

Laura C. Bickel Senior Counsel Legal Department

April 2, 2020

VIA E-FILING

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

Re: In Re: Commission's Review of the Benefits and Costs of Net Metering Credit Calculation Pursuant to R.I. Gen. Laws § 39-26.4-3: Docket No. 5010

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a National Grid (the Company), enclosed for filing with the Rhode Island Public Utilities Commission (the Commission) please find the Company's responses to the first set of data requests issued by the Commission. Consistent with the instructions issued by the Commission on March 16, 2020, this filing is being made electronically only. Hard copies will be submitted after the termination of the State of Emergency.

If you have any questions, please contact me at: 781-907-2126. Thank you for your time and attention to this matter.

Very truly yours,

Laura C. Bickel RI Bar # 10055

Enclosures

Docket No. 5010 Service List cc:

Docket No. 5010 Service List as of 4/1/2020

N T	E-mail	Phone
Name PUC		
	Luly Massage @nya si sayy	401 700 2107
Luly Massaro, Clerk	Luly.Massaro@puc.ri.gov;	401-780-2107
Todd Bianco	Todd.Bianco@puc.ri.gov;	
Emma Rodvien	Emma.Rodvien@puc.ri.gov;	
Cynthia Wilson-Frias	Cynthia.WilsonFrias@puc.ri.gov;	
D1 W -14	D1 W-1	1
Raquel Webster Vishal Ahirrao	Raquel.Webster@nationalgrid.com;	
Ian Springsteel	Vishal.Ahirrao@nationalgrid.com;	
Timothy Roughan	ian.springsteel@nationalgrid.com;	
Brooke Skulley	Timothy.Roughan@nationalgrid.com;	
Kate Grant	brooke.skulley@nationalgrid.com;	
Laura Bickel	Kate.Grant2@nationalgrid.com;	
Thomas Kender	Laura.Bickel@nationalgrid.com;	
John Kennedy	Thomas.Kender@nationalgrid.com;	
•	John.Kennedy@nationalgrid.com;	
Chris Kearns	Christopher.Kearns@energy.ri.gov;	
Shauna Beland	Shauna.Beland@energy.ri.gov;	
Nicholas Ucci	Nicholas.Ucci@energy.ri.gov;	
Carrie Gill	Carrie.Gill@energy.ri.gov;	
Jonathan Schrag	Jonathan.Schrag@dpuc.ri.gov;	
Jon Hagopian	Jon.Hagopian@dpuc.ri.gov;	
John Bell	John.Bell@dpuc.ri.gov;	
Nicole Verdi	Nicole.Verdi@governor.ri.gov;	
Maria Messick	Maria.Messick@governor.ri.gov;	
	mishag@brightplanetsolar.com;	
Alan McBride	amcbride@iso-ne.com;	
Andrew Bernstein	abernstein@kearsargeenergy.com;	
Annie Ratanasim	Annie.Ratanasim@commerceri.com;	
Ben Aparo	ben@edp-energy.com;	
Ben Swanson	ben.swanson@trinitysolarsystems.com;	
Blake Elder	belder@eq-research.com;	
Charles Nutter	cnutter@nexamp.com;	
Christian Capizzo	ccapizzo@psh.com;	
Christopher Warfel	cwarfel@entech-engineering.com;	
Dan Bosley	dbosley@necec.org;	
Dan Hendrick	dan.hendrick@clearwayenergy.com;	
Dana Weinberg	dana@sunwatt.solar;	
Daniel Pertwee	daniel.pertwee@palmettoventures.com;	
David Milner	dmilner@nugencapital.com;	
Devina Thakur	dthakur@ameresco.com;	
Doug Sabetti	doug@newportsolarri.com;	

E W Tatelbaum	etatelbaum@kearsargeenergy.com;	
Eric Beecher	eric@solpowersolar.com;	
Erika Niedowski	erika@communitysolaraccess.org;	
Ethan Gyles	egyles@nexamp.com;	
Evan Dube	evand@sunrun.com;	
Frank Epps	frank@edp-energy.com;	
Frank McMahon	fmcmahon@advocacysolutionsllc.com;	
Fred Unger	unger@hrtwd.com;	
George Zainyeh	gzainyeh@shslawfirm.com;	
Hannah Morini	hm@green-ri.com;	
Helen Anthony	helen@handylawllc.com;	
James Feinstein	james.feinstein@arcadia.com;	
Jeremy McDiarmid	jmcdiarmid@necec.org;	
Joel Lindsay	jlindsay@ameresco.com;	
Johanna Rosas	johanna@southernskyre.com;	
John Habib	jhabib@keeganwerlin.com;	
Julian Dash	jdash@cleaneconomydevelopment.com;	
Julian Dash	jdash@cleaneconomydevelopment.com;	
Karen Bradbury	karen_bradbury@whitehouse.senate.gov;	
Kate Tohme	kate.tohme@state.ma.us;	
Kathryn Chelminski	kchelminski@ameresco.com;	
Kavita Ravi	kravi@bluewavesolar.com;	
Kenneth Payne		
Kleo Taliadouros		
Laura Frazier	lfrazier@nugencapital.com;	
Laura Stern		
Lindsay McGovern	lindsay@southernskyre.com;	
Louis DiPalma		
Mark DePasquale	md@green-ri.com;	
Mark Durrenberger	mark@newenglandcleanenergy.com;	
Mark Sylvia	msylvia@bluewavesolar.com;	
Matt Sullivan	ms@green-ri.com;	
Matthew Stern	mstern@keeganwerlin.com;	
Michael Daley	mdaley@ibew99.org;	
Michael Kerr	michael@nehydropower.com;	
Michelle Carpenter	mcarpenter@tpoint-e.com;	
Miguel Silva	Miguel.Silva@directenergy.com;	
Mike Lucini	mlucini@ismgroup.com;	
Nathan Phelps	nathan@votesolar.org;	
Palmer Moore	pmoore@nexamp.com;	
Paul Del Mar	pdelmar@ameresco.com;	
Paul Raducha	praducha@kearsargeenergy.com;	
Pete Fine	pete@ussolarworks.com;	
Peter Hughes	<pre>peter@sunwatt.solar;</pre>	
Philip Small	psmall@brownrudnick.com;	

Ralph Gillis	rg@green-ri.com;	
Ralph Palumbo	ralph@southernskyre.com;	
Rick Sellers	rhsellers@gmail.com;	
Russ Mamon	russ@edp-energy.com;	
Ryan Palumbo	ryan@southernskyre.com;	
Sarah O'Neil	seo@green-ri.com;	
Scott Milnes	smilnes@econoxgroup.com;	
Sean Burke	sburke@necec.org;	
Seth Handy	seth@handylawllc.com;	
Sheila Keane	sheila.keane@state.ma.us;	
Stephen Lassiter	Stephen.lassiter@sunrun.com;	
Sue Lyons	sue@ussolarworks.com;	
Sydney Usatine	SUsatine@riib.org;	
Tara Pennese	tp@green-ri.com;	
Thomas Champlin	Thomaschamplin4@gmail.com;	
Tom Holt	tholt@kearsargeenergy.com;	
Tyler Haines	tyler.haines@fairstead.com;	
Weezie Nuara	mnuara@iso-ne.com;	
Nicholas Al Ferzly	nalferzly@seadvantage.com	
Jim Kennerly	jkennerly@seadvantage.com	

PUC 1-1

Request:

Per § 39-26.4-2, an eligible net-metering system consists of a facility "designed and sized to annually produce electricity in an amount that is equal to, or less than, the renewable self-generator's usage... measured by the *three-year average annual consumption of energy over the previous three years*" (emphasis added).

- a. How is the time period of the three-year average determined? For example, is the time period the thirty-six months prior to the filing of the interconnection application, or some other thirty-six-month period?
- b. Is the determination of the three-year period the same for remote net metering enrollment, or does the period begin at some other time? For example, for certain facility and customer enrollments, is the period the thirty-six months prior to a customer being included on a filed Schedule B?
 - i. Please describe any difference in the determination for a community remote net metering project as compared to a "public entity, educational institution, hospital, nonprofit, or multi-municipal collaborative."
- c. For operational net metering facilities (already awarded interconnection), does National Grid retain data on when each facility filed its initial interconnection application?

Response:

- a. When calculating a customer's three-year average annual usage, the Company begins with the customer's most recent bill, and includes it in the average of the prior 36 months. If any more recent bills are issued in between the time that a customer applies for net metering and the time that the three-year average usage is calculated, then the Company includes the more recent bills in the calculation of the average.
- b. The Company calculates the three-year average annual usage for remote net metering customers in the same manner as it does for net metering customers. The Company performs the calculation when a Schedule B form is submitted.

i. The Company calculates three-year average usage for recipients of remote net metering credits in a consistent manner, regardless of whether the billing customer is a residential, large public, or private commercial/industrial entity. However, Schedule B must allocate credits to Low to Moderate income (LMI) participants from a Rhode Island Housing entity or to three (3) other eligible recipients. Although the three-year average usage for LMI customers is calculated in the same manner as that of other customers, it affects the LMI customer's credit allocation from a remote net metering facility differently. Such LMI customers receive a discount of either 25% or 30% on their monthly bill, which is applied to their remote net metering credit allocation along with their calculated three-year average usage. The Net Metering Tariff requires remote net metering facilities to allocate credits to Residential and LMI recipients as follows:

For Residential recipients:

- No more than 50% of the net metering credits may go to one recipient
- At least 50% of the net metering credits must go to individual customers in amounts no greater than the annual kWh produced by a 25 kW AC system

For LMI recipients:

- Projects that seek to serve an LMI customer account must receive written approval from a Rhode Island Housing entity prior to enrolling the project with National Grid.
- c. Yes, the Company retains the interconnection applications of net metering customers after their facilities become operational.

PUC 1-2

Request:

Given the known period over which data is collected to establish the three-year average annual consumption limit provided in response to PUC 1-1, please explain the following:

- a. What data is used by National Grid in this calculation of the three-year annual average, and from where does this data originate? For example, is the data thirty-six monthly meter-read differences recorded in National Grid's billing system?
- b. What is National Grid's method for calculating the average? For example, is there an adjustment for line losses?
- c. Please provide at least one example showing how the responses to part a and b are implemented.

Response:

- a. National Grid calculates a customer's three-year annual average use based on the customer's electric usage at their current address, as shown in kilowatt-hours on the customer's monthly bills. If the Company has billed a customer for less than three years at the customer's current address, then the Company calculates an average based on the data that are available, and the average is updated when a three-year history has been established.
- b. The Company's method for calculating the three-year annual average involves finding a monthly average from a customer's 36 most recent billing cycles, then multiplying by 12 to produce an annual average. No, the Company does not adjust a customer's three-year annual average use for line losses or outages.
- c. Please see Attachment 1-2, in which the Company has provided an illustrative example outlining the three-year *annual* average use calculation, when data is exported from the Company's customer database. The calculated monthly average is multiplied by twelve to calculate a customer's annual average.

	Bill Cycle Start	Bill Cycle End	Total Meter Reading (kWh)
1	2/12/2020	3/12/2020	470
2	1/15/2020	2/12/2020	466
3	12/12/2019	1/15/2020	885
4	11/8/2019	12/12/2019	714
5	10/11/2019	11/8/2019	468
6	9/12/2019	10/11/2019	581
7	8/14/2019	9/12/2019	790
8	7/12/2019	8/14/2019	1061
9	6/12/2019	7/12/2019	798
10	5/14/2019	6/12/2019	539
11	4/10/2019	5/14/2019	574
12	3/13/2019	4/10/2019	438
13	2/11/2019	3/13/2019	503
14	1/11/2019	2/11/2019	554
15	12/11/2018	1/11/2019	872
16	11/9/2018	12/11/2018	659
17	10/12/2018	11/9/2018	465
18	9/12/2018	10/12/2018	575
19	8/10/2018	9/12/2018	926
20	7/12/2018	8/10/2018	884
21	6/13/2018	7/12/2018	785
22	5/11/2018	6/13/2018	614
23	4/11/2018	5/11/2018	484
24	3/15/2018	4/11/2018	437
25	2/9/2018	3/15/2018	543
26	1/11/2018	2/9/2018	474
27	12/12/2017	1/11/2018	800
28	11/10/2017	12/12/2017	697
29	10/11/2017	11/10/2017	517
30	9/12/2017	10/11/2017	626
31	8/11/2017	9/12/2017	733
32	7/13/2017	8/11/2017	708
33	6/14/2017	7/13/2017	754
34	5/12/2017	6/14/2017	709
35	4/13/2017	5/12/2017	567
36	3/14/2017	4/13/2017	580
		Total	23250
	Total Usage kWh	23250	
	# of Months	36	
	Average Usage	645.8333333	

7750

Annual Average

PUC 1-3

Request:

Given the data described in response to PUC 1-2, when determining a customer's three-year consumption limit for net metering, please explain the following:

- a. Does National Grid conduct any screens of the data described to identify significant changes in customer load during that three-year window?
 - i. If so, what screens are used, what are they intended to identify, and how are they included in the calculation of the three-year consumption limit?
- b. How does National Grid establish three-year consumption data for customers with less than three years of consumption data at their current customer address?
 - i. What data is utilized in those calculations, and from where does it originate?
 - ii. Please explain if there is a difference between new residences and new occupancy of existing residences.
- c. How does National Grid establish three-year consumption data for customers with existing distributed generation resources (DG) associated with their account? For example, if a customer could enroll in incremental DG through more on-site net metering, remote net metering, or the Renewable Energy Growth Program, how would that eligible load be established?
 - i. If there is a difference in assumption based on load increases versus generation decreases (due to panel degradation at the existing system) please explain.
- d. Please provide at least one example showing how the responses to part a, b, and c are implemented.

Response:

a. In determining average consumption, the Company does not screen a customer's load profile for any significant changes. If a developer or customer states that there was significant load added (for example, an electric car or a mini split heat pump) within the past three years, then the Company will use the past twelve months of usage instead of three years.

- b. For premises with more than one year of usage at the premise, but less than three years, the Company will use the most recent twelve months of usage to determine average consumption. If there is less than a year of usage data available, then the Company estimates the rest of the year's consumption based on average monthly usage or based on a load sheet, especially if the missing months are significant heating or cooling months. For new customers at an existing premise the Company will use the electricity consumption of the prior account holder to determine average consumption.
 - i. Again, for new premises with less than twelve months of data, the Company uses a load sheet, and for existing premises, the Company uses actual usage data from the meter.
 - ii. For new residences without usage data, the Company uses a load sheet to determine average consumption.
- c. For customers with existing DG systems, the Company will use net usage after the first DG system became operational to determine average consumption. If the DG was interconnected less than three years earlier, then the existing months of net usage will be annualized to estimate an annual total. In Attachment 1-3, tab (c) shows customer usage after a DG system reached commercial operation on 4/9/2019. Though additional billing data is available going back 36 months (noted in gray text), this customer's three-year average usage is calculated using only the time period when on-site DG is operational for a full billing period (in this case, from the 4/17/2019 bill period forward).

There is no difference for load increase versus panel degradation.

d. See Attachment 1-3 for examples of parts (b) and (c). Part (a) is not demonstrable in an example.

Bill Cycle Start	Bill Cycle End	Source	Total Usage (kWh)
2/11/2020	3/12/2020	Regular Company	80
1/15/2020	2/11/2020	Regular Company	57
12/12/2019	1/15/2020	Regular Company	76
11/8/2019	12/12/2019	Regular Company	98
10/11/2019	11/8/2019	Regular Company	58
9/12/2019	10/11/2019	Regular Company	58
8/14/2019	9/12/2019	Regular Company	71
7/12/2019	8/14/2019	Regular Company	89
7/5/2019	7/12/2019	Estimate Reading	94
6/14/2019	7/5/2019	Estimated Final Reading	100
6/12/2019	6/14/2019	Manual Final Reading	10
5/14/2019	6/12/2019	Regular Company	138

Total Usage over customer's 12 mon	th
billing history (kWh)	929
Avg Annual Usage (kWh)	929

	Bill Cycle Start	Bill Cycle End	Source	Total Usage (kWH)
1	2/14/2020	3/17/2020	Regular Company	128
2	1/20/2020	2/14/2020	Regular Company	628
3	12/16/2019	1/20/2020	Regular Company	1204
4	11/14/2019	12/16/2019	Regular Company	1510
5	10/16/2019	11/14/2019	Regular Company	177
6	9/18/2019	10/16/2019	Regular Company	-96
7	8/19/2019	9/18/2019	Regular Company	170
8	7/17/2019	8/19/2019	Regular Company	632
9	6/18/2019	7/17/2019	Regular Company	315
10	5/17/2019	6/18/2019	Regular Company	-487
11	4/17/2019		Regular Company	-94
12	4/9/2019		Regular Company	5
13		4/9/2019	Change Meter - In Reading	0
14	3/18/2019	4/9/2019	Change Meter - Out Reading	543
15	2/14/2019	3/18/2019	Regular Company	830
16	1/16/2019		Regular Company	726
17	12/17/2018	1/16/2019	Regular Company	650
18	11/15/2018	12/17/2018	Regular Company	522
19	10/17/2018	11/15/2018	Regular Company	414
20	9/17/2018		Regular Company	422
21	8/17/2018		Regular Company	1052
22	7/18/2018		Regular Company	1366
23	6/20/2018		Regular Company	1101
24	5/16/2018		Regular Company	866
25	4/18/2018		Regular Company	583
26	3/19/2018		Regular Company	523
27	2/14/2018		Regular Company	585
28	1/17/2018	2/14/2018	Regular Company	508
29	12/19/2017		Regular Company	627
30	11/15/2017		Regular Company	638
31	10/17/2017		Regular Company	449
32	9/15/2017		Regular Company	604
33	8/17/2017		Regular Company	834
34	7/19/2017		Regular Company	1386
35	6/16/2017		Regular Company	1688
36	5/18/2017		Regular Company	733
37	4/19/2017		Regular Company	388
ļ	3/20/2017		Regular Company	543
	Total Net Usage aft	•		4087
	4087 kWh / 11 full	•		372
Avg Monthly Usage 372 kWh x 12 months =				4459
Average Annual Usage (kWh)				4459

^{* 11} months of operation determined from the first full bill start date after the meter was installed on 4/9/2019, to the most recent bill, 3/17/2020. The usage between 4/9/2019 - 4/17/2019 indicates the first reading after the addition of DG, and is not counted as a full billing cycle.

PUC 1-4

Request:

For customers with less than three years of consumption data at their current customer address, please explain the following with regards to net metering enrollment:

- a. Of the approximately 4,150 net metering customers to-date (reported by National Grid in the Net Metering Report, filed in Docket No. 5005), how many had less than three years of consumption data when they filed their interconnection application with National Grid?
- b. For those customers for whom National Grid had to *estimate* usage when processing their net metering interconnection applications (due to a lack of three-year consumption data), does National Grid retain those calculated estimates in their customer database?
- c. If the answer to 1-4(b) is yes, what is the amount of time it would take for National Grid to run a query on its customer database to return those usage estimates along with information on the net metering facilities they correspond to?

Response:

- a. Of the approximately 4,150 net metering customers last reported by National Grid, about 25 percent of customers had less than 3 years of consumption data when they filed their interconnection applications. Specifically, National Grid estimated average annual usage for 1,058 customers.
- b. Yes, National Grid retains in its database the estimated annual average usage, and it will continue to apply it unless and until the customer requests that it be updated. If a customer requests that the Company update the usage calculation, all calculations performed by the Company after 2010 can be reviewed by examining an individual's account details.
- c. If this question refers to the time needed to run a query on the three-year usage of the 1,058 customer accounts referred to in part (a) above, and analyze variations between their actual and estimated usage, then the Company believes that it could complete this analysis within 30 business days. However, if an individual customer requested the estimated usage for an account, the Company would provide it much sooner.