

January 29, 2016

BY HAND DELIVERY AND ELECTRONIC MAIL

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

**RE: Docket 4589-A-Proposed 2016 Renewable Energy Growth Program Tariff and Rule
Changes and Proposed SolarWise Program
Responses to PUC Data Requests – Set 4**

Dear Ms. Massaro:

I have enclosed ten copies of National Grid's¹ responses to the fourth set of data requests issued by the Public Utilities Commission in the above-referenced docket.

Thank you for your attention to this filing. If you have any questions, please contact me at 781-907-2121.

Very truly yours,



Raquel J. Webster

Enclosure

cc: Docket 4589 Service List
Leo Wold, Esq.
Jon Hagopian, Esq.
Steve Scialabba, Division

¹ The Narragansett Electric Company d/b/a National Grid (National Grid or Company).

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

January 29, 2016

Date

Docket No. 4589-A National Grid 2016 Renewable Energy Growth Program Tariff and Rule Changes and Proposed SolarWise Program; and

Docket No. 4589-B RI Distributed Generation Board (DG Board) Report and Recommendation Regarding 2016 Renewable Energy Growth Classes, Ceiling Prices and Targets

Service List updated 12/23/15

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COMM 4-1

Request:

- A) Is it possible for a customer to be simultaneously eligible to receive one of the Pilot class ceiling prices and a Solarwise bonus PBI? If yes, what is the highest PBI that a customer fitting both of these criteria could receive, assuming approval of the Board's proposed 2016 ceiling prices? If no, provide the citation to the tariff and/or rules which specifically states that a customer can be eligible for either Solarwise *or* the Pilot, but not both.
- B) Estimate the number of customers the Company expects to qualify for both the Pilot ceiling price and Solarwise bonus PBI in the 2016 program year.

Response:

- A) Yes, if the Distributed Generation Board's recommendation as proposed for the Non-Profit Affordable Housing and Income Eligible Pilot (the Pilot) is approved, and the SolarWise program as proposed is approved, then it would be possible for participants eligible for the Pilot to also qualify for the SolarWise bonus Tier 1 or 2 on their Pilot-level tariff payments. Please see the response in National Grid Record Request 1 in RIPUC Docket No. 4589-B for calculations of these rates, page 3 of 7, column (d).
- B) As shown in response National Grid Record Request 1, Attachment COMM-RR-1 in RIPUC Docket No. 4589-B (Attached to this response as Attachment COMM 4-1), the Company has apportioned the enrollment of the Pilot set aside capacity between SolarWise tiers and non-SolarWise projects based on the ratio of SolarWise bonus capacity – 2.5 MW for Small Solar and 1 MW for Medium Solar – to the overall capacity available for each class – 6.5 MW for Small Solar and 6 MW for Medium Solar, which each include the 1 MW set aside proposed for the Pilot. Based on this methodology, 30 participants could possibly enroll in both a Pilot tariff and a SolarWise bonus tier. Please see COMM 4-9 Attachment 1, page 1, column (e).



Raquel J. Webster
Senior Counsel

January 25, 2016

BY HAND DELIVERY AND ELECTRONIC MAIL

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

**RE: Docket 4589-B – Rhode Island Distributed Generation Board
Report and Recommendation Regarding 2016 Renewable Energy Growth
Classes, Ceiling Prices and Targets
National Grid Response to Record Request**

Dear Ms. Massaro:

I have enclosed ten copies of National Grid's¹ response to the record request issued at the Public Utilities Commission's evidentiary hearing on January 14, 2016 in the above-referenced docket.

Thank you for your attention to this matter. If you have any questions, please contact me at 781-907-2121.

Very truly yours,

A handwritten signature in blue ink that reads "Raquel Webster".

Raquel J. Webster

Enclosures

cc: Docket 4589-B Service List
Leo Wold, Esq.
Steve Scialabba, Division

¹ The Narragansett Electric Company d/b/a National Grid (National Grid or Company).

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Joanne M. Scanlon

January 25, 2016
Date

Docket No. 4589-A National Grid 2016 Renewable Energy Growth Program Tariff and Rule Changes and Proposed SolarWise Program; and

Docket No. 4589-B RI Distributed Generation Board (DG Board) Report and Recommendation Regarding 2016 Renewable Energy Growth Classes, Ceiling Prices and Targets

Service List updated 12/23/15

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Shagun Boughen	shagunboughen@gmail.com ;	

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4589-B

In Re: Report and Recommendation of RI Distributed Generation Board on
2016 Renewable Energy Growth Ceiling Prices, Classes and Targets
Response to Record Request issued at the Commission's Evidentiary Hearing
On January 14, 2016

Record Request 1

Request:

Provide the estimated bill impact of the 2016 ceiling prices, as currently proposed, both with and without the Non-Profit Affordable Housing Income Eligible Pilot, for all customer classes.

Response:

Please see Attachment COMM-RR-1 for an illustrative estimate by customer class of the incremental RE Growth Factor charge for the second year of the RE Growth Program (April 2016 – March 2017) both with and without the Non-Profit Affordable Housing Income Eligible Pilot program. The illustrative estimate assumes that all 40MW of projects are installed and operational for the entire year illustrated, rather than brought on line as they are constructed. For a residential customer using 500 kWh in one month, the incremental RE Growth Factor increase, including the Pilot Program, is \$0.66, or 0.7%. For the same customer, the incremental RE Growth Factor increase, excluding the pilot program, would be \$0.65, or 0.7%.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4589-B
Attachment COMM-RR-1
Page 1 of 7

National Grid
RE Growth Program Year 2
Incremental RE Growth Factors Comparison
With and Without Non-Profit and Affordable Housing Pilot Program

	Residential <u>A16 / A60</u> (a)	Small Commercial & Industrial <u>C-06</u> (b)	General Commercial & Industrial <u>G-02</u> (c)	Large Demand <u>B32 / G32</u> (d)	Optional Large Demand <u>B62 / G62</u> (e)	Street Lighting <u>S10 / S14</u> (f)
(1) Total Illustrative Incremental RE Growth Factor With NP & Aff. Housing	\$0.66	\$1.09	\$10.11	\$73.65	\$1,843.38	\$0.29
(2) Total Illustrative Incremental RE Growth Factor Without NP & Aff. Housing	\$0.65	\$1.07	\$9.90	\$72.08	\$1,804.04	\$0.28
(3) Change	\$0.01	\$0.02	\$0.21	\$1.57	\$39.34	\$0.01

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4589-B
Attachment COMM-RR-1
Page 2 of 7

National Grid
RE Growth Program Year 2
Incremental RE Growth Factors
With Non-Profit and Affordable Housing Pilot Program

	<u>Total</u> (a)	<u>Residential</u> <u>A16 / A60</u> (b)	<u>Small</u> <u>Commercial &</u> <u>Industrial</u> <u>C-06</u> (c)	<u>General</u> <u>Commercial &</u> <u>Industrial</u> <u>G-02</u> (d)	<u>Large Demand</u> <u>B32 / G32</u> (e)	<u>Optional Large</u> <u>Demand</u> <u>B62 / G62</u> (f)	<u>Street Lighting</u> <u>S10 / S14</u> (g)
(1) Estimated RE Growth PBI Payments	\$12,367,169						
(2) Estimated Market Value	\$5,739,003						
(3) Estimated RE Growth Program Cost	\$6,628,166						
(4) Total Rate Base (\$000s)	\$561,737	\$296,489	\$54,542	\$82,460	\$77,651	\$21,309	\$29,286
(5) Percentage of Total	100.00%	52.78%	9.71%	14.68%	13.82%	3.79%	5.21%
(6) Allocated Expense		\$3,498,346	\$643,595	\$973,015	\$916,013	\$251,207	\$345,327
(7) Forecasted Number of Bills	7,139,873	5,250,413	593,944	97,341	12,593	138	1,185,444
(8) Illustrative Incremental RE Growth Factor - monthly per bill/luminaire charge		\$0.66	\$1.08	\$9.99	\$72.73	\$1,820.34	\$0.29
(9) Uncollectible Percentage	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%
(10) Total Illustrative Incremental RE Growth Factor		\$0.66	\$1.09	\$10.11	\$73.65	\$1,843.38	\$0.29

Footnotes:

Line (1) : Page 3 Total (Line 27, Column (e))
Line (2) : Page 4 Total (Line 27, Column (f))
Line (3) : Line (1) - Line (2)
Line (4) : per RIPUC 4323, Compliance Attachment 3A, (Schedule HSG-1), page 2, Line 10
Line (5) : Line (4) ÷ Line (4) Total Column
Line (6) : Line (5) x Line (3) Total Column
Line (7) : per Company forecast for the period April 1, 2016 through March 31, 2017; for Streetlighting number represents individual fixtures
Line (8) : Line (6) ÷ Line (7), truncated to two decimal places
Line (9) : Uncollectible Percentage approved in RIPUC Docket No. 4323
Line (10) : Line (8) ÷ [1 - Line (9)], truncated to two decimal places

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4589-B
Attachment COMM-RR-1
Page 3 of 7

National Grid
RE Growth Program Year 2
Estimated PBI Payments
With Non-Profit and Affordable Housing Pilot Program

Section 1: Estimated PBI Payments

	<u>Estimated</u> <u>Class Capacity</u> <u>(MW)</u> <u>(a)</u>	<u>Capacity</u> <u>Factor</u> <u>(b)</u>	<u>Estimated</u> <u>Annual Output</u> <u>(MWh)</u> <u>(c)</u>	<u>Ceiling price</u> <u>(\$ per MWh)</u> <u>(d)</u>	<u>Estimated Annual</u> <u>Cost</u> <u>(e)</u>
SolarWise Tier 1					
(1) Small I, Resident Owned*	1.189	13.49%	1,405.25	\$373.28	\$524,545
(2) Small I, Third party owned*	0.149	13.49%	175.66	\$278.51	\$48,923
(3) Small I, Non-Profit & Affordable Housing*	0.149	13.49%	175.66	\$446.78	\$78,479
(4) Small II	0.462	13.49%	546.20	\$261.45	\$142,803
(5) Small II, Non-Profit & Aff Hous	0.051	13.49%	60.69	\$316.58	\$19,212
(6) Medium Solar	0.720	13.45%	848.32	\$256.20	\$217,339
(7) Medium Solar, Non-Profit & Aff Hous	0.080	13.45%	94.26	\$310.28	\$29,246
SolarWise Tier 2					
(8) Small I, Resident Owned*	0.297	13.49%	351.31	\$391.05	\$137,381
(9) Small I, Third party owned*	0.037	13.49%	43.91	\$291.78	\$12,813
(10) Small I, Non-Profit & Affordable Housing*	0.037	13.49%	43.91	\$468.05	\$20,554
(11) Small II	0.116	13.49%	136.55	\$273.90	\$37,401
(12) Small II, Non-Profit & Aff Hous	0.013	13.49%	15.17	\$331.65	\$5,032
(13) Medium Solar	0.180	13.45%	212.08	\$268.40	\$56,922
(14) Medium Solar, Non-Profit & Aff Hous	0.020	13.45%	23.56	\$325.05	\$7,660
Non-SolarWise					
(15) Small I, Resident Owned*	1.679	13.49%	1,983.98	\$355.50	\$705,304
(16) Small I, Third party owned*	0.647	13.49%	764.58	\$265.25	\$202,804
(17) Small I, Non-Profit & Affordable Housing*	0.647	13.49%	764.58	\$425.50	\$325,327
(18) Small II	0.924	13.49%	1,092.39	\$249.00	\$272,005
(19) Small II, Non-Profit & Aff Hous	0.103	13.49%	121.38	\$301.50	\$36,595
(20) Medium Solar	4.100	13.45%	4,830.70	\$244.00	\$1,178,691
(21) Medium Solar, Non-Profit & Aff Hous	0.900	13.45%	1,060.40	\$295.50	\$313,348
(22) Commercial Scale Solar	8.000	13.59%	9,523.87	\$193.00	\$1,838,107
(23) Large Solar	9.000	14.18%	11,179.51	\$151.00	\$1,688,106
(24) Wind*	9.000	21.00%	16,556.40	\$180.50	\$2,988,430
(25) Hydro*	0.750	40.00%	2,628.00	\$180.50	\$474,354
(26) Anaerobic Digestion	0.750	73.60%	4,835.52	\$208.00	\$1,005,788
(27) Total	40.000		59,473.83		\$12,367,169

*Prices of different tariffs are averaged (duration / or technology size)

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4589-B
Attachment COMM-RR-1
Page 4 of 7

National Grid
RE Growth Program Year 2
Estimated Market Value
With Non-Profit and Affordable Housing Pilot Program

Section 2: Estimated Market Value

		<u>Estimated</u> <u>MWh</u> <u>Purchased</u> <u>Under Tariffs</u> (a)	<u>Market</u> <u>Energy</u> <u>Proxy</u> (b)	<u>Energy</u> <u>Market Value</u> (c)	<u>REC Proxy</u> (d)	<u>REC Market</u> <u>Value</u> (e)	<u>Total Market</u> <u>Value</u> (f)
	SolarWise Tier 1						
(1)	Small I, Resident Owned	1,405.25	n/a	n/a	\$48.53	\$68,197	\$68,197
(2)	Small I, Third party owned	175.66	n/a	n/a	\$48.53	\$8,525	\$8,525
(3)	Small I, Non-Profit & Affordable Housing	175.66	n/a	n/a	\$48.53	\$8,525	\$8,525
(4)	Small II	546.20	n/a	n/a	\$48.53	\$26,507	\$26,507
(5)	Small II, Non-Profit & Aff Hous	60.69	n/a	n/a	\$48.53	\$2,945	\$2,945
(6)	Medium Solar	848.32	\$55.08	\$46,725	\$48.53	\$41,169	\$87,894
(7)	Medium Solar, Non-Profit & Aff Hous	94.26	\$55.08	\$5,192	\$48.53	\$4,574	\$9,766
	SolarWise Tier 2						
(8)	Small I, Resident Owned	351.31	n/a	n/a	\$48.53	\$17,049	\$17,049
(9)	Small I, Third party owned	43.91	n/a	n/a	\$48.53	\$2,131	\$2,131
(10)	Small I, Non-Profit & Affordable Housing	43.91	n/a	n/a	\$48.53	\$2,131	\$2,131
(11)	Small II	136.55	n/a	n/a	\$48.53	\$6,627	\$6,627
(12)	Small II, Non-Profit & Aff Hous	15.17	n/a	n/a	\$48.53	\$736	\$736
(13)	Medium Solar	212.08	\$55.08	\$11,681	\$48.53	\$10,292	\$21,974
(14)	Medium Solar, Non-Profit & Aff Hous	23.56	\$55.08	\$1,298	\$48.53	\$1,144	\$2,442
	Non-SolarWise						
(15)	Small I, Resident Owned	1,983.98	n/a	n/a	\$48.53	\$96,282	\$96,282
(16)	Small I, Third party owned	764.58	n/a	n/a	\$48.53	\$37,105	\$37,105
(17)	Small I, Non-Profit & Affordable Housing	764.58	n/a	n/a	\$48.53	\$37,105	\$37,105
(18)	Small II	1,092.39	n/a	n/a	\$48.53	\$53,014	\$53,014
(19)	Small II, Non-Profit & Aff Hous	121.38	n/a	n/a	\$48.53	\$5,890	\$5,890
(20)	Medium Solar	4,830.70	\$55.08	\$266,075	\$48.53	\$234,434	\$500,509
(21)	Medium Solar, Non-Profit & Aff Hous	1,060.40	\$55.08	\$58,407	\$48.53	\$51,461	\$109,868
(22)	Commercial Scale Solar	9,523.87	\$55.08	\$524,575	\$48.53	\$462,194	\$986,768
(23)	Large Solar	11,179.51	\$55.08	\$615,768	\$48.53	\$542,542	\$1,158,309
(24)	Wind	16,556.40	\$55.08	\$911,927	\$48.53	\$803,482	\$1,715,409
(25)	Hydro	2,628.00	\$55.08	\$144,750	\$48.53	\$127,537	\$272,287
(26)	Anaerobic Digestion	4,835.52	\$55.08	\$266,340	\$48.53	\$234,668	\$501,008
(27)	Total	59,473.83		\$2,852,738		\$2,886,265	\$5,739,003

Footnotes:

Column (a): Page (3) Column (c)

Column (b): RIPUC Docket No. 4587 Attachment 1, page 3

Column (c): Column (a) x Column (b), truncated to 2 decimal places

Column (d): RIPUC Docket No. 4587 Attachment 1, page 3

Column (e): Column (a) x Column (d), truncated to 2 decimal places

Column (f): Column (c) + Column (e)

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4589-B
Attachment COMM-RR-1
Page 5 of 7

National Grid
RE Growth Program Year 2
Incremental RE Growth Factors
Without Non-Profit and Affordable Housing Pilot Program

	<u>Total</u> (a)	<u>Residential</u> <u>A16 / A60</u> (b)	<u>Small</u> <u>Commercial &</u> <u>Industrial</u> <u>C-06</u> (c)	<u>General</u> <u>Commercial &</u> <u>Industrial</u> <u>G-02</u> (d)	<u>Large Demand</u> <u>B32 / G32</u> (e)	<u>Optional Large</u> <u>Demand</u> <u>B62 / G62</u> (f)	<u>Street Lighting</u> <u>S10 / S14</u> (g)
(1) Estimated RE Growth PBI Payments	\$12,225,720						
(2) Estimated Market Value	\$5,739,003						
(3) Estimated RE Growth Program Cost	\$6,486,717						
(4) Total Rate Base (\$000s)	\$561,737	\$296,489	\$54,542	\$82,460	\$77,651	\$21,309	\$29,286
(5) Percentage of Total	100.00%	52.78%	9.71%	14.68%	13.82%	3.79%	5.21%
(6) Allocated Expense		\$3,423,689	\$629,860	\$952,250	\$896,464	\$245,847	\$337,958
(7) Forecasted Number of Bills	7,139,873	5,250,413	593,944	97,341	12,593	138	1,185,444
(8) Illustrative Incremental RE Growth Factor - monthly per bill/luminaire charge		\$0.65	\$1.06	\$9.78	\$71.18	\$1,781.49	\$0.28
(9) Uncollectible Percentage	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%
(10) Total Illustrative Incremental RE Growth Factor		\$0.65	\$1.07	\$9.90	\$72.08	\$1,804.04	\$0.28

Footnotes:

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The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4589-B
Attachment COMM-RR-1
Page 6 of 7

National Grid
RE Growth Program Year 2
Estimated PBI Payments
Without Non-Profit and Affordable Housing Pilot Program

Section 1: Estimated PBI Payments

	<u>Estimated</u> <u>Class Capacity</u> <u>(MW)</u> <u>(a)</u>	<u>Capacity</u> <u>Factor</u> <u>(b)</u>	<u>Estimated</u> <u>Annual Output</u> <u>(MWh)</u> <u>(c)</u>	<u>Ceiling price</u> <u>(\$ per MWh)</u> <u>(d)</u>	<u>Estimated Annual</u> <u>Cost</u> <u>(e)</u>
SolarWise Tier 1					
(1) Small I, Resident Owned*	1.189	13.49%	1,405.25	\$373.28	\$524,545
(2) Small I, Third party owned*	0.149	13.49%	175.66	\$278.51	\$48,923
(3) Small I, Non-Profit & Affordable Housing*	0.149	13.49%	175.66	\$373.28	\$65,568
(4) Small II	0.462	13.49%	546.20	\$261.45	\$142,803
(5) Small II, Non-Profit & Aff Hous	0.051	13.49%	60.69	\$261.45	\$15,867
(6) Medium Solar	0.720	13.45%	848.32	\$256.20	\$217,339
(7) Medium Solar, Non-Profit & Aff Hous	0.080	13.45%	94.26	\$256.20	\$24,149
SolarWise Tier 2					
(8) Small I, Resident Owned*	0.297	13.49%	351.31	\$391.05	\$137,381
(9) Small I, Third party owned*	0.037	13.49%	43.91	\$291.78	\$12,813
(10) Small I, Non-Profit & Affordable Housing*	0.037	13.49%	43.91	\$391.05	\$17,173
(11) Small II	0.116	13.49%	136.55	\$273.90	\$37,401
(12) Small II, Non-Profit & Aff Hous	0.013	13.49%	15.17	\$273.90	\$4,156
(13) Medium Solar	0.180	13.45%	212.08	\$268.40	\$56,922
(14) Medium Solar, Non-Profit & Aff Hous	0.020	13.45%	23.56	\$268.40	\$6,325
Non-SolarWise					
(15) Small I, Resident Owned*	1.679	13.49%	1,983.98	\$355.50	\$705,304
(16) Small I, Third party owned*	0.647	13.49%	764.58	\$265.25	\$202,804
(17) Small I, Non-Profit & Affordable Housing*	0.647	13.49%	764.58	\$355.50	\$271,807
(18) Small II	0.924	13.49%	1,092.39	\$249.00	\$272,005
(19) Small II, Non-Profit & Aff Hous	0.103	13.49%	121.38	\$249.00	\$30,223
(20) Medium Solar	4.100	13.45%	4,830.70	\$244.00	\$1,178,691
(21) Medium Solar, Non-Profit & Aff Hous	0.900	13.45%	1,060.40	\$244.00	\$258,737
(22) Commercial Scale Solar	8.000	13.59%	9,523.87	\$193.00	\$1,838,107
(23) Large Solar	9.000	14.18%	11,179.51	\$151.00	\$1,688,106
(24) Wind*	9.000	21.00%	16,556.40	\$180.50	\$2,988,430
(25) Hydro*	0.750	40.00%	2,628.00	\$180.50	\$474,354
(26) Anaerobic Digestion	0.750	73.60%	4,835.52	\$208.00	\$1,005,788
(27) Total	40.000		59,473.83		\$12,225,720

*Prices of different tariffs are averaged (duration / or technology size)

The Narragansett Electric Company
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National Grid
RE Growth Program Year 2
Estimated Market Value
Without Non-Profit and Affordable Housing Pilot Program

Section 2: Estimated Market Value

	<u>Estimated</u> <u>MWh</u> <u>Purchased</u> <u>Under Tariffs</u> (a)	<u>Market</u> <u>Energy</u> <u>Proxy</u> (b)	<u>Energy</u> <u>Market Value</u> (c)	<u>REC Proxy</u> (d)	<u>REC Market</u> <u>Value</u> (e)	<u>Total Market</u> <u>Value</u> (f)
SolarWise Tier 1						
(1) Small I, Resident Owned	1,405.25	n/a	n/a	\$48.53	\$68,197	\$68,197
(2) Small I, Third party owned	175.66	n/a	n/a	\$48.53	\$8,525	\$8,525
(3) Small I, Resident Owned	175.66	n/a	n/a	\$48.53	\$8,525	\$8,525
(4) Small II	546.20	n/a	n/a	\$48.53	\$26,507	\$26,507
(5) Small II	60.69	n/a	n/a	\$48.53	\$2,945	\$2,945
(6) Medium Solar	848.32	\$55.08	\$46,725	\$48.53	\$41,169	\$87,894
(7) Medium Solar	94.26	\$55.08	\$5,192	\$48.53	\$4,574	\$9,766
SolarWise Tier 2						
(8) Small I, Resident Owned	351.31	n/a	n/a	\$48.53	\$17,049	\$17,049
(9) Small I, Third party owned	43.91	n/a	n/a	\$48.53	\$2,131	\$2,131
(10) Small I, Resident Owned	43.91	n/a	n/a	\$48.53	\$2,131	\$2,131
(11) Small II	136.55	n/a	n/a	\$48.53	\$6,627	\$6,627
(12) Small II	15.17	n/a	n/a	\$48.53	\$736	\$736
(13) Medium Solar	212.08	\$55.08	\$11,681	\$48.53	\$10,292	\$21,974
(14) Medium Solar	23.56	\$55.08	\$1,298	\$48.53	\$1,144	\$2,442
Non-SolarWise						
(15) Small I, Resident Owned	1,983.98	n/a	n/a	\$48.53	\$96,282	\$96,282
(16) Small I, Third party owned	764.58	n/a	n/a	\$48.53	\$37,105	\$37,105
(17) Small I, Resident Owned	764.58	n/a	n/a	\$48.53	\$37,105	\$37,105
(18) Small II	1,092.39	n/a	n/a	\$48.53	\$53,014	\$53,014
(19) Small II	121.38	n/a	n/a	\$48.53	\$5,890	\$5,890
(20) Medium Solar	4,830.70	\$55.08	\$266,075	\$48.53	\$234,434	\$500,509
(21) Medium Solar	1,060.40	\$55.08	\$58,407	\$48.53	\$51,461	\$109,868
(22) Commercial Scale Solar	9,523.87	\$55.08	\$524,575	\$48.53	\$462,194	\$986,768
(23) Large Solar	11,179.51	\$55.08	\$615,768	\$48.53	\$542,542	\$1,158,309
(24) Wind	16,556.40	\$55.08	\$911,927	\$48.53	\$803,482	\$1,715,409
(25) Hydro	2,628.00	\$55.08	\$144,750	\$48.53	\$127,537	\$272,287
(26) Anaerobic Digestion	4,835.52	\$55.08	\$266,340	\$48.53	\$234,668	\$501,008
(27) Total	59,473.83		\$2,852,738		\$2,886,265	\$5,739,003

Footnotes:

Column (a):
Column (b):
Column (c):
Column (d):
Column (e):
Column (f):

Page (6) Column (c)
RIPUC Docket No. 4587 Attachment 1, page 3
Column (a) x Column (b), truncated to 2 decimal places
RIPUC Docket No. 4587 Attachment 1, page 3
Column (a) x Column (d), truncated to 2 decimal places
Column (c) + Column (e)

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4589-A
In Re: Renewable Energy Growth Program and SolarWise Proposal
Responses to Commission's Fourth Set of Data Requests
Issued on January 20, 2016

COMM 4-2

Request:

Provide illustrative examples, showing mathematical calculations, of how the bonus tiers will result in increased PBI payments to Solarwise customers in the small and medium solar classes in both the Pilot and non-Pilot categories.

Response:

Please see the Company's response to Record Request 1 (RIPUC Docket No. 4589-B), Attachment COMM-RR-1, page 3 of 7, column (d) (See Attachment COMM 4-1). Rows 1 through 14 illustrate SolarWise Tier 1 and 2 ceiling prices, and Rows 15 through 21 illustrate Non-SolarWise ceiling prices.

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d/b/a National Grid
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COMM 4-3

Request:

Is there a limit to the number of participants in the Solarwise program, other than the 2.5MW and 1MW allocations reserved for small and medium solar, or will enrollment be allowed for any eligible participants up to the applicable targets reserved for these classes? If there is an enrollment limit for the Solarwise program, other than the reserve allocation, provide the appropriate citation to the tariff and/or rules.

Response:

The enrollment for the SolarWise program is limited to the 2.5 MW and 1 MW allocations reserved for small and medium solar classes. If those class allocations are reached during the program year, National Grid will inform the Distributed Generation Board and the PUC. The DG Board could then opt to propose any modifications to the allocations for the remainder of the year.

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COMM 4-4

Request:

Referring to IS, page 19, line 20-21, does the term “technical study” refer to the Technical Reference Manual?

Response:

No. The term “technical study” refers to the Technical Assessments (TAs), which are performed by an array of Company-approved vendors (also called TA vendors), who identify the right mix of energy-efficient technologies and financial incentives available for commercial and industrial customers.

COMM 4-5

Request:

It is unclear from COMM 1-7 and COMM 1-15 whether Solarwise customers will be required to demonstrate reduced energy consumption, after the approval process, in order to receive, or continue receiving, tiered PBI payments, or whether receipt of tiered PBIs will be based on energy savings assumed in the TRM or other technical evaluation standard/study. It appears that the Company will perform 2 energy efficiency savings evaluations with respect to Solarwise customers. The first evaluation is for the purpose of determining eligibility for the program, which occurs prior to approval of the application, and is based on a TRM or other technical study. The Company will perform a second evaluation to confirm that the customer has followed through with the committed investments and actions, which occurs one year from the date of bonus approval, as per COMM 1-7. The second evaluation consists of merely confirming, by way of the Company's InDemand system, that the EE measures have actually been installed. Please confirm whether this is correct.

Response:

That is correct. Non-residential customers will use energy savings based on committed measures for the purpose of determining eligibility for receipt of the tiered PBIs. After all the energy efficiency measures have been installed, and after post-installation inspection of the project, the energy savings calculations will be confirmed. If the customer meets the tiered requirements, the customer will receive the appropriate SolarWise bonus.

Please note that the term "evaluation" in this discussion is the process of the Company reviewing and verifying that the measures are installed and that energy savings has been documented.

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COMM 4-6

Request:

Explain the basis for the EE savings percentages associated with the tiers shown on Tables 1 and 2 of the Solarwise Customer guide (Attachment IS-1, Page 4 of 8).

Response:

The basis for the EE savings percentages was the review and analysis of energy savings results from the Residential (2014 and 2015 savings results) and Commercial & Industrial (2014 savings results) programs as presented in Attachment LR-1, pages 1 and 2.

The SolarWise Bonus Award Eligibility Criteria (Attachment IS-1, Page 4 of 8) were selected to reach customers who achieved high levels of energy efficiency and may be interested in pursuing solar as a continuation of their energy management efforts.

COMM 4-7

Request:

According to the Solarwise Customer Guide (Attachment IS-1, Page 2 of 8), customers receiving EE assessments in 2014 and 2015 are eligible for the Solarwise program. This question refers to a hypothetical customer who installed an EE measure in 2014. What type of evaluation, if any, would the Company perform to confirm that the EE measure installed at the customer premise is achieving the percentage savings shown in Tables 1 and 2? If an evaluation will be performed, when will it be performed, in the initial application stage or at some future date?

Response:

For EE audits completed in 2014 and 2015, such as for the hypothetical customer who was audited and installed EE measures in 2014, the Company will obtain the customer's energy savings from the Company's records of their installed energy efficiency measures. The twelve-month customer baseline will be the customer's usage prior to the audit for residential customers or the usage prior to the Technical Review for non-residential customers. The Company will provide the customer baseline along with the energy savings from installed measures to EnergySage for use in the SolarWise Marketplace. In this way, the Company and EnergySage will be able to inform customers who have completed energy savings measures prior to the effective date of SolarWise, April 1, 2016, that they may qualify for a SolarWise bonus. The customer would then need to proceed with the SolarWise application and qualify for the bonus in order to receive the bonus qualification. Their post-installation reduced 3-year baseline would then also be used for sizing their solar PV system.

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COMM 4-8

Request:

Please clarify whether PBI credits are used to offset a customer's entire bill or only the generation portion of the bill? Include in your response the specific provision of the rules, tariffs and/or cost recovery provision which explain this.

Response:

PBI credits provided through the RE Growth Program are valued at the volumetric rates for delivery and supply, as described in the RE Growth Program statute at R.I. Gen. Laws § 39-26.6-20 and as detailed in the Company's RE Growth Program tariffs. PBI credits are neither designed to offset the customer's whole bill nor just the generation (or supply) component of the bill. If the amount generated by the customer's solar array is equal to, or greater than, the amount consumed and billed to the customer by the Company, the customer would still owe their customer charge, appropriate taxes on the entire billed amount, LIHEAP, and RE Growth Program fixed charges, and any other charges not associated with the per kWh charges for delivery and supply. If the amount generated is smaller than the amount used, then the customer would also owe for any net usage at the appropriate kWh rate for delivery and supply.

COMM 4-9

Request:

- A) Does the Company still intend to install parallel meters for measuring output of generation from renewable DG projects?
- B) If yes, what is the timeframe and estimated total and annual cost for achieving this goal?
- C) Will any portion of this cost be billed through ISR, or will it be recovered entirely through the RE Growth Factor.

Response:

- A) Yes, the Company intends to continue to require parallel meters for measuring the output of generation from renewable DG projects enrolling in the RE Growth Program. For Small Solar installations, the Company will provide such meters at no cost to the customer. At other locations, the customer is responsible for the cost of the meter.
- B) Parallel meters will be installed as the RE Growth Program DG systems are installed. The estimated total cost for these meters to be installed at Small Solar installations, and the first year annual revenue requirement for meters for the 2016 program year are provided in Attachment COMM-4-9, using meter installation cost estimates from the Company's 2015 cost recovery filing. Future years would follow accordingly, based on the future allocations to the Small-Scale solar class and the future cost of installing the meters, along with allowed return on and of the meter investment and other variables.
- C) No, all of the costs for these meter installations will be recovered through the RE Growth Cost Recovery Factor, not through the ISR.

National Grid
RE Growth Program Year 2
Estimated Participation and Number of Systems
With Non-Profit and Affordable Housing Pilot Program

	<u>Estimated</u> <u>Class Capacity</u> <u>(MW)</u> (a)	<u>Estimated</u> <u>Average</u> <u>System Size</u> <u>(kW)</u> (b)	<u>Number of</u> <u>Systems</u> (c)	<u>Number of</u> <u>Company</u> <u>Funded Meters</u> (d)	<u>Number of</u> <u>Customers in Pilot</u> <u>and SolarWise</u> (e)
SolarWise Tier 1					
(1)	Small I, Resident Owned	1.189	6.83	174	174
(2)	Small I, Third party owned	0.149	6.83	22	22
(3)	Small I, Non-Profit & Affordable Housing	0.149	6.83	22	22
(4)	Small II	0.462	21.25	22	22
(5)	Small II, Non-Profit & Aff Hous	0.051	21.25	2	2
(6)	Medium Solar	0.720	130	6	
(7)	Medium Solar, Non-Profit & Aff Hous	0.080	130	1	1
SolarWise Tier 2					
(8)	Small I, Resident Owned	0.297	6.49	46	46
(9)	Small I, Third party owned	0.037	6.49	6	6
(10)	Small I, Non-Profit & Affordable Housing	0.037	6.49	6	6
(11)	Small II	0.116	20	6	6
(12)	Small II, Non-Profit & Aff Hous	0.013	20	1	1
(13)	Medium Solar	0.180	120	2	
(14)	Medium Solar, Non-Profit & Aff Hous	0.020	120	0	0
Non-SolarWise					
(15)	Small I, Resident Owned	1.679	8.04	209	209
(16)	Small I, Third party owned	0.647	8.04	80	80
(17)	Small I, Non-Profit & Affordable Housing	0.647	8.04	80	80
(18)	Small II	0.924	25	37	37
(19)	Small II, Non-Profit & Aff Hous	0.103	25	4	4
(20)	Medium Solar	4.100	145	28	
(21)	Medium Solar, Non-Profit & Aff Hous	0.900	145	6	
(22)	Total Small Solar	6.500			
(23)	Total Medium Solar	6.000			
(24)	Total Small Pilot	1.000			
(25)	Total Medium Pilot	1.000			
(26)	Total	12.500		760.00	717.00
					30.00

National Grid
RE Growth Program Year 2
Estimated Cost of Company Purchased Meters
With Non-Profit and Affordable Housing Pilot Program

(1) Estimated Year 2 number of Company funded meters	717
(2) Cost per Meter, from 2015 RE Growth Recovery Filing	<u>\$ 60</u>
(3) Total Investment	\$ 43,020
(4) Initial Year Revenue Requirement	\$ 2,749

Line 1: Page 1, Row 26, column d

Line 2: From RE Growth Factor Filing, Schedule NG-2

Line 3: Line 1 * Line 2

Line 4: Revenue requirement estimate as performed for RE Growth Factor Filing, Schedule NG-2

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COMM 4-10

Request:

Cite all appropriate provision(s) of the enrollment rules which explain the eligibility criteria for enrolling in the 2016 Non-profit, Affordable Housing Income Eligible Pilot. If there are no provisions explaining this, explain why there are no provisions explaining this, and whether the Company is willing to include an explanation.

Response:

The Company did not include either the description or eligibility guidelines for the OER's pilot for non-profit, affordable housing, and income-eligible customers in the tariff, enrollment rules, or customer guide because this pilot, which is being run by the OER, is still in the initial development stages. In addition, the Company has had very limited interaction with the OER regarding the pilot details. Once the Pilot requirements and processes are available, National Grid will be able to incorporate such information for customers in its enrollment rules. The OER will be fully responsible for promoting, running, funding and managing the Pilot.

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COMM 4-11

Request:

This question refers to the following sentence contained in the Red-lined version of the Small Solar Rules (Section 2.1.1, Page 7 of 15): "Applicants who have been approved as qualifying for a Solarwise Bonus Tier are eligible to receive Solarwise Bonus Payments, provided their project is selected in the RE Growth Program per Section 2.3 below." Until such time as the annual target is fully subscribed, would there be any reason why a small solar project would not be selected for participation in the RE Growth Program pursuant to Sec.2.3? Stated differently, are there any reasons, other than achievement of the annual class target, why a small solar project would not be allowed to enroll in the RE Growth Program, assuming all other eligibility criteria has been met?

Response:

Applicants to the RE Growth Program Small Scale Solar class must meet several requirements and provide certain information, certifications and documents to the Company, as outlined in the Solicitation and Enrollment Process Rules for Small-Scale Solar Projects (Rules). Approval for a SolarWise Bonus tier will be a process separate from the RE Growth Program application process. If an applicant cannot or chooses not to provide all information and forms required by the Rules, then the applicant would not be selected and approved for a RE Growth Program Certificate of Eligibility by the Company under Section 2.3 of the Rules even though the applicant has been approved for participation in one of the bonus tiers in SolarWise.

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COMM 4-12

Request:

Referring to the Large Solar/Other Rules, specifically Schedule NG-4, Schedule 2, page 18 of 20, why are the tiered bonus PBIs shown only for 30% ITC and not for 10% ITC?

Response:

The Company did not show the bonus tier Performance Based Incentives (PBIs) with the 10% federal Investment Tax Credit (ITC) because, at its October 19, 2015 meeting, the Distributed Generation Board approved the use of the 2015 PBI for the Medium class for 2016. This class price did not include consideration of the 10% ITC. The Bonus Tiers are only available to Small and Medium-sized solar installations, so did not include any classes affected at the time by the potential expiration of the 30% ITC.