table G-5 Primary from the Second Compliance Filing in Docket No. 5189 indicates the Program Implementation Expenses for the 2022 gas Income Eligible Multifamily program were \$2.9 million, while Table G-5 Primary in Docket No. 22-33-EE indicates that Program Implementation Expenses for the 2023 gas Income Eligible Multifamily program are \$3.2 million. Those tables also indicate that the total benefits of the gas Income Eligible Multifamily program decreased from \$17.6 million to \$10.5 million. Please explain why program benefits decreased by nearly half from 2022 to 2023 despite the program budget increasing.

Response:

The cost of equipment for the custom income eligible multifamily program has continued to rise during 2022. The 2023 program has a decline in savings due to fewer measures being planned. The custom measures that are planned for 2023 also have higher costs than in 2022. Finally, there was a reduction from 2022 to 2023 in lower cost measures, such as aerators and pipe wrap, based on what was currently being installed in the program. These three factors resulted in a decline in overall total benefits.

PUC 1-14
Budgets: program spending

Request:

On Bates page 60, the Company describes proposed changes to the C&I program for 2023 and writes that it will “sunset efforts that have failed to demonstrate the potential to generate significant cost-effective savings, including the Telecommunications Initiative and multiple demonstrations and assessments in order to reduce costs and focus resources on efforts that are successful or have greater future potential.” For each of the measures, initiatives, or pilots/assessments/demonstrations that the Company “sunset” from the 2023 Plan, please provide the following:

- a. A description of why they were “sunset” by the Company
- b. Planned savings included in the 2022 Plan
- c. Associated budget included in the 2022 Plan.

Response:

The Company has decided to sunset the following:

Telecommunications Initiative

- a. This initiative, which the Company launched in early 2021, is being discontinued because the initiative produced no savings to date and has not developed a significant pipeline of future projects. Therefore, the Company believes it is prudent to terminate the vendor’s contract, as well as the associated initiative. Telecommunications customers will continue to be served through the standard pathways available to large C&I customers.
- b. Although the 2022 Plan does not include savings specifically associated with this initiative, the Company anticipated the Telecommunications Initiative would achieve an estimated 2,319,648 gross annual kWh in 2022, which is the amount specified in the contract with the vendor implementing this initiative. The Company estimates this volume of gross savings would achieve approximately 20,545 net lifetime MWh if the majority of savings came from Custom HVAC projects, which was the Company’s expectation.
- c. The associated budget in the 2022 Plan was \$450,000, based on anticipated vendor fees. The contract includes \$180,810 in annual fixed fee payments to the vendor, which the Company is obligated to pay on a monthly basis. The remainder of the budget is contingent on achieving savings, with a specified dollar-per-kWh payout rate.

PUC 1-14, Page 2
Budgets: program spending

Pilots, Demonstrations, and Assessments

Although several of the Pilots, Demonstrations, and Assessments (“PDAs”) in the 2022 Plan that the Company has proposed to discontinue in 2023 were expected to be completed in 2022, the text referenced in this request was intended to convey the Company’s intention to reduce the overall size of the PDA portfolio. By reducing the number of PDAs from 13 in 2022 to five in 2023, the Company reduced its total proposed budget for PDAs in 2023 by \$1,040,348 (59%) relative to 2022. In the C&I sector only, the number of PDAs was reduced from ten to five, and the budget was reduced by 880,257 (59%).

Please see below for an explanation of the reason(s) each C&I PDA included the 2022 Plan was discontinued in 2023, as well as the planned savings and budget in 2022.

Continuous Energy Improvement (“CEI”)

- a. The Company decided to sunset this Demonstration in 2022 in part because it was scheduled to end. The Company decided to retire it rather than make it a standard program offering because of the high cost to achieve savings using the CEI approach.
- b. 2022 planned savings: 1,378 net lifetime MWh and 12,399 net lifetime MMBtu.
- c. 2022 planned budget: \$290,980.

Network Lighting Controls Plus HVAC

- a. The vendor conducting the Demonstration concluded this approach does not present a significant opportunity to achieve cost-effective savings.
- b. 2022 planned savings: Not specified in the Plan.
- c. 2022 planned budget: \$186,330.

Gas Heat Pumps

- a. The Company decided to end this Demonstration in 2022 because of limited customer interest and market potential.
- b. 2022 planned savings: Not specified in the Plan.
- c. 2022 planned savings: \$223,596.

Smart Valves

- a. The Company anticipates this study will be completed in 2022 and there will be no need to continue this Demonstration. Once the study is complete, the Company will determine

PUC 1-14, Page 3
Budgets: program spending

whether to offer incentives for smart valves going forward as a standard offering. There is a possibility the timeline will extend in 2023, but the majority of budget will be spent in 2022.

- b. 2022 planned savings: Not specified in the Plan.
- c. 2022 planned budget: \$130,431.

Refrigeration Leak Repair

- a. The Company anticipates this study will be completed in 2022 and there will be no need to continue this Demonstration. Once the study is complete, the Company will determine whether to offer incentives for refrigeration leak repair projects going forward as a standard offering. There is a possibility the timeline will extend in 2023, but the majority of budget will be spent in 2022.
- b. 2022 planned savings: Not specified in the Plan.
- c. 2022 planned budget: \$49,688.

Building Flexibility through Demand Response

- a. The Company expects this Assessment to conclude in 2022. After the Assessment is concluded, the Company will determine whether it is prudent to conduct additional analysis of this measure or develop a related offering.
- b. 2022 planned savings: No savings.
- c. 2022 planned budget: \$24,844.

Air Curtains

- a. In collaboration with the Massachusetts energy efficiency Program Administrators, the Company will forgo the Demonstration process and proceed to qualify air curtains as a new measure because this is an established technology and has clear potential to become a standard offering within the energy efficiency programs.
- b. 2022 planned savings: Not specified in the Plan.
- c. 2022 planned budget: \$194,777.

PUC 1-15
Budgets: program spending

Request:

In its October 13, 2022 filing with the Commission titled “Corrections to Gas Performance Incentive Earnings Opportunity and Benefits for Home Energy Reports,” the Company indicated that it inadvertently overstated the benefits from the gas Home Energy Reports program in its original filing due to “a residential window non-energy impact (“NEI”) making its way into two of the HERs measures.” After correcting such error, total benefits from the gas Home Energy Reports program decreased. Please explain the following:

- a) As a percentage of total program benefits, how much does this correction reduce benefits by?
- b) How did the residential window NEI make its way into only two of the gas HER measures, as opposed to all of them?
- c) After this correction, is the Company confident that the residential window NEI is not inadvertently included in any other gas HER measure?
- d) Did the Company review its electric HER program data to ensure the same inadvertent inclusion of the residential window NEI benefit did not occur in that program, as well?

Response:

- a) This correction reduced the non-energy impact (“NEI”) contribution of the gas Home Energy Reports (“HER”) program from \$933,348 to \$0. As a result, the total program benefits were reduced from \$3,832,541 to \$2,899,193. This translates to a 24% reduction in benefits for the gas HER program.
- b) The means by which the residential window NEI made its way into only two of the gas HER measures as opposed to all of them is unknown. After a review of all measures in the gas BCR model, Rhode Island Energy confirmed that this NEI error is isolated to these two measures in this single program.
- c) The Company is confident that the residential window NEI is not inadvertently included in any other gas HER measure.
- d) The Company reviewed its electric HER program data before filing “Corrections to Gas Performance Incentive Earnings Opportunity and Benefits for Home Energy Reports” to ensure the same inadvertent inclusion of the residential window NEI benefit did not occur.

PUC 1-16
Budgets: non-incentive costs

Request:

The 2022 approved electric budget for Evaluation and Market Research (EM&V) was \$1.8 million. For 2023, the Company is proposing a budget of \$2.1 million. Regarding electric EM&V costs, please explain the following:

- a. Using the most up to date estimates, how much does the Company expect to have spent on electric EM&V in 2022?
- b. Why does the Company need an additional \$300,000 for electric EM&V in 2023 relative to 2022? Explain the specific drivers of the incremental budget request.

Response:

- a. The Company expects to spend approximately \$1.1 million, or 61% of the budget, on electric EM&V in 2022.
- b. The electric EM&V budget for 2023 is influenced by a combination of projected expenses for delayed studies and planned new studies.

The launch of several studies was delayed in 2022, particularly in the C&I sector. The Company observes that this is frequently the case in studies where Massachusetts leads the study and the Company joins as a participant. In these cases, the Company cannot control the study timing. Although “piggybacking” in this way reduces the Company’s evaluation expenses, it comes at the cost of delays beyond the Company’s control and actual expenditures falling short of budget in a given year.

Despite these challenges, the Company’s need to use evaluation research as a tool to serve the interests of verification of savings and to drive improvements in delivery and execution is not diminished from 2022. Therefore, the Company’s evaluation budget for 2023 combines expenses from delayed studies, such as C&I Custom Gas and Electric Evaluation Studies and C&I New Construction Baseline Study,¹ with new studies including an EnergyWise Impact evaluation, an Economic Impact study to replace the Brattle Study from 2019, follow-up research to build on the Residential Participation and

¹ Because funds were not spent on these studies in 2022 and each annual evaluation budget stands on its own, unspent funds are not carried over and these studies are included once again in the 2023 evaluation budget.

PUC 1-16, Page 2

Budgets: non-incentive costs

Non-Participation Studies completed in 2022, C&I Free-Ridership and Spillover Studies, which need to be updated periodically as programs evolve, and an evaluation of commercial cooking equipment, which has never been studied. The budgets for these new studies are included in both the electric and gas portfolio EM&V budgets as they will address both fuels.

The Company pledges to work closely with the EERMC's evaluation consultants (several of whom also serve in Massachusetts) and its evaluation colleagues in Massachusetts to call attention to the impacts of delayed studies on Rhode Island and attempt to influence the timely execution of all evaluation work.

PUC 1-17
Budgets: non-incentive costs

Request:

The 2022 approved gas budget for Evaluation and Market Research (EM&V) was \$588,000 million. For 2023, the Company is proposing a budget of \$768,000. Regarding gas EM&V costs, please explain the following:

- a. Using the most up to date estimates, how much does the Company expect to have spent on gas EM&V in 2022?
- b. Why does the Company need an additional \$180,000 for gas EM&V in 2023 relative to 2022? Explain the specific drivers of the incremental budget request.

Response:

- a. The Company expects to spend approximately \$500,000, or 81% of the budget, on gas EM&V in 2022.
- b. The gas EM&V budget for 2023 is influenced by a combination of projected expenses for delayed studies and planned new studies.

Several studies were delayed in being launched in 2022, particularly in the C&I sector. The Company observes that this is frequently the case in studies where Massachusetts leads the study and the Company joins as a participant. In these cases, the Company cannot control the study timing. Although "piggybacking" in this way reduces the Company's evaluation expenses, it comes at the cost of delays beyond the Company's control and actual expenditures falling short of budget in a given year.

Despite these challenges, the Company's need to use evaluation research as a tool to serve the interests of verification of savings and to drive improvements in delivery and execution is not diminished from 2022. Therefore, the Company's evaluation budget for 2023 combines expenses from delayed studies, such as C&I Custom Gas and Electric Evaluation Studies and C&I New Construction Baseline Study,¹ with new studies including an EnergyWise Impact evaluation, an Economic Impact study to replace the Brattle Study from 2019, follow-up research to build on the Residential Participation and

¹ Because funds were not spent on these studies in 2022 and each annual evaluation budget stands on its own, unspent funds are not carried over and these studies are included once again in the 2023 evaluation budget.

PUC 1-17, Page 2

Budgets: non-incentive costs

Non-Participation Studies completed in 2022, C&I Free-Ridership and Spillover Studies, which need to be updated periodically as programs evolve, and an evaluation of commercial cooking equipment, which has never been studied. The budgets for these new studies are included in both the electric and gas portfolio EM&V budgets as they will address both fuels.

The Company pledges to work closely with the EERMC's evaluation consultants (several of whom also serve in Massachusetts) and its evaluation colleagues in Massachusetts to call attention to the impacts of delayed studies on Rhode Island and attempt to influence the timely execution of all evaluation work.

PUC 1-18
Budgets: non-incentive costs

Request:

The 2022 approved electric budget for Sales, Technical Assistance, and Training (STAT) was \$15.4 million. For 2023, the Company is proposing a budget of \$15.9 million. Why did electric STAT costs increase from 2022 to 2023 despite the total budget decreasing by more than \$3 million?

Response:

Much of the increased STAT budget is designed to right-size programs based on anticipated activity and to expand program capabilities that will enable long-term achievement of cost-effective savings. These activities will help reach underserved customers, identify and analyze new energy efficiency measures, better engage local vendors, optimize incentive levels, and expand initiatives that are successful and will pay long-term dividends for the programs and for the Company's customers. These increases in STAT costs are coupled with decreases in STAT costs in areas such as Company labor and reduction in budgets for less effective initiatives. Thus, the net increase in STAT costs represents a right-sizing and reallocation to more effectively utilize funds.

For Residential programs, the increase in STAT costs is driven by the EnergyStar Appliances, EnergyStar HVAC, and EnergyWise programs. The EnergyStar Appliances and EnergyStar HVAC STAT were increased in 2023 to right-size the budgets based on historical STAT overspend for these programs. STAT for these programs is associated with the lead vendor's outreach activities which helps increase customer uptake. For the EnergyWise program, the STAT percentage of total program budget remained essentially constant; the increased STAT cost is a result of overall increased funding for this program.

For Income Eligible programs, the increase in STAT costs is driven by the Multifamily program. The custom measures that are planned for the Income Eligible Multifamily program in 2023 have higher costs than in 2022. Additionally, there was a reduction from 2022 to 2023 in lower cost measures, such as aerators and pipe wrap, based on what was currently being installed in the program. STAT for this program is calculated as a percentage of overall program costs, and so higher-cost measures result in higher STAT costs.

For C&I programs, the increase in STAT costs is driven by the New Construction and Retrofit programs. Within these programs, the Company is proposing the following items involving STAT cost increases from 2022 to 2023:

- Building Analytics Program: New initiative that applies analytics to identify low-cost savings opportunities.

PUC 1-18, Page 2

Budgets: non-incentive costs

- Industrial: Increased volume of activity in Industrial Initiative in recent years. Increased budget compensates vendor for greater savings achieved (and associated workload).
- Technical Assistance Studies: More Technical Assistance studies required to identify and calculate savings from a greater volume of custom non-lighting projects.
- Sales Support: Additional Sales staff to cover underserved segments, particular "mid-sized customers" with 1,000,000 to 2,000,000 kWh per year of consumption.
- Vendor Outreach: New contract employee to serve as a liaison to trade allies, primarily mechanical contractors. This individual would educate trade allies about program offerings and trainings, route vendor inquiries to the correct energy efficiency program sales and engineering staff and capture ongoing feedback from the industry.
- Incentive Pricing Study: One-time study to determine prices and propose revised incentive levels.

PUC 1-19
Budgets: non-incentive costs

Request:

The 2022 approved electric budget for Program Planning and Administration (PPA) was \$5 million. For 2023, the Company is proposing a budget of \$5.4 million. Why did electric PPA costs increase from 2022 to 2023 despite the total budget decreasing by more than \$3 million? In your response, specifically address why electric PPA costs are increasing despite the Company's representations that its Energy Efficiency program is understaffed.

Response:

From 2022 to 2023, the PPA amounts budgeted for external expenses and general portfolio-wide expenses decreased, and the PPA amount for labor (including both internal and consultant labor) increased, resulting in the net increase of \$0.4 million referenced.

Some PPA costs activities like planning and strategy are not directly tied to overall budget and program activity because the amount of planning and reporting are independent. Therefore, such costs do not necessarily decrease with lower programmatic budgets. With respect to 2023, the Company will be working on a three-year plan concurrently with an annual plan, which will result in additional costs. This is a similar scenario to what the EERMC consultant budget is proposing for 2023.

In addition, when the Company was sold by National Grid USA to PPL Rhode Island Holdings, LLC in 2022, the number of FTEs assigned to Rhode Island was reduced. This initial staffing reduction led to increased workload per FTE, which resulted in staff attrition. The Company retained the services of outside consultants in the areas with greatest risk to augment internal staff for the remainder of 2022 and the greater portion of 2023 until such time as the vacancies are filled. The Company is now in the process of hiring internally to rebuild the team; however, there will be a knowledge gap going into 2023 where the consultants will need to stay highly engaged while new internal staff members are trained and gain experience. The long-term goal is to reduce reliance on consultants in 2024 and beyond in an effort to decrease PPA within the program.

PUC 1-20
Budgets: non-incentive costs

Request:

The 2022 approved gas budget for Program Planning and Administration (PPA) was \$2 million. For 2023, the Company is proposing a budget of \$2.2 million. Why did gas PPA costs increase from 2022 to 2023 despite the total budget slightly decreasing? In your response, specifically address why gas PPA costs are increasing despite the Company's representations that its Energy Efficiency program is understaffed.

Response:

From 2022 to 2023, the PPA amounts budgeted for external expenses and general portfolio-wide expenses decreased, and the PPA amount for labor (including both internal and consultant labor) increased, resulting in the net increase of \$0.2 million referenced.

Some PPA costs activities like planning and strategy are not directly tied to overall budget and program activity, because the amount of planning and reporting are independent. Therefore, such costs do not necessarily decrease with lower programmatic budgets. With respect to 2023, the Company will be working on a three-year plan concurrently with an annual plan, which will result in additional costs. This is a similar scenario to what the EERMC consultant budget is proposing for 2023.

In addition, when the Company was sold by National Grid USA to PPL Rhode Island Holdings, LLC in 2022, the number of FTEs assigned to Rhode Island was reduced. This initial staffing reduction led to increased workload per FTE which resulted in staff attrition. The Company retained the services of outside consultants in the areas with greatest risk to augment internal staff for the remainder of 2022 and the greater portion of 2023 until such time as the vacancies are filled. The Company is now in the process of hiring internally to rebuild the team, however there will be a knowledge gap going into 2023 where the consultants will need to stay highly-engaged while new internal staff members are trained and gain experience. The long-term goal is to reduce reliance on consultants in 2024 and beyond in an effort to decrease PPA within the program.

PUC 1-22

Budgets: non-incentive costs

Request:

What is the cost of the 2023 Pricing Study described by the Company on Bates page 164?

Response:

A budget of \$150,000 is included in the 2023 Plan. Because no price has yet been negotiated with a vendor to complete the Pricing Study, the Company does not know the exact cost yet, and the Company will likely treat this as a not-to-exceed amount when negotiating with potential vendors.

PUC 1-21
Budgets: non-incentive costs

Request:

On Bates page 164, the Company describes a Pricing Study it plans to undertake in 2023. Please provide the following information for each product and/or measure the Company plans to study:

- a. Proposed 2023 incentive budget associated with the specific product/measure
- b. An explanation of why the specific product/measure was included in the study
- c. A description of how the results of the Pricing Study will differ from the pricing-related results of the Supply Chain Disruption study commissioned by the Company in summer 2022?

Response:

- a. The Pricing Study proposed in the 2023 Plan will cover equipment with combined Electric and Gas incentive budgets totaling approximately \$3 to 5 million in the 2023 Plan. The Company does not know the exact incentive budget amount because the measure mix to be studied has not been finalized. When considering this amount, it should also be noted that changes made to incentives as a result of this study would likely be in place for multiple years (potentially the full duration of the 2024-2026 three-year plan).

The measures that may be included in the study correspond to 180 measure codes listed in the BC model. The following table lists the measure types to be studied.

Fuel	Measure Type	Incentive Budget to Potentially Study
Gas	Boiler	\$ 165,480
Gas	HVAC (equipment and controls)	\$ 749,101
Gas	Miscellaneous/Other	\$ 1,485,233
Electric	Compressed Air	\$ 386,498
Electric	Custom	\$ 2,859,634
Electric	HVAC (equipment and controls)	\$ 919,037
Electric	Miscellaneous/Other	\$ 608,792
Electric	Industrial Process	\$ 171,194
Electric	Refrigeration	\$ 341,834
Electric	Motors and Drives	\$ 572,982

PUC 1-21, Page 2
Budgets: non-incentive costs

Please note that the “Custom” Electric measure type is a broad category that include a wide range of measures that overlaps with the other measure types listed in the table. The Custom Electric measure category is largely made up of compressed air, HVAC, refrigeration, industrial process, and chiller measures.

- b. The Company intends for the study to include a number of different types of equipment for which incentives are available through the Large Commercial Retrofit Program and Large Commercial New Construction Program. The focus is expected to be on high-volume equipment and other equipment where the Company sees opportunities for growth. The Company is currently considering including the following categories of equipment in the study: chillers, pumps, fans, electric water heaters, air compressors, boilers, heat recovery equipment, thermostats, and variable speed drives.

Equipment incentivized through the Upstream pathways would be excluded as the Company's Upstream vendors already provide sufficient market intelligence and recommended incentive levels. Likewise, downstream lighting measures will be excluded because the Company's downstream incentives already incorporate market data from the Upstream Lighting initiative.

- c. The 2022 Supply Chain Disruption study had a limited scope focused on quantifying product lead time delays and price trends for broad categories of equipment (lighting HVAC, etc.) as well as recommending potential mitigation strategies. The Supply Chain Disruption study was not sufficiently granular to assist in setting incentive levels for specific equipment.

In contrast, the objective of the Pricing Study proposed in the 2023 Plan is to recommend revised incentive amounts for specific measures. The purpose of this study is to capture market data on current prices of specific high-efficiency products relative to baseline products in order to optimize incentive levels for key high-efficiency products. The Pricing Study will include an investigation of current market prices of specific equipment (e.g., specific types and size classes of chillers) incentivized through the C&I programs, as these prices will help determine appropriate incentive levels. The Pricing Study will include recommendations on how to establish a system for review and setting measure-specific incentive amounts going forward.

PUC 1-23
Budgets: non-incentive costs

Request:

For each of the four recommendations from the Supply Chain Disruption study included on Bates Page 186, please describe what specific actions and/or considerations the Company has undertaken in response to the recommendations.

Response:

The study recommendations listed on Bates Page 186 were for Rhode Island Energy to consider:

1. Adjusting incentive levels and focusing on marketing products with shorter lead times.
2. Reducing savings targets.
3. Communicating mitigation strategies to market actors.
4. Helping market actors (contractors) forecast product pricing and availability.

Please see a description below of the specific actions the Company has taken in response to each recommendation.

Adjusting incentive levels and focusing on marketing products with shorter lead times

- The Company proposed incrementally greater unit incentive levels in the 2023 Plan. Please refer to the Company's response to PUC 1-7 for more detailed information.
- The Company's Upstream Lighting vendor:
 - o Worked with distributors to diversify their manufacturer base.
 - o Helped distributors identify products they did not currently stock that qualified for incentives and which companies manufacture those products.
 - o For products with long lead times (especially lighting controls), the vendor helped introduce distributors to manufacturers of alternative products offering shorter lead times.
- The Company's vendor for the Upstream HVAC, Food Service, and Gas initiatives:
 - o Worked with distributors and dealers to identify which products were available despite supply chain disruptions. For example, if one brand had long delays, the vendor worked with distributors to identify other efficient products with shorter delays that qualified for incentives but were not currently carried by the distributor.
 - o Recommended product pricing and promotions that the Company chose to adopt. The Company approved an incentive increase for a measure where significant price increases had been observed because of supply chain constraints. The

PUC 1-23, Page 2

Budgets: non-incentive costs

vendor also executed a promotion to spur sales commitments so products could be ordered as soon as possible and earlier in the year.

- o Worked with the Company to diversify the product mix, with new offerings through this pathway, including energy recovery ventilators and vending misers.

Reducing savings targets

- The Company proposed moderate reductions in savings targets in the 2023 Plan relative to the 2022 Plan. Please refer to the Company's response to PUC 1-7 for more detailed information.

Communicating mitigation strategies to market actors

- The Company discussed mitigation strategies with multiple program implementation vendors, including both Upstream vendors as well as the Industrial Initiative vendor about how to assist customers and contractors mitigate supply chain disruptions. These discussions encouraged the vendors to take the actions described elsewhere in this response related to promoting products with shorter lead times and helping market actors forecast product availability.

Helping market actors (contractors) forecast product pricing and availability

- The Company's Upstream vendor for the HVAC, Food Service, and Gas initiatives communicated lead times to contractors and closely monitored prices for high-volume equipment. The vendor meets more regularly with manufacturer representatives and identifies distributors with low levels of participation and those that have struggled during the pandemic.
- The Company shared information with customers and contractors/Project Expeditors about product availability. For products with long wait times, the Company and its vendors helped identify alternative products.

Please note that most of these actions are part of ongoing efforts. These efforts not only help address current supply chain challenges but also assist with longer-term program growth. The addition of new measures is a clear example of this. Likewise, continuing to work with market actors across the value chain (customers, contractors, distributors, and manufacturers) to identify a wider range of available products has the potential to reduce project development timelines and reduce project costs where alternative products that would not have otherwise been considered are available at a lower cost to the customer.

PUC 1-24

Budgets: non-incentive costs

Request:

Regarding the Economic Impact Study (RI-23-XX-EcImpacts23), please provide a timeline showing when the study was commenced, milestone deadlines, and when it will be completed.

Response:

The Consulting Services Agreement with the contractor performing the study was executed on August 1, 2022, and a kick-off meeting was held on August 3, 2022. The contractor will begin work on the study once the 2023 Energy Efficiency Plan is finalized, as the plan will provide inputs to the study.

Once work begins, the contractor will provide Rhode Island Energy with a monthly report detailing progress of activities. The status report will be submitted together with the invoice and be due by the first Tuesday of every month.

The contractor will provide a draft report for Rhode Island Energy and external stakeholders to provide feedback. The draft report is planned to be submitted by the 2nd week of May 2023 and a final report by the 2nd week of June 2023.

PUC 1-25
Weatherization

Request:

Given current and forecast energy market prices, does the Company expect greater customer demand for energy efficiency in 2023 relative to 2022? If no, why not? If yes, how did the adjust its proposed 2023 incentive levels and associated customer contributions to account for the increased customer demand, relative to 2022?

Response:

Rhode Island Energy considered energy market prices among several drivers of customer demand specific to each program when determining the 2023 budget. These drivers include supply chain delays, customer budget constraints, equipment price inflation, changes to initiatives, incentive adjustments, changing measure mix, and market saturation. While energy market prices have the potential to drive increases in customer participation, program budgets reflect the aggregate anticipation of customer demand due to energy market prices and other drivers. As a result, despite increased energy market prices, the Company has proposed decreased budgets for several programs relative to 2022.

Rhode Island Energy changed incentive levels due to changes in equipment and labor cost increases and anticipated customer demand. The multifamily and Commercial and Industrial sectors are seeing reduced customer demand as businesses hold on to capital due to unforeseen inflationary pressures as well as saturation of the lighting market.

PUC 1-26
Weatherization

Request:

Comparing Tables E-5 Primary from Dockets No. 5189 (Second Compliance Filing) and Docket No. 22-33-EE, it appears that Program Implementation Expenses for the electric EnergyWise program stayed relatively flat between 2022 and 2023 while Customer Contributions increased by over 400%. Comparing Tables G-5 Primary from Dockets No. 5189 (Second Compliance Filing) and Docket No. 22-33-EE, it appears that Program Implementation Expenses for the gas EnergyWise program increased by 15% between 2022 and 2023 while Customer Contributions only increased by 30%. Relative to 2022, why did the Company increase Customer Contributions so much more significantly in the 2023 electric EnergyWise program than in the 2023 gas EnergyWise program? In your response, please address whether the Company believes customer demand for EnergyWise program offerings (specifically, weatherization) to be different between gas heating vs. non-gas heating customers, and if so, why.

Response:

The larger increase in customer contribution on the electric side is a result of a decline in the incentive for deliverable fuel weatherization projects which are paid for through the EnergyWise electric budget. Customer contributions for all customers increased as a result of the total resource cost increasing. The current program design is in response to how the Company is interpreting Commission feedback that energy efficiency should concentrate on returning electric and gas savings to customers. The Company does not believe that customer demand for weatherization differs between heating fuels, however participation does increase when fuel prices and/or incentives increase.

PUC 1-27
Weatherization

Request:

Please provide the following information: number of moderate income participants who received a weatherization proposal at the 100% moderate income incentive level in 2022; number of weatherization projects completed in 2022 at the 100% moderate income incentive level; total costs associated with the moderate income weatherization projects in 2022; and, the specific costs associated with income qualification for the moderate income weatherization incentives in 2022.

Response:

Through Q2, 2022 there have been 47 low and moderate income ("LMI") customers that have completed their 100% weatherization projects in RI. LMI customers self-attest to being LMI and that generally happens only when they are ready to actively participate in weatherization. Therefore, the Company does not have a number of LMI participants that have received weatherization proposals.

The total cost associated with Moderate Income Weatherization is \$357,257.

There have been no specific costs associated with income qualification for moderate income weatherization since RGGI funds are still being leveraged to pay for LMI weatherization projects up to 100% incentive. RGGI funds only require a customer self-attestation form, therefore, no additional costs have been incurred in qualifying the LMI customers.

PUC 1-28
Weatherization

Request:

What is the proposed 2023 budget for the 100% moderate income weatherization incentives offered through the Electric and Gas EnergyWise programs?

Response:

The moderate income weatherization incentives are not broken out as an individual line item. Based on weatherization data from the first half of 2022, the Company increased the EnergyWise electric incentive budget by \$307,944.49 and the EnergyWise gas incentive budget by \$272,462.13 to provide funding for the 100% incentives which includes the moderate income weatherization incentives as well as the renter/landlord weatherization incentives in the 2023 budget.

PUC 1-29
Heating Electrification and the Income-Eligible Fuel Switching Program

Request:

Regarding the Company's proposed income-eligible fuel-switching program, please explain the following:

- a. How many heat pump installations is the Company proposing for 2023 through this new program?
- b. How many near-end-of-life delivered fuel heating systems at income eligible properties is the Company aware of?
- c. How did the Company develop its list of near-end-of-life delivered fuel heating systems at income eligible properties to replace through the proposed program? Please be specific.
- d. On page 30 of pre-filed testimony, the Company writes "it would benefit the residents of the housing authority with lower heating costs." Please provide all quantitative analyses the Company has undertaken to support the claim that the proposed fuel-switching program will result in lower heating costs to participants.
- e. How, specifically, will CAP agencies be involved in administering and/or delivering the proposed program? Does the Company believe the CAP agencies have the necessary labor and administrative capacity to deliver the proposed program?
- f. What is the budget for the proposed program?
- g. Is the budget allocated to the income eligible single-family program or the multifamily program or both? If both, what is the allocation across programs?

Response:

- a. For single-family income eligible, the Company budgeted for 12 electric heat, heat pump projects. This number comes from tracking information on projects that are near end of life and could be upgraded to heat pumps. In the multi-family income eligible program, there was a very large project used as a basis for planning. As the program year progresses, the actual project(s) will depend on the number of identified and suitable projects and available budget.
- b. The single-family program has identified 12 projects over the past one-and-a-half years of tracking. On the multi-family side, the Company is aware of one very large project that needs replacement. The Company does understand that many housing authorities had multifamily housing built around the same time period with central heating systems.

PUC 1-29, Page 2

Heating Electrification and the Income-Eligible Fuel Switching Program

- c. During weatherization and heating system assessments, the assessors identify and verify that the system is near end of life. Frequently, it is the customer who proactively contacts the CAP agency with a concern and, because of the project expenses, seeks assistance. The CAP agencies note the deliverable fuel projects that are near end of life and notify the Lead Vendor. The projects include heating systems that are failing as well as very old systems with a leaking storage tank that needs to be addressed immediately.
- d. The savings analysis that the Company's Technical Assistance vendor performed for the large project referenced in the Company's responses to parts a. and b., above, estimates a baseline case annual heating oil consumption of 1,531 MMBtu. Applying an oil price of \$5.13 per gallon (which the Company obtained from the US Energy Information Administration and used in this Plan's delivered fuels bill impacts analysis) and an energy content of 0.137381 MMBtu per gallon yields an estimated baseline case annual heating cost of \$57,170. The analysis estimates a proposed case annual electric heating consumption of 56,862 kWh. Applying the current commercial Last Resort Service rate of 18.279 cents/kWh yields an estimated proposed case annual heating cost of \$10,394.
- e. The CAPs are already providing heating system replacements as one of their offerings and are familiar with heat pump projects with electric resistance heat to heat pump replacements. All the replacement work is contracted out to licensed HVAC contractors. This is one area where the CAP agencies have been successfully facilitating the customer's needs. During the winter months, there is also the added requirement of emergency replacements.
- f. Incentive costs for single-family projects are estimated at \$192,000. Multi-family project incentives are budgeted at \$900,000.
- g. Please see the Company's response to part f., above.

See Attachment PUC 1-29 excel workbook for the requested analysis.

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-33-EE
In Re: 2023 Annual Energy Efficiency Plan
Responses to the Commission's First Set of Data Requests
Issued on October 17, 2022

Attachment PUC 1-29
Heating Electrification and the Income-Eligible Fuel Switching Program

The Company is providing an Excel version of Attachment PUC 1-29

PUC 1-30
Heating Electrification and the Income-Eligible Fuel Switching Program

Request:

For each of the three sectors, provide two tables showing the following information:

- a. Planned vs. actual heat pump installations replacing existing electric resistance heating systems during program years 2019 -2022
- b. Planned vs. actual spending on heat pump replacements for existing electric resistance heating systems during program years 2019 -2022

Response:

Please refer to Table 1 and Table 2 below. There were no planned or actual heat pump replacements for existing electric resistance heating systems in the Commercial & Industrial sector for 2019 through 2022. 2022 values are year-to-date.

Table 1. Planned and Actual Electric Resistance-to-Heat Pump Installations 2019-2022

Planned vs. Actual Electric Resistance-to-Heat Pump Installations			
Year	Sector	Units	
		Planned	Actual
2019	Non-Income Eligible	0	65
	Income Eligible	15	12
2020	Non-Income Eligible	38	347
	Income Eligible	20	9
2021	Non-Income Eligible	186	615
	Income Eligible	46	15
2022	Non-Income Eligible	430	294
	Income Eligible	48	18

Table 2. Planned and Actual Electric Resistance-to-Heat Pump Spending 2019-2022

Planned vs. Actual Electric Resistance-to-Heat Pump Spending			
Year	Sector	Incentives	
		Planned	Actual
2019	Non-Income Eligible	\$0	\$136,066
	Income Eligible	\$60,000	\$158,884
2020	Non-Income Eligible	\$114,000	\$661,283
	Income Eligible	\$300,000	\$106,329
2021	Non-Income Eligible	\$600,780	\$1,123,213
	Income Eligible	\$690,000	\$252,098
2022	Non-Income Eligible	\$1,720,000	\$458,894
	Income Eligible	\$720,000	\$260,039

PUC 1-31
Heating Electrification and the Income-Eligible Fuel Switching Program

Request:

For each of the three sectors, how many heat pump replacements for existing electric resistance heating systems is the Company proposing for 2023, and what is the associated budget for the heat pump replacements?

Response:

Please refer to Table 1 below. There are no planned heat pump replacements for existing electric resistance heating systems in the Commercial & Industrial sector for 2023.

Table 1. Planned Installations and Incentive Spend for Heat Pumps Replacing Existing Electric Resistance

Planned Electric Resistance-to-Heat Pump Installations and Spend			
Year	Sector	Planned	
		Units	Incentives
2023	Non-Income Eligible	355	\$1,474,000
	Income Eligible	20	\$320,000
	Commercial & Industrial	0	\$0

PUC 1-32
Heating Electrification and the Income-Eligible Fuel Switching Program

Request:

Regarding the heat pump replacements identified in PUC 1-7, how will the Company market such programming to electric resistance heating customers in 2023? Please describe the specific marketing and/or customer outreach activities the Company will undertake.

Response:

To identify customers with electric resistance heat, the Company will use data identifying customers' heating fuel type. For residential customers, this data includes the Energy Specialist's findings from in-person home energy assessments as well as self-reported data from customers completing online home energy assessments and home energy report heating fuel surveys. This will enable the Company to execute targeted, one-to-one communications to electric resistance heating customers, such as e-mail, direct mail, and potentially telemarketing.

As noted in the Company's response to PUC 1-31, no electric resistance replacements are planned for 2023 in the Commercial and Industrial sector, and the Company is not actively conducting marketing or outreach to pursue these projects.

PUC 1-33
Heating Electrification and the Income-Eligible Fuel Switching Program

Request:

Does the Company maintain a list of residential customers who heat with electric resistance heating? If yes, please provide a copy of that list. If no, please explain why not (including any technical limitations to identifying such customers and maintaining such a list).

Response:

At the level of the full residential customer base, the Company currently does not maintain a list of all residential customers who use electric resistance heating. At the full customer level base, the Company maintains customer lists based on rate classes, and the Company currently does not offer an electric heating rate. The Company does not have the technical capabilities to disaggregate customer usage data to identify electric resistance heating users across all residential customers. Outside of technical approaches, these customers would need to be identified through processes such as self-reporting, surveying, and recording findings during participation with Company programs. The Company plans to collect this data from program participants as described in the Company's response to PUC 1-31, but Company processes currently do not gather this level of usage data across the entirety of the customer base. Once collected, the Company does have the technical capabilities to maintain a list of this data.

PUC 1-34
Heating Electrification and the Income-Eligible Fuel Switching Program

Request:

In response to Division 1-21 regarding the 2022 Second Quarterly Report (Docket No. 5189), the Company provided the results of 38 HVAC rebate quality control inspections recently performed. The results indicate that 4 of 14 “Mini-Split Heat Pump Ducted/Mixed - Electric Replacement” installations failed inspection, and 1 of 7 “Mini-Split Heat Pump Ductless Electric Replacement” installations failed inspection. Regarding these results, please explain the following:

- a. The Company’s response indicates that the inspections related to “equipment availability.” What specifically was being inspected, and what does a failed inspection mean?
- b. What is the significance, if any, of the fact that the only inspection failures came from heat pumps replacing electric heat (as opposed to replacing oil/propane)?

Response:

- a. The Quality Control (“QC”) inspection described in the response to Division 1-21 is administrative in nature. The Lead Vendor is identifying whether the customer qualifies for the enhanced rebate as opposed to checking a mechanical system.
- b. Three systems that failed were installed by contractors that are not qualified to offer enhanced rebates. Two other systems replaced natural gas heat, which disqualified them from being eligible for an enhanced rebate. While these five systems did not meet the requirements for receiving the enhanced rebates, all five systems did meet the requirements for standard rebates. Since the QC inspection is administrative and captured issues with electrically heated homes and gas heated homes, there is no significance to the inspection failures coming from heat pumps replacing electric heat.

PUC 1-35
Heating Electrification and the Income-Eligible Fuel Switching Program

Request:

Please review the Company's response to data request PUC 2-7 in Docket No. 5076 (regarding the gas overspend), where the Company explained how it allocates costs between the gas and electric efficiency programs for dual-heat customers. In its response, the Company wrote "the Company assigns the cost of the weatherization work to the primary heating source for the home." Please explain the following:

- a. How does the Company define primary heating source?
- b. Who determines a participant's primary heating source, the Company or the participant? If the Company makes such determination, please describe how it does so and with what data. If the participant makes such determination, please describe how the Company verifies that their determination complies with the Company's definition of "primary heating source"?

Response:

- a. The Company determines the primary heating source based on the majority heating costs for the customer. Generally, there is a primary central heating system used to provide heat. Occasionally, renovations or additions will add a localized heating system (e.g., electric resistance or mini-split) in the new space, which may or may not use the same fuel as the primary central system. Because the primary heating source is used to identify where the energy savings and funding would occur for weatherization projects, the Company typically selects the heating source in the home that would contribute to the highest energy savings.
- b. The Company's Lead Vendor determines a participant's primary heating source and does so using a two-pronged approach. First, before meeting with a customer, the energy specialist reviews the customer's electric and/or gas account billing/usage to help inform what concerns may arise at the home, including which fuel appears to be the primary heating source. Electric and/or gas usage is reviewed as the Company has this data available, and this usage review may also help indicate to the energy specialist that a customer uses delivered fuels for heating. Second, once at a customer's home, the energy specialist confirms the on-site heating equipment and discusses the billing/usage review and equipment findings with the customer to confirm the primary heating source for the home. The primary heating source is then documented in the assessment energy action plan.

PUC 1-36
Heating Electrification and the Income-Eligible Fuel Switching Program

Request:

Bates page 30 and page 120 of the filing explains the proposal to replace oil/propane heating systems that are at the end-of-life are to be replaced with electric heat pumps for certain low income customers. What if the customer does not want an electric heat pump? Will the customer be allowed to replace the failing system with a new oil/propane system?

Response:

It is the customer's decision whether to switch to an electric heat pump in the proposed income eligible program. The customer is also allowed to replace a failing oil/propane system with a new oil/propane system. Propane and oil heating like for like replacements receive full (100%) heating system replacement incentive.

PUC 1-37
ConnectedSolutions

Request:

For each of the following Residential ConnectedSolutions offerings, please clarify the incentive level (e.g. dollar value) and incentive delivery structure (e.g. payment upon enrollment, annual payment, etc.), and explain how the Company determined that such incentive level and delivery structure were appropriate:

- a. Solar inverters, new
- b. Solar inverters, existing
- c. Thermostats existing
- d. Thermostats new
- e. Batteries

Response:

- a. Solar inverters, new: \$25 upon enrollment and \$20 per year
- b. Solar inverters, existing: \$25 upon enrollment and \$20 per year
- c. Thermostats existing: \$25 upon enrollment and \$20 per year
- d. Thermostats new: \$25 upon enrollment and \$20 per year
- e. Batteries: \$400 per kW performed per summer

The thermostat incentive structure was based on benchmarks of similar utility programs around the country. The original incentives were higher, and in 2017 the Company reduced the incentives to \$20 upfront and \$25 per year to achieve cost effectiveness. In 2019, the Company changed it to \$25 upfront and \$20 per year because customers value the upfront payment more than ongoing payment.

For batteries, the incentives are aimed to provide customers a four- to five-year payback if the customer is converting to solar at the same time and receiving the federal investment tax credit. This is approximately the payback period for solar in Rhode Island and Massachusetts. The Company did not want installing batteries to hurt the overall payback.

Solar inverter incentives are based on the thermostat incentives for ease of customer understanding.

PUC 1-38
ConnectedSolutions

Request:

For each of the following Commercial ConnectedSolutions offerings, please clarify the incentive level (e.g. dollar value) and incentive delivery structure (e.g. payment upon enrollment, annual payment, etc.), and explain how the Company determined that such incentive level and delivery structure were appropriate:

- a. Daily dispatch
- b. Targeted dispatch

Response:

- a. Daily dispatch: \$300/kW-Summer annual payment
Similar to residential batteries as described in the Company's response to PUC 1-37, the Company considered what incentive rate would be likely to allow a C&I customer to realize a 4-5 year payback if the customer was simultaneously converting to solar and receiving the applicable federal investment tax credit.
- b. Targeted dispatch: \$35/kW-Summer annual payment
The Company considered other similar programs across the country and picked an incentive rate close to the bottom of the range. The Company did so based upon the belief that it would more desirable to later seek an increase incentives, if necessary, than it would be to decrease incentives levels. The Company submits that the savings produced by this offering amply support this incentive level.

PUC 1-39
ConnectedSolutions

Request:

Please provide a table showing each of the Residential ConnectedSolutions offerings listed on Bates Page 145 and the associated demand reduction the Company expects to achieve in 2023 from each offering.

Response:

Offering	Net Summer kW	Net Winter kW
Solar Inverters, New	55.00	55.00
Solar Inverters, Existing	275.00	275.00
Thermostats Existing	3,996.07	0.00
Thermostats New	251.93	0.00
Battery Daily (savings)	3,300.00	0.00

PUC 1-40
ConnectedSolutions

Request:

On Bates page 139, the Company writes “if the customer’s solar generation (kWh) is decreased by more than the annual incentive, the customer will be given an additional incentive to guarantee they are not penalized for their participation in this demonstration.” Please explain how the Company will effectuate this policy, using an illustrative example with hypothetical data

Response:

It is not actually possible for the customer’s solar generation to be decreased because the inverters have been set to prioritize active power (also known as solar generation). The Company included this statement to alleviate customer concerns about this. Because it is not possible for the customer’s solar generation to be decreased because the inverters have been set to prioritize active power, the Company did not create a policy or procedure and has not provided an illustrative example of how the situation would be handled.

The setting to prioritize active power is part of the UL 1741 SA (page SA 38) testing and requirements that all interconnected solar inverters must meet.

SA13 Volt/VAr Mode (Q(V))

SA13.1 General

SA13.1.1 In order to maintain a stable grid voltage, it is desired that inverters be able to supply or absorb reactive power to/from the EPS. One way to achieve this is to have the inverter supply or absorb reactive power in response to fluctuations in EPS voltage. The inverter supplies or absorbs reactive power as a function of voltage known as a Q(V) function or Volt-VAr mode. This test verifies that the inverter’s Volt-VAr mode implements the reactive power response to fluctuations in EPS voltage.

SA13.1.2 Inverters can be set to prioritize reactive or active power. This priority setting defines the inverter’s behavior when the inverter reaches its kVA limits. Volt-VAr mode can function with active or reactive power priority. When an inverter is set in Volt-VAr mode with reactive power priority and the inverter’s apparent power kVA limit is reached, active power is reduced to maintain reactive power production. When an inverter is set in Volt-VAr mode with active power priority and the inverter’s apparent power kVA limit is reached, the reactive power is reduced to maximize active power production.

PUC 1-41
ConnectedSolutions

Request:

Given the fact that ConnectedSolutions programs are excluded from the Electric Energy Efficiency PIM, and given that the Amended Settlement Agreement only contemplated System Efficiency PIM targets and incentive levels for 2019, 2020, and 2021, does the Company believe it is appropriately incentivized to plan and deliver the “right” amount of ConnectedSolutions programming and associated demand response? In your answer, explain what the Company believes to be the “right” amount of ConnectedSolutions programming.

Response:

Despite the lack of incentive, the Company will continue to offer ConnectedSolutions programming in 2023. Business strategies are necessarily multi-year strategies. The Company not only has to plan for 2023 but also ensure 2023 programming paves the way for achieving core objectives in 2024 and beyond. Removing the ConnectedSolutions program from 2023 poses risks to internal capacity and market expectations; therefore, the Company continues to propose ConnectedSolutions in 2023. The Company, however, may not offer ConnectedSolutions indefinitely without a performance incentive if, in its review of other investment options, other opportunities create greater value for customers.

The current incentive level (\$0) is not designed to send a regulatory signal to the Company that this program is a high priority for driving customer net benefits relative to other incentivized programs even as the Company continues to pursue ConnectedSolutions to achieve its objectives. To send appropriate signals to the Company that it should plan for and deliver the “right” amount of ConnectedSolutions programming and associated demand response in the long term, the Company recommends the program be incentivized. Without a performance incentive, the scale of demand response offered competes with all other demands for Company investment, including investments in infrastructure. A performance incentive helps to increase the priority of the program not only for financial reasons, but also aligns the Company's performance with the public interest. The “right” amount of demand response would be determined within the larger context of asset management decisions within the context of the Company's multi-year business strategy and expectations.

PUC 1-42
ConnectedSolutions

Request:

Regarding the ConnectedSolutions programs, the Company explains “the Company may be eligible to earn a shareholder incentive through the System Efficiency Annual MW Capacity Savings Performance-Based Incentive Mechanisms in Docket Nos. 4770/4780” and notes that “funding for the shareholder incentive for achieving annual MW capacity savings is from Docket Nos. 4770/4780” (Bates pages 361 and 363). Will the Company seek a shareholder incentive for demand reductions delivered through the proposed 2023 ConnectedSolutions programs? If yes, please explain why the Company believes it is eligible earn a System Efficiency performance incentive for ConnectedSolutions demand reductions delivered in 2023, and how the Company will calculate its earned incentive in 2023.

Response:

The Company will not seek a shareholder incentive for demand reductions delivered through the proposed 2023 ConnectedSolutions programs. The quoted text was an erroneous holdover from a previous year’s plan, and the Company apologizes for any confusion.

PUC 1-43
ConnectedSolutions

Request:

On Bates page 364, the Company writes “unlike the energy storage projects approved as part of Dockets No. 4770/4780 Amended Settlement Agreement, the Energy Storage Initiative in the 2023 Plan is a storage-enabled DR program that is focused on incentivizing the use of customer-owned BTM storage to shift peak load at traditional end-use customer facilities. Through this energy efficiency offering, the Company is intending to test use cases for BTM, customer-owned storage, to identify all applications that are beneficial to customers and the grid and to grow a robust market.” Please explain the following:

- a. What is the “Energy Storage Initiative in the 2023 Plan” and is it separate from the ConnectedSolutions program?
- b. Through the 2023 Plan, how specifically does the Company plan to “test use cases for BTM, customer-owned storage”? What associated learnings/work products will be generated as a result of this effort?
- c. Through the 2023 Plan, how specifically does the Company plan to “identify all [storage] applications that are beneficial to customers and the grid”? What associated learnings/work products will be generated as a result of this effort?
- d. Through the 2023 Plan, how specifically does the Company plan to “grow a robust [storage] market”? What associated learnings/work products will be generated as a result of this effort?

Response:

- a. It is the same as the ConnectedSolutions program. This is the same language that was used in the 2022 Plan, and the program is the same for 2023. As stated on Bates page 193 of the 2023 Plan, “there are no anticipated program changes related to Targeted or Daily Dispatch for 2023 based on performance projections and results from currently available data.”
- b. The program is the same as 2022. Rhode Island Energy will continue to work with Curtailment Service Providers who have customers that are interested in pursuing BTM, customer-owned storage. Different types of customers have different use cases for storage, such as resiliency, sustainability, and economics. Rhode Island Energy wants to learn how different customer types and use cases fit the program so Rhode Island Energy can both tailor the program for them and/or adjust the program to attract different types of customers and use cases.

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ConnectedSolutions

- c. The program is the same as 2022. Rhode Island Energy will identify storage applications through multiple channels:
- i. Curtailment Service Providers
 - ii. Rhode Island Energy Energy Efficiency Sales Representatives
 - iii. Program Marketing

Rhode Island Energy wants to continue to learn which channels are most effective to identify storage applications so that Rhode Island Energy can both optimize highly-effective channels and adjust less-effective channels to improve their effectiveness.

- d. The program is the same as 2022. Rhode Island Energy will continue to grow the storage market in Rhode Island by continuing to promote the program to customers and work with Curtailment Service Providers to educate them on the Company's program and help them recruit customers to participate. Building on the Company's responses to parts b. and c., above, Rhode Island Energy wants to learn what types of customers, applications, and go-to-market channels hold the most opportunity to hone in on those segments while adjusting the Company's approaches to other segments.

PUC 1-44
ISO-NE Forward Capacity Market

Request:

Does the Company expect to incur any Financial Assurance penalties from ISO-NE during the 2023 calendar year related to its energy efficiency capacity supply obligation(s)? If yes, please explain why and estimate the value of the Financial Assurance penalty.

Response:

No, the Company does not expect to incur any Financial Assurance penalties from ISO-NE during the 2023 calendar year related to its energy efficiency capacity supply obligation(s).

PUC 1-45
ISO-NE Forward Capacity Market

Request:

On Bates Page 96, the Company writes “if, as a result of circumstances beyond the Company’s control, the Company is unable to provide all or a portion of the megawatts of capacity proposed in its qualification packages and capacity auction bids, some or all of the financial assurance monies would be forfeited.” Please define “circumstances beyond the Company’s control” and explain the significance of “Company control” to the potential risk of Financial Assurance forfeiture.

Response:

If implementation and administration of the Energy Efficiency Plan and program were limited, altered or prohibited by legislative or regulatory action, these circumstances would be outside of the Company’s control. As noted on Bates page 96, footnote 51 of the Company’s 2023 Energy Efficiency Plan, circumstances beyond the Company’s control may include “legislative action to alter the EE Program Charge or discontinue the Company’s authority to implement the energy efficiency programs underlying the Qualifications Package or a PUC decision limiting the Company’s role in bidding the demand savings acquired through program efforts in the FCM.” Additionally, if there were changes or shifts in the market impacting a New Generating Capacity Resource or New Demand Capacity’s ability to achieve FCM Commercial Operation, those circumstances would likely also be outside of the Company’s control.

ISO-NE has the authority to require the Company to forfeit its Financial Assurance when the Company’s New Generating Capacity Resource or New Demand Capacity “is only capable of delivering less than the amount of capacity that cleared in the Forward Capacity Auction.”¹ ISO-NE’s authority to impose the forfeiture is not limited to instances where the circumstance that gave rise to the Company’s inability to meet its obligations is outside of the Company’s control. Therefore, there is no direct significance of “Company control” to the potential risk of Financial Assurance forfeiture. However, if the circumstances surrounding the Company’s forfeiture of Financial Assurance are outside of its control, this may support recovery of the Financial Assurance penalty through the Energy Efficiency Program fund if the Company can demonstrate that the penalty was prudently incurred.

¹ ISO-NE Market Rule 1, Section 13 – Forward Capacity Market, Release of Financial Assurance, III.13.1.9.2.2 (available at https://www.iso-ne.com/static-assets/documents/regulatory/tariff/sect_3/mr1_sec_13_14.pdf).

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ISO-NE Forward Capacity Market

Moreover, if the reasons the Company cannot provide the required capacity is within the Company's control, the Company would seek to address it so as not to forfeit the Financial Assurance. After ISO-NE required the Company to forfeit its Financial Assurance in January 2022 for the first time since the Company began bidding energy efficiency into the FCM, the Company adjusted its bidding strategy (an item within the Company's control) to decrease the likelihood that it would not be able to meet future obligations. Specifically, the Company started conservatively bidding capacity into forward auctions based on current capacity levels rather than future projected capacity levels to reduce risk of non-delivery.

PUC 1-46
Carbon benefits

Request:

Table 19 on Bates page 100 indicates that non-embedded carbon benefits are categorized as Electric Utility System Benefits, 100% of whose value is counted towards the Company’s performance incentive. Elsewhere in the Plan, the Company explains that it is not requesting approval to include non-embedded carbon benefits in the calculation of the Company’s performance incentive. Please clarify.

Response:

Table 19 on Bates page 100 erroneously included a reference to non-embedded carbon benefits as Electric Utility System Benefits.

The Company is *not* requesting approval to include non-embedded carbon benefits in the calculation of the Company’s performance incentive, and this is consistent with calculations associated with the PIM. See below for a corrected version of Table 19 that reflects the employed approach and complements language found elsewhere in the Plan.

Table 19. Electric Energy Efficiency Portfolio Benefits Alignment for PIM Calculations

Benefit	PIM Categorization	Percent Allocation in PIM Calculation
Summer Generation	Electric Utility System Benefits	100%
Capacity DRIPE		
Transmission		
Distribution		
Reliability		
Winter Peak Electric Energy		
Winter Off Peak Electric Energy		
Summer Peak Electric Energy		
Summer Off Peak Electric Energy		
Electric Energy DRIPE		
Utility Non-Energy Impacts (NEIs)		
Natural Gas and Natural Gas DRIPE	Resource Benefits	50%
Oil and Oil DRIPE		
Propane		
Water		
Non-Resource (NEIs)	Other Not Included Benefits	0%
Non-Embedded Carbon		
Non-Embedded NOx		
Economic		

PUC 1-47
Carbon benefits

Request:

When estimating the value of avoided non-embedded carbon emissions from the electric savings delivered by the 2023 Gas and Electric Plans, did the Company assume any positive value after 2033 (when the Renewable Energy Standard will reach 100%)? If no, explain why not. If yes, show the Company’s estimate of the avoided carbon benefits (in dollars) from electric savings delivered by the 2023 Gas and Electric Plans after 2033, and explain why the Company finds it appropriate to value carbon emissions from electric savings even after Rhode Island’s electric supply is required to be 100% renewable.

Response:

When estimating the value of avoided non-embedded carbon emissions from the electric savings delivered by the 2023 Gas and Electric Plans, the Company assumed a positive value in and after 2033.

Table 1 below illustrates the Company’s estimate of the avoided carbon benefits (in dollars) from the electric savings delivered by the 2023 Gas and Electric Plans from 2023 through 2032, and 2033 onward. This table demonstrates that while non-embedded carbon benefits from electricity savings are modeled as positive after 2033, the magnitude of benefits on the electric side is small relative to benefits modeled from 2023-2032. Decreasing (and potentially diminishing) non-embedded carbon benefits after 2033 are not inconsistent with the Renewable Energy Standard because the Renewable Energy Standard is not a time-sensitive policy (e.g. the non-embedded carbon benefit from energy savings on 5pm August 31 is not considered to be different from the non-embedded carbon benefit from energy savings at midnight on March 31) and because the Renewable Energy Standard may be met with Alternative Compliance Payments in lieu of Renewable Energy Credits.

Table 1. Planned Non-Embedded Carbon Benefits from Electricity Savings Before and After 2033

Non-Embedded Carbon Benefits from Electricity Savings (\$)			
Time Period	Electric Plan	Gas Plan	Total
2023 Through 2032	\$93,499,246	\$1,303,240	94,802,487
2033 Onward	\$16,780,941	\$840,496	17,621,437
Total Lifetime	\$110,280,188	\$2,143,736	112,423,924

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Carbon benefits

Even if the non-embedded carbon benefits are brought to \$0 in 2033 onward, the composition of the Electric and Gas Plans would be unaffected, and all constituent programs would remain cost-effective based on the Rhode Island Test.

The Company recognizes that the accounting of carbon reductions and benefits in the state is still evolving and will become clearer over the near term. For example, the state, through the Executive Climate Change Coordinating Council (EC4), will be updating the *2016 Greenhouse Gas Emissions Reduction Plan* by December 31, 2022.¹ Furthermore, the Rhode Island Department of Environmental Management's Office of Air Resources (OAR) is adopting an updated methodology to account for electricity sector greenhouse gas (GHG) emissions. Rhode Island Energy is open to using a different emissions accounting methodology if deemed appropriate.

¹ <https://climatechange.ri.gov/act-climate>

PUC 1-48
Carbon benefits

Request:

Please provide an alternative version of Table E-6 where the carbon benefits are calculated assuming zero benefit from electric savings starting in 2033.

Response:

Please see the table below for an updated Table E-6 where the carbon benefits are calculated assuming zero benefit from electric savings starting in 2033.

	Benefits (\$ Thousands)		
	Societal		
	Carbon	NOx	Economic
Non-Income Eligible Residential			
Residential New Construction	\$3,026	\$61	\$2,510
ENERGY STAR® HVAC	\$9,050	\$309	\$8,748
EnergyWise	\$15,751	\$525	\$16,458
EnergyWise Multifamily	\$1,267	\$18	\$1,953
Home Energy Reports	\$3,079	\$18	\$3,543
Residential Consumer Products	\$4,825	\$26	\$2,769
Non-Income Eligible Residential SUBTOTAL	\$36,997	\$958	\$35,981
Income Eligible Residential			
Single Family - Income Eligible Services	\$8,514	\$280	\$11,590
Income Eligible Multifamily	\$2,021	\$50	\$5,536
Income Eligible Residential SUBTOTAL	\$10,535	\$329	\$17,126
Commercial & Industrial			
Large Commercial New Construction	\$17,779	\$77	\$23,212
Large Commercial Retrofit	\$45,233	\$157	\$129,113
Small Business Direct Install	\$11,972	\$0	\$11,884
C&I SUBTOTAL	\$74,984	\$234	\$164,209
TOTAL	\$122,516	\$1,521	\$217,316

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-33-EE
In Re: 2023 Annual Energy Efficiency Plan
Responses to the Commission’s First Set of Data Requests
Issued on October 17, 2022

PUC 1-49
Carbon benefits

Request:

Please provide an alternative version of Table G-6 where the carbon benefits are calculated assuming zero benefit from electric savings starting in 2033.

Response:

Please see the table below for an updated Table G-6 where the carbon benefits are calculated assuming zero benefit from electric savings starting in 2033.

	Benefits (\$ Thousands)		
	Societal		
	Carbon	NOx	Economic
Non-Income Eligible Residential			
EnergyWise	\$12,051	\$332	\$10,741
Energy Star® HVAC	\$6,198	\$357	\$3,485
EnergyWise Multifamily	\$2,487	\$75	\$2,529
Home Energy Reports	\$2,109	\$64	\$404
Residential New Construction	\$601	\$40	\$212
Non-Income Eligible Residential SUBTOTAL	\$23,446	\$868	\$17,371
Income Eligible Residential			
Single Family - Income Eligible Services	\$3,275	\$117	\$5,710
Income Eligible Multifamily	\$1,775	\$118	\$5,218
Income Eligible Residential SUBTOTAL	\$5,050	\$235	\$10,928
Commercial & Industrial			
Large Commercial New Construction	\$9,947	\$522	\$2,088
Large Commercial Retrofit	\$19,273	\$746	\$9,753
Small Business Direct Install	\$2,187	\$96	\$961
Commercial & Industrial Multifamily	\$702	\$47	\$1,384
Commercial & Industrial SUBTOTAL	\$32,110	\$1,411	\$14,185
Grand Total	\$60,606	\$2,514	\$42,483

PUC 1-50
Carbon benefits

Request:

Does the Company believe its methodology for estimating the non-embedded carbon benefits from electric savings is consistent with the Rhode Island Department of Environmental Management's (RIDEM) Greenhouse Gas Inventorying methodology for the electric sector? In your response, please detail any attempts made by the Company to synchronize its methodology for estimating the non-embedded carbon benefits from electric savings with RIDEM's Greenhouse Gas Inventorying methodology for the electric sector.

Response:

Rhode Island Energy believes its methodology to calculate emissions reductions from energy savings is likely different from the methodology used by RIDEM to calculate emissions from the electric sector. It is the Company's understanding that RIDEM uses a method specifically developed by Massachusetts, Connecticut, and Rhode Island (i.e., not the State Inventory Tool developed by the US EPA) to account for emissions reductions due to Renewable Energy Standards in each of those states. The Company is not aware of RIDEM calculating non-embedded carbon benefits from electric savings and cannot speak to its methodology for doing so.

Rhode Island Energy's current accounting method for quantifying emissions reductions for 2023 is found in Attachment 4 of the Plan on Bates page 268.

The Company has not yet made any attempts to synchronize the calculation of emissions reductions with RIDEM, although it is not opposed to it. Rhode Island Energy has made an initial effort to start discussions about emissions accounting with the State, but ultimately defers to appropriate entities on further guidance for how to calculate and report emissions.

PUC 1-51
Carbon benefits

Request:

Please explain why the Company finds it appropriate to value a unit of carbon reduction from electric savings delivered by a measure that replaces a piece of fossil fuel equipment with a more efficient piece of fossil fuel equipment *differently* than a unit of carbon reduction from electric savings delivered by a weatherization project (or any other measure that does not involve fossil fuel equipment replacement).

Response:

The Company believes that the approach that values a unit of carbon reduction from a measure that replaces a piece of fossil fuel equipment *differently* from that of a measure that does not involve fossil fuel equipment replacement appropriately gives more weight to measures that holistically impact Rhode Island's climate mandates set forth in the 2021 Act on Climate in both the short and long term.

Social Cost of Carbon (SCC) and Marginal Abatement Cost (MAC) represent two different quantifications of benefits of greenhouse gas emissions reductions. The SCC additionally quantifies the long-term societal impact of relevant measures that is not implicit in the MAC. Because the 2021 Act on Climate sets greenhouse gas emissions reduction mandates out to 2050, the Company feels a quantification of benefits that includes long-term societal impacts (the SCC) is more appropriate than a short-term quantification (the MAC) in certain applications.

While Rhode Island Energy wants to provide incentives to customers who are still replacing boilers in 2023 with more efficient boilers, there are two perspectives to consider: (1) an economic perspective where those customers may need to take additional action in the near-term to become more efficient and reduce carbon to help meet the state's targets and (2) a societal perspective where a new fossil fuel-fired boiler will limit the opportunity to reduce or eliminate carbon emissions associated with the source of heating for at least 15 years, regardless of the claimable measure life within the Plan. Each of these perspectives is expanded on below.

From the first perspective, Rhode Island Energy, customers, and/or other members of society will have to pay for these incremental carbon reductions at that time, regardless of technology, as well as bear the brunt of future societal costs attributed to released carbon that would otherwise have been partially (or fully) prevented had an alternative been employed earlier. Since future action will cost incrementally more, a premium value should be put on eradicating that carbon now. Implementing a weatherization measure, on the other hand, does not influence the HVAC

PUC 1-51, Page 2
Carbon benefits

system in place and will provide savings relative to a less weatherized baseline both in the present and future.

From the second perspective, if a piece of fossil fuel equipment is replaced and there is no action taken in the near-term to become more efficient, the clock is reset on the carbon reduction opportunity in the current energy landscape, and Rhode Island Energy, customers, and/or other members of society will have to bear the brunt of negative externalities attributed to released carbon that would otherwise have been partially (or fully) prevented had an alternative been employed earlier. Since it is best for the mitigation of future consequences to take the opportunity now, a premium value should be placed on eradicating that carbon now.

Based on either of these perspectives, it is appropriate for the BCR models to put a greater value, through measure-specific application of SCC versus the MAC, on the carbon reduction from measures planned for implementation in 2023 that are durable and may not need to be replaced with a future investment, and/or do not pose a lost opportunity to reduce carbon now. The SCC appropriately reflects both the societal and economic dimensions. Society would not bear the cost differently between the measures, but for the opportunity cost of not mitigating the quantity of carbon earlier. Since the BCA considers costs and benefits associated with measures installed in 2023, not future activities even those activities might be anticipated, the future actual costs or lost opportunity costs are not captured elsewhere in the BCR model.

The rationale for application of the SCC vs MAC described above applies to measures in either the electric or gas portfolios; there is one measure in the electric plan that replaces a piece of fossil fuel equipment and provides electric savings to which MAC is applied. This measure is part of the Single Family – Income Eligible Services program and is titled “Heating System Retrofit, Boiler, Oil.” There are several gas combustion equipment replacement measures in the gas portfolio that create electric savings.

PUC 1-52
Carbon benefits

Request:

The Company estimates \$139.2 million in avoided carbon benefits from the 2023 Electric Plan. Please provide a breakdown of that \$139.2 million by fuel savings type (i.e. electric vs. gas vs. oil vs. propane). In your response, please further break down the avoided carbon value from electric savings by cost methodology (i.e. the value associated with savings from fossil fuel replacement measures vs. the value associated with all other measures).

Response:

Please see the following table for the requested information.

Table 1. Breakdown of Non-Embedded Carbon Benefits by Fuel Type from the 2023 Electric Plan

Cost of Carbon Method	Non-Embedded Carbon Benefits from the 2023 Electric Plan				
	Electric	Gas	Oil	Propane	All
Social Cost of Carbon (SCC)	\$ 110,280,188	\$ (1,846,960)	\$ 28,517,890	\$ 2,250,281	\$ 139,201,399
Marginal Abatement Cost (MAC)	\$ -	\$ (32,396)	\$ 136,964	\$ 9,852	\$ 114,420
Total	\$ 110,280,188	\$ (1,879,356)	\$ 28,654,854	\$ 2,260,133	\$ 139,315,819

*As stated in the Plan, the Marginal Abatement Cost (MAC) is used as the cost basis for the non-embedded carbon value associated with savings from fossil fuel equipment replacement measures and the Social Cost of Carbon (SCC) is used as the cost basis for the non-embedded carbon value associated with savings from all other measures.

PUC 1-53
Carbon benefits

Request:

The Company estimates \$61.4 million in avoided carbon benefits from the 2023 Gas Plan. Please provide a breakdown of that \$61.4 million by fuel savings type (i.e. electric vs. gas). In your response, please further break down the avoided carbon value from electric savings by cost methodology (i.e. the value associated with savings from fossil fuel replacement measures vs. the value associated with all other measures).

Response:

Please see the following table for the requested information.

Table 1. Breakdown of Non-Embedded Carbon Benefits by Fuel Type from the 2023 Gas Plan

Cost of Carbon Method	Non-Embedded Carbon Benefits from the 2023 Gas Plan		
	Electric	Gas	All
Social Cost of Carbon (SCC)	\$ 2,144,476	\$ 50,934,542	\$ 53,079,018
Marginal Abatement Cost (MAC)	\$ (740)	\$ 8,367,788	\$ 8,367,049
Total	\$ 2,143,736	\$ 59,302,330	\$ 61,446,066

*As stated in the Plan, the Marginal Abatement Cost (MAC) is used as the cost basis for the non-embedded carbon value associated with savings from fossil fuel equipment replacement measures and the Social Cost of Carbon (SCC) is used as the cost basis for the non-embedded carbon value associated with savings from all other measures.

PUC 1-54
Avoided Energy Supply Costs

Request:

Please provide a copy of the ICF model used by the Company to develop the non-PTF avoided transmission benefit, indicating how the \$8.20/kW-year value was derived.

Response:

Please see Attachment PUC 1-54. The "Cover" tab of the workbook provides a summary of each of the subsequent tabs. The calculation of the non-PTF avoided transmission value is shown on the "Summary" tab.

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-33-EE
In Re: 2023 Annual Energy Efficiency Plan
Responses to the Commission's First Set of Data Requests
Issued on October 17, 2022

Attachment PUC 1-54
Avoided Energy Supply Costs

The Company is providing an Excel version of Attachment PUC 1-54

PUC 1-55
Avoided Energy Supply Costs

Request:

Please explain how the Company adjusted ICF's non-PTF avoided transmission model (and/or the Company's own inputs to the model) to reflect the pending changes to Local Network Service (LNS) for Rhode Island electric distribution customers as a result of the separation of Narragansett Electric Company LNS assets from New England Power and the resulting new Rhode Island Energy LNS rates.

Response:

The Company did not adjust the non-PTF avoided transmission model inputs to reflect the pending changes to LNS. The primary inputs of the model are Rhode Island Energy capital investment and load forecasts which do not consider changes to LNS. The capital investment forecasts are developed from data in the Company's plant system and CAPEX information provided from project managers.

PUC 1-56
Avoided Energy Supply Costs

Request:

Please explain why Other Resource benefits from the Electric portfolio (excluding ConnectedSolutions) increased from \$2 million in the 2022 Electric Plan to \$3.9 million in the 2023 Electric Plan.

Response:

The majority of the increase from \$2 million in the 2022 Electric Plan to \$3.9 million in the 2023 Electric Plan is due to the presence of planned quantities for “Wx Other” under Energywise (i.e., the Energywise weatherization measure for propane customers). The 2023 Electric Plan specified a total of 167 for this measure, contributing \$1,367,051 in Other Resource benefits. In contrast, the 2022 Electric Plan did not have planned quantities for this measure and, thus, contributed \$0 in Other Resource benefits. Another significant factor is the presence of planned quantities for “Wx Other” under Single Family - Income Eligible Services (i.e., the Single Family – Income Eligible Services weatherization measure for propane customers). The 2023 Plan specified a total of 50 for this measure, contributing \$166,325 in Other Resource benefits. The 2022 Plan, did not contain this measure and, thus, contributed \$0 in Other Resource benefits.

Because propane is the heating fuel source for a small number of the Company’s customers, the number of actual measures for propane-heated homes varies from year to year, which makes it difficult to plan for propane customers. Because of this, in the 2022 Plan, the Company planned a smaller number of propane measures in the BCR model. For 2023, however, Rhode Island Energy planned for more – chief among them being weatherizations of propane-heated homes. Rhode Island Energy developed an estimate of 167 weatherizations of propane-heated homes under Energywise and 50 weatherizations of propane-heated homes under Single Family - Income Eligible Services, based on recent historic data, and entered those in “Wx Other” for these two programs.

The third factor contributing to this increase is an error in the planned quantities and component measures for Renovation Rehab-type measures in Residential New Construction. Specifically, there were errors in planned quantities for “RR_COOLINGTIER2_ELEC” and “RR_DHW TIER2_ELEC,” which were contributing \$165,767 to Other Resource benefits when they should have been contributing \$0. The BCRs of all impacted programs remain above 1.00 when these quantities are corrected. This correction to Renovation Rehab-type measures will be part of the Company’s submission of an updated Attachment 5 and electric BCR model at a later date.

PUC 1-57
Avoided Energy Supply Costs

Request:

Please explain why Reliability benefits from the Electric portfolio (excluding ConnectedSolutions) increased from \$116,000 in the 2022 Electric Plan to \$1.4 million in the 2023 Electric Plan, despite summer and winter demand reduction decreasing between 2022 and 2023.

Response:

Electric reliability benefits (excluding ConnectedSolutions) increased from \$116,000 to \$1.4 million between 2022 and 2023 because of an error in a VLOOKUP range in the electric BCR model. When corrected, the 2023 electric reliability benefit (excluding ConnectedSolutions) is \$166,397. The increase from \$116,000 to \$166,397 between 2022 and 2023 is due to the 2023 reliability cost inputs from the AESC User Interface (see the table below). Except for Year 1, reliability avoided costs are larger in the 2023 Plan.

Reliability Annual Avoided Costs (\$/kW)				
Year	2022 Plan (in \$2022)		2023 Plan (in \$2023)	
2022	Year 1	\$7.19	-	-
2023	Year 2	\$5.13	Year 1	\$5.48
2024	Year 3	\$5.43	Year 2	\$5.88
2025	Year 4	\$4.89	Year 3	\$5.37
2026	Year 5	\$4.60	Year 4	\$5.05
2027	Year 6	\$3.96	Year 5	\$6.10
2028	Year 7	\$2.44	Year 6	\$4.26
2029	Year 8	\$1.46	Year 7	\$2.73
2030	Year 9	\$0.42	Year 8	\$1.51

With this correction, the BCR of the portfolio (excluding ConnectedSolutions) is 2.53 and the BCRs of all individual programs remain greater than 1.00.

Upon discovery of the error mentioned above, the Company conducted a thorough check of all other VLOOKUP ranges in both the Electric and Gas BCR Models and concluded that this error type is isolated to electric reliability benefits only. The Company will submit an updated Attachment 5 and electric BCR model at a later date.

PUC 1-58
Avoided Energy Supply Costs

Request:

Please explain why Reliability benefits from the ConnectedSolutions programs decreased from \$1.1 million in the 2022 Electric Plan to \$241,000 million in the 2023 Electric Plan, despite summer demand reduction increasing between 2022 and 2023.

Response:

Electric reliability benefits from ConnectedSolutions decreased from \$1.1 million to \$241,000 between 2022 and 2023 because of an error in a VLOOKUP range in the electric BCR model. When corrected the 2023 electric reliability benefit for ConnectedSolutions is \$806,736. The decrease from \$1.1 million to \$806,736 between 2022 and 2023 is due to the 2023 reliability cost inputs from the AESC User Interface (see the table below). Please note that ConnectedSolutions offerings all have a measure life of one year. Therefore, only one year of reliability avoided costs are used to calculate benefits.

Reliability Annual Avoided Costs (\$/kW)				
Year	2022 Plan (in \$2022)		2023 Plan (in \$2023)	
2022	Year 1	\$7.19	-	-
2023	-	-	Year 1	\$5.48

With this correction, the BCR of the ConnectedSolutions program is 2.08.

Upon discovery of the error mentioned above, the Company conducted a thorough check of all other VLOOKUP ranges in both the Electric and Gas BCR Models and concluded that this error type is isolated to electric reliability benefits only. The Company will submit an updated Attachment 5 and electric BCR model at a later date.

PUC 1-59
Avoided Energy Supply Costs

Request:

Between the 2022 Electric Plan and the 2023 Electric Plan, why did capacity DRIPE benefits increase from \$9.1 million to \$9.6 million despite both summer and winter demand reduction savings decreasing from 2022 to 2023?

Response:

Capacity DRIPE benefits increased between 2022 and 2023, despite decreases in demand reduction savings, because of changes to the avoided cost inputs. For the 2023 Plan, the 2021 AESC User Interface provides a new set of DRIPE values using 2023 as the measure vintage. Please see the table below which shows the differences in annual uncleared and cleared capacity DRIPE avoided costs used for the 2022 and 2023 electric plans.

Capacity DRIPE Annual Avoided Costs (\$/kW)				
Year	2022 Plan (in \$2022)		2023 Plan (in \$2023)	
2022	Year 1	\$153.68	-	-
2023	Year 2	\$178.37	Year 1	\$212.59
2024	Year 3	\$166.28	Year 2	\$201.11
2025	Year 4	\$129.07	Year 3	\$174.26
2026	Year 5	\$96.73	Year 4	\$131.18
2027	Year 6	\$70.52	Year 5	\$127.38
2028	Year 7	\$24.63	Year 6	\$73.91

PUC 1-60
Avoided Energy Supply Costs

Request:

Please provide the underlying workpapers and calculations to support the Marginal Distribution Cost value of \$121.58/kW-year (referenced on Bates page 260). In your response, please explain whether Rhode Island Energy's MDC methodology differs from National Grid's MDC methodology (explained in response to PUC 3-18 in Docket No. 5189). Also explain why the MDC value increased from \$96.56/kW-year in 2022 to \$121.58/kW-year in 2023.

Response:

Please see Attachment PUC 1-60 for the marginal distribution cost model.

For the 2023 Plan, Rhode Island Energy's MDC methodology does not differ from National Grid's MDC methodology as explained in the Company's response to PUC 3-18 in Docket No. 5189.

The MDC value increased from \$96.56/kW-year in 2022 to \$121.58/kW-year in 2023 because a different distribution capital investment forecast was used. The more recent forecast used for the 2023 Plan includes larger distribution capital investment projections than the capital forecast used for the 2022 Plan. Therefore, the 2023 MDC value is higher than the 2022 MDC value.

Inputs

Item	Value	Source
Base Year	2022	User
Number of Historical Years	5	User
Number of Forecast Years	6	User
Historical Escalation Rate	2.0%	Source: Federal Reserve Economic Data Implicit Price Deflator (Q1 2017 - Q1 2021)
Forecast Escalation Rate	6.9%	Source: Federal Reserve Economic Data Implicit Price Deflator (Q1 2021 - Q1 2022)
Distribution Percentage Assumed to be Related to Increasing Load	14.3%	Electric Infrastructure, Safety, and Reliability Plan FY 2023 Proposal, section 2, page 57
General Inflation	1.3%	2023 RI Electric BCR Model
Non-PTF Percentage of Transmission Capital Investment	25.0%	Assumption
Percent of NEP Transmission Capital Investment Located in Rhode Island BEFORE Sale of NECO to PPL	25.0%	Assumption
Percent of NEP Transmission Capital Investment Located in Rhode Island AFTER Sale of NECO to PPL	0.0%	National Grid

Summary

Distribution			
Item	Units	Value	Source
Incremental Investments in Distribution Systems Caused by Load Growth	US\$	\$248,172,575	Dist Invmt
Annual Carrying Charge of Distribution Capital Investments	%/yr	12.2%	Dist Carrying Charge
Distribution Incremental Growth in Peak Demand	MW	249	Peak Growth
Marginal Cost of Distribution Capacity	\$/kW-yr	\$121.58	

Distribution Investment

Item	Units	NECO Nominal Value	NECO Real Value
Historical Incremental Investments into Distribution Systems	US\$	\$519,422,247	\$490,528,778
Forecast Incremental Investments into Distribution Systems	US\$	\$1,035,631,808	\$1,243,222,663
Total Incremental Investments into Distribution Systems	US\$	\$1,555,054,055	\$1,733,751,441
Historical Incremental Investments Caused by Load Growth	US\$		\$70,215,249
Forecast Incremental Investments Caused by Load Growth	US\$		\$177,957,325
Total Incremental Investments Caused by Load Growth	US\$		\$248,172,575

Distribution Carrying Charge

Item	Units	NECO Value	NECO Source
After Tax Cost of Financing (WACC)	%	6.7%	
Share of project financed through debt	%	50.0%	Assumption
Real Interest Rate on Debt	%	3.7%	
Nominal Interest Rate on Debt	%	5.1%	Assumption
Expected After Tax Real Return on Equity	%	10.5%	
Expected After Tax Nominal Return on Equity	%	12.0%	Assumption
State Income Tax Rate	%	0.0%	Adael Acosta, Director, U.S. Indirect and Employment Tax, 8/30/21
Federal Income Tax Rate	%	21.0%	FERC Form 1, pages 122-123, Tax Cuts and Jobs Act
Effective State and Federal Income Tax Rate	%	21.0%	
Property Taxes Expense	%	0.9%	
Total Plant Annual Property (Real Estate) Taxes	MM\$	\$25.8	FERC Form 1, pages 320-323, line 164, column b
Net Book Value of Total Plant	MM\$	\$2,783.3	
Insurance Expense	%	1.0%	
Total Plant Annual Insurance Costs	MM\$	\$28.9	FERC Form 1, pages 320-323, line 185, column b
Net Book Value of Total Plant	MM\$	\$2,783.3	FERC Form 1, pages 200-201, line 15, column c
Depreciation Expense (using Sinking Fund Factor Approach)	%	1.4%	
Depreciation Life of Distribution Plant	Yr	27	Assumption
Operation and Maintenance Expense	%	0.9%	
Annual Distribution Operation and Maintenance Expenses	MM\$	\$11.4	
Net Book Value of Distribution Plant	MM\$	\$1,219.2	
Electric Plant in Service	\$	\$1,974,406,407	FERC Form 1, pages 204-207, line 75, column g
Accumulated Depreciation	\$	\$755,166,463	FERC Form 1, page 219, line 26, column b
Income Taxes Expense	%	1.2%	
Gross up factor for taxes	%	79.0%	
Annual Real Carrying Charge of Capital Investments	%	12.2%	

Peak Growth

Item	Units	NECO Value
Total incremental growth in peak demand	MW	249

Appendix: Transmission and Distribution Operation and Maintenance Cost Avoidable Expenses

Operation Transmission Expenses										
Item	Total NEP Value	NEP Source	Total NECO Value	NECO Source	Share Avoidable	Source	Avoidable NEP Value	Avoidable NECO Value	Avoidable Total Value	
(560) Operation Supervision and Engineering	\$5,434,831	FERC Form 1, pages 320-323, line 83, column b	\$1,482,514	FERC Form 1, pages 320-323, line 83, column b		0% Assumption	\$0	\$0	\$0	
(561) Load Dispatching	\$7,638,635	FERC Form 1, pages 320-323, lines 85-92, column b	\$6,967,034	FERC Form 1, pages 320-323, lines 85-92, column b		0% Assumption	\$0	\$0	\$0	
(562) Station Expenses	\$4,325,509	FERC Form 1, pages 320-323, line 93, column b	\$383,312	FERC Form 1, pages 320-323, line 93, column b		10% Assumption	\$432,551	\$38,331	\$470,882	
(563) Overhead Lines Expenses	\$1,309,456	FERC Form 1, pages 320-323, line 94, column b	\$335,880	FERC Form 1, pages 320-323, line 94, column b		20% Assumption	\$67,176	\$261,891	\$329,067	
(564) Underground Lines Expenses	\$102,312	FERC Form 1, pages 320-323, line 95, column b	\$0	FERC Form 1, pages 320-323, line 95, column b		20% Assumption	\$20,462	\$0	\$20,462	
(565) Transmission of Electricity by Others	\$11,386,336	FERC Form 1, pages 320-323, line 96, column b	\$75,360,507	FERC Form 1, pages 320-323, line 96, column b		20% Assumption	\$2,277,267	\$15,072,101	\$17,349,369	
(566) Miscellaneous Transmission Expenses	\$11,954,710	FERC Form 1, pages 320-323, line 97, column b	\$2,234,051	FERC Form 1, pages 320-323, line 97, column b		50% Assumption	\$5,977,355	\$1,117,026	\$7,094,381	
(567) Rents	\$2,028,294	FERC Form 1, pages 320-323, line 98, column b	\$30,168	FERC Form 1, pages 320-323, line 98, column b		0% Assumption	\$0	\$0	\$0	
Total	\$44,180,082		\$86,793,466				\$8,969,527	\$16,294,634	\$25,264,161	
Maintenance Transmission Expenses										
Item	Total NEP Value	NEP Source	Total NECO Value	NECO Source	Share Avoidable	Source	Avoidable NEP Value	Avoidable NECO Value	Avoidable Total Value	
(568) Maintenance Supervision and Engineering	\$427,723	FERC Form 1, pages 320-323, line 101, column b	\$75,530	FERC Form 1, pages 320-323, line 101, column b		0% Assumption	\$0	\$0	\$0	
(569) Maintenance of Structures	\$73,815	FERC Form 1, pages 320-323, lines 102-106, column b	\$2,063	FERC Form 1, pages 320-323, lines 102-106, column b		20% Assumption	\$14,763	-\$413	\$14,350	
(570) Maintenance of Station Equipment	\$2,357,608	FERC Form 1, pages 320-323, line 107, column b	\$319,060	FERC Form 1, pages 320-323, line 107, column b		20% Assumption	\$471,522	\$63,812	\$535,334	
(571) Maintenance of Overhead Lines	\$19,306,858	FERC Form 1, pages 320-323, line 108, column b	\$3,501,393	FERC Form 1, pages 320-323, line 108, column b		20% Assumption	\$3,861,372	\$700,279	\$4,561,650	
(572) Maintenance of Underground Lines	\$3,933,307	FERC Form 1, pages 320-323, line 109, column b	\$237,585	FERC Form 1, pages 320-323, line 109, column b		20% Assumption	\$786,661	\$47,517	\$834,178	
(573) Maintenance of Miscellaneous Transmission Plant	\$12,650	FERC Form 1, pages 320-323, line 110, column b	\$1,597	FERC Form 1, pages 320-323, line 110, column b		50% Assumption	\$6,325	\$799	\$7,124	
Total	\$26,111,961		\$4,133,102				\$5,140,643	\$811,994	\$5,952,636	
Total Transmission Expenses										
Item	Total NEP Value	NEP Source	Total NECO Value	NECO Source	Share Avoidable	Source	Avoidable NEP Value	Avoidable NECO Value	Avoidable Total Value	
Total Operation and Maintenance Transmission Expense	\$70,292,043		\$90,926,568				\$14,110,169	\$17,106,628	\$31,216,797	
Operation Distribution Expenses										
Item	Total NECO Value	NECO Source	Share Avoidable	Source	Avoidable NECO Value					
(580) Operation Supervision and Engineering	\$4,809,341	FERC Form 1, pages 320-323, line 134, column b		0% Assumption	\$0					
(581) Load Dispatching	\$1,377,442	FERC Form 1, pages 320-323, line 135, column b		0% Assumption	\$0					
(582) Station Expenses	\$1,153,890	FERC Form 1, pages 320-323, line 136, column b		10% Assumption	\$115,389					
(583) Overhead Line Expenses	\$1,362,803	FERC Form 1, pages 320-323, line 137, column b		20% Assumption	\$272,561					
(584) Underground Line Expenses	\$97,783	FERC Form 1, pages 320-323, line 138, column b		20% Assumption	\$19,557					
(585) Street Lighting and Signal	\$252,647	FERC Form 1, pages 320-323, line 139, column b		0% Assumption	\$0					
(586) Meter Expenses	\$2,512,976	FERC Form 1, pages 320-323, line 140, column b		0% Assumption	\$0					
(587) Customer Installations Expenses	\$175,844	FERC Form 1, pages 320-323, line 141, column b		0% Assumption	\$0					
(588) Miscellaneous Expenses	\$9,213,935	FERC Form 1, pages 320-323, line 142, column b		50% Assumption	\$4,606,968					
(589) Rents	\$163,755	FERC Form 1, pages 320-323, line 143, column b		0% Assumption	\$0					
Total	\$21,110,416				\$5,014,474					
Maintenance Distribution Expenses										
Item	Total NECO Value	NECO Source	Share Avoidable	Source	Avoidable NECO Value					
(590) Maintenance Supervision and Engineering	\$418,026	FERC Form 1, pages 320-323, line 146, column b		0% Assumption	\$0					
(591) Maintenance of Structures	\$76,990	FERC Form 1, pages 320-323, line 147, column b		20% Assumption	\$15,398					
(592) Maintenance of Station Equipment	\$1,297,564	FERC Form 1, pages 320-323, line 148, column b		10% Assumption	\$129,756					
(593) Maintenance of Overhead Lines	\$26,890,750	FERC Form 1, pages 320-323, line 149, column b		20% Assumption	\$5,378,150					
(594) Maintenance of Underground Lines	\$2,016,071	FERC Form 1, pages 320-323, line 150, column b		20% Assumption	\$403,214					
(595) Maintenance of Line Transformers	\$400,888	FERC Form 1, pages 320-323, line 151, column b		20% Assumption	\$80,178					
(596) Maintenance of Street Lighting and Signal	\$561,513	FERC Form 1, pages 320-323, line 152, column b		0% Assumption	\$0					
(597) Maintenance of Meters	\$63,937	FERC Form 1, pages 320-323, line 153, column b		0% Assumption	\$0					
(598) Maintenance of Miscellaneous Distribution Plant	\$784,474	FERC Form 1, pages 320-323, line 154, column b		50% Assumption	\$392,237					
Total	\$32,510,213				\$6,398,933					
Total Distribution Expenses										
Item	Total NECO Value	NECO Source	Share Avoidable	Source	Avoidable NECO Value					
Total Operation and Maintenance Distribution Expense	\$53,620,629				\$11,413,407					

PUC 1-61
Avoided Energy Supply Costs

Request:

Why did non-resource benefits from the proposed 2023 Gas Plan decrease by roughly \$24 million relative to the 2022 Gas Plan?

Response:

Below, the Company provides detailed explanations for the programs that contributed most significantly to the \$24.9 million decrease in non-resource benefits (i.e., non-energy impacts – aka NEIs). These areas contribute to \$24.5 million, or 98%, of the decrease. The remainder of the decrease can generally be attributed to measure count changes between 2022 and 2023.

Large Commercial Retrofit

There is a decrease in non-resource benefits of \$16,550,836 for Large Commercial Retrofit, or 66% of the observed \$24.9 million net reduction. The decrease in non-resource benefits for the Large Commercial Retrofit program can be explained by the changes in granularity and NEI assignments of the following end uses.

- In the 2022 Gas Plan, “Custom: General” was planned as a single measure and was assigned a weighted value for its NEI as a function of its constituent measures. In the 2023 Gas Plan, this measure was expanded to 40 constituent measures, 16 of which were planned. The result of this added granularity led to a different assignment of relevant NEIs. Taken together, these two adjustments resulted in a decrease in non-resource benefits of \$6,991,891.
- Envelope-related measures for this program were not planned in the 2023 Gas Plan which resulted in a decrease in non-resource benefits of \$6,383,603.
- In the 2022 Gas Plan, HVAC-related measures were represented by a single measure, “Controls.” In the 2023 Gas Plan, this measure was replaced with a list of nine HVAC-related measures, four of which were planned for 2023. The result of this added granularity led to a different assignment of relevant NEIs. Taken together, these two adjustments resulted in a decrease in non-resource benefits of \$3,090,250.

Income Eligible Multifamily

There is a decrease in non-resource benefits of \$6,418,819 for Income Eligible Multifamily, or 26% of the observed \$24.9 million net reduction. The decrease in non-resource benefits for the Income Eligible Multifamily program can be explained by differences in planned quantities.

- Quantities for the measure “Insulation” decreased from 1,000 to 650 which directly decreased non-resource benefits by \$2,898,355.

PUC 1-61, Page 2
Avoided Energy Supply Costs

- Quantities for the measure “Air Sealing” decreased from 420 to 50 which directly decreased non-resource benefits by \$1,901,330.

Single Family – Income Eligible Services

There is a decrease in non-resource benefits of \$2,018,960 for Single Family – Income Eligible Services, or 8% of the observed \$24.9 million net reduction. The decrease in non-resource benefits for the Single Family – Income Eligible Services program can be explained by differences in planned quantities.

- Quantities for the measure “Weatherization” decreased from 704 to 500 which directly decreased non-resource benefits by \$2,065,014.

Large Commercial New Construction

There is a decrease in non-resource benefits of \$1,035,270 for Large Commercial New Construction, or 4% of the observed \$24.9 million net reduction. The decrease in non-resource benefits for the Large Commercial New Construction program can be explained by difference in planned quantities.

- Quantities for the Food Service-related measures decreased from 32,003 to 26,738. This resulted in a decrease in non-resource benefits of \$1,174,882.

PUC 1-62
Avoided Energy Supply Costs

Request:

Please review data requests PUC 1-122 and PUC 5-10 that the Commission asked National Grid in Docket No. 5189. Does Rhode Island Energy believe the electric and gas bill impact models included in the proposed 2023 Plan are accurately reflecting intra-class cost allocation and ratemaking treatment of avoided infrastructure costs?

Response:

The Company believes that the electric and gas bill impact models provide an accurate representation of the electric and gas bill impacts resulting from the 2023 Plan's projected expenses.

However, the Company cannot answer this question regarding the accuracy of intra-class cost allocation and ratemaking treatment of avoided infrastructure costs with certainty for a few reasons. First, the rate and bill impact models used are simplified models that approximate rate and bill impacts. The simplifications are reflected in the introduction to the rate and bill impact analysis (Bates page 324), which states, "in the electric and gas bill impact analysis, rate changes are modeled by **mapping** energy efficiency programs to groupings of customers **approximating** rate classes and **estimating** changes in both delivery service rates and supply costs." (emphases added) Second, the models use current rates and avoided per unit infrastructure costs as inputs, as described in the responses to PUC 1-122 and PUC 5-10 from Docket No. 5189, but are not intended to align with actual ratemaking treatment and intra-class allocation of avoided infrastructure costs. Third, there are no avoided gas infrastructure costs to include in the gas bill impacts model as there are on the electric side. Finally, as noted in the response to PUC 1-122 from Docket No. 5189, "there is no allocation of the dollar value of avoided infrastructure investments" to specific rate classes in the models.

PUC 1-63
Oil and Propane savings

Request:

Referencing Table E-6A of the 2022 and 2023 Electric Plans, it appears that oil savings increased roughly 20% between 2022 and 2023 (both annual and lifetime). What are the specific measures proposed for 2023 that contribute to this increase? Provide a table showing their planned quantities for 2022 vs. 2023 and their respective oil savings for 2022 vs. 2023 (both annual and lifetime).

Response:

See the attached Excel workbook titled Attachment PUC 1-63.

In addition to an increase in the planned quantities of some continued measures from the 2022 Plan, main drivers of the increase in oil savings can be attributed to the following:

- The inclusion of "RR_COOLINGTIER1_ELEC" and "RR_DHW TIER1_ELEC" in the 2023 Plan.
- See below for further detail on error and correction.
- The inclusion of "Wi-Fi Tstat-cool and heat oil/propane" in the 2023 Plan
- The inclusion of "Heat Pumps – Oil" in the 2023 Plan

The Company identified an error in the planned quantities and component measures for Renovation Rehab-type measures in Residential New Construction while producing the table required for this response. To illustrate this correction within the response, two worksheets are included in Attachment PUC 1-63.

1. **Worksheet titled "As Filed on 9.30.2022"**: This worksheet contains a table response which reflects the planned measures and oil savings as they are found in the 2023 Electric Plan filed with the Commission on September 30th, 2022.
2. **Worksheet titled "Correction to Renovation Rehab"**: This worksheet contains a table response with "RR_COOLINGTIER1_ELEC" and "RR_DHW TIER1_ELEC" removed from the 2023 Electric Plan filed with the Commission on September 30th, 2022.

These two measures were incorrectly planned and were therefore duplicating savings for Tier 1 Renovation Rehab measures. Correcting these quantities does not change the prevailing observation on which this question is based. The net annual and net lifetime oil savings still remain roughly 20% higher than in the 2022 Plan.

PUC 1-63, Page 2
Oil and Propane savings

The BCRs of all impacted programs remain above 1.00. The broader correction to Renovation Rehab-type measures will be part of the Company's submission of an updated Attachment 5 and electric BCR model at a later date.

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-33-EE
In Re: 2023 Annual Energy Efficiency Plan
Responses to the Commission's First Set of Data Requests
Issued on October 17, 2022

Attachment PUC 1-63
Oil and Propane savings

The Company is providing an Excel version of Attachment PUC 1-63

PUC 1-64
Oil and Propane savings

Request:

Referencing Table E-6A of the 2022 and 2023 Electric Plans, it appears that propane savings increased more than 200% between 2022 and 2023 (both annual and lifetime). What are the specific measures proposed for 2023 that contribute to this increase? Provide a table showing their planned quantities for 2022 vs. 2023 and their respective propane savings for 2022 vs. 2023 (both annual and lifetime).

Response:

Please see the associated workbook titled "EE 2023 PUC 1-64_1.xlsx" attached as Attachment DIV 1-64.

In addition to an increase in the planned quantities of some continued measures from the 2022 Plan, main drivers of the increase in propane savings can be attributed to the following:

- The inclusion of "RR_COOLINGTIER2_ELEC" and "RR_DHWTIER2_ELEC" in the 2023 Plan.
- Please see below for further detail on error and correction.
- The inclusion of "Wx Other" in the 2023 Plan under Energywise and Single Family – Income Eligible Services.
- The number of actual measures for propane-heated homes varies from year to year because propane is the heating fuel source for a small number of our customers. Because of this, in the 2022 Plan, the Company planned a smaller number of propane measures in the BCR model. For 2023, however, Rhode Island Energy planned for more – chief among them being weatherizations of propane-heated homes. Rhode Island Energy developed an estimate of 167 weatherizations of propane-heated homes under Energywise and 50 weatherizations of propane-heated homes under Single Family - Income Eligible Services, based on recent historic data, and entered those in "Wx Other" for these two programs.

The Company identified an error in the planned quantities and component measures for Renovation Rehab-type measures in Residential New Construction while producing the table required for this response. To illustrate this correction within the response, two worksheets were created in in Attachment DIV 1-64:

PUC 1-64, Page 2
Oil and Propane savings

1. Worksheet titled "As Filed on 9.30.2022": This worksheet contains a table response that reflects the planned measures and propane savings as they are found in the 2023 Electric Plan filed with the Commission on September 30, 2022.
2. Worksheet titled "Correction to Renovation Rehab": This worksheet contains a table response with "RR_COOLINGTIER2_ELEC" and "RR_DHWTIER2_ELEC" removed from the 2023 Electric Plan filed with the Commission on September 30, 2022.

These two measures were planned incorrectly and therefore were duplicating savings for Tier 1 Renovation Rehab measures. Correcting these quantities does not change the prevailing observation on which this question is based. The net annual and net lifetime propane savings still remain over 100% higher than in the 2022 Plan.

The BCRs of all impacted programs remain above 1.00 when this correction is made. The broader correction to Renovation Rehab-type measures will be part of the Company's submission of an updated Attachment 5 and electric BCR model at a later date.

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 22-33-EE
In Re: 2023 Annual Energy Efficiency Plan
Responses to the Commission's First Set of Data Requests
Issued on October 17, 2022

Attachment PUC 1-64
Oil and Propane savings

The Company is providing an Excel version of Attachment PUC 1-64

PUC 1-65
Pilots, Demonstrations, and Assessments

Request:

Regarding the C&I Innovative Electric demonstration listed on Bates page 348, please explain the following:

- a. Is this demonstration different from the demonstration that the Company requested and received approval for in 2022 (Docket No. 5189)?
- b. On Bates page 479 of the 2022 Plan (Docket No. 5189), the Company listed the duration of the C&I Innovative Electric demonstration as 2022. Please explain why the Company is proposing to continue the demonstration into 2023. In your response, describe the incremental learnings the Company plans to achieve in 2023.

Response:

- a. This is not a specific demonstration. The Innovation Pipeline budget is intended to fund emerging ideas that arise during the course of the program year. The Innovation Pipeline is described in detail on Bates page 342.
- b. As described the Company's response to part a., above, this is not a specific demonstration but rather a budget to enable the Company to fund emerging ideas that arise during the course of the program year that present potential for program innovation.

PUC 1-66
Pilots, Demonstrations, and Assessments

Request:

Regarding the C&I Rightsizing RTU assessment listed on Bates page 348, please explain the following:

- a. Is this assessment different from the assessment that the Company requested and received approval for in 2022 (Docket No. 5189)?
- b. On Bates page 479 of the 2022 Plan (Docket No. 5189), the Company listed the duration of the Rightsizing RTU assessment as 2022. Please explain why the Company is proposing to continue the assessment into 2023. In your response, describe the incremental learnings the Company plans to achieve in 2023.

Response:

- a. No, this is the same demonstration that was approved for 2022 in Docket No. 5189.
- b. The study kicked off in September 2022 and is in its early stages. The Company is sponsoring this Assessment in collaboration with two Program Administrators ("PAs") in Massachusetts and waited until these PAs were ready to begin work on the Assessment, which contributed to project delays.

As described on Bates page 356, the objectives of this Assessment are to "establish a protocol for when and how [rooftop unit] rightsizing should be considered" and to "make recommendations on whether rightsizing should be considered within the prescriptive HVAC offerings or only on a custom basis." The Company does not believe that the learnings to date are sufficient to achieve these objectives, and it is likely the study will continue into 2023. Because the timeline of this Assessment will continue through 2023, the Company does anticipate that incremental learnings will be achieved in 2023.

PUC 1-67
Pilots, Demonstrations, and Assessments

Request:

Regarding the Gas Demand Response Pilot proposed for 2023, please explain the following:

- a. Is this pilot different from the pilot that the Company requested and received approval for in 2022 (Docket No. 5189)?
- b. On Bates page 480 of the 2022 Plan (Docket No. 5189), the Company listed the duration of the Gas Demand Response Pilot as 2022. Please explain why the Company is proposing to continue the pilot into 2023. In your response, describe the incremental learnings the Company plans to achieve in 2023.

Response:

- a. No, this is the same pilot as the 2022 pilot.
- b. The current pilot has been limited to customers on Aquidneck Island. The Company would like to expand the pilot statewide to see where other customers are interested in participating to alleviate potential gas supply constraints throughout the Company's service territory.

The Company would also like to learn if there are other customer types and response methods, beyond the current participants, that are willing and able to participate in the program and provide reliable response. The two existing customers in the pilot switched to alternative fuel sources to reduce natural gas usage. The continuation of the pilot is to see if there are customers that can curtail gas usage by reducing or shifting usage without switching to other fuels.

PUC 1-68
Pilots, Demonstrations, and Assessments

Request:

Regarding the Gas C&I Rightsizing RTUs assessment proposed for 2023, please explain the following:

- a. Is this assessment different from the assessment that the Company requested and received approval for in 2022 (Docket No. 5189)?
- b. On Bates page 480 of the 2022 Plan (Docket No. 5189), the Company listed the duration of the Gas C&I Rightsizing RTUs assessment as 2022. Please explain why the Company is proposing to continue the assessment into 2023. In your response, describe the incremental learnings the Company plans to achieve in 2023.

Response:

- a. No, this is the same demonstration that was approved for 2022 in Docket No. 5189.
- b. The study kicked off in September 2022 and is in its early stages. The Company is sponsoring this Assessment in collaboration with two Program Administrators ("PAs") in Massachusetts and waited until these PAs were ready to begin work on the Assessment, which contributed to project delays.

As described on Bates page 356, the objectives of this Assessment are to "establish a protocol for when and how [rooftop unit] rightsizing should be considered" and to "make recommendations on whether rightsizing should be considered within the prescriptive HVAC offerings or only on a custom basis." The Company does not believe that the learnings to date are sufficient to achieve these objectives, and it is likely the study will continue into 2023. Because the timeline of this Assessment will continue through 2023, the Company does anticipate that incremental learnings will be achieved in 2023.

PUC 1-69
Pilots, Demonstrations, and Assessments

Request:

Regarding the Residential Innovation Electric demonstration listed on Bates page 349, please explain the following:

- a. Is this demonstration different from the demonstration that the Company requested and received approval for in 2022 (Docket No. 5189)?
- b. On Bates page 481 of the 2022 Plan (Docket No. 5189), the Company listed the duration of the Residential Innovation Electric demonstration as 2022. Please explain why the Company is proposing to continue the demonstration into 2023. In your response, describe the incremental learnings the Company plans to achieve in 2023.

Response:

- a. This is not a specific demonstration. The Innovation Pipeline budget is intended to fund emerging ideas that arise during the course of the program year. The Innovation Pipeline is described in detail on Bates pages 342-343 of the Plan.
- b. As described in the Company's response to part a., above, this is not a specific demonstration but rather a budget to enable the Company to fund emerging ideas that arise during the course of the program year that present potential for program innovation.

PUC 1-70
Pilots, Demonstrations, and Assessments

Request:

Regarding the Residential Innovation Gas demonstration listed on Bates page 349, please explain the following:

- a. Is this demonstration different from the demonstration that the Company requested and received approval for in 2022 (Docket No. 5189)?
- b. On Bates page 481 of the 2022 Plan (Docket No. 5189), the Company listed the duration of the Residential Innovation Gas demonstration as 2022. Please explain why the Company is proposing to continue the demonstration into 2023. In your response, describe the incremental learnings the Company plans to achieve in 2023.

Response:

- a. This is not a specific demonstration. The Innovation Pipeline budget is intended to fund emerging ideas that arise during the course of the program year. The Innovation Pipeline is described in detail on Bates pages 342-343.
- b. As described in the Company's response to part a., above, this is not a specific demonstration but rather a budget to enable the Company to fund emerging ideas that arise during the course of the program year that present potential for program innovation.

PUC 1-71
Pilots, Demonstrations, and Assessments

Request:

On Bates page 349, the Company proposes two Residential demonstrations for 2023 (Innovation Electric and Innovation Gas). The combined budget for the two demonstrations appears to be \$125,000. On Bates page 358, under the “Residential Pilots, Demonstrations, and Assessments” header, the Company writes “the Company does not propose any new or continued Residential Pilots for 2023.” Please reconcile these two statements and confirm whether the Company is proposing any new or continued Residential Pilots, Demonstrations, and Assessments in 2023.

Response:

The Innovation Pipeline line items for Electric and Gas are not specific demonstrations. The Innovation Pipeline budget is intended to fund emerging ideas that arise during the program year. The Innovation Pipeline is described in detail on Bates pages 342-343.

PUC 1-72
Other

Request:

On page 18 of the 2022 Second Quarterly Report in Docket No. 5189, the Company writes “In Q2, program staff connected with the design team for a large iconic downtown Providence building schedule for a major renovated,” and later confirmed it to be the Superman Building. Does any of the proposed 2023 Plan budget include incentives for the Superman Building renovation? If yes, please specify the measures and associated budgets.

Response:

No, the Company has not allocated incentive funds in the 2023 Plan budget for the Superman Building renovation because this project is not expected to be completed in 2023.

PUC 1-73
Other

Request:

Please update Record Request 8 from Docket No. 5189 for the proposed 2023 Electric Plan.

Response:

Please see the table below for the requested update to Record Request 8 from Docket No. 5189.

	Electric	
Measure Life	Total Net Lifetime MWh	% of Portfolio
1 year	27,390	4%
2 to 5 years	40,881	6%
6 to 10 years	272,881	40%
Greater than 10 years	344,119	50%
Total	685,270	

PUC 1-74
Other

Request:

Please update Record Request 8 from Docket No. 5189 for the proposed 2023 Gas Plan.

Response:

Please see the table below for the requested update to Record Request 8 from Docket No. 5189.

	Gas	
Measure Life	Total Net Lifetime MMBTU	% of Portfolio
1 year	91,640	3%
2 to 5 years	144,826	4%
6 to 10 years	104,946	3%
Greater than 10 years	3,196,422	90%
Total	3,537,835	

PUC 1-75
Other

Request:

In its presentation to the EERMC on the Final Draft of the 2023 Energy Efficiency Plan (dated September 29, 2022), the EERMC's Consultant Team raised concerns regarding the Company's apparent increase in measure life assumptions for several residential gas efficiency measures, which increased final residential gas savings by 13% relative to 2nd draft estimates. See slide 17: http://rieermc.ri.gov/wp-content/uploads/2022/09/c-team-2023-plan-second-draft-updates-presentation_2022.09.29.pdf. Please clarify which specific residential gas measures the Company increased measure life estimates for going into the final draft of the Plan, confirm the increase in savings (annual and lifetime) that resulted from the measure life increases, and explain why the Company increased the measure life assumptions between its second and final Plan drafts.

Response:

The EERMC Consultant Team presentation on September 29, 2022, identified four residential gas measures for which the measure lives changed between the Second draft and the Final Draft. These four measures are:

1. Combo condensing 95
2. Furnace (forced hot air) w/ ECM \geq 95% AFUE
3. Furnace 97% AFUE with ECM
4. Weatherization

Of these measures, the measure lives for the weatherization and integrated water heater/condensing boiler 95 increased and the measure lives for the furnace (95% AFUE) and furnace (97% AFUE) decreased.

The changes in measure lives between the Second Draft and Final Plan were the result of the completion of the Company's ongoing review and updating of the assumptions underlying the Plan, including measure lives. The review focused on updating assumptions embedded in the Technical Reference Manual ("TRM"), incorporating latest relevant evaluation results and improving the alignment of the TRM and the BC model. Although the changes in measure lives identified by the EERMC were made between the Second Draft and Final Plan, other changes were made earlier in the planning process.

PUC 1-75, Page 2
Other

The table below summarizes the cumulative impacts of the measure life changes for the four measures and confirms the Consultant’s team calculation of the change in lifetime savings, with an adjustment for rounding.

Table 1: Residential Gas Measures Measure Life Changes Effect on Savings

Measure	Measure Life			Net Annual Savings	Total Net Lifetime Savings (MMBTU)		
	Final	2nd Draft	Difference		Final	2nd draft	Difference
COMBO CONDENSING 95	23	17	6	11,605	266,920	197,289	69,631
Furnace (forced hot air) w/ ECM >=95%AFUE	17	20	-3	1,946	33,076	38,913	(5,837)
Furnace 97% AFUE with ECM	17	20	-3	464	7,886	9,278	(1,392)
WEATHERIZATION	25	20	5	17,472	436,800	349,440	87,360
Total Difference							149,763

The following provides detail of the residential gas measure lives that were adjusted from the 2022 Plan and 2023 Plan.

Measure Name: Weatherization

Program: Energy Wise Single Family

Measure Life Update: 25

Source: Massachusetts Common Assumption

Reason for update: The weatherization measure life update from 20 to 25 years from the Second Draft to the Final Draft was from further review of the measure lives of air sealing and insulation measures that comprise the weatherization measure, based on Massachusetts Common Assumptions. Insulation has a 25-year measure life, based on the 2012 Cadmus Group Report - Massachusetts 2011 Residential Retrofit Multifamily Program Impact Analysis. In the 2023 Plan, the air sealing measure life was updated from 15 to 20 years based on the recommendation from a 2018 Commonwealth Edison (Illinois) Effective Useful Life Research Report. This report recommends updating Air Sealing – Weatherization from 15 to 20 years based on weatherization research, and, upon review; this was judged to be a more relevant source than the Company’s prior source, which dated back to 2007. After further review, it was decided to use a

PUC 1-75, Page 3

Other

measure life of 25 years for weatherization because of the update of air sealing to 20 years and because insulation is the predominant component in weatherization.

Measure Name: Furnace (Forced Hot Air) \geq 97% AFUE

Program: A02b Energy Star Heating System

Measure Life Update: 17

Source: 2021 Massachusetts Comprehensive TRM

Reason for update: The 2021 Massachusetts Comprehensive TRM Review recommends updating the measure life to 17 years, and this also aligns with other measure life updates for boilers and water heaters. The change decreased the measure life from 20 to 17 based on the review of the measure life and its source.

Measure Name: Furnace (Forced Hot Air) 95% AFUE w/ECM

Program: A02b EnergyStar Heating System

Measure Life Update: 17

Source: 2021 Massachusetts Comprehensive TRM

Reason for update: The 2021 Massachusetts Comprehensive TRM Review recommends updating to 17 years, and this also aligns with other measure life updates for boilers and water heaters. The change decreased the measure life from 20 to 17 based on the review of the measure life and its source.

Measure Name: Integrated Water Heater/Condensing Boiler 95

Program: A02b EnergyStar Heating System

Source: 2021 Massachusetts Comprehensive TRM

Measure Life Update: 23

Reason for update: The integrated water heater/condensing boiler 95 measure life was updated to 23 years to remain consistent with the electric measure life update to 23 years that was made to the Heating System Retrofit Boiler measure life based on the recommendation in the 2021 Massachusetts Comprehensive TRM Review. These measures had consistent measure lives in the 2022 Plan.

PUC 1-76
Other

Request:

Please reference the following CBS News article titled “Stoneham Police Officer, Brother Accused of Fraudulently Receiving \$36 Million in Mass Save Funds” dated April 29, 2022: <https://www.cbsnews.com/boston/news/stoneham-police-officer-brother-joseph-christopher-ponzo-fraud-36-million-mass-save-funds/>. Have any of the contractors named in the referenced lawsuit or their associated companies performed work for the Rhode Island Energy Efficiency program?

Response:

No, the referenced contractors and their associated companies perform weatherization services for the Mass Save companies. Rhode Island uses a different lead vendor for weatherization services.

PUC 1-77
Other

Request:

Bates page 11 of the filing contains the following language "...the Acquisition resulted in lower short-term staffing levels in the area of energy efficiency administration. The Company is working to restaff these positions while seeking to identify opportunities for administrative efficiency that would reduce administrative costs for customers without interfering with quality of service."

- a. Please provide the FTE count, including position titles, assigned or allocated to the Energy Efficiency Program.
- b. Please provide the salary and overhead cost associated with the FTEs assigned or allocated to the Energy Efficiency Program.

For a. & b. above please provide the information for each of the following points in time:

- i. Pre-acquisition.
 - ii. Current levels (For this point in time, please identify which positions are filled and which are vacant).
 - iii. Future target levels.
- c. Please provide organizational charts for the EE program including employees assigned or allocated to the program for the period prior to the acquisition and for the present.

Response:

- a. Please reference Attachment DIV 1-77-1.
- b. Please reference Attachment DIV 1-77-1.
- c. Please reference Attachment DIV 1-77-2 for an organizational chart for the EE program prior to the acquisition. Please reference DIV 1-77-3 for the current organizational chart.

		FTE TOTALS			2022 Org Structure - Current & Future																														
		↓ ↓	↓ ↓	↓ ↓	EE Policy & Strategy		FTEs		FTEs		Sales & EE Implementation		FTEs		FTEs		EE, EV, Cust Programs		FTEs		FTEs		Cust Connections & Programs		FTEs		FTEs		Low/Mod Income		FTEs		FTEs		
2021 Org Structure	2021	2022	2023		Now	Future	Now	Future	Now	Future	Now	Future	Now	Future	Now	Future	Now	Future	Now	Future	Now	Future	Now	Future	Now	Future	Now	Future	Now	Future	Now	Future			
	44.16	29.95	40.82		8.01	12.74			10.13	12.00			6.12	7.33			0.88	0.88			4.81	7.87													
CUSTOMER SALES & SOLUTIONS																																			
Customer Solutions	1.65	3.74	3.83		1.00	1.00			0.91	1.00			0.83	0.83															1.00	1.00					
Mgrs: Deliv, Impl, Sales, Tech	1.16																																		
Cust Sales Mgr: 1, 2, 3, 4, 5	0.48			EE Policy & Strategy:	1.00	1.00	Sales & EE		0.91	1.00	Implement: Spvr		EE, EV, Cust		0.83	0.83	Programs: Spvr											Low/Mod Income:	1.00	1.00					
				Mgr																								Spvr							
C&I Portfolio Delivery	2.99	2.92	4.00												2.92	4.00																			
Business Anlst: 1, 2	0.85												Business Anlst		0.97	1.00																			
C&I Program Mgr-1	0.82												C&I Prog Mgr-1		0.95	1.00																			
C&I Program Mgr-2	0.22												C&I Prog Mgr-2		1.00	1.00																			
DR Program Mgr	0.30												Contractor		0.00	1.00																			
EV Program Mgr-1	0.41																																		
EV Program Mgr-2	0.38																																		
Resi Portfolio Delivery	1.99	2.81	4.87																									2.81	4.87						
Resi Program Mgr: 1, 2	0.73																											Resi Prog Mgr-1	0.94	1.00					
Resi Program Mgr: 3, 4	0.75																											Resi Prog Mgr-2	1.00	1.00					
Resi Program Mgr: 5	0.34																											Resi Prog Mgr-3	0.00	1.00					
Resi Program Mgr: 6	0.18																											Consumer Advo	0.87	0.87					
Resi Program Mgr: 7	0.02																											Contractor	0.00	1.00					
Sales & Strategic Accounts	5.51	5.31	6.00						5.31	6.00																									
Commercial Sales Rep-1	1.00										C&I Sales Rep-1	0.83	1.00																						
Commercial Sales Rep-2	0.96										C&I Sales Rep-2	1.00	1.00																						
Commercial Sales Rep-3	0.96										C&I Sales Rep-3	0.90	1.00																						
Commercial Sales Rep: 4, 5	1.33										C&I Sales Rep-4	0.91	1.00																						
Strategic Account Rep-1	0.54										Key Acct Mgr	0.68	1.00																						
Strategic Account Rep: 2, 3, 4	0.73										Strategic Partners	1.00	1.00																						
Channel Sales	2.14	1.00	1.00						1.00	1.00																									
Channel Sales Rep-1	1.00										C&I Product Lead	1.00	1.00																						
Chan Sales Rep: 2, 3, 4, 5, 6, 7	1.14																																		
C&I Product Implementation	0.32	0.37	0.50												0.37	0.50																			
Project Mgr: 1, 2, 3	0.32												EV/DR Prog Mgr		0.37	0.50																			
SOLUTIONS OPERATION SUPPORT																																			
Technical Sales Support	4.53	2.91	4.00						2.91	4.00																									
Tech Sales Support Anlst-1	1.00										Tech Engineer-1	1.00	1.00																						
Tech Sales Support Anlst-2	1.00										Tech Engineer-2	1.00	1.00																						
Tech Sales Support Anlst-3	0.92										Tech Engineer-3	0.91	1.00																						
Tech Sales Support Anlst-4	0.58										Tech Engineer-4	0.00	1.00																						
Tech Sales Support Anlst-5	0.35																																		
Tech Sale Sup Anls: 6, 7, 8, 9, 10	0.67																																		
Support Processing	4.13	2.01	2.00												2.01	2.00																			
Support Processing: Mgr	0.36																																		
Supp Process Anlst: 1, 2, 3, 4	2.09																																		
Supp Process Anlst: 5, 6, 7, 8, 9	1.47																																		
InDemand Supp Anlst: 1, 2, 3, 4	0.22																																		

			2022 Org Structure - Current & Future											
FTE TOTALS			EE Policy & Strategy		Sales & EE Implementation		EE, EV, Cust Programs		Cust Connections & Programs		Low/Mod Income			
2021 Org Structure	2021	2022	2023	FTEs Now	FTEs Future	FTEs Now	FTEs Future	FTEs Now	FTEs Future	FTEs Now	FTEs Future	FTEs Now	FTEs Future	
↓ ↓ ↓ ↓ ↓ ↓	44.16	29.95	40.82	8.01	12.74	10.13	12.00	6.12	7.33	0.88	0.88	4.81	7.87	
CUSTOMER PRODUCT GROWTH														
Brand & Marketing	2.41	1.00	2.00									1.00	2.00	
C&I Marketing: Mgr	0.03													
C&I Marketing Anlst: 1, 2, 3	0.50													
Marketing Anlst: 1, 2, 3, 4, 5, 6	1.08													
Resi Marketing: Mgr	0.00													
Resi Marketing Anlst: 1, 2, 3	0.58											Marketing Anlst	1.00	1.00
Resi Marketing Anlst: 4, 5, 6	0.22											Contractor	0.00	1.00
Customer Growth	1.14	0.83	0.83							0.83	0.83			
Prog Mgmt Anlst: 1, 2, 3, 4, 5	0.33													
LMI Cust Princ Strategist	0.01													
Cust Energy Management: Dir	0.29													
Cust Sales & Solutions: Dir	0.51									Cust Connects & Progs: Sr Mgr	0.83	0.83		
Customer & Market Intelligence	2.58	0.81	1.00	0.81	1.00									
EM&V: Mgr	0.20													
EM&V Anlst: 1	1.00			Resi Prod Owner-1	0.81	1.00								
EM&V Anlst: 2, 3, 4, 5, 6, 7, 8	1.38													
Commercial Portfolio Performance	2.15	2.00	2.00	2.00	2.00									
Product Reporting: Mgr	0.18													
Prod Reporting Anlst: 1, 2, 3, 4	1.62			Reporting Anlst-1	1.00	1.00								
Prod Reporting Anlst: 5, 6, 7	0.36			Reporting Anlst-2	1.00	1.00								
Customer Energy Management	11.03	3.61	7.00	3.61	7.00									
CEM Growth Development: Mgr	0.51													
C&I Product Owners: 1	1.00			C&I Prod Owner-1	0.92	1.00								
C&I Product Owners: 2	1.00			C&I Prod Owner-2	0.31	1.00								
C&I Product Owners: 3	0.24			C&I Prod Owner-3	1.00	1.00								
Resi Product Owners: 1, 2	2.00			Resi Prod Owner-2	0.31	1.00								
Strat & Policy Anlst: 1, 2, 3, 4, 5	3.18			Strat Policy Anlst-1	0.75	1.00								
Strat & Policy Anlst: 6, 7, 8, 9	2.19			Strat Policy Anlst-2	0.32	1.00								
CEM Product Category: Mgr	0.91			Contractor	0.00	1.00								
Other	1.58	0.63	1.79	0.59	1.74					0.04	0.05			
Procure Rep: 1, 2, 3, 4, 5, 6, 7	1.07			Procure Rep	0.24	0.24								
ISO Product Owner-1	0.43			ISO Prod Owner	0.35	0.00								
ISO Product Owner-2	0.03			Forward Capacity	0.00	1.00								
Accounting Anlst	0.04			Accounting Anlst	0.00	0.50								
Executive	0.00									Customer Services: Sr Dir	0.04	0.05		

NOTE: Positions in green text are currently vacant

PUC 1-77

RIPUC Docket No. 22-33-EE

a. Please provide the FTE count, including position titles, assigned or allocated to the Energy Efficiency Program

Pre-Acquisition FTE Count = 44.16

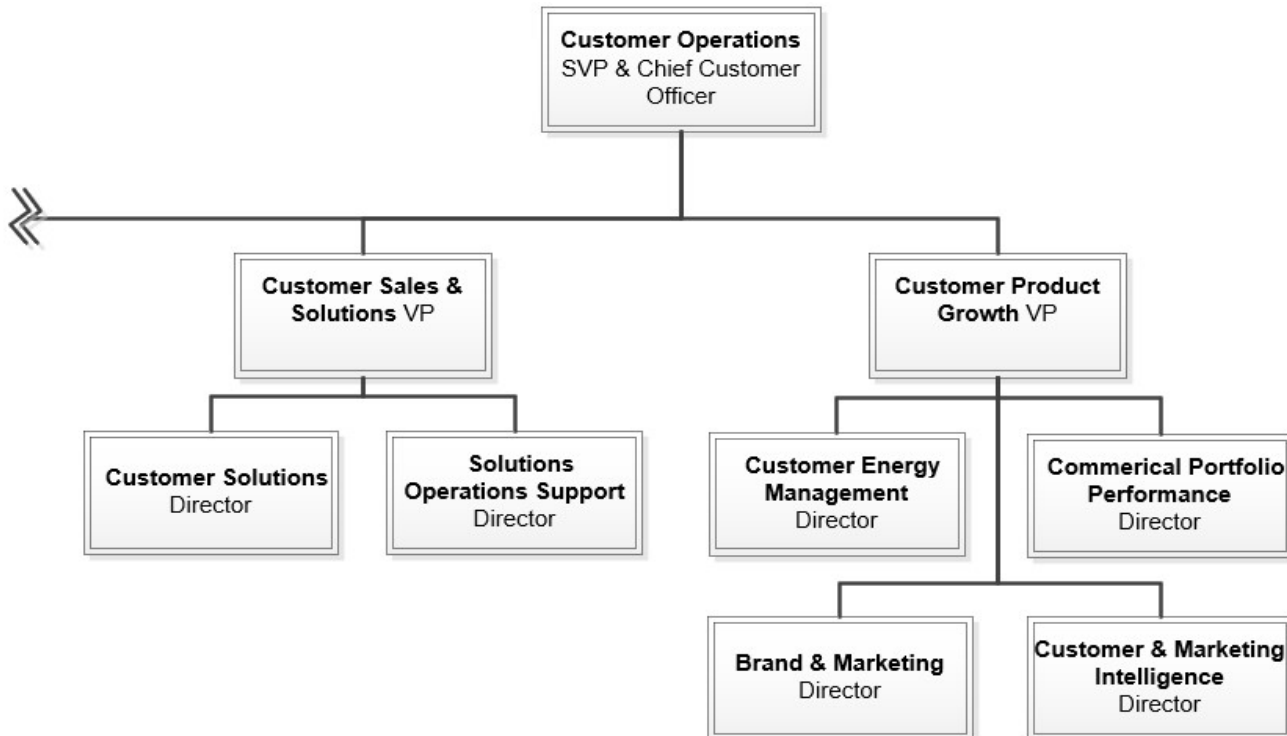
Please see Attachment DIV 1-77-1 for the Company's response to PUC 1-77(a. & b.), i. Pre-acquisition, ii. Current levels, iii. Future target levels

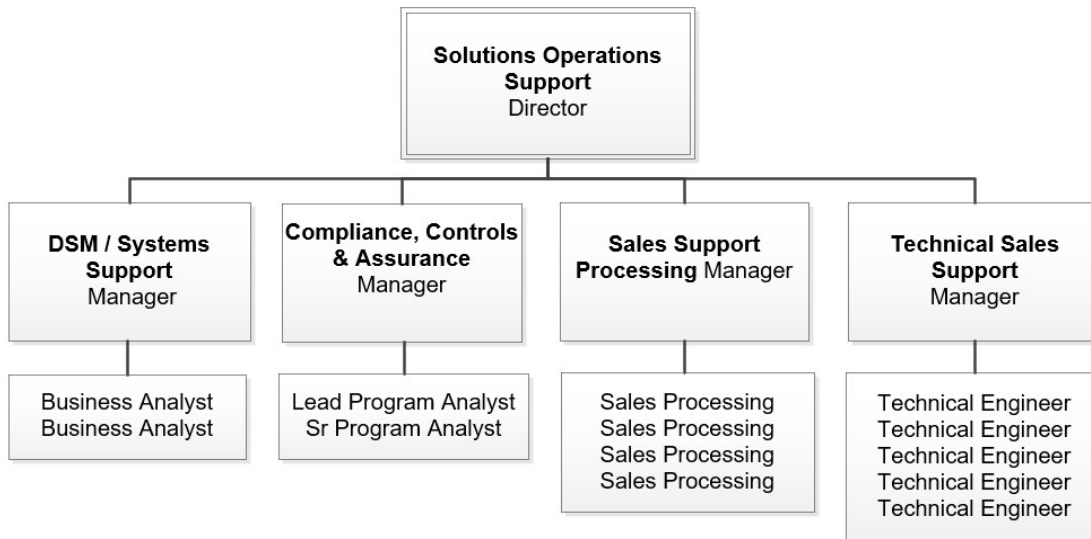
b. Please provide the salary and overhead cost associated with the FTEs assigned or allocated to the Energy Efficiency Program.

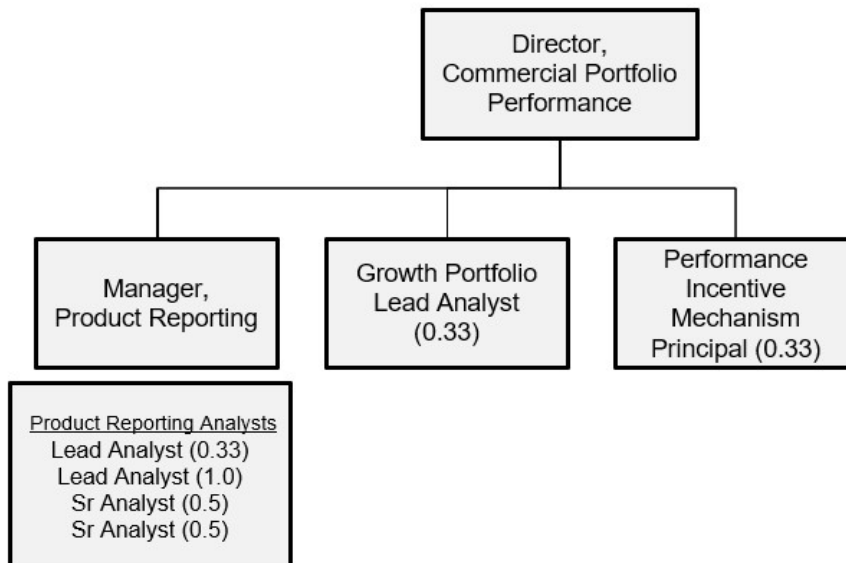
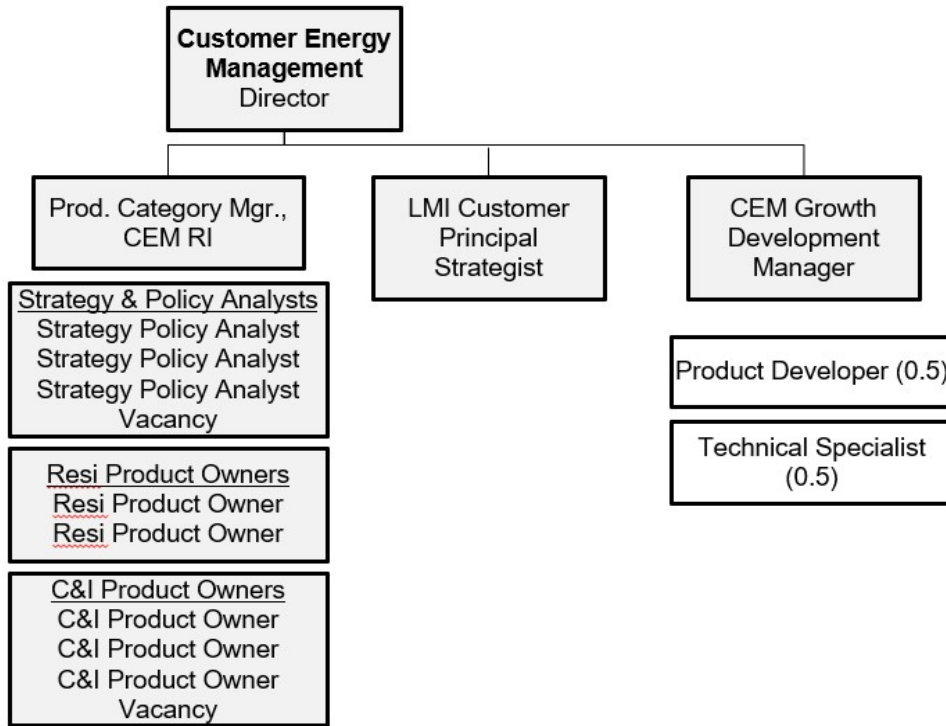
Pre-Acquisition Salary Cost = \$4,662,853
Overhead = \$578,107

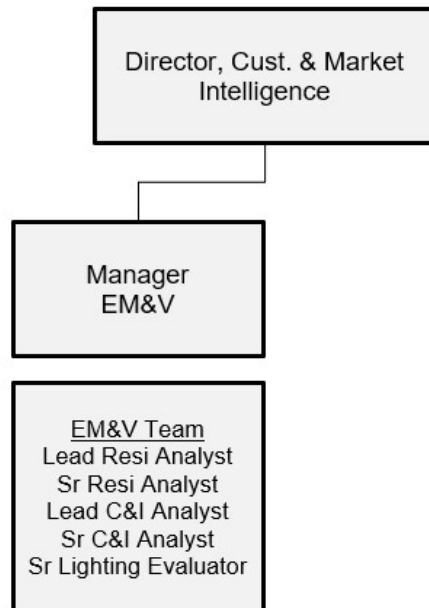
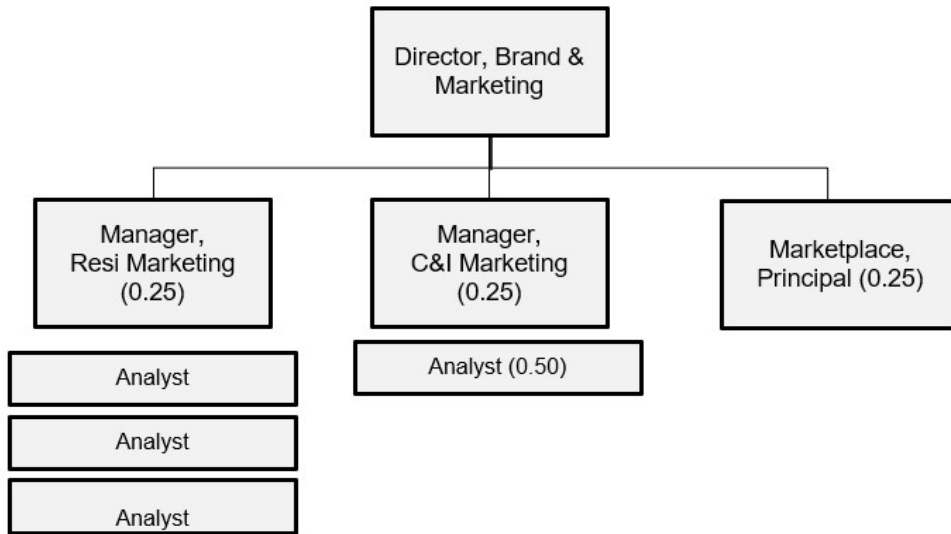
c. Please provide organizational charts for the EE program including employees assigned or allocated to the program for the period prior to the acquisition and for the present.

Pre-Acquisition Organizational Charts









PUC 1-77

RIPUC Docket No. 22-33-EE

a. Please provide the FTE count, including position titles, assigned or allocated to the Energy Efficiency Program

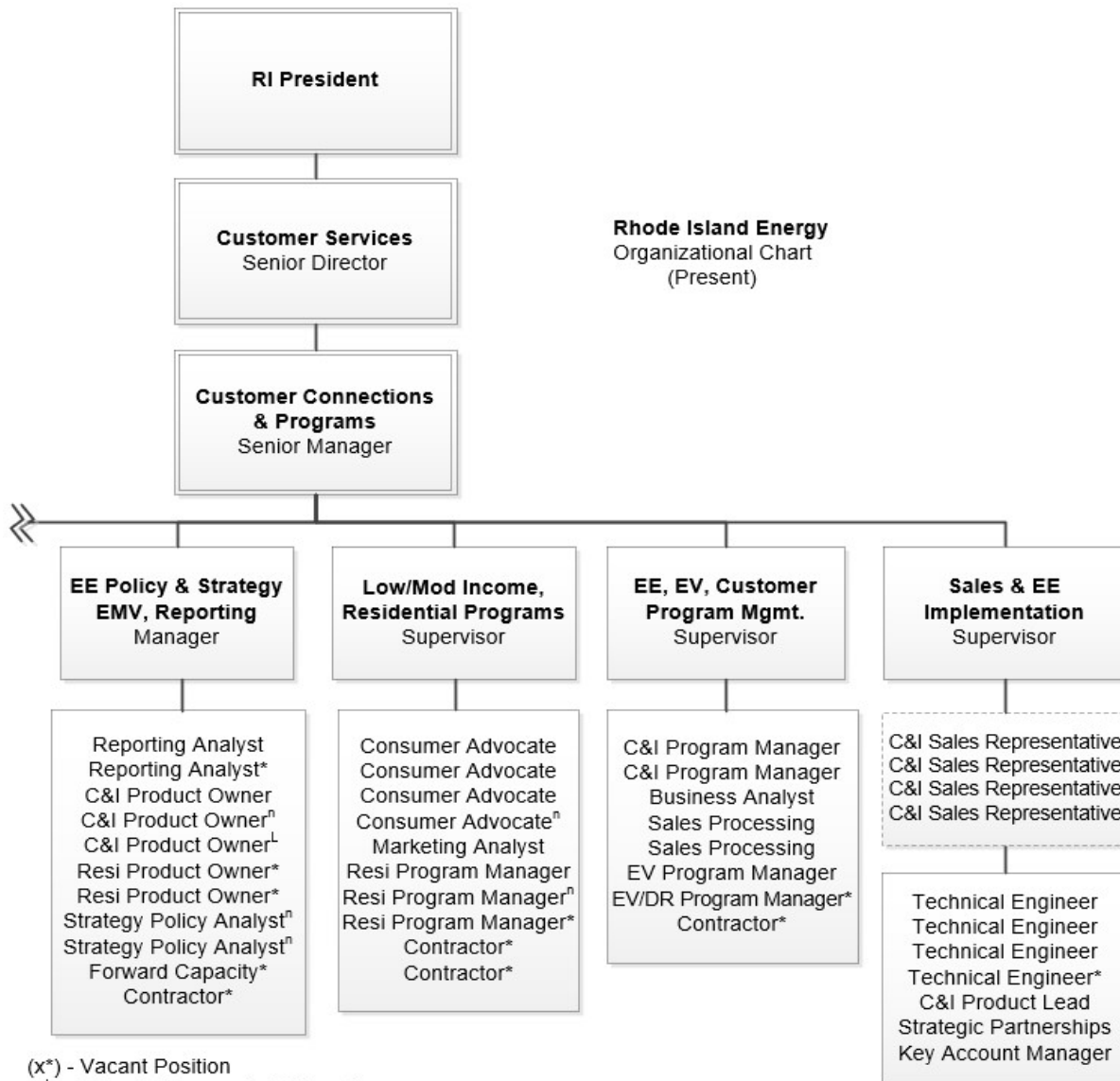
Current FTE Count = 29.95 Future FTE Count = 40.82

Please see Attachment DIV 1-77-1 for the Company's response to PUC 1-77(a. & b.), i. Pre-acquisition, ii. Current levels, iii. Future target levels

b. Please provide the salary and overhead cost associated with the FTEs assigned or allocated to the Energy Efficiency Program.

Current Salary Cost = \$3,380,487 Future Salary Cost = \$4,698,202
Overhead = \$419,117 Overhead = \$582,489

c. Please provide organizational charts for the EE program including employees assigned or allocated to the program for the period prior to the acquisition and for the present.



(x*) - Vacant Position
(x^l) - Extended Leave (> 90 Days)
(xⁿ) - Recently Filled Position (within 60 Days)

PUC 1-78
Other

Request:

In Docket 5189, the company was granted funding to hire an additional consumer advocate that would focus on energy efficiency.

- a. Was this position filled? If so, when?
- b. Please confirm that the total number of consumer advocates funded in rates (either through base or EE rates) is 4.
- c. For each month, January 2022 through the present, please provide the number of advocate positions filled.

Response:

- a. The energy efficiency consumer advocate was hired on May 25, 2022.
- b. Yes, there are three consumer advocates funded through base rates and one through the energy efficiency docket.
- c. In January, there were two consumer advocates working for National Grid. The energy efficiency consumer advocate was hired on May 25, 2022. The third consumer advocate position is scheduled to be filled on October 31, 2022.

PUC 1-79
Other

Request:

Bates page 135 discusses offering triple pane window incentives in 2023.

- a. What is the BC ratio for this measure?
- b. Why is there a requirement that the windows be installed by a contractor?
- c. How much money is budgeted for this measure in 2023?
- d. How is the incentive structured?

Response:

- a. The BC ratios for triple pane window are as follows:
 - Window – Electric Resistance – 2.26 b/c ratio
 - Window – Heat Pump – 1.59 b/c ratio
 - Window – Oil – 2.59 b/c ratio
 - Window – Propane – 2.9 b/c ratio
 - Triple Pane Windows (gas) – 1.76 b/c ratio
- b. Similar to weatherization and HVAC equipment, the energy savings performance will be optimized when correctly installed. The Company views using professional installers as the best path to produce the most energy savings.
- c. \$67,275 is budgeted in incentives for this measure in the electric HVAC program. \$27,375 is budgeted in incentives for this measure in the gas HVAC program. This comes to a total of \$91,659 in incentives through the gas and electric HVAC programs.
- d. There is a per window incentive of \$75 per window. Verification of installation and a receipt from the window contractor will be required. The Company will most likely limit the number of incentives per account as the incentive form is designed.

PUC 1-80
Other

Request:

Please provide any documentation received from the RI Infrastructure Bank required to support a funding request for the transfer of funds from the 2021 Energy Efficiency budget to the Efficient Buildings Fund.

Response:

Please see Attachments PUC 1-80-1 through 1-80-9. Rhode Island Energy is in the process of completing its due diligence to transfer the 2021 funds to Rhode Island Infrastructure Bank ("RIIB") and anticipates that it will transfer the 2021 funds to RIIB in mid-November 2022.



Efficient Buildings Fund
Program Cashflows - System Benefit Charges
As of December, 2021

2026				2026																																
Loan repayments	\$	1,635,220	\$	837,944	\$	416,000	\$	97,424	\$	119,000	\$	156,000	\$	17,000	\$	163,350	\$	1,650	\$	316,512	\$	2,488	\$	385,220	\$	740,520	\$	58,000								
Balance - 12/31/26	\$	-	\$	8,918,220	\$	(5,313,257)	\$	663,954	\$	(592,664)	\$	(97,424)	\$	(360,075)	\$	(1,116,376)	\$	(109,000)	\$	(1,249,982)	\$	(14,018)	\$	(0)	\$	0	\$	(1,301,451)	\$	(10,549)	\$	(5,950,072)	\$	(11,357,695)	\$	(116,000)
2027				2027																																
Loan repayments	\$	1,824,288	\$	842,564	\$	592,664	\$	97,424	\$	121,000	\$	159,000	\$	17,000	\$	166,320	\$	1,680	\$	318,496	\$	2,504	\$	387,623	\$	745,140	\$	58,000								
Balance - 12/31/27	\$	-	\$	10,742,507	\$	(4,470,693)	\$	663,954	\$	-	\$	(239,075)	\$	(957,376)	\$	(92,000)	\$	(1,083,662)	\$	(12,338)	\$	(0)	\$	0	\$	(982,955)	\$	(8,045)	\$	(5,562,448)	\$	(10,612,555)	\$	(58,000)		
2028				2028																																
Loan repayments	\$	1,248,713	\$	751,080	\$	-	\$	124,000	\$	162,000	\$	18,000	\$	170,280	\$	1,720	\$	321,473	\$	2,527	\$	390,713	\$	751,080	\$	58,000										
Balance - 12/31/28	\$	-	\$	11,991,221	\$	(3,719,613)	\$	663,954	\$	-	\$	(115,075)	\$	(795,376)	\$	(74,000)	\$	(913,382)	\$	(10,618)	\$	(0)	\$	0	\$	(661,482)	\$	(5,518)	\$	(5,171,735)	\$	(9,861,475)	\$	-		
2029				2029																																
Loan repayments	\$	1,195,222	\$	757,680	\$	-	\$	115,075	\$	166,000	\$	18,000	\$	173,250	\$	1,750	\$	324,449	\$	2,551	\$	394,147	\$	757,680												
Balance - 12/31/29	\$	-	\$	13,186,443	\$	(2,961,933)	\$	663,954	\$	-	\$	(629,376)	\$	(56,000)	\$	(740,132)	\$	(8,868)	\$	(0)	\$	0	\$	(337,033)	\$	(2,967)	\$	(4,777,588)	\$	(9,103,795)	\$	-				
2030				2030																																
Loan repayments	\$	1,106,267	\$	765,600	\$	-	\$	-	\$	170,000	\$	18,000	\$	178,200	\$	1,800	\$	337,033	\$	2,967	\$	398,267	\$	765,600												
Balance - 12/31/30	\$	-	\$	14,292,709	\$	(2,196,333)	\$	663,954	\$	-	\$	(459,376)	\$	(38,000)	\$	(561,932)	\$	(7,068)	\$	(0)	\$	0	\$	-	\$	-	\$	(4,379,322)	\$	(8,338,195)	\$	-				
2031				2031																																
Loan repayments	\$	782,073	\$	774,840	\$	-	\$	-	\$	175,000	\$	19,000	\$	183,150	\$	1,850	\$	-	\$	-	\$	403,073	\$	774,840												
Balance - 12/31/31	\$	-	\$	15,074,783	\$	(1,421,493)	\$	663,954	\$	-	\$	(284,376)	\$	(19,000)	\$	(378,782)	\$	(5,218)	\$	(0)	\$	0	\$	-	\$	-	\$	(3,976,248)	\$	(7,563,355)	\$	-				
2032				2032																																
Loan repayments	\$	718,629	\$	786,720	\$	-	\$	-	\$	100,376	\$	19,000	\$	188,100	\$	1,900	\$	-	\$	-	\$	409,253	\$	786,720												
Balance - 12/31/32	\$	-	\$	15,793,412	\$	(634,773)	\$	663,954	\$	-	\$	(184,000)	\$	-	\$	(190,682)	\$	(3,318)	\$	(0)	\$	0	\$	-	\$	-	\$	(3,566,995)	\$	(6,776,635)	\$	-				
2033				2033																																
Loan repayments	\$	794,120	\$	799,920	\$	-	\$	-	\$	184,000	\$	-	\$	190,682	\$	3,318	\$	-	\$	-	\$	416,120	\$	799,920												
Balance - 12/31/33	\$	-	\$	16,587,532	\$	165,147	\$	663,954	\$	-	\$	-	\$	-	\$	-	\$	-	\$	(0)	\$	0	\$	-	\$	-	\$	(3,150,875)	\$	(5,976,715)	\$	-				
2034				2034																																
Loan repayments	\$	423,673	\$	814,440	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	423,673	\$	814,440												
Balance - 12/31/34	\$	-	\$	17,011,205	\$	979,587	\$	663,954	\$	-	\$	-	\$	-	\$	-	\$	-	\$	(0)	\$	0	\$	-	\$	-	\$	(2,727,202)	\$	(5,162,275)	\$	-				
2035				2035																																
Loan repayments	\$	431,913	\$	830,280	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	431,913	\$	830,280												
Balance - 12/31/35	\$	-	\$	17,443,119	\$	1,809,867	\$	663,954	\$	-	\$	-	\$	-	\$	-	\$	-	\$	(0)	\$	0	\$	-	\$	-	\$	(2,295,288)	\$	(4,331,995)	\$	-				
2036				2036																																
Loan repayments	\$	17,167	\$	33,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	17,167	\$	33,000												
Balance - 12/31/36	\$	-	\$	17,460,285	\$	1,842,867	\$	663,954	\$	-	\$	-	\$	-	\$	-	\$	-	\$	(0)	\$	0	\$	-	\$	-	\$	(2,278,122)	\$	(4,298,995)	\$	-				
2037				2037																																
Loan repayments	\$	873,783	\$	1,679,700	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	873,783	\$	1,679,700												
Balance - 12/31/37	\$	-	\$	18,334,069	\$	3,522,567	\$	663,954	\$	-	\$	-	\$	-	\$	-	\$	-	\$	(0)	\$	0	\$	-	\$	-	\$	(1,404,338)	\$	(2,619,295)	\$	-				
2038				2038																																
Loan repayments	\$	12,017	\$	23,100	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	12,017	\$	23,100												
Balance - 12/31/38	\$	-	\$	18,346,085	\$	3,545,667	\$	663,954	\$	-	\$	-	\$	-	\$	-	\$	-	\$	(0)	\$	0	\$	-	\$	-	\$	(1,392,322)	\$	(2,596,195)	\$	-				
2039				2039																																
Loan repayments	\$	12,017	\$	23,100	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	12,017	\$	23,100												
Balance - 12/31/39	\$	-	\$	18,358,102	\$	3,568,767	\$	663,954	\$	-	\$	-	\$	-	\$	-	\$	-	\$	(0)	\$	0	\$	-	\$	-	\$	(1,380,305)	\$	(2,573,095)	\$	-				
2040				2040																																
Loan repayments	\$	663,954	\$	1,380,305	\$	663,954	\$	1,380,305	\$	2,573,095	\$	(663,954)	\$	-	\$	-	\$	-	\$	-	\$	1,380,305	\$	2,573,095												
Balance - 12/31/40	\$	663,954	\$	19,738,407	\$	6,141,862	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	(0)	\$	0	\$	-	\$	-	\$	(0)	\$	-	\$	-				



235 Promenade Street, Suite 119
Providence, RI 02908
T 401.453.4430
riib.org

Jeffrey R. Diehl
Executive Director and CEO

October 21, 2022

Mr. Brett Feldman
Manager, Customer Energy Management
Rhode Island Energy
Via Email

Dear Mr. Feldman:

RE: Transfer of 2021 RIIB System Benefit Charges (SBC)

The Board of Directors of Rhode Island Infrastructure Bank (Bank) has approved two loans from the Bank's Efficient Building Fund for \$6,618,000 to the Town of Smithfield and \$5,000,000 to the Providence Water Supply Board. The Bank does not have sufficient funds in its SBC and SBC Repayment/Recycled Funds to make these loans. Each of the Borrowers has executed loan commitments with the Bank and intends to close their respective loans by December 31, 2022.

In accordance with the documentation required by Orders issued in Dockets 4979 and 5076 and of the Public Utilities Commission (PUC) for the transfer of the PUC approved \$5,000,000 allocation of 2021 system benefit charges, please find attached to this memorandum the following:

1. The Office of Energy Resources (OER) Project Priority List (PPL) as of today's date. The Town of Smithfield has submitted their application to the OER for inclusion on the PPL. OER has indicated to the Bank that it expects to review and approve the project for inclusion on the PPL and to post the PPL during the week of November 14, 2022. This will be the last regulatory hurdle required for the Bank to close the loan with the Town of Smithfield. The Providence Water Supply Board is already included on the PPL. The Bank will provide a copy of the final PPL including the Town of Smithfield project as soon as it is issued by OER.
2. Executed loan commitment letters from the Providence Water Supply Board and the Town of Smithfield indicating each Borrower intends to close their loan by December 31, 2022.

On behalf of the Bank, I certify that as of today's date, the Bank has \$1,163,100.00 of SBC and SBC Replacement/Recycled Funds available to be lent for these two projects. I have reviewed this fund balance and it is accurate to the best of my knowledge.

Sincerely,



February 18, 2022

Shaun O'Rourke
Managing Director, Program & Business Development
Rhode Island Infrastructure Bank
235 Promenade Street, Suite 119
Providence, RI 02908

Re: Updated & Corrected Round 12a Project Priority List for the Efficient Buildings Fund

Dear Shaun:

The Office of Energy Resources (OER) respectfully submits the enclosed updated and corrected Project Priority List (PPL) for Round 12a of the Efficient Buildings Fund. Based on the scoring detailed below, OER has completed its review and evaluation of the below applicants for this round. The Infrastructure Bank can now engage in conversation with these borrowers to discuss financing terms and loan closing based on the ranking and scores below. OER is providing the maximum Least-Cost Procurement (LCP) Eligible and All Energy Eligible numbers below to support the Infrastructure Bank in its determination of eligible funds for these loans.

EBF Project Priority List - Round 12a					
RAN K	App #	Project	LCP Eligible	All Energy Eligible	AVG SCORE
1	1	Kent County Water Authority*	\$1,826,913.43		85.00
2	2	Providence Water Supply Board	\$10,000,000.00		79.00
ROUND TOTAL			\$11,826,913.43	\$-	

Note that the Providence Water Supply Board LCP eligible financing amount has been updated from the previous version of the PPL for this Round. A prior version contained a calculation error lowering the eligible loan amount listed on the PPL, which has been corrected here and this project is eligible for \$10 million dollars in financing based on our evaluation of the application.

***This project is eligible to move forward, receive financing, and draw down those funds contingent on meeting the below criteria:**

As this project has not yet completed final design, financing will be contingent upon OER and its consultant, DNV, receiving and reviewing the final design documents for the project. Further, the final design will need to meet or exceed the minimum standards outlined herein for each measure listed. Failure to meet or exceed these minimum standards will result in funds not being disbursed to support the procurement and/or installation of the measure and any costs incurred for a measure not meeting these specifications will be borne in full by the borrower.

Measure	Minimum Measure Standards
Building Insulation	Above grade wall R-value must be R-30 or greater R-30 or greater slab-on-grade floor insulation

	Double pane with low E windows or better, with a window to wall ratio of 0.33 or less.
HVAC VRF System	Cooling COP of VRF systems must be 3.0 or greater. Heating COP of design VRF systems must be 3.7 or greater
Interior Lighting	Design LPD for the proposed lighting system in the office area must be 0.61 W/SF or lower. Design LPD for the proposed lighting system in the garage area must be 0.16 W/SF or lower.
EPDM Roofing System	Roof R-value must be R-30 or greater.
Domestic hot water heating	Code-compliant natural gas water heater (80%) or better
Solar PV	Proposed solar PV system must have a DC capacity of 155.60 kW, AC capacity of 130 kW, azimuth angle of 180° (due south), tilt angle of 20°, inverter efficiency of 96%, premium efficiency solar PV modules (greater than 19% efficiency), system losses totaling 14.08%, for a total generation of 207,882 kWh in the first year at a capacity factor of 15.2%.

If you have any questions regarding this evaluation and scoring, please contact me at any time.

Sincerely,



Nathan Cleveland
Program Services Officer
Rhode Island Office of Energy Resources
Nathan.Cleveland@energy.ri.gov



235 Promenade Street, Suite 119
Providence, Rhode Island 02908
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October 17, 2022

Richard Caruolo
General Manager
Providence Water Supply Board
125 Dupont Drive
Providence, RI 02907

RE: Providence Water Supply Board – Efficient Buildings Fund Loan

Dear Mr. Caruolo,

The Board of Directors of the Rhode Island Infrastructure Bank (the “Bank”), pursuant to policies and procedures adopted in accordance with Chapter 46-12.2 of the Rhode Island General Laws, is pleased to inform you that the application from the Providence Water Supply Board (the “Borrower”) dated as of December 13, 2021 for financing through the Bank has been accepted at the Bank’s October 17, 2022 Board Meeting. The Bank shall provide financial aid in the form of a loan on the terms stated below in an amount up to \$5,500,000 for a term not to exceed twenty years from the time the loan is closed (the “Loan”). The Bank and the Borrower each intend to close the Loan on or prior to December 31, 2022.

This approval is subject to the Borrower meeting the following terms:

- 1) that all projects to be funded appear on the Office of Energy Resources (“OER”) Project Priority List;
- 2) that the Loan complies with all applicable Federal, State, OER and Bank laws, rules and regulations;
- 3) that a satisfactory Loan agreement be signed by all parties to the transaction (the “Agreement”);
- 4) that Loan will be made subject to availability of funds as related to the Bank’s capacity; and
- 5) that the Loan will be made subject to ranking on OER’s Project Priority List.

TERMS AND CONDITIONS

1) **Project Priority List**

Each project approved for financing by the Bank must be listed on the Office of Energy Resources Project Priority List, which may be revised from time to time by OER.

2) **Loan Agreement**

The Agreement will outline the specific terms and conditions of the Bank’s EBF loan program, as more generally set forth below and in the Agreement, including the Loan. The Borrower’s repayment obligation to the Bank under the Agreement will be evidenced by a Bond(s) of the Borrower outlining the Loan’s specific terms and conditions (the “Bonds”). The Bonds shall be in fully marketable form, accompanied by documentation, in form and



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substance satisfactory to the Bank, and an opinion, in form and substance satisfactory to the Bank, of nationally recognized bond counsel satisfactory to the Bank as to its valid authorization, execution, delivery and enforceability. The general provisions of the agreement, which will be more fully set forth prior to the time of the pricing of the loan by the Bank will include, without limitation, the following provisions:

(a) **Borrowing Rate**

The stated interest rate on the Borrower Bond, which is the Borrower's market rate (the "Market Rate"), is the prevailing market tax-exempt interest rate for issuers of comparable creditworthiness to the Borrower, as determined by the Bank on the advice of the Financial Advisor after consultation with the Borrower. The subsidized interest rate for the Loan shall be 33 1/3% off of the Market Rate (the "Subsidized Interest Rate"). The Borrower will be obligated by the Borrower Bond to pay the Market Rate but will be billed only for the Subsidized Interest Rate. If the Borrower or other EBF program borrowers of the Bank should default in timely payment of debt service on the Loan or on the loans made to such other borrowers of the Bank, the Bank may require the Borrower to pay up to the Market Rate on the Borrower Bond.

Interest is to be calculated based on a 360-day year and twelve thirty-day months, and may be capitalized during construction. Interest payments are semi-annually on March 1 and September 1.

(b) **Amortization**

Amortization will begin at a mutually agreed upon date, but in no case later than September 1 after completion of the construction of the projects. Principal payments will be made annually on September 1 and the schedule of payments will be structured to meet the debt service and financial assistance needs of the Borrower.

(c) **Final Maturity**

Loans shall mature no later than twenty (20) years after loan closing.

(d) **Prepayments**

A Loan may be prepaid by the Borrower at any time but may be subject to a prepayment penalty based on the cost of reinvesting the prepayment, the cost of prepaying outstanding bonds of the Bank or any other negative financial impact to the Bank.

(e) **Security**

Loans will have a pledge of (a) general revenues; (b) appropriation backed obligation; or (c) may be secured by any other assets and upon such other terms and



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conditions as the Bank deems appropriate to protect the interests of the other participants in the loan programs of the Bank; bondholders; other creditors of the Bank; or the finances of the Bank.

3) **Construction Progress Payments**

Progress payments and reimbursements for each construction project will be made through an account established by the Bank (the "Project Account"). Loan proceeds will be transferred to the Project Account for the benefit of the Borrower based upon approved Requisition Forms submitted to the Bank. Upon receipt of the Requisition Form, the Bank will verify: a) that the funds requested are in connection with a project on the OER project priority list b) that the vendor is identified in the contract; and c) that there is sufficient availability in the Project Account to make the payment. Payments will be made directly to the vendor and/or the Borrower for reimbursements by the Bank, and a "paid" stamped copy of the Requisition Form will be sent to the Borrower and OER. OER, or its designated representative, will perform periodic project inspections to a) monitor construction progress; b) verify eligibility of construction costs under the program; and c) ensure that construction is in conformity with Plans and Specifications. OER will provide a copy of the inspection report to the Bank. Any adverse conditions will be reported to the Bank who will suspend further payments until the adverse conditions have been rectified. OER will perform a final project inspection to ensure that the project has been completed as described in the project application, and upon satisfactory inspection, shall provide the Bank with a written approval for the final disbursement. The amount of the final disbursement shall not be less than ten percent (10%) of the principal amount of the Loan.

No more frequently than monthly, the Borrower may submit to the Bank a requisition in the form provided by the Bank, for payment from the Borrower Project Account. Such requisition shall be accompanied by vendor, contractor or supplier invoices, or such other documentation as the Bank shall require, showing that the payee, the purpose and the aggregate amount of payments is within the project definition, all applicable OER approvals and the total amount of the Loan. In the case of a requisition for the reimbursement of project costs paid in the first instance by the Borrower, the requisition shall additionally state that such costs have not been the subject of any prior requisitions and are within all applicable guidelines for reimbursement financing.

Except as provided below, when the Bank and OER have reviewed any requisition and found it to be complete and proper, or have, in their reasonable discretion, waived any non-compliance, the Bank shall transfer the amount of such requisition to the Bank for the Borrower's account therewith. The Bank and OER review of any requisition shall be completed within five (5) business days of its receipt. Upon receipt of such transfer, and in any case within five (5) business days thereof, the Bank shall issue its check to or on the order of the Borrower, in each case, for payment as specified in the requisition. If at the time of any requisition any of the following shall be true:

- (i) there shall then be a continuing event of default hereunder;
- (ii) the Bank shall have been notified by OER that disbursement of the Loan should be suspended as a result of conditions found during an OER review or inspection of the



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- project, or any components thereof; or
(iii) if the representations and warranties contained in the Agreement shall not be true and correct in all material respects as of the date of the requisition;

then the Bank shall have sole discretion as to whether to cause such transfer and to issue such check, as aforesaid.

4) **Compliance and Reporting Requirements**

OER, or its designated representative, may inspect the project at any time during the construction process and following completion of the Project.

For Energy Efficiency Projects – Within thirty (30) days of construction completion, the Borrower shall have an independent, 3rd party commissioning of all energy efficiency measures. A copy of the commissioning report (hard copy and electronic copy) shall be forwarded to the Bank and OER within thirty (30) days following the commissioning.

For Solar PV Projects – Within thirty (30) days of interconnection, the Borrower shall have an independent third-party inspection of the renewable energy system. Third party independent inspections completed pursuant to existing State programs are acceptable. A copy of the inspection report (hard copy and electronic copy) shall be forwarded to the Bank and OER within sixty (60) days following the inspection.

The Borrower is required to comply with all OER data and reporting requests for a minimum period of five (5) years following completion of the project, including but not limited to:

- (a) Actual number of full-time equivalent jobs associated with the project;
- (b) Job types;
- (c) Borrower wide energy consumption compared to baseline consumption that was submitted to OER in the Borrower EBF Project Priority List application;
- (d) For any portion of the projects consisting of energy efficiency projects, comparison of actual units of energy (e.g. kWh, therms, gallons) saved versus estimated units of energy saved based on the Borrower EBF Project Priority List application submitted to OER; and
- (e) For any portion of the project consisting of renewable energy projects, accessibility to the project production dash boards (e.g. Locus, Solectria).

Any inspection or review by the OER or its designated representative is for the limited purpose of confirming completion of the project as described in the project application and is not intended to relieve the borrower or its contractors of any responsibility with respect to the design and construction.

The design and construction shall comply with all applicable State-required regulations, including regulations relating to the federal Americans with Disabilities Act, historic preservation regulations, environmental regulations, and any other regulations or applicable portions thereof.



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Upon completion of the project, the Borrower shall be responsible for maintaining all aspects of the project in accordance with the design plans and specifications developed for the project, and its own cost and expense.

Nothing in this letter shall in any way alter or negate the terms of any contracts or agreements necessary for the use of Federal funds or utility incentives for any portion of the project.

The Borrower agrees to comply with all State requirements with respect to carrying out the project, including, but not limited to, those requirements contained in:

- (i) Chapter 46-12.2 of the Rhode Island General Laws;
- (ii) Chapter 37-13 of the Rhode Island General Laws;
- (iii) Chapter 37-14.1 of the Rhode Island General Laws; and
- (iv) Other State laws or administrative rules applying to activities supported with State funds.

The Borrower shall for as long as is required by the Agreement and any applicable law, submit to the Bank on a timely basis, such reports and other information as the Bank may reasonably require to show that the Borrower is in compliance with all such requirements.

The Borrower will be required to provide information to the Bank during the life of the Loan. These are:

- (a) A copy of its annual audited financial statements in accordance with Generally Accepted Government Accounting Standards, annually within 9 months of end of fiscal year.
- (b) Unless included as part of the audited financial statements furnished pursuant to item (a) or the annual budget furnished pursuant to item (c), an analysis of municipal operating revenues and expenses and a comparison of such revenues and expenses to the budget adopted for the respective period, annually within 9 months of the end of the fiscal year.
- (c) A copy of the annual budget of the Borrower, within fifteen days of its adoption.
- (d) Unless included as a part of the annual budget or audited financial statements and furnished pursuant to item (c), a schedule of current and projected short-term and long-term debt service, annually with the aforesaid budget.
- (e) Copies of reports submitted to OER, U.S Department of Energy and any other regulatory agency relating to any project financed by the Bank or the operation thereof, simultaneously with such submission.
- (f) Other information or reports that the Bank deems appropriate.



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5) **Compliance with State and Federal Law**

The Borrower must comply with all applicable state laws and regulations.

6) **Fees**

An origination fee of the greater of \$1,000 or one percent (1%) of the principal amount of the Loan will be payable to the Bank by the Borrower at the time of the Loan's closing. All other costs incidental to the Borrower's role in the transaction, i.e. legal fees, financial advisory fees, bond insurance premiums and the like, will be paid by the Borrower. The Bank will charge an annual service fee of three-tenths of one percent (0.3%) of the Loan's outstanding principal, payable semi-annually at each interest payment date. A late payment fee will be charged for every 15 days that a payment is late of five percent (5%) of the amount of the late payment.

7) **Modifications**

Where deemed appropriate by the Bank, waiver or variation of any provisions herein may be made or additional requirements may be added.

8) **Merger**

Once the Agreement, the Bonds and all other closing documents, in form and substance satisfactory to the Bank, associated with the making of the Loan (collectively, the "Closing Documents") are executed, the terms of this letter shall be merged with those of the Closing Documents. The terms of the Closing Documents will govern the extension of the Loan to the Borrower. To the extent that any provisions contained in this letter are inconsistent with the definitive provisions contained in the Closing Documents, the terms of the Closing Documents shall control.

9) **Beneficiaries**

This letter shall constitute a binding commitment between the Bank and the Borrower but no third party shall have any rights arising hereunder and the Borrower shall indemnify and hold the Bank harmless from any and all claims arising from or in connection with this letter, the Loan or the project financed thereby. In any case, the Bank's liability under this letter shall be limited to the amount held in the Borrower's CPF from time to time.

Please sign and return one original copy of this letter to the Rhode Island Infrastructure Bank at 235 Promenade Street, Suite 119, Providence, RI 02908 or via email.

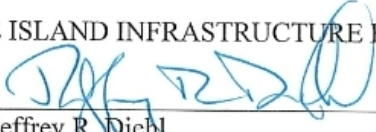
I would like to take this opportunity to thank you for your participation in the Bank's loan program. Please be assured that every effort will be made to get the lowest total cost for your long-term capital needs. If you have any questions, please do not hesitate to call me.

Very truly yours,

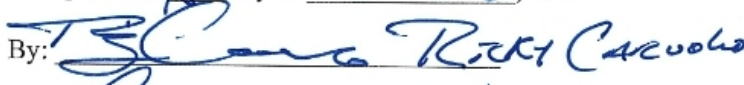


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RHODE ISLAND INFRASTRUCTURE BANK

By: 
Jeffrey R. Dicht
Executive Director & CEO

Accepted this 8th day of October, 2022

By: 
Title: GENERAL MANAGER
Authorized Official

Name and Address of Legal Counsel and/or Bond Counsel to the Borrower

Karen Grande
Locke Lord
Suite 2800
One Financial Plaza
Westminster Street
Providence, RI 02903



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September 26, 2022

Randy Rossi
Town Manager, Smithfield
64 Farnum Pike
Smithfield, RI 02917

RE: Town of Smithfield – Efficient Buildings Fund Loan

Dear Mr. Rossi,

The Board of Directors of the Rhode Island Infrastructure Bank (the “Bank”), pursuant to policies and procedures adopted in accordance with Chapter 46-12.2 of the Rhode Island General Laws, is pleased to inform you that the application from the Town of Smithfield (the “Borrower”) dated as of August 22, 2022 for financing through the Bank has been accepted at the Bank’s September 15 Board Meeting. The Bank shall provide financial aid in the form of a loan on the terms stated below in an amount up to \$6,618,000 for a term not to exceed twelve years from the time the loan is closed (the “Loan”). The Bank and the Borrower each intend to close the Loan on or prior to December 31, 2022.

This approval is subject to the Borrower meeting the following terms:

- 1) that all projects to be funded appear on the Office of Energy Resources (“OER”) Project Priority List;
- 2) that the Loan complies with all applicable Federal, State, OER and Bank laws, rules and regulations;
- 3) that a satisfactory Loan agreement be signed by all parties to the transaction (the “Agreement”);
- 4) that Loan will be made subject to availability of funds as related to the Bank’s capacity; and
- 5) that the Loan will be made subject to ranking on OER’s Project Priority List.

TERMS AND CONDITIONS

1) **Project Priority List**

Each project approved for financing by the Bank must be listed on the Office of Energy Resources Project Priority List, which may be revised from time to time by OER.

2) **Loan Agreement**

The Agreement will outline the specific terms and conditions of the Bank’s EBF loan program, as more generally set forth below and in the Agreement, including the Loan. The Borrower’s repayment obligation to the Bank under the Agreement will be evidenced by a Bond(s) of the Borrower outlining the Loan’s specific terms and conditions (the “Bonds”). The Bonds shall be in fully marketable form, accompanied by documentation,



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in form and substance satisfactory to the Bank, and an opinion, in form and substance satisfactory to the Bank, of nationally recognized bond counsel satisfactory to the Bank as to its valid authorization, execution, delivery and enforceability. The general provisions of the agreement, which will be more fully set forth prior to the time of the pricing of the loan by the Bank will include (without limitation) the following provisions:

(a) **Borrowing Rate**

The stated interest rate on the Borrower Bond, which is the Borrower's market rate (the "Market Rate"), is the prevailing market tax-exempt interest rate for issuers of comparable creditworthiness to the Borrower, as determined by the Bank on the advice of the Financial Advisor after consultation with the Borrower. The subsidized interest rate for the Loan shall be 33 1/3% off of the Market Rate (the "Subsidized Interest Rate"). The Borrower will be obligated by the Borrower Bond to pay the Market Rate but will be billed only for the Subsidized Interest Rate. If the Borrower or other EBF program borrowers of the Bank should default in timely payment of debt service on the Loan or on the loans made to such other borrowers of the Bank, the Bank may require the Borrower to pay up to the Market Rate on the Borrower Bond.

Interest is to be calculated based on a 360-day year and twelve thirty-day months, and may be capitalized during construction. Interest payments are semi-annually on March 1 and September 1.

(b) **Amortization**

Amortization will begin at a mutually agreed upon date, but in no case later than September 1 after completion of the construction of the projects. Principal payments will be made annually on September 1 and the schedule of payments will be structured to meet the debt service and financial assistance needs of the Borrower.

(c) **Final Maturity**

Loans shall mature no later than 12 (twelve) years after loan closing.

(d) **Prepayments**

A Loan may be prepaid by the Borrower at any time but may be subject to a prepayment penalty based on the cost of reinvesting the prepayment, the cost of repaying outstanding bonds of the Bank or any other negative financial impact to the Bank.

(e) **Security**

Loans will have a pledge of (a) general revenues; (b) appropriation backed



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obligation; or (c) may be secured by any other assets and upon such other terms and conditions as the Bank deems appropriate to protect the interests of the other participants in the loan programs of the Bank; bondholders; other creditors of the Bank; or the finances of the Bank.

3) **Construction Progress Payments**

Progress payments and reimbursements for each construction project will be made through an account established by the Bank (the "Project Account"). Loan proceeds will be transferred to the Project Account for the benefit of the Borrower based upon approved Requisition Forms submitted to the Bank. Upon receipt of the Requisition Form, the Bank will verify: a) that the funds requested are in connection with a project on the OER project priority list b) that the vendor is identified in the contract; and c) that there is sufficient availability in the Project Account to make the payment. Payments will be made directly to the vendor and/or the Borrower for reimbursements by the Bank, and a "paid" stamped copy of the Requisition Form will be sent to the Borrower and OER. OER, or its designated representative, will perform periodic project inspections to a) monitor construction progress; b) verify eligibility of construction costs under the program; and c) ensure that construction is in conformity with Plans and Specifications. OER will provide a copy of the inspection report to the Bank. Any adverse conditions will be reported to the Bank who will suspend further payments until the adverse conditions have been rectified. OER will perform a final project inspection to ensure that the project has been completed as described in the project application, and upon satisfactory inspection, shall provide the Bank with a written approval for the final disbursement. The amount of the final disbursement shall not be less than ten percent (10%) of the principal amount of the Loan.

No more frequently than monthly, the Borrower may submit to the Bank a requisition in the form provided by the Bank, for payment from the Borrower Project Account. Such requisition shall be accompanied by vendor, contractor or supplier invoices, or such other documentation as the Bank shall require, showing that the payee, the purpose and the aggregate amount of payments is within the project definition, all applicable OER approvals and the total amount of the Loan. In the case of a requisition for the reimbursement of project costs paid in the first instance by the Borrower, the requisition shall additionally state that such costs have not been the subject of any prior requisitions and are within all applicable guidelines for reimbursement financing.

Except as provided below, when the Bank and OER have reviewed any requisition and found it to be complete and proper, or have, in their reasonable discretion, waived any non-compliance, the Bank shall transfer the amount of such requisition to the Bank for the Borrower's account therewith. The Bank and OER review of any requisition shall be completed within five (5) business days of its receipt. Upon receipt of such transfer, and in any case within five (5) business days thereof, the Bank shall issue its check to or on the order of the Borrower, in each case, for payment as specified in the requisition. If at the time of any requisition any of the following shall be true:



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- (i) there shall then be a continuing event of default hereunder;
- (ii) the Bank shall have been notified by OER that disbursement of the Loan should be suspended as a result of conditions found during an OER review or inspection of the project, or any components thereof; or
- (iii) if the representations and warranties contained in the Agreement shall not be true and correct in all material respects as of the date of the requisition;

then the Bank shall have sole discretion as to whether to cause such transfer and to issue such check, as aforesaid.

4) **Compliance and Reporting Requirements**

OER, or its designated representative, may inspect the project at any time during the construction process and following completion of the Project.

For Energy Efficiency Projects – Within thirty (30) days of construction completion, the Borrower shall have an independent, 3rd party commissioning of all energy efficiency measures. A copy of the commissioning report (hard copy and electronic copy) shall be forwarded to the Bank and OER within thirty (30) days following the commissioning.

For Solar PV Projects – Within thirty (30) days of interconnection, the Borrower shall have an independent third-party inspection of the renewable energy system. Third party independent inspections completed pursuant to existing State programs are acceptable. A copy of the inspection report (hard copy and electronic copy) shall be forwarded to the Bank and OER within sixty (60) days following the inspection.

The Borrower is required to comply with all OER data and reporting requests for a minimum period of five (5) years following completion of the project, including but not limited to:

- (a) Actual number of full time equivalent jobs associated with the project;
- (b) Job types;
- (c) Borrower wide energy consumption compared to baseline consumption that was submitted to OER in the Borrower EBF Project Priority List application;
- (d) For any portion of the projects consisting of energy efficiency projects, comparison of actual units of energy (e.g. kWh, therms, gallons) saved versus estimated units of energy saved based on the Borrower EBF Project Priority List application submitted to OER; and
- (e) For any portion of the project consisting of renewable energy projects, accessibility to the project production dash boards (e.g. Locus, Solectria).

Any inspection or review by the OER or its designated representative is for the limited purpose of confirming completion of the project as described in the project application and is not intended to relieve the borrower or its contractors of any responsibility with respect to the design and construction.



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The design and construction shall comply with all State required regulations, including applicable Americans with Disabilities regulations, historic preservation regulations, environmental regulations, and any other pertinent regulations or applicable portions thereof.

Upon completion of the project, the Borrower shall be responsible for maintaining all aspects of the project in accordance with the design plans and specifications developed for the project, and its own cost and expense.

Nothing in this Commitment Letter shall in any way alter or negate the terms of any contracts or agreements necessary for the use of Federal funds or utility incentives for any portion of the project.

The Borrower agrees to comply with all State requirements with respect to carrying out the project, including those requirements contained in:

- (i) Chapter 46-12.2 of the Rhode Island General Laws;
- (ii) Chapter 37-13 of the Rhode Island General Laws;
- (iii) Chapter 37-14.1 of the Rhode Island General Laws; and
- (iv) Other State laws or administrative rules applying to activities supported with State funds.

The Borrower shall for as long as is required by the Loan Agreement and any applicable law, submit to the Bank on a timely basis, such reports and other information as the Bank may reasonably require to show that the Borrower is in compliance with all such requirements.

The Borrower will be required to provide information to the Bank during the life of the Loan. These are:

- (a) A copy of its annual audited financial statements in accordance with Generally Accepted Government Accounting Standards, annually within 9 months of end of fiscal year.
- (b) Unless included as part of the audited financial statements furnished pursuant to item (a) or the annual budget furnished pursuant to item (c), an analysis of municipal operating revenues and expenses and a comparison of such revenues and expenses to the budget adopted for the respective period, annually within 9 months of the end of the fiscal year.
- (c) A copy of the annual budget of the Borrower, within fifteen days of its adoption.
- (d) Unless included as a part of the annual budget or audited financial statements and furnished pursuant to item (c), a schedule of current and projected short-term and long-term debt service, annually with the aforesaid budget.



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- (e) Copies of reports submitted to OER, U.S Department of Energy and any other regulatory agency relating to any project financed by the Bank or the operation thereof, simultaneously with such submission.
- (f) On September 1 of each year, submit a Tax Compliance Certificate as required in the Loan Agreement.
- (g) Other information or reports that the Bank deems appropriate.

5) **Compliance with State and Federal Law**

The Borrower must comply with all applicable state laws and regulations.

In addition, the Borrower must agree to take all action, or refrain from taking any action, that would cause interest on any obligations of the Bank to be included, for federal income tax purposes, in the gross income of the holders of such obligations.

6) **Fees**

An origination fee of the greater of \$1,000 or one percent (1%) of the principal amount of the Loan will be payable to the Bank by the Borrower at the time of the Loan's closing. All other costs incidental to the Borrower's role in the transaction, i.e. legal fees, financial advisory fees, bond insurance premiums and the like, will be paid by the Borrower. The Bank will charge an annual service fee of three-tenths of one percent (0.3%) of the Loan's outstanding principal, payable semi-annually at each interest payment date. A late payment fee will be charged for every 15 days that a payment is late of five percent (5%) of the amount of the late payment.

7) **Modifications**

Where deemed appropriate by the Bank, waiver or variation of any provisions herein may be made or additional requirements may be added.

8) **Merger**

Once the Agreement, the Bonds and all other closing documents, in form and substance satisfactory to the Bank, associated with the making of the Loan (collectively, the "Closing Documents") are executed, the terms of this letter shall be merged with those of the Closing Documents. The terms of the Closing Documents will govern the extension of the Loan to the Borrower. To the extent that any provisions contained in this letter are inconsistent with the definitive provisions contained in the Closing Documents, the terms of the Closing Documents shall control.

9) **Beneficiaries**

This letter shall constitute a binding commitment between the Bank and the Borrower but



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no third party shall have any rights arising hereunder and the Borrower shall indemnify and hold the Bank harmless from any and all claims arising from or in connection with this letter, the Loan or the project financed thereby. In any case, the Bank's liability under this letter shall be limited to the amount held in the Borrower's CPF from time to time.

Please sign and return one original copy of this letter to the Rhode Island Infrastructure Bank at 235 Promenade Street, Suite 119, Providence, RI 02908 or via email.

I would like to take this opportunity to thank you for your participation with the Bank. Please be assured that every effort will be made to get the lowest total cost for your long-term capital needs. If you have any questions, please do not hesitate to call me.

Very truly yours,

RHODE ISLAND INFRASTRUCTURE BANK

By: _____


Jeffrey R. Diehl
Executive Director & CEO

Accepted this 11th day of October, 2022

By: 

Title: Town Manager
Authorized Official

Name and Address of Legal Counsel and/or Bond Counsel to the Borrower

Eugene G. Bernardo

40 Westminster Street, Suite 1100

Providence, RI 02903

Rhode Island Infrastructure Bank

June 14 request for response to 2021 EBF transfer

Requirement	Basis/Reference	RIIB reply
<p>1. RIIB must demonstrate that SBC \$ are needed to fund projects. Current SBC fund balances, SBC repayment funds, and access to other funds should all be considered in evaluating whether the transfer is prudent and warranted.</p>	<p>The PUC has asked several times in various formats if RIIB has the resources to fund projects before allowing transfers of SBC funds. Most recently –</p> <p>Docket 5189 – 2022 Plan – PUC 1-55 “Please complete the accompanying Excel worksheet RIIB EBF Cash Flow Statement by Funding Souce.xls.” There were seven bullets under this request. Point two read, “The worksheet should include ALL funding sources for EBF (including bond proceeds)” Point three read, “If there are additional funding sources for EBF not listed, please add as appropriate.” Point seven read, “Add any additional information (either as part of the worksheet or in written form) that would provide a clear, understandable and complete picture of the activity taking place within the EBF.”</p> <p>In addition, the PUC adding the requirement for a cash flow statement shows their interest in knowing whether SBC funds are required by the RIIB.</p>	<p>The \$5,000,000 directed to RIIB for 2022 and forward should not be included in this calculation. The highlighted language below from the RI General Laws clearly indicates that RIIB may use those funds for “any energy efficiency, renewable energy, or demand side management project financing program administered by the Rhode Island infrastructure bank”</p> <p>Section 39-2-1.2(n)</p> <p>(n) Effective January 1, 2022, the commission shall allocate, from demand-side management gas and electric funds authorized pursuant to this section, five million dollars (\$5,000,000) of such funds on an annual basis to the Rhode Island infrastructure bank. Gas and electric demand-side funds transferred to the Rhode Island infrastructure bank pursuant to this section shall be eligible to be used in any energy efficiency, renewable energy, or demand-side management project financing program administered by the Rhode Island infrastructure bank notwithstanding any other restrictions on the use of such collections set forth in this chapter. The infrastructure bank shall report annually to</p>

Docket 5076 - Open Meeting – Motion and Context – 38:27 (time)

Almost verbatim - I move that the Commission add a third condition to the conditions on regarding when National Grid can transfer SBC funds to RIIB found on page 354 of the 2019 EE plan. (I think she means 2020 – presented and approved in 2019) That condition is that documentation from RIIB to National Grid must be provided something that shows that the RIIB does not have sufficient funds in its SBC and SBC repayment / recycled funds available accounts to commit towards those loans. National Grid should only transfer these efficient funds for RIIB to commit those funds...

Verbatim “My effect of the motion that I intend, as I described in the motion, is that RIIB would have to provide documentation to National Grid that they don’t they don’t have sufficient funds from SBC sources and that they need additional funds to make the loan. I intend that National Grid will manage this. That they will review the documentation and determine if RIIB has those funds on hand. They are receiving an incentive on these funds so the burden is should be on National Grid to make a smart transfer that is consistent with this motion and that we will review it later.”

the commission within ninety (90) days of the end of each calendar year how collections transferred under this section were utilized. Once this funding is removed from the analysis, this leaves the Bank with approximately 1.5-2.0M available in the EBF to make future EBF loans.

Inclusion of this specific legislative language also evidences the General Assembly’s intent to allow the Bank to deploy these funds in any of the several energy financing programs the Bank currently administers.

	<p>The motion, with clearer language, was passed 3-0.</p>	
<p>2. SBC funds should be spent, allocated, or transferred as close to when they are required as possible.</p>	<p>Docket 5189 – Open Meeting – 50:11</p> <p>In discussing his calculations and opinion on how much spending the EERMC should be allowed the PUC chairman said, “..but then I subtracted \$100,000 for the future cost. From my perspective this is a future cost the year in which they are going to incur it. Come in add to your budget and we will put it in...there are no study costs that are incurred in 2022 so I have removed that.”</p> <p>Commissioner Anthony asked what the Division recommended. The chairman answered that they sought a substantial reduction from the request in the plan including the \$100,000 for the study.</p> <p>A motion was made by the chairman to lower the amount allocated to EERMC. The motion was approved 3-0.</p>	<p>The Bank does not object to this timing mechanic. The Bank would request that funds be transferred prior to the Bank signing of a loan commitment letter with a Borrower. The Bank needs the certainty of access to the capital before they can sign a loan commitment with a Borrower</p>
<p>3. It is not appropriate to fund projects or parts of projects that are not primarily energy efficiency in nature.</p>	<p>Docket 5076 Order</p> <p>National Grid may transfer the \$5 million to the Rhode Island Infrastructure Bank with all previous conditions remaining in</p>	<p>With regard to the 2021 funds specifically, the Bank does not disagree with this assertion. All projects currently being reviewed and developed for potential</p>

	<p>place. National Grid shall report in the next Annual Plan and the year-end report the following: 1) verify that funds were used to support incremental investments and measures included in an approved plan; 2) whether or not the amount transferred covers more than the participants contribution for investment in that measure; and 3) whether it's cost effective including the cost of any interest rate reduction.</p> <p>Docket 4979 - 2020 Plan - Bates pg. 355 “The funds allocated to the Bank and EBF under prior and future Settlement Agreements have been or will be committed to energy efficiency projects.”</p> <p>The Company was asked several times over the years by the PUC to verify that SBC funds were going to energy efficiency projects and not to other areas such as renewables. The Company confirmed that this was the case several times, often after confirming this fact with RIIB.</p>	<p>funding with the 2021 proceeds are primarily energy efficiency in nature.</p>
<p>4. The Company should not transfer, directly or indirectly, SBC funds to a customer for purposes of purchasing National Grid assets. The Company feels uncomfortable</p>	<p>Lack of precedent, perception of self-dealing</p>	<p>The Bank does not agree with this assertion. It is the sole discretion of the Bank and its partner agency, OER, to determine which projects are eligible for financing from the Efficient Buildings Fund</p>

<p>doing so without explicit permission from the PUC.</p>		<p>and further the sole discretion of the Bank and its Board of Directors as to approval of financing for an eligible project. The utility has no role in selecting which Borrowers or which projects receive financing from the Bank.</p>
<p>5. SBC funds should only be transferred to RIIB for loans to customer(s) whose project(s) are on the PPL list at the time of the request.</p>	<p>Docket 5076 – 4-23-1 In an email from Nathan Cleveland to Ben Rivers – “If a project is listed on OER’s PPL, it has met all the requirements of the EBF rules and regulations, including OER’s cost effectiveness screening. That information is posted online and shared with the Bank directly to inform their conversation with borrowers on final financing amounts.”</p> <p>As such, the Company can only assume that a project that is not listed on the PPL has not met all necessary requirements.</p>	<p>The Bank will not request a transfer of funds for a project which is not on the Project Priority List. However, as the Bank and OER assist communities in the development of their projects to be listed on the PPL, the Bank must have certainty that funds will be available to provide financing for those projects.</p>

12/22/21, 10:03 AM

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General Information

Providence Water

125 Dupont Drive Providence, RI 02907-3105

() -

Providence Water Energy Projects 2021



Efficient Buildings Fund Loan Application

Please note, to efficiently process your application, all requested information is required.

Section 1: Loan Information

Project Cost Amount:

10,000,000.00

Loan Term (years):

20

Estimated Borrower Cost of Issuance

Financial Advisor:

0.00

Bond Counsel:

0.00

Legal Counsel:

0.00

Other:

0.00

Total Loan Amount, including Cost of Issuance:

0.00

Type of Loan Security

2. Revenue Pledge

Note: Revenue pledges require a debt service reserve fund or the purchase of a surety bond equal to that amount.

Long-Term Credit Rating (Moody's/S&P or Fitch Ratings equivalent), if applicable:

Will the transaction require the capitalization of interest?

No

Please select the **Next** button to move to the next page of the application.

12/22/21, 10:03 AM

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Section 2: Project Information

Project Description

Please download and complete the [Excel-based Project Worksheet](#). Once completed, attach the Excel Worksheet to the application here:

Note: Project description is required for all projects other than Community Septic System Loan Program (CSSLP) or Sewer Tie-In Loan Fund (STILF) applications.

Current File: Projects

What is your status on the Project Priority List?

Borrowing Authority

Do you have authority to borrow funds for this project?

No

If yes, select which type of authority (if applicable, complete information below):

If Other, please explain.

Loan will require Providence Water Board/ City Council and RIPUC approval.

Date authority was granted:

//

Please attach a copy of the authorizing document here.

Current File: None

Approximate date City/Town is looking to receive financing:

//

Draw Down Schedule

Please download and complete the [Estimated Construction Draw Schedule Worksheet](#). Once completed, attach the Excel Worksheet to the application here:

Note: The draw schedule should reflect your best estimate of when funds are going to be requested for disbursement and is required for all projects other than Community Septic System Loan Program (CSSLP) or Sewer Tie-In Loan Fund (STILF) applications.

Current File: None

Please select the **Next** button to move to the next page of the application.

Section 3: Additional Information

Application Resilience

For municipalities only: Does your municipality have a FEMA-approved hazard mitigation plan?

No

Application Resilience

For municipalities only: Does your municipality have a FEMA-approved hazard mitigation plan?

No

For all applicants: What adaptation strategies (plans, policies or projects) has your organization undertaken to address the impacts of climate change?

Providence Water has been diligently working on reducing our carbon footprint in reaching our goal of being 100% powered by Renewable Energy through our 4.99 megawatt ground mounted solar array along with our .5 megawatt rooftop solar array at our COF. Providence Water also installed two electrical vehicle charging stations and purchased three electric vehicles. All lighting at our COF is LED.

For all applicants: What adaptation strategies (plans, policies or projects) has your organization undertaken to address the impacts of climate change?

12/22/21, 10:03 AM

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See above.

Financial and Audit Reports

Please attach a copy of your most recent financial audit and independent auditors report.

Current File: None

If not included in the above, please also attach the Schedule of Findings.

Current File: None

Financial Advisor

If Other is selected, please provide the information below:

Advisor Name:

Contact Name:

Telephone:

Email Address:

Bond Counsel

Firm Name:

Contact Name:

Telephone:

Email Address:

Legal Counsel

Firm Name:

Contact Name:

Telephone:

Email Address:

Application Certification

By submitting this application, the undersigned is authorized to request the funds described in this application on behalf of the Borrower. To the best of my knowledge all information contained in this application is valid and accurate.

Contact Information for person submitting application:

Contact Name:

Gary Marino

Title:

Division Manager

Telephone:

401.521.6300 ext. 7232

Email Address:

gmarino@provwater.com

If you have any questions or need further information to complete this application, please contact:

Anna Coelho Cortes

Rhode Island Infrastructure Bank

235 Promenade Street Suite 119

12/22/21, 10:03 AM
Providence, RI 02908
(401) 453-4430 ext. 112
acoelho@riib.org

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Sydney Usatine

Rhode Island Infrastructure Bank
235 Promenade Street Suite 119
Providence, RI 02908
(401) 453-4430 ext. 126
susatine@riib.org



Project Listing
as of 12/22/2021

Instructions: Please complete items in blue. Sum of Project Amounts must equal Gross Loan Request (otherwise cell will turn red as a warning).

	Providence Water	Borrower Name
\$	10,000,000.00	Gross Loan Request (\$)
\$	10,000,000.00	Sum of Project Amounts (calculated from Project Amount below)

Description of Project(s)

--

Project #	Project Amount (\$)	Project Name
Origination Fee	\$ 100,000.00	Origination fee is 1%
Debt Service Reserve Fund		May be required for projects with a revenue pledge. Contact the Infrastructure Bank or your financial advisor for more information.
Cost of Issuance		
1	\$ 2,000,000.00	Replace an existing 1986 2 stroke diesel powered 1000 kW generator with a new natural gas powered (1000 kW or smaller) Scope includes replacement of the motor control panel, automatic transfer switch, and replace existing
2	\$ 400,000.00	Replace six (6) rooftop HVAC units at the COF.
3	\$ 350,000.00	Replace existing 1989 150 kW natural gas generator with a new 250 kW natural gas generator.
4	\$ 1,200,000.00	Replace existing manual transfer switch with a new automatic transfer switch to enable the existing 2 MG watt generator to be utilized as the treatment plants primary emergency back-up unit.
5	\$ 200,000.00	Replace three (3) rooftop HVAC units in Treatment Plant Laboratory.
6	\$ 500,000.00	Replace two (2) Treatment Plant heating boilers
7	\$ 600,000.00	Replace three (3) Treatment Plant filter blowers.
8	\$ 800,000.00	Replace Treatment Plant Windows. Scope includes asbestos and PCB abatement.
9	\$ 2,000,000.00	Replace four (4) pumps at the Neutaconkanut Pump Station.
10	\$ 1,600,000.00	Replace three (3) pumps and replacement of HVAC system at the Bath Street Pump Station.
11	\$ 250,000.00	Various LED Lighting Upgrades (Raw Water Booster Pump Station, Forestry Garage, Watershed Storage Facility, Structure D & E Flow Control Structures, Aqueduct Pump Station Archive Records Room)
12		
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Shaun O'Rourke

From: Gregg Giasson <greggg@provwater.com>
Sent: Friday, January 7, 2022 12:51 PM
To: Shaun O'Rourke
Cc: David Tikoian; Ricky Caruolo
Subject: Providence Water - Intent to Obtain Financing in 2022

CAUTION: This email originated from outside of the Bank. Please be cautious with any hyperlinks or attachments.

Shaun,

Providence Water has approved projects on the Rhode Island Infrastructure Bank Efficient Buildings Fund Project Priority List. It is Providence Water's intent to obtain financing in 2022, through the Rhode Island Infrastructure Bank, to fund the projects on the Project Priority List.

Thank you for ongoing support of Providence Water and our financing needs.

Gregg G.



Gregg Giasson, P.E.

Deputy General Manager/Executive Engineer

(401) 521-6300 Ext. 7291

(401) 632-4682 [Fax]

(401) 419-3885 [Mobile]

ggiasson@provwater.com

[Providence Water](#)

125 Dupont Drive

Providence, RI 02907



Click to add a signature

8/23/2021

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General Information

Central Coventry Fire District
240 Arnold Rd Coventry, RI 02816
() -

Central Coventry Fire District



Efficient Buildings Fund Loan Application

Please note, to efficiently process your application, all requested information is required.

Section 1: Loan Information

Project Cost Amount:

300,000.00

Loan Term (years):

10

Estimated Borrower Cost of Issuance

Financial Advisor:

0.00

Bond Counsel:

0.00

Legal Counsel:

0.00

Other:

0.00

Total Loan Amount, including Cost of Issuance:

0.00

Type of Loan Security

1. General Obligation

Note: Revenue pledges require a debt service reserve fund or the purchase of a surety bond equal to that amount.

Long-Term Credit Rating (Moody's/S&P or Fitch Ratings equivalent), if applicable:

Will the transaction require the capitalization of interest?

No

Please select the **Next** button to move to the next page of the application.

8/23/2021

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Section 2: Project Information

Project Description

Please download and complete the [Excel-based Project Worksheet](#). Once completed, attach the Excel Worksheet to the application here:

Note: Project description is required for all projects other than Community Septic System Loan Program (CSSLP) or Sewer Tie-In Loan Fund (STILF) applications.

Current File: Projects

What is your status on the Project Priority List?

Borrowing Authority

Do you have authority to borrow funds for this project?

Yes

If yes, select which type of authority (if applicable, complete information below):

2. Resolution

If Other, please explain.

Date authority was granted:

07/15/2021

Please attach a copy of the authorizing document here.

Current File: ResolutionAttachment

Approximate date City/Town is looking to receive financing:

11/01/2021

Draw Down Schedule

Please download and complete the [Estimated Construction Draw Schedule Worksheet](#). Once completed, attach the Excel Worksheet to the application here:

Note: The draw schedule should reflect your best estimate of when funds are going to be requested for disbursement and is required for all projects other than Community Septic System Loan Program (CSSLP) or Sewer Tie-In Loan Fund (STILF) applications.

Current File: DrawDownSchedule

Please select the **Next** button to move to the next page of the application.

Section 3: Additional Information

Application Resilience

For municipalities only: Does your municipality have a FEMA-approved hazard mitigation plan?

No

Application Resilience

For municipalities only: Does your municipality have a FEMA-approved hazard mitigation plan?

No

For all applicants: What adaptation strategies (plans, policies or projects) has your organization undertaken to address the impacts of climate change?

This project as well as energy audits are steps to address the impacts of climate change.

For all applicants: What adaptation strategies (plans, policies or projects) has your organization undertaken to address the impacts of climate change?

This project as well as energy audits are steps to address the impacts of climate change.

8/23/2021

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Financial and Audit Reports

Please attach a copy of your most recent financial audit and independent auditors report.

Current File: AuditAttachment

If not included in the above, please also attach the Schedule of Findings.

Current File: None

Financial Advisor

If Other is selected, please provide the information below:

Advisor Name:

Contact Name:

Telephone:

Email Address:

Bond Counsel

Firm Name:

Contact Name:

Telephone:

Email Address:

Legal Counsel

Firm Name:

Gorham and Gorham

Contact Name:

David M. D'Agostino, Esq.

Telephone:

401-647-1400

Email Address:

daviddagostino@gorhamlaw.com

Application Certification

By submitting this application, the undersigned is authorized to request the funds described in this application on behalf of the Borrower. To the best of my knowledge all information contained in this application is valid and accurate.

Contact Information for person submitting application:

Contact Name:

Gayle Corrigan

Title:

District Manager

Telephone:

401-481-8962

Email Address:

gcorrigan@ccfdri.com

If you have any questions or need further information to complete this application, please contact:

8/23/2021

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Anna Coelho Cortes

Rhode Island Infrastructure Bank
235 Promenade Street Suite 119
Providence, RI 02908
(401) 453-4430 ext. 112
acoelho@riib.org

Sydney Usatine

Rhode Island Infrastructure Bank
235 Promenade Street Suite 119
Providence, RI 02908
(401) 453-4430 ext. 126
susatine@riib.org

Sydney Usatine

From: David Dagostino <daviddagostino@gorhamlaw.com>
Sent: Monday, January 10, 2022 9:31 AM
To: Sydney Usatine
Cc: cperry770@hotmail.com; Treasurer@CCFDRI.com
Subject: Central Coventry Fire District

CAUTION: This email originated from outside of the Bank. Please be cautious with any hyperlinks or attachments.

Dear Ms. Usatine:

I am writing to inform you that the Central Coventry Fire District, which resolved last year to seek funding from the RI Infrastructure Bank, intends to pursue funding this year.

The streetlight purchase and conversion to LED project, for which the District seeks funding, will be a significant benefit to the District and the greater Coventry community. It will bring long-standing savings for the District by greatly reducing energy costs in perpetuity; it will also provide greater level of service (i.e., functionality and reliability) with the technological improvements that LEDs bring over the current incandescent fixtures.

The President of the Board, Cynthia A. Fagan-Perry and the District Treasurer are both copied on this email.

Thanks,
Dave

David M. D'Agostino, Esq.
GORHAM & GORHAM, INC.
25 Danielson Pike
P.O. Box 46
North Scituate, RI 02857
(401) 647-1400 Telephone
(401) 647-1446 Facsimile
daviddagostino@gorhamlaw.com

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THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE ADDRESSEE. IT CONTAINS INFORMATION, WHICH IS CONFIDENTIAL UNDER THE ATTORNEY-CLIENT PRIVILEGE OR OTHERWISE NOT SUBJECT TO DISCLOSURE. IF YOU ARE NOT THE INTENDED RECIPIENT OR THE EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERING THE MESSAGE TO THE INTENDED RECIPIENT, ANY USE OF THIS INFORMATION, OR DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE (IF LONG DISTANCE, CALL COLLECT) AND REPLY TO THIS E-MAIL MESSAGE. THANK YOU.

12/22/21, 9:47 AM

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General Information

Kent County Water Authority
1072 Main Street West Warwick, RI 02893
() -

KENT COUNTY WATER AUTHORITY



Efficient Buildings Fund Loan Application

Please note, to efficiently process your application, all requested information is required.

Section 1: Loan Information

Project Cost Amount:

1,794,000.00

Loan Term (years):

0

Estimated Borrower Cost of Issuance

Financial Advisor:

0.00

Bond Counsel:

0.00

Legal Counsel:

206,000.00

Other:

0.00

Total Loan Amount, including Cost of Issuance:

0.00

Type of Loan Security

Note: Revenue pledges require a debt service reserve fund or the purchase of a surety bond equal to that amount.

Long-Term Credit Rating (Moody's/S&P or Fitch Ratings equivalent), if applicable:

Will the transaction require the capitalization of interest?

No

Please select the **Next** button to move to the next page of the application.

Section 2: Project Information

12/22/21, 9:47 AM

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Project Description

Please download and complete the [Excel-based Project Worksheet](#). Once completed, attach the Excel Worksheet to the application here:

Note: Project description is required for all projects other than Community Septic System Loan Program (CSSLP) or Sewer Tie-In Loan Fund (STILF) applications.

Current File: None

What is your status on the Project Priority List?

Borrowing Authority

Do you have authority to borrow funds for this project?

No

If yes, select which type of authority (if applicable, complete information below):

If Other, please explain.

Date authority was granted:

//

Please attach a copy of the authorizing document here.

Current File: None

Approximate date City/Town is looking to receive financing:

//

Draw Down Schedule

Please download and complete the [Estimated Construction Draw Schedule Worksheet](#). Once completed, attach the Excel Worksheet to the application here:

Note: The draw schedule should reflect your best estimate of when funds are going to be requested for disbursement and is required for all projects other than Community Septic System Loan Program (CSSLP) or Sewer Tie-In Loan Fund (STILF) applications.

Current File: None

Please select the **Next** button to move to the next page of the application.

Section 3: Additional Information

Application Resilience

For municipalities only: Does your municipality have a FEMA-approved hazard mitigation plan?

No

Application Resilience

For municipalities only: Does your municipality have a FEMA-approved hazard mitigation plan?

No

For all applicants: What adaptation strategies (plans, policies or projects) has your organization undertaken to address the impacts of climate change?

For all applicants: What adaptation strategies (plans, policies or projects) has your organization undertaken to address the impacts of climate change?

Financial and Audit Reports

Please attach a copy of your most recent financial audit and independent auditors report.

Current File: None

If not included in the above, please also attach the Schedule of Findings.

Current File: None

12/22/21, 9:47 AM

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Financial Advisor

If Other is selected, please provide the information below:

Advisor Name:

Contact Name:

Telephone:

Email Address:

Bond Counsel

Firm Name:

Contact Name:

Telephone:

Email Address:

Legal Counsel

Firm Name:

Contact Name:

Telephone:

Email Address:

Application Certification

By submitting this application, the undersigned is authorized to request the funds described in this application on behalf of the Borrower. To the best of my knowledge all information contained in this application is valid and accurate.

Contact Information for person submitting application:

Contact Name:

Title:

Telephone:

Email Address:

If you have any questions or need further information to complete this application, please contact:

Anna Coelho Cortes

Rhode Island Infrastructure Bank

235 Promenade Street Suite 119

Providence, RI 02908

(401) 453-4430 ext. 112

acoelho@riib.org

Sydney Usatine

Rhode Island Infrastructure Bank

235 Promenade Street Suite 119

Providence, RI 02908

(401) 453-4430 ext. 126

susatine@riib.org

12/22/21, 9:47 AM

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Sydney Usatine

From: David Simmons <dsimmons@kentcountywater.org>
Sent: Tuesday, January 11, 2022 1:57 PM
To: Sydney Usatine
Cc: Anna Coelho Cortes; Michael Lanfredi
Subject: RE: National Grid Brief Narrative

CAUTION: This email originated from outside of the Bank. Please be cautious with any hyperlinks or attachments.

Hello Sydney,

The Kent County Water Authority's intent to pursue financing through the RIIB/ OER Efficient Buildings Fund Program in 2022 is to fund energy efficiency efforts including, but not limited to, photovoltaic panels, electric charging stations, high efficiency HVAC systems, energy efficient glazing design, and high R insulation, in the design and construction of a new office and maintenance facility.

Best Regards,
Dave



David L Simmons P.E.

Executive Director/Chief Engineer
Kent County Water Authority
1072 Main Street
West Warwick, RI 02893-0192
ph: (401) 821-9300 cell: (401) 954-0823 fax: (401) 823-4810
www.kentcountywater.org