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August 11, 2023

VIA ELECTRONIC MAIL

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

**RE: Docket No. 23-05-EL – The Narragansett Electric Company d/b/a Rhode Island Energy
Tariff Advice to Amend the Net Metering Provision - Proposal for Administration
of Excess Net Metering Credits
Responses to MassAmerican Energy's Data Requests – Set 1**

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a Rhode Island Energy (the “Company”) enclosed are the Company’s responses to MassAmerican Energy’s First Set of Data Requests in the above-referenced matter.

Thank you for your attention to this filing. If you have any questions, please contact me at 401-784-4263.

Sincerely,

A handwritten signature in blue ink, appearing to read "Andrew S. Marcaccio".

Andrew S. Marcaccio

Enclosures

cc: Docket No. 23-05-EL Service List

MAE 1-1

Request:

In PUC Docket 5127, in response to PUC data request 5-1, NEC described its exercise of discretion in deciding whether to use a volumetric or monetary basis for netting production from net metering customers.

- a) Is that still NEC's approach?
- b) What is the basis for NEC's determination?

Response:

- a) In Docket 5127, response to PUC 5-1, the Company explained that it "...has considered and prefers the monetary method to reconcile the accounts with excess net metering credits."

In a subsequent filing in Docket 5127, in response to PUC 8-1, the Company's Proposed Solution for net metering reconciliation explained that it would "Use volumetric method to calculate excess generation."

Presently, as confirmed in RIPUC Docket No. 23- 05- EL response to PUC 1-6, the Company intends to perform net metering reconciliation based on a volumetric method as filed in RIPUC Docket No. 23-05- EL Schedule EJRS-1.

- b) The Company believes this reconciliation method is most closely aligned with the intent of the definitions of "Renewable net-metering credit" and "Excess renewable net-metering credit" in R.I. Gen. Laws § 39-26.4-2.

MAE 1-2

Request:

In PUC Docket 5127, in response to PUC data request 1-22A, NEC states it uses a 16.1% capacity factor to estimate generation from solar installations. What is the basis for that determination and NEC's exercise of discretion on it?

Response:

Capacity factor is defined as:

“...a measure of how much energy is produced by a plant compared with its maximum output. It is measured as a percentage, generally by dividing the total energy produced during some period of time by the amount of energy the plant would have produced if it ran at full output during that time.”¹

For example, a 10kW system with a 16.1% capacity factor would generate 14131 kWh annually.

$$\text{Capacity factor} = \frac{\text{annual total energy produced}}{\text{annual full output energy}}$$

$$\text{Capacity factor} = \frac{14131 \text{ kWh}}{10 \text{ kw} * 8760 \text{ hours/year}}$$

$$\text{Capacity factor} = 16.1\%$$

The Company is currently reviewing past year's data on a random sample of interconnected systems to calculate capacity factor and evaluate the need to update the 16.1% which is presently used as an estimate today. The Company recognizes that capacity factor will vary on a site-by-site basis for factors such as, but not limited to, system orientation, shading, and equipment

¹ See *Solar Energy and Capacity Value*, National Renewable Energy Laboratory (“NREL”), dated September 2013. NREL is a national laboratory of the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, operated by the Alliance for Sustainable Energy, LLC. The document may be accessed at: <https://www.nrel.gov/docs/fy13osti/57582.pdf>

The Narragansett Electric Company
d/b/a Rhode Island Energy
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Issued on July 21, 2023

MAE 1-2, page 2

performance. As such, there is a range of acceptable values, and the Company seeks to ensure the most accurate estimate possible going forward.²

The capacity factor has limited impact on the net metering reconciliation since, as filed in RIPUC Docket No. 23-05-EL response to the Division 1-3, "The Company intends to use historic data to obtain the Estimated Consumption variable and will perform the reconciliation analysis by using the Estimated Consumption and the Net Generation variables." Thus, the Estimated Generation is not proposed as a variable in the reconciliation calculation.

² Per the Rhode Island Office of Energy Resources ("OER")' solar webpage consisting of frequently asked questions as of August 7, 2023, "[i]n Rhode Island, solar systems typically see capacity factors around 13%." See <https://energy.ri.gov/renewable-energy/solar/faqs>.

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 23-05-EL
In Re: Net Metering Excess Credits Tariff Advice 2023
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MAE 1-3

Request:

Does NEC ever assess a net annual charge on a net metered electric account when that account generates more electricity than it consumes behind a single meter? If so, please explain how that can happen.

Response:

Yes, the Company may assess a net annual charge on a net metered electric account for an account that generates more electricity than it consumes behind a single meter if the value of the net metering credits are not worth enough to offset the fixed charges on the electric account.

MAE 1-4

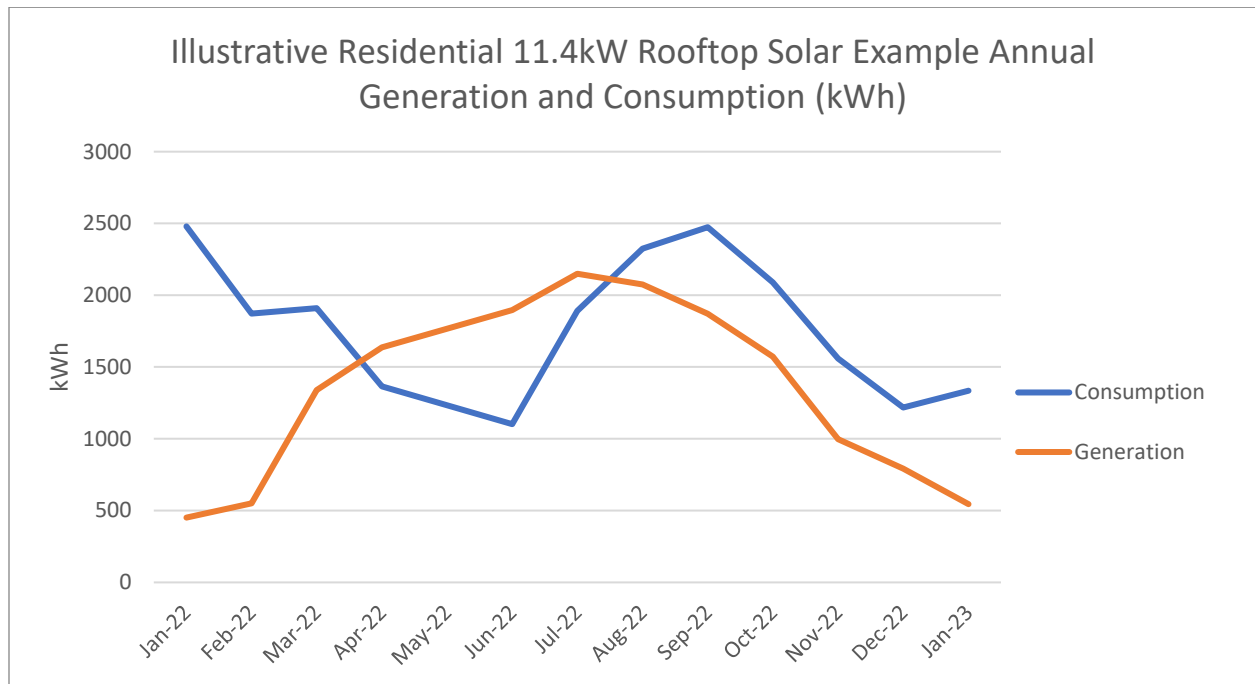
Request:

Please produce the monthly production and consumption curves of a typical residential net metered account last year.

Response:

The Company cannot produce monthly production and consumption curves of a typical residential net metered account because we do not measure those values monthly. The Company measures the net value, or the difference between the production and consumption monthly.

The Company can produce monthly production and consumption curves of a random residential Renewable Energy Growth account because we do measure production and consumption with two separate meters and two separate parallel services. The metering configuration has no impact on the system performance, thus, can be used for illustrative purposes. One should note that there are different types of load profiles depending on the customer's end usage/appliances such as electric heat, air conditioning, heated pool, electric vehicle charging, electric water heater, etc.



MAE 1-5

Request:

- a) Provide the seasonal rate differential for residential net metering credits, and explain what factors drive that differential.
- b) How does local electrical production to the electric distribution system impact that differential?

Response:

- a) Residential Net Metering Credits are calculated pursuant to the terms and conditions of R.I.P.U.C. No. 2257 (The Narragansett Electric Company Net Metering Provision):

“**Renewable Net Metering Credit**” shall mean a credit that applies up to one hundred percent of a Net Metering Customer’s consumption at the Eligible Net Metering System Site or the aggregate consumption of the Net Metered Accounts over the applicable period. This credit shall be equal to the total kilowatt-hours of electrical energy generated up to the amount consumed on-site by the Net Metering Customer of the Net Metered Accounts during the billing period multiplied by the sum of the:

- (i) Last Resort Service kilowatt-hour charge for the rate class applicable to the Net Metering Customer, not including the Renewable Energy Standard charge;
- (ii) Distribution kilowatt-hour charge;
- (iii) Transmission kilowatt-hour charge; and
- (iv) Transition kilowatt-hour charge.”

Each component of the Renewable Net Metering Credit is established independently pursuant to the terms and conditions of its applicable tariff. Any differential in the Renewable Net Metering Credit across periods (e.g., months) is consequently due to changes in each of the components of the Renewable Net Metering Credit pursuant to the applicable tariffs and subject to Commission approval.

To the extent the Last Resort Service component of the Renewable Net Metering Credit differs between seasons (i.e., the summer months of April through September and the winter months of October through March), this is largely a function of natural gas pipeline constraints into the New England market and high natural gas demand causing elevated natural gas prices and, consequently, elevated electricity prices during the winter

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period as compared to the summer period. For additional details, please refer to R.I.P.U.C. Docket No. 23-01-EL, the Joint Testimony of James M. Rouland and James Ruebenacker at Page 12, Lines 12 to 21:

“Q. Please provide an explanation of the high electric prices in winter compared to summer.

A. It is the Company’s understanding that natural gas pipeline constraints into the New England market and high natural gas demand both from heating customers and natural gas generators in the winter season results in higher and more volatile natural gas prices during the winter period. Electric prices are closely correlated to natural gas prices as natural gas generators typically set the marginal price of wholesale electric power in New England. Higher natural gas prices and high volatility in natural gas which typically translates to increased risk premiums have resulted in elevated electric prices in winter periods as compared to summer periods.”

For the Renewable Net Metering Credit and Excess Renewable Net Metering Credit for Residential (A-16) customers in effect for each month of 2022, please refer to MAE 1-5 Attachment.

- b) As stated above, any differential between the Renewable Net Metering Credit across periods (e.g., months) is a function of changes in the components of the Renewable Net Metering Credit pursuant to the applicable tariffs and Commission approval. Local electrical production to the electric distribution system does not directly affect the value of the Renewable Net Metering Credit but may indirectly affect the underlying components of the Renewable Net Metering Credit either by affecting an amount for which the Company is seeking cost recovery or the billing determinants used in the design of rates. This net effect across all components of the Renewable Net Metering Credit is too complex to easily identify.

I. Summary

| | (a) = Pg. 2, Col. (e) | (b) = Pg. 3, Col. (l) | (c) = Pg. 4, Col. (d) | (d) = Pg. 4, Col. (g) | (e) = (a) + (b) + (c) + (d) | (f) = (a) |
|----------------|--|-----------------------|-----------------------|-----------------------|----------------------------------|---|
| A-16 | Last Resort Service (Excluding RES) | Distribution | Transmission | Transition | Renewable Net Metering Credit | Excess Renewable Net Metering Credit |
| Jan-22 | \$ 0.10217 | \$ 0.05699 | \$ 0.03574 | \$ (0.00145) | \$ 0.19345 | \$ 0.10217 |
| Feb-22 | \$ 0.10217 | \$ 0.05699 | \$ 0.03574 | \$ (0.00145) | \$ 0.19345 | \$ 0.10217 |
| Mar-22 | \$ 0.10217 | \$ 0.05699 | \$ 0.03574 | \$ (0.00145) | \$ 0.19345 | \$ 0.10217 |
| Apr-22 | \$ 0.06900 | \$ 0.06301 | \$ 0.03665 | \$ 0.00018 | \$ 0.16884 | \$ 0.06900 |
| May-22 | \$ 0.06900 | \$ 0.06301 | \$ 0.03665 | \$ 0.00018 | \$ 0.16884 | \$ 0.06900 |
| Jun-22 | \$ 0.06900 | \$ 0.06301 | \$ 0.03665 | \$ 0.00018 | \$ 0.16884 | \$ 0.06900 |
| Jul-22 | \$ 0.06900 | \$ 0.06387 | \$ 0.03665 | \$ 0.00018 | \$ 0.16970 | \$ 0.06900 |
| Aug-22 | \$ 0.06900 | \$ 0.06387 | \$ 0.03665 | \$ 0.00018 | \$ 0.16970 | \$ 0.06900 |
| Sep-22 | \$ 0.06900 | \$ 0.06387 | \$ 0.03665 | \$ 0.00018 | \$ 0.16970 | \$ 0.06900 |
| Oct-22 | \$ 0.17064 | \$ 0.06338 | \$ 0.03665 | \$ 0.00018 | \$ 0.27085 | \$ 0.17064 |
| Nov-22 | \$ 0.17064 | \$ 0.06338 | \$ 0.03665 | \$ 0.00018 | \$ 0.27085 | \$ 0.17064 |
| Dec-22 | \$ 0.17064 | \$ 0.06338 | \$ 0.03665 | \$ 0.00018 | \$ 0.27085 | \$ 0.17064 |
| AVERAGE | | | | | \$ 0.20071 | \$ 0.10270 |

II. Last Resort Service

| A-16 | (a) | (b) | (c) | (d) | (e) = (a) + (b) + (c) |
|--------|---------------------------------|--------------------------------|--|----------------------------------|-------------------------------------|
| | Last Resort Service Base Charge | Last Resort Service Adjustment | Last Resort Service Admin. Cost Factor | Renewable Energy Standard Charge | Last Resort Service (Excluding RES) |
| Jan-22 | \$ 0.10491 | \$ (0.00512) | \$ 0.00238 | \$ 0.00665 | \$ 0.10217 |
| Feb-22 | \$ 0.10491 | \$ (0.00512) | \$ 0.00238 | \$ 0.00665 | \$ 0.10217 |
| Mar-22 | \$ 0.10491 | \$ (0.00512) | \$ 0.00238 | \$ 0.00665 | \$ 0.10217 |
| Apr-22 | \$ 0.07174 | \$ (0.00512) | \$ 0.00238 | \$ 0.00665 | \$ 0.06900 |
| May-22 | \$ 0.07174 | \$ (0.00512) | \$ 0.00238 | \$ 0.00665 | \$ 0.06900 |
| Jun-22 | \$ 0.07174 | \$ (0.00512) | \$ 0.00238 | \$ 0.00665 | \$ 0.06900 |
| Jul-22 | \$ 0.07174 | \$ (0.00512) | \$ 0.00238 | \$ 0.00665 | \$ 0.06900 |
| Aug-22 | \$ 0.07174 | \$ (0.00512) | \$ 0.00238 | \$ 0.00665 | \$ 0.06900 |
| Sep-22 | \$ 0.07174 | \$ (0.00512) | \$ 0.00238 | \$ 0.00665 | \$ 0.06900 |
| Oct-22 | \$ 0.17149 | \$ (0.00318) | \$ 0.00233 | \$ 0.00721 | \$ 0.17064 |
| Nov-22 | \$ 0.17149 | \$ (0.00318) | \$ 0.00233 | \$ 0.00721 | \$ 0.17064 |
| Dec-22 | \$ 0.17149 | \$ (0.00318) | \$ 0.00233 | \$ 0.00721 | \$ 0.17064 |

Notes:

(a)(b)(c)(d) For January - March 2022: Docket No. 4978 (July 20, 2021), Attachment 2.
For April - September 2022: Docket No. 4978 (January 19, 2022), Attachment 1, Page 3 of 5.
For October - December 2022: Docket No. 4978 (July 21, 2022), Schedule 2.

III. Distribution

| A-16 | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) = SUM((a):(k)) |
|--------|---------------------|--|---------------------------|---------------------|-----------------------------|-----------------|---------------------------|---------------------------------|--|-------------------------------------|------------------------------|-----------------------------|
| | Distribution Charge | Operating and Maintenance Expense Charge | O&M Reconciliation Factor | CapEx Factor Charge | CapEx Reconciliation Factor | RDM Adj. Factor | Pension Adjustment Factor | Storm Fund Replenishment Factor | Arrearage Management Adjustment Factor | Low-Income Discount Recovery Factor | Performance Incentive Factor | Billing Distribution Charge |
| Jan-22 | \$ 0.04580 | \$ 0.00204 | \$ (0.00010) | \$ 0.00544 | \$ (0.00069) | \$ (0.00042) | \$ (0.00006) | \$ 0.00288 | \$ 0.00006 | \$ 0.00196 | \$ 0.00008 | \$ 0.05699 |
| Feb-22 | \$ 0.04580 | \$ 0.00204 | \$ (0.00010) | \$ 0.00544 | \$ (0.00069) | \$ (0.00042) | \$ (0.00006) | \$ 0.00288 | \$ 0.00006 | \$ 0.00196 | \$ 0.00008 | \$ 0.05699 |
| Mar-22 | \$ 0.04580 | \$ 0.00204 | \$ (0.00010) | \$ 0.00544 | \$ (0.00069) | \$ (0.00042) | \$ (0.00006) | \$ 0.00288 | \$ 0.00006 | \$ 0.00196 | \$ 0.00008 | \$ 0.05699 |
| Apr-22 | \$ 0.04580 | \$ 0.00211 | \$ (0.00010) | \$ 0.00639 | \$ (0.00069) | \$ (0.00042) | \$ (0.00006) | \$ 0.00788 | \$ 0.00006 | \$ 0.00196 | \$ 0.00008 | \$ 0.06301 |
| May-22 | \$ 0.04580 | \$ 0.00211 | \$ (0.00010) | \$ 0.00639 | \$ (0.00069) | \$ (0.00042) | \$ (0.00006) | \$ 0.00788 | \$ 0.00006 | \$ 0.00196 | \$ 0.00008 | \$ 0.06301 |
| Jun-22 | \$ 0.04580 | \$ 0.00211 | \$ (0.00010) | \$ 0.00639 | \$ (0.00069) | \$ (0.00042) | \$ (0.00006) | \$ 0.00788 | \$ 0.00006 | \$ 0.00196 | \$ 0.00008 | \$ 0.06301 |
| Jul-22 | \$ 0.04580 | \$ 0.00211 | \$ (0.00010) | \$ 0.00639 | \$ (0.00069) | \$ (0.00003) | \$ (0.00006) | \$ 0.00788 | \$ 0.00007 | \$ 0.00238 | \$ 0.00012 | \$ 0.06387 |
| Aug-22 | \$ 0.04580 | \$ 0.00211 | \$ (0.00010) | \$ 0.00639 | \$ (0.00069) | \$ (0.00003) | \$ (0.00006) | \$ 0.00788 | \$ 0.00007 | \$ 0.00238 | \$ 0.00012 | \$ 0.06387 |
| Sep-22 | \$ 0.04580 | \$ 0.00211 | \$ (0.00010) | \$ 0.00639 | \$ (0.00069) | \$ (0.00003) | \$ (0.00006) | \$ 0.00788 | \$ 0.00007 | \$ 0.00238 | \$ 0.00012 | \$ 0.06387 |
| Oct-22 | \$ 0.04580 | \$ 0.00211 | \$ - | \$ 0.00639 | \$ (0.00089) | \$ (0.00003) | \$ (0.00045) | \$ 0.00788 | \$ 0.00007 | \$ 0.00238 | \$ 0.00012 | \$ 0.06338 |
| Nov-22 | \$ 0.04580 | \$ 0.00211 | \$ - | \$ 0.00639 | \$ (0.00089) | \$ (0.00003) | \$ (0.00045) | \$ 0.00788 | \$ 0.00007 | \$ 0.00238 | \$ 0.00012 | \$ 0.06338 |
| Dec-22 | \$ 0.04580 | \$ 0.00211 | \$ - | \$ 0.00639 | \$ (0.00089) | \$ (0.00003) | \$ (0.00045) | \$ 0.00788 | \$ 0.00007 | \$ 0.00238 | \$ 0.00012 | \$ 0.06338 |

Notes:

- (a) For January - December 2022: R.I.P.U.C. Tariff No. 2095 (Effective 1/1/2022; Issued 12/23/2021)
- (b) For January - March 2022: R.I.P.U.C. Tariff No. 2095 (Effective 1/1/2022; Issued 12/23/2021)
For April - December 2022: R.I.P.U.C. Tariff No. 2095 (Effective 10/1/2022; Issued 9/27/2022)
- (c) For January - September 2022: R.I.P.U.C. Tariff No. 2095 (Effective 1/1/2022; Issued 12/23/2021)
For October - December 2022: R.I.P.U.C. Tariff No. 2095 (Effective 10/1/2022; Issued 9/27/2022)
- (d) For January - March 2022: R.I.P.U.C. Tariff No. 2095 (Effective 1/1/2022; Issued 12/23/2021)
For April - December 2022: R.I.P.U.C. Tariff No. 2095 (Effective 10/1/2022; Issued 9/27/2022)
- (e) For January - September 2022: R.I.P.U.C. Tariff No. 2095 (Effective 1/1/2022; Issued 12/23/2021)
For October - December 2022: R.I.P.U.C. Tariff No. 2095 (Effective 10/1/2022; Issued 9/27/2022)
- (f) For January - June 2022: R.I.P.U.C. Tariff No. 2095 (Effective 1/1/2022; Issued 12/23/2021)
For July - December 2022: R.I.P.U.C. Tariff No. 2095 (Effective 10/1/2022; Issued 9/27/2022)
- (g) For January - September 2022: R.I.P.U.C. Tariff No. 2095 (Effective 1/1/2022; Issued 12/23/2021)
For October - December 2022: R.I.P.U.C. Tariff No. 2095 (Effective 10/1/2022; Issued 9/27/2022)
- (h) For January - March 2022: R.I.P.U.C. Tariff No. 2095 (Effective 1/1/2022; Issued 12/23/2021)
For April - December 2022: R.I.P.U.C. Tariff No. 2095 (Effective 10/1/2022; Issued 9/27/2022)
- (i) For January - June 2022: R.I.P.U.C. Tariff No. 2095 (Effective 1/1/2022; Issued 12/23/2021)
For July - December 2022: R.I.P.U.C. Tariff No. 2095 (Effective 10/1/2022; Issued 9/27/2022)
- (j) For January - June 2022: R.I.P.U.C. Tariff No. 2095 (Effective 1/1/2022; Issued 12/23/2021)
For July - December 2022: R.I.P.U.C. Tariff No. 2095 (Effective 10/1/2022; Issued 9/27/2022)
- (k) For January - June 2022: R.I.P.U.C. Tariff No. 2095 (Effective 1/1/2022; Issued 12/23/2021)
For July - December 2022: R.I.P.U.C. Tariff No. 2095 (Effective 10/1/2022; Issued 9/27/2022)

IV. Transmission

| A-16 | (a) | (b) | (c) | (d) = (a) + (b) + (c) |
|--------|--------------------------|-------------------------|-----------------------------------|-----------------------|
| | Transmission | | | |
| | Base Transmission Charge | Transmission Adjustment | Transmission Uncollectible Factor | Transmission |
| Jan-22 | \$ 0.03454 | \$ 0.00074 | \$ 0.00046 | \$ 0.03574 |
| Feb-22 | \$ 0.03454 | \$ 0.00074 | \$ 0.00046 | \$ 0.03574 |
| Mar-22 | \$ 0.03454 | \$ 0.00074 | \$ 0.00046 | \$ 0.03574 |
| Apr-22 | \$ 0.03524 | \$ 0.00095 | \$ 0.00046 | \$ 0.03665 |
| May-22 | \$ 0.03524 | \$ 0.00095 | \$ 0.00046 | \$ 0.03665 |
| Jun-22 | \$ 0.03524 | \$ 0.00095 | \$ 0.00046 | \$ 0.03665 |
| Jul-22 | \$ 0.03524 | \$ 0.00095 | \$ 0.00046 | \$ 0.03665 |
| Aug-22 | \$ 0.03524 | \$ 0.00095 | \$ 0.00046 | \$ 0.03665 |
| Sep-22 | \$ 0.03524 | \$ 0.00095 | \$ 0.00046 | \$ 0.03665 |
| Oct-22 | \$ 0.03524 | \$ 0.00095 | \$ 0.00046 | \$ 0.03665 |
| Nov-22 | \$ 0.03524 | \$ 0.00095 | \$ 0.00046 | \$ 0.03665 |
| Dec-22 | \$ 0.03524 | \$ 0.00095 | \$ 0.00046 | \$ 0.03665 |

Notes:

(a)(b)(c) For January - March 2022: R.I.P.U.C. Tariff No. 2095 (Effective 1/1/2022; Issued 12/23/2021)
For April - December 2022: R.I.P.U.C. Tariff No. 2095 (Effective 10/1/2022; Issued 9/27/2022)

V. Transition

| A-16 | (e) | (f) | (g) = (e) + (f) |
|--------|------------------------|------------------------------|-----------------|
| | Transition | | |
| | Base Transition Charge | Transition Charge Adjustment | Transition |
| Jan-22 | \$ (0.00149) | \$ 0.00004 | \$ (0.00145) |
| Feb-22 | \$ (0.00149) | \$ 0.00004 | \$ (0.00145) |
| Mar-22 | \$ (0.00149) | \$ 0.00004 | \$ (0.00145) |
| Apr-22 | \$ - | \$ 0.00018 | \$ 0.00018 |
| May-22 | \$ - | \$ 0.00018 | \$ 0.00018 |
| Jun-22 | \$ - | \$ 0.00018 | \$ 0.00018 |
| Jul-22 | \$ - | \$ 0.00018 | \$ 0.00018 |
| Aug-22 | \$ - | \$ 0.00018 | \$ 0.00018 |
| Sep-22 | \$ - | \$ 0.00018 | \$ 0.00018 |
| Oct-22 | \$ - | \$ 0.00018 | \$ 0.00018 |
| Nov-22 | \$ - | \$ 0.00018 | \$ 0.00018 |
| Dec-22 | \$ - | \$ 0.00018 | \$ 0.00018 |

Notes:

(e)(f) For January - March 2022: R.I.P.U.C. Tariff No. 2095 (Effective 1/1/2022; Issued 12/23/2021)
For April - December 2022: R.I.P.U.C. Tariff No. 2095 (Effective 10/1/2022; Issued 9/27/2022)

MAE 1-6

Request:

- a) Explain whether thermal demand for gas factors into the seasonal valuation of net metering credits.
- b) If so, please explain whether such a method is consistent with the guiding principles adopted in PUC Docket 4600, and with the purpose of Rhode Island's net metering law as set out in § 39-26.4-1 and otherwise with Rhode Island's State Energy Plan, Energy 2035, and with Rhode Island's energy and climate policies.

Response:

- a) Please refer to the Company's response to MAE 1-5 for an explanation of the calculation of the value of Renewable Net Metering Credits. The thermal demand for gas of an individual customer is not a factor in the calculation of the value of their respective Renewable Net Metering Credit if they are a net metering customer. With respect to the aggregate demand for natural gas from heating customers: as discussed in the Company's response to MAE 1-5, to the extent the Last Resort Service component of the Renewable Net Metering Credit differs between seasons (i.e., the summer months of April through September and the winter months of October through March), this is largely a function of natural gas pipeline constraints into the New England market and high natural gas demand, *including from heating customers*, causing elevated natural gas prices and, consequently, elevated electricity prices during the winter period as compared to the summer period.
- b) The method by which the value of Renewable Net Metering Credits are calculated is pursuant to the Company's Commission-approved Net Metering Provision, R.I.P.U.C. 2257. The Company believes the approved Net Metering Provision is consistent with the guiding principles adopted in R.I.P.U.C. Docket No. 4600, with the purpose of Rhode Island's net metering law as set out in § 39-26.4-1, with Rhode Island's State Energy Plan, Energy 2035, and with Rhode Island's energy and climate policies.

MAE 1-7

Request:

- a) Explain whether an annual reconciliation of the value of the net metering credit has to be based on the monthly (seasonal) value under either the law or the net metering tariff.
- b) If not, could the value of the credit be reconciled with the production/consumption reconciliation?
- c) Which approach would better fulfill the purpose of the net metering statute?
- d) Which approach would be most consistent with the Docket 4600 valuation principles?

Response:

- a) Annual reconciliation of the value of the net metering credit based on the monthly value is consistent with *both* the law (RIGL 39-26.4-3.(a)(2)(ii)) *and* the net metering tariff (RIPUC 2257 II (5)). The law contemplates monthly bills in the reconciliation; the law does not contemplate seasonal values in the reconciliation.
- b) Not applicable.
- c) Annual reconciliation using monthly values is the only approach that fulfills the purpose of the net metering statute. RIGL 39-26.4-1 identifies the purposes of net metering as “to facilitate and promote installation of customer-sited, grid-connected generation of renewable energy; to support and encourage customer development of renewable generation systems; to reduce environmental impacts; to reduce carbon emissions that contribute to climate change by encouraging the local siting of renewable energy projects; to diversify the state’s energy generation sources; to stimulate economic development; to improve distribution system resilience and reliability; and to reduce distribution system costs. to reduce distribution system costs.” The Company’s understanding of “an annual reconciliation of the value of the net metering credits based on the monthly ... value” is that it is equivalent to monetizing the net metering credit at the time of generation as we do today (i.e, on a monthly basis). The Company’s understanding of “could the value of the credit be reconciled with the production/consumption reconciliation” is that the net metering credit monetization would be tied to the electric rate at the time of consumption rather than the electric rate at the time of generation. The former, and the approach the Company takes today, is more aligned with fulfilling the purpose of the net metering statute by “reducing distribution system costs”. If we were to implement the latter, ratepayers would be adversely impacted by further subsidizing the net metering program. Additionally, compensation at the time of generation is

MAE 1-7, page 2

aligned with fulfilling the purpose of the statute which is intended for “grid-connected generation of renewable energy” such that compensation at the time of consumption would be more aligned with a energy storage system.

- d) Annual reconciliation using monthly values is the approach that is most consistent with Docket 4600 valuation principles. The Stakeholder Report adopted by Order 22851 in Docket 4600 provides twelve rate making principles [page 12 of the Stakeholder Report], of which the most relevant principles for this discussion are as follows:
- Promote economic efficiency over the short and long term
 - Provide efficient price signals that reflect long-run marginal cost
 - All parties should provide fair compensation for value and services received and should receive fair compensation for value and benefits delivered
 - Be consistent with policy goals (e.g. environmental, climate (Resilient Rhode Island Act), energy diversity, competition, innovation, power/data security, least cost procurement, etc.)
 - Rate structures should be evaluated on whether they encourage or discourage appropriate investments that enable the evolution of the future energy system

Each of the five principles above supports an annual reconciliation of monthly value rather than seasonal value. By more closely linking the timing of generation to the timing of consumption, the Company is more appropriately valuing renewable energy production, which provides its benefits at the time of generation absent an energy storage system. By allowing seasonal valuation, and implicitly incorrectly assuming energy storage capability of renewable energy systems, the Company would be violating the Docket 4600 principle that “rate structures should be evaluated on whether they encourage or discourage appropriate investments that enable the evolution of the future energy system” because the value of energy storage would be inappropriately internalized in compensation for renewable energy production.

The Narragansett Electric Company
d/b/a Rhode Island Energy
RIPUC Docket No. 23-05-EL
In Re: Net Metering Excess Credits Tariff Advice 2023
Responses to MassAmerican Energy's First Set of Data Requests
Issued on July 21, 2023

MAE 1-8

Request:

Provide calculations demonstrating the impact of such an annual reconciliation of valuation based on last year's rates for a residential account, relative to the current way of valuing the net metering credit based on monthly (seasonal) value.

Response:

On a monthly basis, the customer will receive the full Renewable Net Metering Credit for any net generation. On an annual basis, if any of that net generation is considered Excess Renewable Net Metering Credit, the account will be trued up to reconcile the over crediting. The value of the Net Metering Credits is listed below month-to-month based on last year's rates for a residential customer.

| A-16 | Renewable Net Metering Credit | | Excess Renewable Net Metering Credit | |
|----------------|--------------------------------------|----------------|---|----------------|
| Jan-22 | \$ | 0.18226 | \$ | 0.10217 |
| Feb-22 | \$ | 0.18226 | \$ | 0.10217 |
| Mar-22 | \$ | 0.18226 | \$ | 0.10217 |
| Apr-22 | \$ | 0.15163 | \$ | 0.06900 |
| May-22 | \$ | 0.15163 | \$ | 0.06900 |
| Jun-22 | \$ | 0.15163 | \$ | 0.06900 |
| Jul-22 | \$ | 0.15163 | \$ | 0.06900 |
| Aug-22 | \$ | 0.15163 | \$ | 0.06900 |
| Sep-22 | \$ | 0.15163 | \$ | 0.06900 |
| Oct-22 | \$ | 0.25327 | \$ | 0.17064 |
| Nov-22 | \$ | 0.25327 | \$ | 0.17064 |
| Dec-22 | \$ | 0.25327 | \$ | 0.17064 |
| AVERAGE | \$ | 0.18470 | \$ | 0.10270 |

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MAE 1-9

Request:

Provide calculations demonstrating the impact of such an annual reconciliation of valuation based on last year's rates for a commercial account, relative to the current way of valuing the net metering credit based on monthly (seasonal) value.

Response:

On a monthly basis, the customer will receive the full Renewable Net Metering Credit for any net generation. On an annual basis, if any of that net generation is considered Excess Renewable Net Metering Credit, the account will be trued up to reconcile the over crediting. The value of the Net Metering Credits is listed below month-to-month based on last year's rates for a commercial customer.

| C-06 | Renewable Net Metering Credit | |
|----------------|--------------------------------------|--------------------------------------|
| | Renewable Net Metering Credit | Renewable Net Metering Credit |
| Jan-22 | \$ 0.17176 | \$ 0.09509 |
| Feb-22 | \$ 0.17176 | \$ 0.09509 |
| Mar-22 | \$ 0.17176 | \$ 0.09509 |
| Apr-22 | \$ 0.15087 | \$ 0.07230 |
| May-22 | \$ 0.15087 | \$ 0.07230 |
| Jun-22 | \$ 0.15087 | \$ 0.07230 |
| Jul-22 | \$ 0.15087 | \$ 0.07230 |
| Aug-22 | \$ 0.15087 | \$ 0.07230 |
| Sep-22 | \$ 0.15087 | \$ 0.07230 |
| Oct-22 | \$ 0.25415 | \$ 0.17558 |
| Nov-22 | \$ 0.25415 | \$ 0.17558 |
| Dec-22 | \$ 0.25415 | \$ 0.17558 |
| AVERAGE | \$ 0.18191 | \$ 0.10382 |

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MAE 1-10

Request:

How can a net metering customer know what they are consuming over a monthly, semi- annual, and annual period?

Response:

Presently, the existing metering solution for net metering customers provides the Company with the monthly net value of the difference between generation and consumption. As such, the Company is not able to directly measure or display the generation or consumption. A net metering customer would need to rely on a production meter or other monitoring solution as part of the solar installation which is owned and operated by the customer/installer. This production data in addition to the Company's monthly meter reading of the net kWh can be used to calculate the consumption over a monthly, semi-annual, and annual period.

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MAE 1-11

Request:

How can a net metering customer know what they are being credited over a monthly, semi-annual, and annual period?

Response:

A net metering customer can know what they are being credited over a monthly, semi-annual, and annual period by looking at their monthly bills. As currently displayed on page two of the bill, if the "Total Usage" value is recorded as a negative kWh, then the customer will receive net metering credits for that amount of generation. This is located on page two labeled as "Renewable Gen Credit" and will show up as a credit, or a negative dollar value, on the bill.

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MAE 1-12

Request:

When a net metering project is crediting to numerous off-take accounts pursuant to a schedule B, how can the developer access and verify the account information to reconcile project production to consumption at the accounts?

Response:

The Company requires permission from the off-taker account allowing us to share the consumption data with the developer. The developer should work directly with their Customer Energy Integration contact at the Company to facilitate this. Alternatively, the developer and the off-taker account holder can work together directly to share information.

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MAE 1-13

Request:

Explain how a net metering customer can gather the information needed to determine whether they are over-consuming or being over-credited in time to adjust and avoid the proposed billing charges?

Response:

The reconciliation analysis is performed annually, looking back at the previous year. In order to avoid a billing charge as explained in RIPUC 2257 II (5), the customer shall appropriately size their system such that the annual generation does not exceed annual consumption and thus avoid producing any Excess Renewable Net Metering Credits. As generation and load may vary substantially year to year, it is not feasible to accurately determine if a given customer will have a billing charge until the year has concluded. The billing charge is a mechanism to true up accounts that were over-credited throughout the year; the customer is compensated for all generation and any excess generation up to 125% generation to consumption.

MAE 1-14

Request:

- a) When in the calendar year would the proposed annual reconciliation take place?
- b) Why then?
- c) How does that timing of reconciliation impact the result of reconciliation, if at all?

Response:

- a) Refer to the Joint Pre-Filed Direct Testimony of Erica J. Russell Salk and Stephanie A. Briggs, Page 15, Line 18 to Page 16, Line 6:

Q. What is the Company's timing for filing for the 2022 Volumetric Method reconciliation?

- A. The Company is targeting to file the CY 2022 Volumetric Method reconciliation by August 1, 2023.

Q. What is the Company's timing for filing for 2023 and beyond?

- A. For CY 2023 and beyond, the Company will file the annual Volumetric Method reconciliations by August 1st.

Please also refer to Page 17, Lines 15 to 20 with respect to the timing of the CY 2022 Volumetric Method reconciliation:

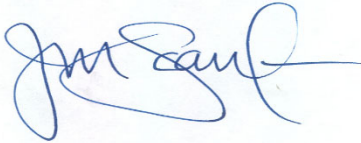
Q. If the Company is not able to make a filing in time for the October 1 effective date, what is the Company proposing?

- A. If the Company is unable to submit a filing to reflect the Volumetric Method reconciliation in time for rates to become effective October 1, the Company proposes to shorten the recovery period such that the amount will still be credited to customers by March 31 or as otherwise approved by the Commission.
- b) The Company's proposed timeline, as described above, provides it with sufficient time to complete the Volumetric Method reconciliation analysis and for the Commission to review the analysis prior to the inclusion of the Volumetric Method reconciliation amount in the net metering charge and the implementation of any charge to net metering customers.
- c) The timing of when the Volumetric Method reconciliation analysis is completed would not affect the results of Volumetric Method reconciliation analysis since it is dependent solely upon historical variables (i.e., historical consumption, generation, and rates).

Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate was 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.



Joanne M. Scanlon

August 11, 2023

Date

**Docket No. 23-05-EL Rhode Island Energy – Net Metering Provision, RIPUC No. 2268
Service List updated 5/12/2023**

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