

STEVEN J. BOYAJIAN

One Financial Plaza, 14th Floor Providence, RI 02903-2485 Main (401) 709-3300 Fax (401) 709-3399 sboyajian@rc.com Direct (401) 709-3359

Also admitted in Massachusetts

November 10, 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 DIV Data Requests – Set 4

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 the Company's responses to the Division of Public Utilities and Carriers' Fourth Set of Data Requests in the above-referenced docket.

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

Very truly yours,

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 10, 2022

Date

Docket No. 22-33-EE – Rhode Island Energy's Energy Efficiency Plan 2023 Service list updated 11/07/22

The Narragansett Electric Company d/b/a Rhode Island Energy Andrew Marcaccio, Esq. 280 Melrose St. Providence, RI 02907 MOCrayne@rienergy BSFeldman@rienergy ACLi@rienergy.com; DJTukey@rienergy.com; SBriggs@pplweb.com	1; .com; m; .com;
d/b/a Rhode Island Energy Andrew Marcaccio, Esq. 280 Melrose St. Providence, RI 02907 Cobrien@pplweb.com jhutchinson@pplweb.com jscanlon@pplweb.com dmmoreira@rienergy MOCrayne@rienergy MCrayne@rienergy ACLi@rienergy.com; DJTukey@rienergy.com	. <u>com;</u> 401-784-4263 <u>m;</u> . <u>com;</u>
Andrew Marcaccio, Esq. 280 Melrose St. Providence, RI 02907 MOCrayne@rienergy MCLi@rienergy.com; DJTukey@rienergy.com	m; .com;
280 Melrose St. Providence, RI 02907 Scanlon@pplweb.com/dmmoreira@rienergy/MOCrayne@rienergy/BSFeldman@rienergy/ACLi@rienergy.com; DJTukey@rienergy.com	n; .com;
MOCrayne@rienergy BSFeldman@rienergy ACLi@rienergy.com; DJTukey@rienergy.co	
BSFeldman@rienergy ACLi@rienergy.com; DJTukey@rienergy.co	
ACLi@rienergy.com; DJTukey@rienergy.co	
DJTukey@rienergy.co	
SRriggs@nnlweb.com	
BJPelletier@rienergy.	
JKessler@rienergy.co	
JOliveira@pplweb.co	<u>·m;</u>
mjshafer@pplweb.co	om;
Leticia C. Pimentel, Esq.	<u>n;</u>
Steve Boyajian, Esq. Robinson & Cole LLP sboyajian@rc.com;	
One Financial Plaza, 14th Floor Providence, RI 02903 LPimentel@rc.com;	
HSeddon@rc.com;	

Division of Public Utilities and	Margaret.L.Hogan@dpuc.ri.gov;	401-780-2120
Carriers	Jon.hagopian@dpuc.ri.gov;	
Margaret L. Hogan, Esq.	john.bell@dpuc.ri.gov;	
	Joel.munoz@dpuc.ri.gov;	
	Machaela.Seaton@dpuc.ri.gov;	
	Paul.Roberti@dpuc.ri.gov;	
Synapse Energy Economics Tim Woolf	twoolf@synapse-energy.com;	
Jennifer Kallay	jkallay@synapse-energy.com;	
22 Pearl Street	<u></u>	
Cambridge, MA 02139		
RI EERMC	marisa@desautelesq.com;	401-477-0023
Marisa Desautel, Esq. Office of Marisa Desautel, LLC	mdewey@desautelesq.com;	
55 Pine St.	Adrian.Caesar@nv5.com;	
Providence, RI 02903	Craig.Johnson@nv5.com;	
	Samuel.Ross@nv5.com;	
Acadia Center Hank Webster, Director & Staff Atty.	HWebster@acadiacenter.org;	401-276-0600 x402
Office of Energy Resources (OER)	Albert.Vitali@doa.ri.gov;	401-222-8880
Albert Vitali, Esq.	Nancy.Russolino@doa.ri.gov;	101 222 0000
Dept. of Administration	Christopher.Kearns@energy.ri.gov;	
Division of Legal Services	Anika.Kreckel.CTR@energy.ri.gov;	
One Capitol Hill, 4th Floor	runku.Ricekone i Rechergy.in.gov,	
Providence, RI 02908	Steven.Chybowski@energy.ri.gov;	
	Nathan.Cleveland@energy.ri.gov;	
Original & 9 copies file w/: Luly E. Massaro, Commission Clerk	Luly.massaro@puc.ri.gov;	401-780-2107
John Harrington, Commission Counsel	John.Harrington@puc.ri.gov;	
Public Utilities Commission	Alan.nault@puc.ri.gov;	
89 Jefferson Blvd. Warwick, RI 02888	Todd.bianco@puc.ri.gov;	
, , , , , , , , , , , , , , , , , , , ,	Emma.Rodvien@puc.ri.gov;	
Interested Party		
Dept. of Human Services Frederick Sneesby	Frederick.sneesby@dhs.ri.gov;	
RI Infrastructure Bank	cvitale@hvlawltd.com;	
Chris Vitale, Esq.,	SUsatine@riib.org;	

Green Energy Consumers Alliance	Larry@massenergy.org;	
Larry Chretien, Executive Director		

DIV 4-1 Benefits

Request:

Please describe why the non-resource benefits are significantly lower in the gas 2023 EE Plan as compared to the 2022 EE Plan.

Response:

The non-resource benefits decreased by \$24.9 million from the 2022 Gas EE Plan to the 2023 Gas EE Plan. 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 "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.

PUC 4-1, Page 2

Benefits

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

DIV 4-2

Request:

With reference to Attachment 4 of the 2023 EE Plan, page 13, please explain why the value of GHG emissions (in terms of \$/ton) from replacing a fossil fuel end-use with another fossil-fuel end-use should be any different from the value of GHG emissions from any other end-use. Is there any reason for this, other than the fact that Massachusetts statutes require it?

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, where 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 believes a quantification of benefits that includes long-term societal impacts (SCC) is more appropriate than a short-term quantification (MAC) in certain applications.

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

DIV 4-2, Page 2

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. Because 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 would seem 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. Because 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 versus MAC described above applies to measures in either the electric or gas portfolios.

DIV 4-3

Request:

Has the Company considered calculating a Rhode Island-based marginal abatement cost to determine the value of GHG emissions? If not, why not?

Response:

No, Rhode Island Energy leverages the regional marginal abatement cost associated with GHG emissions output from the AESC 2021 study developed by Synapse. This value is a New England-based marginal abatement cost derived from the electric sector which is tied to future cost trajectories for offshore wind energy along the eastern seaboard. Since Rhode Island relies on regional power supply and the state's current emissions methodology inventories emissions from the regional system fuel mix, a state-specific marginal abatement cost does not make sense for the 2023 EE Plan and was not developed in the AESC study. If state emissions accounting methodologies are put in place that make it such that a state-specific marginal abatement cost makes sense and allows the AESC study to characterize a state-specific marginal abatement cost, then we will use that in future years where the use of the marginal abatement cost is appropriate.

DIV 4-4

Request:

How does the Company account for the cost of complying with the Rhode Island Renewable Energy Standard in the 2023 EE Plan? Does this calculation account for the most recent RES requirement to purchase 100 percent renewable energy by 2023? Please provide all workpapers and calculations.

Response:

The Company includes the cost of complying with an accelerated and strengthened Rhode Island Renewable Standard in the 2023 EE Plan implicitly within AESC 2021's modeled retail Summer/Winter Peak/Off-Peak \$/kWh avoided cost. This avoided cost is incorporated into the electric energy benefits of the 2023 EE Plan.

In modeling this avoided cost, the AESC study assumes Rhode Island's compliance with meeting a 100% Renewable Energy Standard by 2030. The AESC study was developed during 2021 and published in May 2021. Because of this timing, its assumptions aligned with Executive Order 20-01 and the resulting report "The Road to 100% Renewable Electricity by 2030 in Rhode Island" rather than the Renewable Energy Standard as amended in 2022 (after the AESC study was published).

Documentation supporting the "100% by 2030" cost of compliance with the Rhode Island Renewable Energy Standard may be found at the following link: https://www.synapse-energy.com/project/aesc-2021-materials, in Section 7 of the May 2021 report.

DIV 4-5

Request:

If the 2023 EE Plan does not account for the cost of compliance with the most recent RES requirement to purchase 100 percent renewable energy by 2033, please provide a new cost-effectiveness analysis to account for that higher RES target. Please provide updated results for the RI Test, the TRC Test, and the cost of supply.

Response:

The Company does account for an accelerated and strengthened Rhode Island Renewable Energy Standard (see Rhode Island Energy's response to DIV 4-4). Specifically, the Company accounts for Rhode Island's compliance with meeting 100% renewable electricity by 2030. This assumption, though appropriate at the time of AESC's study, represents a more accelerated schedule of compliance than the current Renewable Energy Standard amended in 2022 and now in force.

The Company is unable to provide a new cost-effectiveness analysis that incorporates the cost of compliance with the most recent Renewable Energy Standard because there is currently no value available from the AESC study. The Company anticipates inclusion of the current Renewable Energy Standard in the next iteration of the AESC, which is expected to be produced in 2024. The Company will then use this updated avoided cost value once it has been vetted and published.

Absent updating the Renewable Energy Standard within the AESC modeling, the Company can postulate about the magnitude and direction of the difference within avoided costs due to using the prolonged schedule of compliance versus the accelerated one currently modeled. Requiring 100% renewable electricity by 2033 instead of 2030¹ likely results in relatively lower cost of compliance (and benefits) in years 2023-2030, higher cost of compliance (and benefits) in years 2031 and 2032, and then similar cost of compliance (and benefits) in years 2033 and after. Given the lack of current insight into the cost profile associated with a prolonged schedule of compliance, the Company cannot speak to the magnitude of its impact but is confident that the cost-effectiveness and cost of supply results would remain positive.

¹ Note that the schedule of compliance also differs between AESC's assumed schedule of compliance using the 100% renewable electricity by 2030 assumption and the current Renewable Energy Standard, not just the date by which 100% compliance is expected.

DIV 4-6 Benefits

Request:

Please provide the results of the cost-effectiveness analysis assuming the same non-embedded GHG value that was used in the 2022 EE Plan. Please provide updated results for the RI Test, the TRC Test, and the cost of supply.

Response:

The results of the cost-effectiveness analysis assuming the same non-embedded GHG value that was used in the 2022 EE Plan are provided in Attachment DIV 4-6 and includes electric- and gas-specific Plan values accordingly.

When creating this response, the Company identified that the total TRC benefits for Residential ConnectedSolutions was including the non-embedded cost of carbon, which is incorrect. This is an incident that is isolated to this program in the electric BCR model only. As such, the TRC benefit value for this program found in Attachment DIV 4-6 represents the corrected value. This correction will be incorporated into a new set of BCR models and new Attachment 5 and Attachment 6 to be filed at a later date.

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 22-33-EE Attachment DIV 4-6 Page 1 of 6

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 22-33-EE DIV 4-6 Benefits

The following table shows the Rhode Island Test for the 2023 Electric Plan assuming the same non-embedded GHG value that was used in the 2022 EE Plan.

Rhode Island

2023 ELECTRIC PLAN - RHODE ISLAND BENEFIT COST TEST USING THE NON-EMBEDDED GHG VALUE FROM THE 2022 PLAN Summary of Benefit, Expenses, Evaluation Costs (\$000)

Total

Program

	Kilouc Island	1 Otal	1 logiani		
	Benefit/	Benefit without	Implementation	Customer	Shareholder
	Cost	Economic Benefits	Expenses	Contribution	Incentive
Non-Income Eligible Residential					
Residential New Construction	2.29	\$5,149.3	\$1,609.2	\$634.6	
EnergyStar HVAC	2.49	\$19,911.0	\$5,536.6	\$2,464.5	
EnergyWise	1.08	\$20,024.6	\$15,674.3	\$2,790.6	
EnergyWise Multi Family	2.29	\$3,290.9	\$1,347.0	\$89.9	
Behavior Feedback	2.53	\$5,427.3	\$2,147.2	\$0.0	
EnergyStar Appliances	2.27	\$7,208.3	\$2,494.5	\$683.3	
Residential ConnectedSolutions	1.55	\$3,051.1	\$1,971.4	\$0.0	
Energy Efficiency Education			\$0.0		
Community Based Initiatives - Residential			\$280.6		
Residential Pilots			\$0.0		
Comprehensive Marketing - Residential			\$310.5		
Residential Workforce Development			\$0.0		
Non-Income Eligible Residential SUBTOTAL	1.65	\$64,062.6	\$31,371.2	\$6,662.9	\$698.3
				·	
Income Eligible Residential					
Income Eligible Single Family	1.76	\$21,279.1	\$12,072.4	\$0.0	
Income Eligible Multi Family	1.12	\$4,763.6	\$4,258.8	\$0.0	
Income Eligible Workforce Development			\$0.0		
Income Eligible Residential SUBTOTAL	1.59	\$26,042.7	\$16,331.3	\$0.0	\$0.0
Commercial & Industrial					
Commercial New Construction	3.51	\$31,988.4	\$8,471.4	\$648.5	
Commercial Retrofit	1.97	\$69,805.8	\$24,453.2	\$11,042.4	
Direct Install	1.11	\$10,515.3	\$7,767.4	\$1,710.4	
Commercial ConnectedSolutions	2.17	\$12,320.1	\$5,683.1	\$0.0	
Community Based Initiatives - C&I			\$93.5		
Commercial Pilots			\$0.0		
C&I Financing			\$2,000.0		
Commercial Workforce Development			\$157.5		
Commercial & Industrial SUBTOTAL	1.92	\$124,629.6	\$48,626.0	\$13,401.3	\$2,802.
OER	П	Т	\$1,101.7	Т	
EERMC			\$850.3		
Rhode Island Infrastructure Bank			\$3,737.5		
Grand Total	1.71	\$214,734.9	\$102,018.0	\$20,064.2	\$3,501.
Grand Total	1./1	3414,/34.9	\$102,018.0	\$40,004.2	33,301.

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 22-33-EE Attachment DIV 4-6 Page 2 of 6

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 22-33-EE DIV 4-6 Benefits

The following table shows the TRC Test for the 2023 Electric Plan assuming the same non-embedded GHG value that was used in the 2022 EE Plan.

Rhode Island

2023 ELECTRIC PLAN - TRC BENEFIT COST TEST USING THE NON-EMBEDDED GHG VALUE FROM THE 2022 PLAN

Summary of Benefit, Expenses, Evaluation Costs (\$000)

Total

Program

	Benefit/	TRC Benefit	Implementation	Customer	Shareholder
	Cost		Expenses	Contribution	Incentive
Non-Income Eligible Residential					
Residential New Construction	1.93	\$4,321.8	\$1,609.17	\$634.6	
EnergyStar HVAC	2.13	\$17,040.1	\$5,536.60	\$2,464.5	
EnergyWise	0.84	\$15,516.3	\$15,674.28	\$2,790.6	
EnergyWise Multi Family	1.97	\$2,829.5	\$1,347.04	\$89.9	
Behavior Feedback	1.91	\$4,108.6	\$2,147.18	\$0.0	
EnergyStar Appliances	1.76	\$5,600.9	\$2,494.51	\$683.3	
Residential ConnectedSolutions	1.54	\$3,043.2	\$1,971.39	\$0.0	
Energy Efficiency Education			\$0.00		
Community Based Initiatives - Residential			\$280.56		
Residential Pilots			\$0.00		
Comprehensive Marketing - Residential			\$310.48		
Residential Workforce Development			\$0.00		
Non-Income Eligible Residential SUBTOTAL	1.35	\$52,460.5	\$31,371.2	\$6,662.9	\$698.3
Income Eligible Residential					
Income Eligible Single Family	1.54	\$18,588.0	\$12,072.44	\$0.0	
Income Eligible Multi Family	0.97	\$4,122.6	\$4,258.82	\$0.0	
Income Eligible Workforce Development			\$0.00		
Income Eligible Residential SUBTOTAL	1.39	\$22,710.6	\$16,331.3	\$0.0	\$0.0
Commercial & Industrial	1				
Commercial New Construction	2.75	\$25,088.3	\$8,471.35	\$648.5	
Commercial Retrofit	1.54	\$54,777.3	\$24,453.24	\$11,042.4	
Direct Install	0.69	\$6,585.5	\$7,767.36	\$1,710.4	
Commercial ConnectedSolutions	2.17	\$12,320.1	\$5,683.11	\$0.0	
Community Based Initiatives - C&I			\$93.46		
Commercial Pilots			\$0.00		
C&I Financing			\$2,000.00		
Commercial Workforce Development			\$157.50		
Commercial & Industrial SUBTOTAL	1.52	\$98,771.1	\$48,626.0	\$13,401.3	\$2,802.8
OER	Т	Γ	\$1,101.68	T	
EERMC		+	\$850.33		
Rhode Island Infrastructure Bank			\$3,737.49		
Grand Total	1.39	\$173,942.2	\$102,018.0	\$20,064.2	\$3,501.2
Grand Total	1.39	31/3,742.2	\$102,010.0	920,004.2	93,301.2

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 22-33-EE Attachment DIV 4-6 Page 3 of 6

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 22-33-EE DIV 4-6 Benefits

The following table provides the Cost of Supply for the 2023 Electric Plan assuming the same non-embedded GHG value that was used in the 2022 EE Plan.

2023 ELECTRIC PLAN - RHODE ISLAND COST OF SUPPLY USING THE NON-EMBEDDED GHG VALUE FROM THE 2022 PLAN

Portfolio Level

Benefits	Value
Electric Energy	\$45,759,087
Electric Generation	\$5,670,286
Electric Transmission Capacity	\$15,452,705
Electric Distribution Capacity	\$17,542,340
Natural Gas	-\$698,454
Delivered Fuel	\$26,168,359
Price Effects	\$31,951,174
Non-Embedded Greenhouse Gas Reduction	\$39,271,210
Non-embedded NOx	\$1,521,491
Reliability	\$1,667,870
Income Eligible Rate Discount	\$42,911
Arrearages	\$50,361
Utility	\$116,202
Cost of Supply	\$184,515,541

Costs	Value
Program Implementation Expenses	\$102,018,013
Customer Contribution	\$20,064,183
Shareholder Incentive	\$3,501,153
Cost of EE	\$125,583,349
Difference	\$58,932,193

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 22-33-EE Attachment DIV 4-6 Page 4 of 6

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 22-33-EE DIV 4-6 Benefits

The following table shows the Rhode Island Test for the 2023 Gas Plan assuming the same non-embedded GHG value that was used in the 2022 EE Plan.

2023 GAS PLAN - RHODE ISLAND BENEFIT COST TEST USING THE NON-EMBEDDED GHG VALUE FROM THE 2022 PLAN Summary of Benefit, Expenses, Evaluation Costs (\$000)

Г	Rhode Island	Total	Program		
	Benefit/	Benefit without	Implementation	Customer	Shareholder
	Cost	Economic Benefits	Expenses	Contribution	Incentive
Non-Income Eligible Residential	<u>.</u>	·	<u> </u>	<u>.</u>	
Energy Star® HVAC	1.44	\$10,554.9	\$3,593.1	\$3,718.7	
EnergyWise	1.06	\$11,466.9	\$9,945.1	\$872.1	
EnergyWise Multifamily	3.87	\$5,177.5	\$1,487.8	-\$150.1	
Home Energy Reports	4.72	\$1,701.9	\$360.5	\$0.0	
Residential New Construction	1.52	\$1,400.9	\$622.3	\$301.1	
Comprehensive Marketing - Residential			\$69.1		
Residential Pilots			\$0.0		
Community Based Initiatives - Residential			\$93.5		
Residential Workforce Development			\$0.0		
Non-Income Eligible Residential SUBTOTAL	1.45	\$30,302.1	\$16,171.4	\$4,741.8	\$0.0
Income Eligible Residential					
Single Family - Income Eligible Services	1.86	\$10,136.1	\$5,437.7	\$0.0	
Income Eligible Multifamily	3.05	\$9,814.7	\$3,221.0	\$0.0	
Income Eligible Workforce Development			\$0.0		
Income Eligible Residential SUBTOTAL	2.30	\$19,950.8	\$8,658.6	\$0.0	\$0.0
Commercial & Industrial					
Large Commercial New Construction	6.09	\$17,538.9	\$2,821.8	\$60.5	
Large Commercial Retrofit	2.35	\$16,873.4	\$4,644.1	\$2,537.2	
Small Business Direct Install	2.76	\$2,370.3	\$691.1	\$166.3	
Commercial & Industrial Multifamily	4.92	\$5,920.4	\$892.6	\$309.9	
Comprehensive Marketing - Commercial and Industrial			\$0.0		
Commercial Pilots			\$12.4		
Community Based Initiatives - C&I			\$31.2		
Finance Costs			\$0.0		
Commercial Workforce Development			\$67.5		
Commercial & Industrial SUBTOTAL	3.28	\$42,703.0	\$9,160.7	\$3,073.9	\$795.2
EERMC			\$283.4	T	
OER			\$616.9		
RIIB			\$1,262.5		
Grand Total	2.08	\$92,955.9	\$36,153.6	\$7,815.7	\$795.2

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 22-33-EE Attachment DIV 4-6 Page 5 of 6

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 22-33-EE DIV 4-6 Benefits

The following table shows the TRC Test for the 2023 Gas Plan assuming the same non-embedded GHG value that was used in the 2022 EE Plan.

2023 GAS PLAN - TRC BENEFIT COST TEST USING THE NON-EMBEDDED GHG VALUE FROM THE 2022 PLAN Summary of Benefit, Expenses, Evaluation Costs (\$000)

	TRC	Total	Program		
	Benefit/	TRC Benefit	Implementation	Customer	Shareholder
	Cost		Expenses	Contribution	Incentive
Non-Income Eligible Residential					
Energy Star® HVAC	0.95	\$6,931	\$3,593.1	\$3,718.7	
EnergyWise	0.80	\$8,605	\$9,945.1	\$872.1	
EnergyWise Multifamily	3.36	\$4,498	\$1,487.8	-\$150.1	
Home Energy Reports	2.02	\$727	\$360.5	\$0.0	
Residential New Construction	1.12	\$1,032	\$622.3	\$301.1	
Comprehensive Marketing - Residential			\$69.1		
Residential Pilots			\$0.0		
Community Based Initiatives - Residential			\$93.5		
Residential Workforce Development			\$0.0		
Non-Income Eligible Residential SUBTOTAL	1.04	\$21,791.5	\$16,171.4	\$4,741.8	\$0.0
Income Eligible Residential					
Single Family - Income Eligible Services	1.67	\$9,063	\$5,437.7	\$0.0	
Income Eligible Multifamily	2.67	\$8,596	\$3,221.0	\$0.0	
Income Eligible Workforce Development			\$0.0		
Income Eligible Residential SUBTOTAL	2.04	\$17,658.6	\$8,658.6	\$0.0	\$0.0
Commercial & Industrial					
Large Commercial New Construction	4.30	\$12,404	\$2,821.8	\$60.5	
Large Commercial Retrofit	1.28	\$9,203	\$4,644.1	\$2,537.2	
Small Business Direct Install	1.66	\$1,420	\$691.1	\$166.3	
Commercial & Industrial Multifamily	4.53	\$5,453	\$892.6	\$309.9	
Comprehensive Marketing - Commercial and Industrial			\$0.0		
Commercial Pilots			\$12.4		
Community Based Initiatives - C&I			\$31.2		
Finance Costs			\$0.0		
Commercial Workforce Development			\$67.5		
Commercial & Industrial SUBTOTAL	2.19	\$28,481.5	\$9,160.7	\$3,073.9	\$795.2
EERMC	T		\$283.4		
OER			\$616.9		
RIIB			\$1,262.5		
Grand Total	1.52	\$67,931.6	\$36,153.6	\$7,815.7	\$795.2

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 22-33-EE DIV 4-6 Benefits

The following table provides the Cost of Supply for the 2023 Gas Plan assuming the same non-embedded GHG value that was used in the 2022 EE Plan.

2023 GAS PLAN - RHODE ISLAND COST OF SUPPLY USING THE NON-EMBEDDED GHG VALUE FROM THE 2022 PLAN

Portfolio Level

Benefits	Value
Electric Energy	\$576,068
Electric Generation	\$347,315
Electric Transmission Capacity	\$476,515
Electric Distribution Capacity	\$586,276
Natural Gas	\$29,750,037
Fuel	\$0
Price Effects	\$1,259,443
Non-Embedded Greenhouse Gas Reduction	\$22,509,906
Non-Embedded NOx	\$2,514,371
Reliability	\$40,633
Income Eligible Rate Discount	\$64,512
Arrearages	\$143,281
Utility	\$326,953
Cost of Supply	\$58,595,309

Costs	Value
Program Implementation Expenses	\$36,153,622
Customer Contribution	\$7,815,712
Shareholder incentive	\$795,220
Cost of EE	\$44,764,554
Difference	\$13,830,755

DIV 4-7

Request:

Please update the tables provided in response to the Division 5-1 in Docket No. 5189.

Response:

Please see the Company's response to Division 2-1 in the responses to the Division's second set of data requests in Docket No. 22-33-EE.