

December 14, 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 seventh set of data requests issued by the Commission on December 7, 2020.

Consistent with the instructions issued by the Commission on March 16, 2020, and updated on October 2, 2020, this filing is being made electronically. Five (5) hard copies will be submitted to the Commission as soon as possible.

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

cc: Docket No. 5010 Service List

Docket No. 5010 Service List as of 9/10/2020

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In Re: Commission's Review of the Benefits and Costs of Net Metering Calculation
Responses to Commission's Seventh Set of Data Requests
Issued on December 7, 2020

PUC 7-1

Request:

In its most recent Providence Water Supply Board case, Providence Water provided the Commission with its Schedule B related to a public entity net metering facility (<http://www.ripuc.ri.gov/eventsactions/docket/4994-ProvWater-COMM-PH%20Set%201%20submission.pdf>). The facility size was listed as 4,999 kW with an annual output of 8,521,000 kWh. The 3-year average annual usage was listed as 7,833,106 kWh. How was this system determined to be sized in compliance with the Net Metering law?

Response:

When the Company reviewed initial Providence Water's proposed project application, it estimated that the project would have an annual output of 7,050,389 kilowatt-hours (kWh), using an AC nameplate rating of 4,999 kilowatts (kW) for the project.

Based on its Schedule B form, Providence Water estimates that the annual output of the project is 8,521,000 kWh. The Company determined that this estimate was derived by Providence Water using a DC nameplate rating of 6,890.4 kW for the project which was included in their interconnection service application (see page 4 of 9, PUC 7-1 Attachment).

The annual output calculation in AC vs DC is explained by the calculation below:

$$4,999 \text{ kw AC} * .161 \text{ (Capacity Factor)} * 8760 = 7,050,389 \text{ kWh}$$
$$6890.4 \text{ kw DC} * .141 \text{ (Capacity Factor)} * 8760 = 8,521,000 \text{ kWh}$$

The Company's practice with net metering facilities is to use the AC nameplate rating to calculate the estimated annual output of a project. Thus, the Company's estimated annual output of 7,050,389 kWh from the Providence Water project does not exceed its three-year average annual usage of 7,833,106 kWh, as required by R.I. Gen. Laws § 39-26.4-2.(5), making the project eligible for net metering.

R.I.P.U.C. No. 2163
Cancelling R.I.P.U.C. No. 2078

The Narragansett Electric Company
Standards for Connecting Distributed Generation

Generating Facility Expedited/Standard Process Interconnection Application

Contact Information

Date Prepared:

08/10/2018 00:00

Legal Name And Address of Interconnecting Customer

Customer or Company Name: AEP Onsite Partners

Contact Name: Tim Dunford

Mailing Address:

0 MICHELLE WA

City: JOHNSTON

State: RI

Zip Code: 02919

Telephone (Primary): (614) 583-6261

Telephone (Secondary):

Fax:

Email Address:

wbartos@aepes.com

Alternative Contact Information

Name: Providence Water Supply Board

Mailing Address:

City:

State:

Zip Code:

Telephone (Primary): (401) 639-2984

Telephone (Secondary):

Fax:

Email Address:
gmarino@provwater.com

Ownership Information (include % ownership by any electric bill)

Generating Facility Information

Address of Facility:

125 Dupont Dr

City: Providence

Zip Code: 02907

Electric Service Company : National Grid

Account Number: 3795842002

Meter Number:

Work Request Number (For Upgrades or New Service):

26833635

Type of Generating Unit: *

Inverter

Generating Unit Type

Manufacturer: Power Electronics

Model : FS2000K

Quantity: 1.00

Nameplate Rating 2000.000 (kW) Processed (kVAr) 600.00 (Volts)

Generating Unit Type

[Remove](#)

Manufacturer: Power Electronics

Model : FS3000K

Quantity: 1.00

Nameplate Rating 3000.000 (kW) (kVAr) 600.00 (Volts)

Generator Phase

Energy Source: *

For Solar PV provide system DCC-STC rating: * (kW)

Screening Type:

Please fill out required fields in the form below for the type of system specified above, the application will not be considered complete unless all required fields are filled out accurately.

Need an air quality permit from RIDEM?

For Inverter based units-is the unit IEEE 1547.1 (UL 1741) Listed? *

Generating system already exists on current account?

Purpose of Generating Facility:
Please read the questions below carefully. You must notify the Company as early as possible if your answers to the questions in this section would be different at any point in the future.

Purpose of Generating facility:

Planning to Export Power? *

A Cogeneration Facility? *

Will Customer generate more than 95% of their hourly consumption on an annual basis?

Anticipated Export Power Purchaser: *

1 Exporting Electricity?

1.1 Site Control? *

2 Net Annual Exporter of Electricity?

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Please select...

3 Selling Electricity?

All of the electricity produced by this Facility will be sold to a customer who will seek net met

3.1 Site Control? *

Please select...

4 Seeking Capacity Revenue?

I do not yet know whether this Facility seek capacity credit from the FCM.

5 Qualifying Facility Certification?

I do not yet know whether this facility will seek QF status.

Est.Install Date: *

08/01/2019

Est.In-Service Date: *

10/01/2019

Agreement Needed by:

Application Process

I hereby certify that, to the best of my knowledge, all of the information provided in this application is true.

Interconnecting Customer

Title:

Signature:

Date:

National grid Signature:

Title:

Date:

Generating Facility Technical Details

Information on the components of the generating facility that are currently Listed equipment(i.e..primarily solar, but if the proposed Facility is using a UL Listed inverter,please fill out below):

Equipment Type Standard	Manufacturer	Model	National Underwriter
Inverter	Power Electronics	FS2000K	National Underwriter
Inverter	Power Electronics	FS3000K	Underwriter

Total Number of Generating Units in Facility? 2

Generator Unit Power Factor Rating: * 1

Max Adjustable Leading Power Factor? * 0.50

Max Adjustable Lagging Power Factor? * 0.50

Generating Characteristic Data(for all inverter-based machines)

Max Design Fault Contribution Current? Instantaneous

Harmonic Characteristics: <3%

Start-Up Power Requirements:

Additional Information for Induction Generating Units that are started by motoring

Motoring Power: * 0.000 (kW)

Design Letter: *

Interconnection Equipment Technical Detail

Date:

08/10/2018

Will a transformer be used between the generator and the point of interconnection? *

Yes

Will the transformer be provided by Interconnecting Customer? *

Yes ▼

Transformer Data(if applicable, for Interconnecting Customer-Owned Transformer including if a grounding bank is proposed, please provide data on each transformer or grounding bank):

Nameplate Rating: * (kVA) Phase: * ▼

Transformer Impedance: * % On a kVA Base

Transformer (Volts)

Primary: *

Primary Winding * ▼

Transformer (Volts)

Secondary :

*

Secondary Winding ▼

*

Transformer Fuse Data(if applicable, for Interconnecting Customer-Owned Fuse):

(Attach copy of fuse manufacturers's Minimum Melt & Total Clearing Time-Current Curves)

Manufacturer Size:

Type: Speed:

Will a Neutral grounding reactor be installed? ▼

Interconnecting Circuit Breaker(if applicable):

Manufacturer: Load Rating: (Amps)

Type: Interrupt Rating: (Amps)

Trip Speed: (Cycles)

Interconnecting Protective Relays(if applicable):

(If microprocessor-controlled)

List of Functions and Adjustable Setpoints for the protective equipment or software:

Microprocessor relay

Relay Setpoint Function

Min

Max

[ADD NEW](#)

Current Transformer Data(if applicable):

(Enclose copy of Manufacturer's & Ratio Correction Curves)

Current Transformer Data

Manufacturer:

Type:

Accuracy class:

Proposed Ratio Connection:

Current Transformer Data

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Manufacturer:

Type:

Accuracy class:

Proposed Ratio Connection:

[ADD NEW](#)

Potential Transformer Data(if applicable):

Potential Transformer Data

Manufacturer:

Type:

Accuracy class:

Proposed Ratio Connection:

[ADD NEW](#)

[Contact Information](#)