

November 14, 2016

VIA HAND DELIVERY & ELECTRONIC MAIL

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

RE: Docket 4673 - Long-Term Contracting for Renewable Energy Recovery Factor

Dear Ms. Massaro:

Pursuant to Rhode Island Public Utilities Commission (PUC) Rule 1.9 and National Grid's¹ Long-Term Contracting for Renewable Energy Recovery Provision (LTC Recovery Provision), RIPUC No. 2127, enclosed please find ten (10) copies of National Grid's Long-Term Contracting for Renewable Energy Recovery Factor (LTC Recovery Factor) filing proposing the LTC Recovery Factor for the period January 2017 through June 2017 (Pricing Period). The Company is proposing a recovery factor of 0.746¢ per kilowatt-hour (kWh), applicable to all customers, effective for usage on and after January 1, 2017. The proposed LTC Recovery Factor is designed to recover the estimated above-market cost of the Company's executed long-term contracts for the Pricing Period. The impact of the proposed LTC Recovery Factor on a typical residential customer using 500 kWhs per month is an increase of \$2.13 per month, or 2.3%.

Proposed LTC Recovery Factor

The Company's LTC Recovery Provision, RIPUC No. 2127, approved by the PUC in Docket 4338, allows for the recovery of payments made to projects under long-term contracts executed pursuant to R.I. Gen. Laws Chapter 39-26.1 and distributed generation (DG) standard contracts executed pursuant to R.I. Gen. Laws Chapter 39-26.2, less the proceeds obtained from the sale of energy, capacity, Renewable Energy Certificates (RECs) or other attributes. The LTC Recovery Factor proposed in this filing is designed to recover from customers the estimated above-market cost associated with the Company's power purchase agreements (PPAs) pursuant to R.I. Gen. Laws § 39-26.1-5(f), and with DG standard contracts (collectively Long Term Renewable Contracts) associated with units that have entered commercial operation.

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

Page 1 of Attachment 1 shows the calculation of the proposed LTC Recovery Factor. The estimated above-market costs of \$22,232,093 shown on Line 1 is divided by the forecasted kWhs for the Pricing Period, resulting in a recovery factor of 0.623¢ per kWh. The uncollectibles percentage of 1.25% is applied to the factor of 0.623¢ per kWh, resulting in an adjusted factor of 0.630¢ per kWh. The currently effective LTC Recovery Reconciliation Factor of 0.116¢ per kWh, approved by the PUC in Docket 4599, is added to the proposed base factor, resulting in a total LTC Recovery Factor of 0.746¢ per kWh, as shown on line 7.

Calculation of the Estimated Above-Market Cost

The estimated above-market cost that is expected to be incurred during the Pricing Period is shown on Page 4 of Attachment 1. The above-market cost is calculated as the total expected payments to be made under the contracts for the Pricing Period less the estimated market value associated with the sale of the energy, RECs, and capacity. While the Deepwater Wind Project is not yet commercially operational, it is expected to begin generating by the end of the calendar year. As this project is anticipated to have a significant output, an estimate of generation and the resulting above-market cost have been included in this cost recovery filing. The calculation of the total expected payments is shown on Page 2. The expected unit generation is estimated by applying the unit availability factor to the unit capacity, resulting in an expected six-month generation of 211,504 megawatt-hours for all units. The estimated generation multiplied by the contract price per megawatt results in expected total payments of \$36,083,301.

The estimated market value of the energy, RECs, and capacity is shown on Page 3. As in the May 2016 LTC Cost Recovery Filing, the market energy proxy is based on NYMEX electricity futures prices for the Pricing Period and renewable resource load shapes (usage in on peak hours and off peak hours). The REC proxy value is based upon the Company's most recent market estimate. The capacity market value is the estimated capacity revenue to be received from ISO New England for the Pricing Period. The market value of the sale of the contract products for the Pricing Period is \$13,851,208, which, when subtracted from the total expected payments of \$36,083,301, results in an estimated above-market cost of \$22,232,093 as shown on Page 4.

Please note that the Company is not filing its Summary of Retail Delivery Rates, RIPUC No. 2095, at this time. The Company has proposed a new Energy Efficiency Program Charge in a separate filing. In addition, the Department of Human Services has also proposed to increase the LIHEAP Enhancement Charge. If approved by the PUC, the Energy Efficiency Program Charge, LIHEAP Enhancement Charge and the LTC Recovery Factor proposed in this filing will be effective January 1, 2017. Therefore, the Company will file its Summary of Retail Delivery Service Rates incorporating all rate changes effective January 1, 2017 once the PUC has ruled on these proposals.

Luly Massaro, Commission Clerk
Docket 4673 - Long-Term Contracting for Renewable Energy Recovery Factor
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Thank you for your attention to this filing. Please feel free to contact me if you have any questions concerning this matter at 401-784-7288.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Jennifer Brooks Hutchinson", with a long horizontal flourish extending to the right.

Jennifer Brooks Hutchinson

Enclosures

cc: Docket 4673 Service List
Leo Wold, Esq.
Steve Scialabba

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

November 14, 2016

Date

Docket No. 4673 - National Grid – Long-Term Contracting for Renewable Energy Recovery Factor (Year 2017)

Service List updated 11/14/16

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**Long-Term Contracting for Renewable Energy Recovery
Factor Calculation
For the Period January 2017 through June 2017**

(1) Above Market Cost for the period January 2017 through June 2017	\$22,232,093
(2) Forecasted kWh Deliveries - January 2017 through June 2017	3,562,840,141
(3) Recovery Factor for Estimated Above Market Cost	\$0.00623
(4) Adjustment for Uncollectibles	<u>1.25%</u>
(5) Proposed LTC Recovery Factor for the period January 2017 through June 2017	\$0.00630
(6) Currently Effective LTC Recovery Reconciliation Factor	<u>\$0.00116</u>
(7) Total Proposed LTC Recovery Factor	\$0.00746
(8) Current LTC Recovery Factor	<u>\$0.00337</u>
(9) Increase in LTC Recovery Factor	\$0.00409

Line Descriptions:

- (1) per page 4, column (c), Line (30)
- (2) per Company forecast
- (3) Line (1) ÷ Line (2), truncated after five decimal places
- (4) uncollectible percentage approved in RIPUC Docket No. 4323
- (5) Line (3) x [1 + Line (4)], truncated to five decimal places
- (6) per RIPUC Docket No. 4599, Schedule ASC-18, page 1, line (8)
- (7) Line (5) + Line (6)
- (8) Summary of Delivery Rates, RIPUC No. 2095
- (9) Line (7) - Line (8)

Long-Term Contracting for Renewable Energy Recovery
Estimated Contract Cost
For the Period January 2017 through June 2017

Estimated Six-Month Contract Cost

	<u>Unit</u>	<u>Unit</u> <u>Capacity (MW)</u>	<u>Commercial</u> <u>Operation Date</u>	<u>Unit</u> <u>Factor</u>	<u>Estimated</u> <u>Six-Month</u> <u>Output (MWh)</u>	<u>Contract Price</u> <u>(\$ per MWh)</u>	<u>Estimated</u> <u>Six-Month</u> <u>Contract Cost</u>
		(a)	(b)	(c)	(d)	(e)	(f)
(1)	RI LFG Genco Asset No. 40054	32.100	05/28/13	85%	119,508.3	\$135.54	\$16,198,155
(2)	Wind Energy Dev. NK Green LLC Asset No. 42394	1.500	03/01/13	24%	1,576.8	\$133.50	\$210,503
(3)	Con Edison Development Plain Mtg House Asset No. 43512	2.000	07/19/13	14%	1,226.4	\$275.00	\$337,260
(4)	ACP Land LLC 28 Jacome Way Asset No. 43527	0.500	07/18/13	14%	306.6	\$316.00	\$96,886
(5)	Comtram Cable Asset No. 43586	0.499	09/30/13	14%	306.0	\$316.00	\$96,692
(6)	CCI New England 500 kW Asset No. 43607	0.498	10/25/13	14%	305.4	\$316.00	\$96,498
(7)	Conanicut Marine Services (CMS) Solar Asset No. 43685	0.128	10/21/13	14%	78.5	\$288.00	\$22,605
(8)	Black Bear Orono B Hydro Asset No. 38083	3.958	11/22/13	90%	15,602.4	\$98.50	\$1,536,840
(9)	West Davisville Solar Asset No. 43716	2.340	12/06/13	14%	1,434.9	\$236.99	\$340,054
(10)	Forbes Street Solar Asset No. 43762	3.710	12/20/13	14%	2,275.0	\$239.00	\$543,718
(11)	CCI New England 181 kW Asset No. 43921	0.181	02/27/14	14%	111.0	\$316.00	\$35,073
(12)	100 Dupont Solar Asset No. 44003	1.500	03/25/14	14%	919.8	\$209.00	\$192,238
(13)	225 Dupont Solar Asset No. 44004	0.300	03/25/14	14%	184.0	\$316.00	\$58,131
(14)	35 Martin Solar Asset No. 44006	0.500	03/27/14	14%	306.6	\$316.00	\$96,886
(15)	0 Martin Solar Asset No. 44005	0.500	03/27/14	14%	306.6	\$316.00	\$96,886
(16)	Gannon & Scott Solar Asset No. 44010	0.406	04/29/14	14%	249.0	\$284.00	\$70,704
(17)	All American Foods Solar Asset. No. 46721	0.331	10/24/14	14%	203.0	\$284.00	\$57,643
(18)	Brickle Group Solar Project Asset. No. 46911	1.084	12/04/14	14%	664.7	\$184.90	\$122,905
(19)	T.E.A.M. Inc. Solar Asset. No. 46913	0.182	12/11/14	14%	111.6	\$288.00	\$32,141
(20)	Newport Vineyards Solar Asset. No. 46917	0.053	12/15/14	14%	32.5	\$299.50	\$9,734
(21)	SER Solar 23 Appian Way Asset. No. 46926	0.052	12/17/14	14%	31.9	\$277.57	\$8,851
(22)	Nexamp 76 Stilson Rd. Asset. No. 47020	0.498	02/28/15	14%	305.4	\$194.88	\$59,511
(23)	Randall Steere Farm Asset. No. 46998	0.091	03/18/15	14%	55.8	\$299.49	\$16,712
(24)	Johnston Solar Asset No. 47357	1.700	08/03/15	14%	1,042.4	\$175.00	\$182,427
(25)	North Kingstown Solar 1720 Davisville Rd.- Asset No. 47487	0.500	10/20/15	14%	306.6	\$190.00	\$58,254
(26)	Wilco 260 South County Trail - Asset No. 48664	1.246	08/11/16	14%	764.0	\$219.50	\$167,708
(27)	Foster Solar - Asset No. 48774	1.250	09/08/16	14%	766.5	\$205.99	\$157,891
(28)	Brookside Equestrian Center No. 48899	1.246	10/19/16	14%	764.0	\$149.90	\$114,531
(29)	Deepwater Wind Asset No. 38495	30.000	*01/01/17	47%	<u>61,758.0</u>	\$243.95	<u>\$15,065,864</u>
(30)	Total				211,504		\$36,083,301

Column Descriptions:

- (a) commercially operable units
- (b) start date of commercial operation
- (c) estimated
- (d) column (a) x column (c) x (8,760 ÷ 2) hours
- (e) per PPA
- (f) column (d) x column (e)

* Expected Commercial Operation Date before January 2017

**Long-Term Contracting for Renewable Energy Recovery
Estimated Market Value
For the Period January 2017 through June 2017**

Estimated Market Value

	<u>Unit</u>	<u>Estimated MWh Purchased Under Contracts</u> (a)	<u>Market Energy Proxy</u> (b)	<u>Energy Market Value</u> (c)	<u>REC Proxy</u> (d)	<u>REC Market Value</u> (e)	<u>Capacity</u> (f)	<u>Total Market Value</u> (g)
(1)	RI LFG Genco Asset No. 40054	119,508.3	\$40.76	\$4,870,727	\$22.00	\$2,629,183	\$539,370	\$8,039,280
(2)	Wind Energy Dev. NK Green LLC Asset No. 42394	1,576.8	\$42.82	\$67,524	\$22.00	\$34,690		\$102,213
(3)	Con Edison Development Plain Mtg House Asset No. 43512	1,226.4	\$35.25	\$43,225	\$22.00	\$26,981		\$70,205
(4)	ACP Land LLC 28 Jacome Way Asset No. 43527	306.6	\$35.25	\$10,806	\$22.00	\$6,745		\$17,551
(5)	Comtram Cable Asset No. 43586	306.0	\$35.25	\$10,785	\$22.00	\$6,732		\$17,516
(6)	CCI New England 500 kW Asset No. 43607	305.4	\$35.25	\$10,763	\$22.00	\$6,718		\$17,481
(7)	Conanicut Marine Services (CMS) Solar Asset No. 43685	78.5	\$35.25	\$2,766	\$22.00	\$1,727		\$4,493
(8)	Black Bear Orono B Hydro Asset No. 38083	15,602.4	\$39.46	\$615,597	\$22.00	\$343,254		\$958,850
(9)	West Davisville Solar Asset No. 43716	1,434.9	\$35.25	\$50,573	\$22.00	\$31,568		\$82,140
(10)	Forbes Street Solar Asset No. 43762	2,275.0	\$35.25	\$80,182	\$22.00	\$50,049		\$130,231
(11)	CCI New England 181 kW Asset No. 43921	111.0	\$35.25	\$3,912	\$22.00	\$2,442		\$6,354
(12)	100 Dupont Solar Asset No. 44003	919.8	\$35.25	\$32,419	\$22.00	\$20,236		\$52,654
(13)	225 Dupont Solar Asset No. 44004	184.0	\$35.25	\$6,484	\$22.00	\$4,047		\$10,531
(14)	35 Martin Solar Asset No. 44006	306.6	\$35.25	\$10,806	\$22.00	\$6,745		\$17,551
(15)	0 Martin Solar Asset No. 44005	306.6	\$35.25	\$10,806	\$22.00	\$6,745		\$17,551
(16)	Gannon & Scott Solar Asset No. 44010	249.0	\$35.25	\$8,775	\$22.00	\$5,477		\$14,252
(17)	All American Foods Solar Asset. No. 46721	203.0	\$35.25	\$7,154	\$22.00	\$4,465		\$11,619
(18)	Brickle Group Solar Project Asset. No. 46911	664.7	\$35.25	\$23,428	\$22.00	\$14,624		\$38,051
(19)	T.E.A.M. Inc. Solar Asset. No. 46913	111.6	\$35.25	\$3,933	\$22.00	\$2,455		\$6,389
(20)	Newport Vineyards Solar Asset. No. 46917	32.5	\$35.25	\$1,145	\$22.00	\$715		\$1,860
(21)	SER Solar 23 Appian Way Asset. No. 46926	31.9	\$35.25	\$1,124	\$22.00	\$702		\$1,825
(22)	Nexamp 76 Stilson Rd. Asset. No. 47020	305.4	\$35.25	\$10,763	\$22.00	\$6,718		\$17,481
(23)	Randall Steere Farm Asset. No. 46998	55.8	\$35.25	\$1,967	\$22.00	\$1,228		\$3,194
(24)	Johnston Solar Asset No. 47357	1,042.4	\$35.25	\$36,741	\$22.00	\$22,934		\$59,675
(25)	North Kingstown Solar 1720 Davisville Rd.- Asset No. 47487	306.6	\$35.25	\$10,806	\$22.00	\$6,745		\$17,551
(26)	Wilco 260 South County Trail - Asset No. 48664	764.0	\$35.25	\$26,929	\$22.00	\$16,809		\$43,738
(27)	Foster Solar - Asset No. 48774	766.5	\$35.25	\$27,015	\$22.00	\$16,863		\$43,878
(28)	Brookside Equestrian Center No. 48899	764.0	\$35.25	\$26,929	\$22.00	\$16,809		\$43,738
(29)	Deepwater Wind Asset No. 38495	61,758.0	\$42.82	<u>\$2,644,675</u>	\$22.00	<u>\$1,358,676</u>		<u>\$4,003,351</u>
(30)	Total			\$8,658,758		\$4,653,080	\$539,370	\$13,851,208

Column Descriptions:

- (a) per Page 2, column (d)
- (b) The market energy proxy is based on NYMEX electricity futures prices for the Pricing Period and renewable resource load shapes (usage in on peak hours and off peak hours)
- (c) column (a) x column (b)
- (d) REC price estimate based on most recent market information
- (e) column (a) x column (d)
- (f) Expected capacity revenue from ISO-NE
- (g) column (c) + column (e) + column (f)

**Long-Term Contracting for Renewable Energy Recovery
Estimated Above (Below) Market Cost
For the Period January 2017 through June 2017**

Estimated Above (Below) Market Cost

<u>Unit</u>		<u>Estimated Six-Month Contract Cost</u> (a)	<u>Total Market Value</u> (b)	<u>Estimated Above (Below) Market Cost</u> (c)
(1)	RI LFG Genco Asset No. 40054	\$16,198,155	\$8,039,280	\$8,158,875
(2)	Wind Energy Dev. NK Green LLC Asset No. 42394	\$210,503	\$102,213	\$108,290
(3)	Con Edison Development Plain Mtg House Asset No. 43512	\$337,260	\$70,205	\$267,055
(4)	ACP Land LLC 28 Jacome Way Asset No. 43527	\$96,886	\$17,551	\$79,334
(5)	Comtram Cable Asset No. 43586	\$96,692	\$17,516	\$79,176
(6)	CCI New England 500 kW Asset No. 43607	\$96,498	\$17,481	\$79,017
(7)	Conanicut Marine Services (CMS) Solar Asset No. 43685	\$22,605	\$4,493	\$18,112
(8)	Black Bear Orono B Hydro Asset No. 38083	\$1,536,840	\$958,850	\$577,989
(9)	West Davisville Solar Asset No. 43716	\$340,054	\$82,140	\$257,914
(10)	Forbes Street Solar Asset No. 43762	\$543,718	\$130,231	\$413,487
(11)	CCI New England 181 kW Asset No. 43921	\$35,073	\$6,354	\$28,719
(12)	100 Dupont Solar Asset No. 44003	\$192,238	\$52,654	\$139,584
(13)	225 Dupont Solar Asset No. 44004	\$58,131	\$10,531	\$47,601
(14)	35 Martin Solar Asset No. 44006	\$96,886	\$17,551	\$79,334
(15)	0 Martin Solar Asset No. 44005	\$96,886	\$17,551	\$79,334
(16)	Gannon & Scott Solar Asset No. 44010	\$70,704	\$14,252	\$56,453
(17)	All American Foods Solar Asset. No. 46721	\$57,643	\$11,619	\$46,024
(18)	Brickle Group Solar Project Asset. No. 46911	\$122,905	\$38,051	\$84,853
(19)	T.E.A.M. Inc. Solar Asset. No. 46913	\$32,141	\$6,389	\$25,753
(20)	Newport Vineyards Solar Asset. No. 46917	\$9,734	\$1,860	\$7,873
(21)	SER Solar 23 Appian Way Asset. No. 46926	\$8,851	\$1,825	\$7,025
(22)	Nexamp 76 Stilson Rd. Asset. No. 47020	\$59,511	\$17,481	\$42,030
(23)	Randall Steere Farm Asset. No. 46998	\$16,712	\$3,194	\$13,518
(24)	Johnston Solar Asset No. 47357	\$182,427	\$59,675	\$122,752
(25)	North Kingstown Solar 1720 Davisville Rd.- Asset No. 47487	\$58,254	\$17,551	\$40,703
(26)	Wilco 260 South County Trail - Asset No. 48664	\$167,708	\$43,738	\$123,970
(27)	Foster Solar - Asset No. 48774	\$157,891	\$43,878	\$114,013
(28)	Brookside Equestrian Center No. 48899	\$114,531	\$43,738	\$70,793
(29)	Deepwater Wind Asset No. 38495	<u>\$15,065,864</u>	<u>\$4,003,351</u>	<u>\$11,062,513</u>
(30)	Total	\$36,083,301	\$13,851,208	\$22,232,093

Column Descriptions:

- (a) page 2 column (f)
- (b) page 3 column (g)
- (c) column (a) - column (b)