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Rhode Island Energy™
a PPL company

July 1, 2022

VIA ELECTRONIC MAIL

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

RE: Docket 5127 – 2021 Retail Rate Filing
Responses to PUC Data Requests – Set 8

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a Rhode Island Energy, attached please find the electronic version[1] of Rhode Island Energy's responses to the Eighth Set of Data Requests.

Thank you for your attention to this filing. If you have any questions or concerns, please do not hesitate to contact me at 401-784-4263.

Sincerely,

Andrew S. Marcaccio

Enclosures

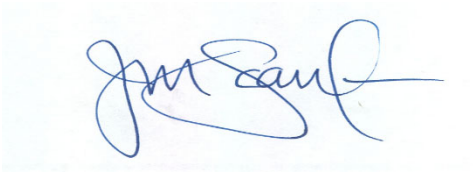
cc: Docket 5127 Service List
Jon Hagopian, Esq., Division
John Bell, Division
Albert Vitali, Esq., Office of Energy Resources

[1] Per a communication from Commission counsel on October 4, 2021, the Company is submitting an electronic version of this filing followed by six (6) hard copies filed with the Clerk within 24 hours of the electronic filing.

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

July 1, 2022
Date

National Grid – 2021 Annual Retail Rate Filing - Docket No. 5127
Service List Updated 7/1/2022

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PUC 8-1

Request:

In PUC 5-1, the Commission asked for the volume and value of excess generation (i.e. negative net kWhs) from net metering facilities in calendar years 2019 and 2020. In response, the Company suggested multiple answers. In subsequent data requests (including some issued in Docket No. 5234), the Commission asked for further information regarding the company's answers to its original question, including the volume and value of excess generation (i.e. negative net kWhs) from net metering facilities in calendar year 2021. Please provide the Company's position on the volume and value of excess generation from net metering facilities in calendar years 2019, 2020, and 2021.

Response:

As explained below, the Company's position on the volume and value of excess generation from net metering facilities in calendar years 2019, 2020, and 2021 results in a total proposed credit to distribution customers of $3,042,534. Please see Table 3, Column (g), for a breakdown by year.

Issue

Net metering facility ("NMF") hosts and their satellite customers have accumulated a total of approximately $15 million of credit balances on their electric accounts as of January 31, 2022. This credit balance accumulation is largely due to excess net metering credits that are not consumed by electric bills.

- To address the provisions of the Net Metering Provision, R.I.P.U.C. No. 2207 (the "NM Tariff")[1] regarding generation in excess of usage, the Company performed an annual reconciliation for 2019, 2020, and 2021 to determine the excess net metering credit amount using volumetric and monetary methods. Both methods use assumptions to calculate total net metering excess credits since the net meter only records the net difference in generation and consumption, not the individual actual generation and actual consumption. The results of the annual reconciliations are shown in Table 1 below.

[1] https://www.rienergy.com/media/pdfs/billing-payments/tariffs/ri/nmprovision_ripuc_2241.pdf

PUC 8-1, page 2

Table 1				
	Volumetric		Monetary	
Year	# of NM Facilities	Total Excess Credits	# of NM Facilities	Total Excess Credits
2019	638	$714,931	540	$2,771,690
2020	869	$962,284	718	$8,464,662
2021	1,139	$2,869,472	793	$6,922,224

- The application of either method will only address part of excess credit balance accumulated as shown in Table 2 below.

Table 2				
	Volumetric		Monetary	
Year	Total Charge to recoup excess credits	Credit Balance after applying charge	Total Charge to recoup excess credits	Credit Balance after applying charge
2019	$308,333	$2,463,357	$1,518,260	$1,253,430
2020	$1,095,782	$7,368,880	$6,185,539	$2,279,123
2021	$2,158,279	$4,763,945	$4,644,833	$2,277,391

Company's Proposed Solution

The Company will be addressing the excess credit balance in its totality and implement processes that will mitigate the risk of NMF host and satellite customers from being in the same situation (where a large sum of a total excess credit balance is being accumulated) moving forward. The excess credits and the associated charge will be calculated using the following:

- Use volumetric method to calculate excess generation.

- Exclude net metering facilities where excess credit balance is $100 or less for residential accounts and $500 or less for non-residential accounts. This means that facilities that do not meet this criterion will not be included in the annual reconciliation for the given year. The Company believes that by excluding these facilities, it will reduce the administrative burden on the Company of performing and applying annual reconciliation.

PUC 8-1, page 3

- Table 3 below represents revised excess generation charge that will be applied to net metering facilities.

Table 3

(a) Year	(b) Number of Net Metering Facilities	(c) Total Excess Generation (kWh)	(d) Total Charge to recoup	(e) Number of Net Metering Facilities after applying above proposal	(f) Total Excess Generation after applying above proposal (kWh)	(g) Total Charge to recoup after applying above proposal
2019	638	3,707,576	$308,333	258	3,318,606	$279,794
2020	869	11,896,251	$1,095,782	278	11,100,830	$1,031,597
2021	1,139	18,477,899	$2,158,279	444	15,381,177	$1,731,142
Total	NA	34,081,726	$3,562,394	NA	29,800,613	$3,042,534

The Company intends to propose that the charges to net metering facilities identified in Column (g) be credited back to distribution customers as a reduction to the currently effective Net Metering Charge over a six-month period from October 1, 2022 through March 31, 2023.

The Company will address any remaining excess credits that are still on the accounts after applying the proposed charges as mentioned above in following manner:

- Allow remote net metering facilities to request a one-time transfer of accumulated credits to other accounts that can accept the credits with no excess, whether or not they are already included on the current Schedule B;

- Refund any bill payments that customers may have made after the net metering system became operational and after Schedule B was completed (i.e., electricity overpayments);

- Allow customers to "repair" their net metering credit ("NMC") allocation percentages on Schedule B to stop accumulation of excess credits on certain accounts; and

- Allow customers with excess NMCs to apply them to other charges on the bill, such as energy efficiency co-payments.

PUC 8-2

Request:

Please explain the mathematical process by which the Company derived its answer to PUC 8-1. Your answer should provide a similar level of detail as what was provided in Attachment PUC 5-1-1.

Response:

Please refer to Attachment PUC 8-2 for the mathematical process of calculating excess generation using the volumetric method.[1]

[1] Please note that the attachment stems from National Grid work product which is why it is branded as National Grid. Rhode Island Energy agrees with the methodology.

Rhode Island Net Metering Reconciliation

Volumetric Method

nationalgrid

High Level Steps

1. Determine which projects are over-generating and by how much (in kWh)
2. Calculate portion of kWh excess btwn 100-125% and >125% of consumption
3. Calculate respective billing charges

Step 1: Volumetric Method

1. Sum host NM reads over 12 month period

2. Sum satellite meter reads of all satellites for a given host over 12 month period

3. 1 + 2 = **Net Excess kWh per "Community" Host**
   - Filter < 0 to get kWh Over Generated

→

- **Net Excess kWh per "Single" Host**
- Filter < 0 to get kWh Over Generated

Input Data:

- All 2019 bills for nm host in RI
- Bills for satellites if transfers in 2019

"Single" Hosts does not allocate to other accounts

Community Hosts allocate to offtaking accounts (remote or onsite)

Step 2: Sort over generating projects

$$\frac{\text{Generation}}{\text{Total Consumption}} * 100 = 100 < \text{x}\,\% < 125; \text{OR y}\,\% > 125$$

Main Issue: **The Company does not have data for onsite usage or generation of NM projects**

- Need to get :
  A. Estimate of Generation, or
  B. Estimate of Usage

Step 2: Generation Estimate

$$\frac{\text{Generation}}{\text{Total Consumption}} * 100 = 100 < \text{x}\,\% < 125; \text{OR y\%}>125$$

- Estimate from “Estimated Annual Generation” filed in parent case SF
- Likely PV Watts or similar

1. Under Consuming **2. Over Generating**

$$\frac{\text{Generation}}{\text{Total Consumption}} = \frac{\text{Est. Generation}}{\text{Est. Gen} - \text{abs(Excess)}} \; or \; \frac{\text{Est. Gen} + \text{abs(Excess)}}{\text{Est. Gen}}$$

Step 2: Usage Estimate

$$\frac{\text{Generation}}{\text{Total Consumption}} * 100 = 100 < x\,\% < 125; \text{OR } y\%>125$$

- 3 yr avg usage filed in parent case SF

3. Under Consuming **4. Over Generating**

$$\frac{\text{Generation}}{\text{Total Consumption}} = \frac{\text{Est. Usage}}{\text{Est. Usage} - \text{abs(Excess)}} \; or \; \frac{\text{Est. Usage} + \text{abs(Excess)}}{\text{Est. Usage}}$$

Step 2: Calculations

Default Equation:

$$\frac{\text{Generation}}{\text{Total Consumption}} = \frac{\text{Est.imated Generation}}{\text{Est.imated Gen} - Excess\ kWh}$$

Standalone*:

$$\frac{\text{Generation}}{\text{Total Consumption}} = \frac{Acutal\ Generation}{\text{Sat}ellite\ \text{Usage}}$$

*For standalone systems onsite consumption is assumed to be zero. The net meter reads provide actual generation values for each billing period.

Step 3: Calculate respective billing charges

Used **December 2019** rates summarized below:

Rate	Supply (Fixed SOS)	Total Transmission	Billing Distribution	Total Transition
A16	0.010957	0.02854	0.05263	-0.00114
A60	0.010957	0.02854	0.05111	-0.00114
C06	0.010248	0.02497	0.05160	-0.00114
G02	0.010248	0.00702	0.01055	-0.00114

kWh Generation	Billing Charge
100-125% of consumption	[Distribution + Transmission + Transition] * (Excess Generation 100% < kWh <125%)
>125% of consumption	[Standard Offer + Distribution + Transmission + Transition]*(Net Excess Generation kWh> 125%)

Step 3: Billing Charge 1

If such consumption is less than the kWh generated by the Eligible Net Metering System during the applicable 12-month period, the Company will apply a billing charge to the Net Metering Customer's account equal to the difference between the Renewable Net Metering Credit and the Excess Renewable Net Metering Credit in effect during the applicable 12-month period multiplied by the difference between the kWh generated by the Eligible Net Metering System and the consumption during the same 12-month period.

Renewable Net Metering Credit =

(i) Standard Offer 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.

Excess Renewable Net Metering Credit = Avoided cost = Standard Offer

Billing Charge 1: [Distribution + Transmission + Transition] * (Excess Generation 100% < kWh <125%)

Step 3: Billing Charge 2

If the kWh generated by the Eligible Net Metering System during the applicable 12-month period exceeds such consumption by more than 25 percent, the Company will apply a billing charge to the Net Metering Customer's account equal to the Renewable Net Metering Credit in effect during the applicable 12-month period multiplied by the kWh generated in excess of 125 percent of the consumption.

Renewable Net Metering Credit =

(i) Standard Offer 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.

Billing Charge 2 = [Standard Offer + Distribution + Transmission + Transition]*(Excess Generation kWh> 125%)

PUC 8-3

Request:

Please identify whether any portion of the Net Metering tariff needs technical amendments in order to effectuate the process described in your response to PUC 8-2.

Response:

The Company would like to make changes to the Net Metering Provision, R.I.P.U.C. No. 2241, to enable the following:

- Propose a cash out provision to cash out Excess Renewable Net Metering Credits (credits for energy produced that is between 100% and 125% of the Net Metering customer's usage during the billing period) at the average annual Last Resort Service rate on annual basis.

- Modify the language of Section II.4 to include details of the volumetric method calculation.

- Include a statement that will specifically require that Schedule B add up to 100% before the project receives authority to interconnect ("ATI") and also require the following:

    - Limit the transfer of Net Metering Credits to a satellite account from single host accounts. This means that a satellite account can only receive net metering credits from a single host account and not multiple host accounts.

    - Allow the transfer of excess Net Metering Credits from satellite accounts back to Host accounts when a satellite account is finaled (closed).

PUC 8-4

Request:

If different from the responses above, please provide the Company's proposal for appropriately executing the Net Metering tariff in accordance with § 39-26.4 on a going forward basis.

Response:

The Company intends to follow the approach as described in the responses to PUC 8-1, PUC 8-2, and PUC 8-3.