

July 30, 2020

VIA E-FILING

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

Re: The Narragansett Electric Company d/b/a National Grid – Annual Forward Capacity Market (FCM) Performance Report: PUC Docket No. 4676

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 an annual FCM performance report regarding solar photovoltaic distributed generation (solar DG) facilities from its DG Standard Contracts (DGSC) and its Renewable Energy Growth (REG) programs within the ISO New England Inc. (ISO-NE) Forward Capacity Market (FCM) Capacity Commitment Period (CCP) 10.

Consistent with the instructions issued by the Commission on March 16, 2020, this filing is being made electronically. However, hard copies will be sent to the Commission and the service list 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. 4676 Service List

Service List updated 7/29/2020

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**The Narragansett Electric Company d/b/a National Grid
Forward Capacity Market Annual Performance Report
Capacity Commitment Period 10:
Submitted July 30, 2020**

I. Introduction

This is the annual performance report (Annual Performance Report) of The Narragansett Electric Company d/b/a National Grid (National Grid or the Company) to the Rhode Island Public Utilities Commission (Commission) regarding solar photovoltaic distributed generation (solar DG) facilities from its DG Standard Contracts (DGSC) and its Renewable Energy Growth (REG) programs within the ISO New England Inc. (ISO-NE) Forward Capacity Market (FCM) Capacity Commitment Period (CCP) 10. As directed by the Commission,¹ in reporting on its overall performance of the program for the prior year, the Company is including, among other things, monthly production from the facilities and the performance of facilities during a Capacity Scarcity Condition (CSC). Specifically, National Grid is providing the following results regarding performance of these DG facilities in the FCM:

1. Net FCM Proceeds (approximately \$87,383);
2. Incremental Administrative Costs (\$62,344); and
3. Company Incentive (\$8,738) and Customer Share of Net FCM Proceeds (\$16,301).

This Annual Performance Report addresses solar DG performance from June 1, 2019 through May 31, 2020, which aligns with CCP 10.

II. Calculation of Net FCM Proceeds

a. Introduction

Revenue for CCP 10 reflects: (1) base revenue from capacity monetized in the Monthly Reconfiguration Auctions (MRAs); and (2) Pay-for-Performance revenue during CSCs. Below are details on these two revenue streams during CCP 10. We then present projections for the Company's FCM proceeds for CCP 11.

¹ A bench decision by the Commission at a hearing on February 17, 2017 in Docket No. 4676, as confirmed by PUC Order 23289 issued October 4, 2018, requires the Company to file: (1) an annual report every March containing its FCM auction results; and (2) an annual report every July detailing the performance of the Company facilities in the FCM. In the annual report, "the Company shall provide an annual report which will analyze the overall performance of the program for the prior year and shall include the monthly production from the facilities and the performance of the facilities in the event of a capacity shortage period. The Company shall include an assessment of how the facilities performed compared to expectations. The Company is encouraged to provide an explanation of any significant deviations, particularly in areas of underperformance." Docket No. 4676, PUC Order 23289, at 15.

b. Monthly Base Revenue

The Company has previously qualified and cleared Capacity Supply Obligations (CSOs) for two sets of solar DG resources through Forward Capacity Auction (FCA)-12² and FCA-13.³ As explained in the previously filed Annual Performance Reports for RIPUC 4676, because these assets have successfully cleared an FCA and are commercially operational, the Company has the ability to monetize this capacity prior to CCP 12 and CCP 13 through participation in the MRAs.⁴ Thus, this Annual Performance Report provides the CSOs and monthly base revenue earned for these assets through the MRAs for June through September 2019.

Table 1, below, summarizes the MRA clearing prices for the June through September 2019 and the Company’s cumulative CSOs across its qualified solar DG assets.

Table 1: Summary of MRA Results -- June 2019 through September 2019

Month	CSO (MW)	MRA Clearing Price (\$/kW-month)
June 2019	10.539	\$2.020
July 2019	10.539	\$2.080
August 2019	10.950	\$2.220
September 2019	10.400	\$1.910

Note: CSO values above reflect the cumulative CSO undertaken by the Company, aggregated across each of its qualified and eligible solar DG resources in Rhode Island. CSOs for individual resources are provided in Table 2, below.

Table 2, below, summarizes the total FCM capacity base monthly revenue earned by the Company for each resource in CCP 10. Capacity base monthly revenue for each resource is calculated by multiplying the CSO by the MRA price and multiplying by 1,000 (in order to convert from \$/kW to \$/MW).

² FCA-12 covers the time period for Capacity Commitment Period 12 (CCP 12), which extends from June 1, 2021 to May 31, 2022.

³ FCA-13 covers the time period for Capacity Commitment Period 13 (CCP 13), which extends from June 1, 2022 to May 31, 2023.

⁴ Prior to bidding in a FCA, a project must submit documentation to ISO-NE in both the Show of Interest and Qualification filings, which are due in April and June, respectively. The FCA then occurs in February of the following calendar year and is for delivery of capacity three years in the future. Once a facility has qualified for the FCA, the first opportunity to monetize capacity following qualification is in the June Reconfiguration Auctions of the following calendar year. The Company’s Solar DG assets participate as summer only resources, and are qualified to take on a CSO for the months of June through September only.

Table 2: FCM Capacity Base Revenue Earned for CCP 10

Resource ID	Program	June 2019		July 2019		August 2019		September 2019		Total Capacity Base Revenue (\$)
		CSO (MW)	Capacity Base Payment (\$)	CSO (MW)	Capacity Base Payment (\$)	CSO (MW)	Capacity Base Payment (\$)	CSO (MW)	Capacity Base Payment (\$)	
38833	DGSC	0.019	\$38.38	0.019	\$39.52	0.019	\$42.18	0.019	\$36.29	\$156.37
38834	DGSC	0.8	\$1,616.00	0.800	\$1,664.00	0.800	\$1,776.00	0.800	\$1,528.00	\$6,584.00
38842	DGSC	1.428	\$2,884.56	1.428	\$2,970.24	1.428	\$3,170.16	1.428	\$2,727.48	\$11,752.44
38843	DGSC	0.907	\$1,832.14	0.907	\$1,886.56	0.907	\$2,013.54	0.907	\$1,732.37	\$7,464.61
38853	DGSC	0.207	\$418.14	0.207	\$430.56	0.207	\$459.54	0.207	\$395.37	\$1,703.61
38855	DGSC	0.162	\$327.24	0.162	\$336.96	0.162	\$359.64	0.162	\$309.42	\$1,333.26
38858	DGSC	0.55	\$1,111.00	0.550	\$1,144.00	0.550	\$1,221.00	0.000	\$0.00	\$3,476.00
38860	DGSC	0.191	\$385.82	0.191	\$397.28	0.191	\$424.02	0.191	\$364.81	\$1,571.93
38861	DGSC	0.121	\$244.42	0.121	\$251.68	0.121	\$268.62	0.121	\$231.11	\$995.83
38862	DGSC	0.196	\$395.92	0.196	\$407.68	0.196	\$435.12	0.196	\$374.36	\$1,613.08
38864	DGSC	0.131	\$264.62	0.131	\$272.48	0.131	\$290.82	0.131	\$250.21	\$1,078.13
38865	DGSC	0.000	\$0.00	0.000	\$0.00	0.411	\$912.42	0.411	\$785.01	\$1,697.43
38867	DGSC	0.047	\$94.94	0.047	\$97.76	0.047	\$104.34	0.047	\$89.77	\$386.81
38868	DGSC	0.425	\$858.50	0.425	\$884.00	0.425	\$943.50	0.425	\$811.75	\$3,497.75
38869	DGSC	0.193	\$389.86	0.193	\$401.44	0.193	\$428.46	0.193	\$368.63	\$1,588.39
38881	DGSC	0.199	\$401.98	0.199	\$413.92	0.199	\$441.78	0.199	\$380.09	\$1,637.77
38883	DGSC	0.448	\$904.96	0.448	\$931.84	0.448	\$994.56	0.448	\$855.68	\$3,687.04
38884	DGSC	0.436	\$880.72	0.436	\$906.88	0.436	\$967.92	0.436	\$832.76	\$3,588.28
38885	DGSC	0.474	\$957.48	0.474	\$985.92	0.474	\$1,052.28	0.474	\$905.34	\$3,901.02
38925	REG	0.086	\$173.72	0.086	\$178.88	0.086	\$190.92	0.086	\$164.26	\$707.78
38949	REG	0.091	\$183.82	0.091	\$189.28	0.091	\$202.02	0.091	\$173.81	\$748.93
38950	REG	0.095	\$191.90	0.095	\$197.60	0.095	\$210.90	0.095	\$181.45	\$781.85
40632	DGSC	0.474	\$957.48	0.474	\$985.92	0.474	\$1,052.28	0.474	\$905.34	\$3,901.02
40640	REG	0.073	\$147.46	0.073	\$151.84	0.073	\$162.06	0.073	\$139.43	\$600.79
40641	REG	0.142	\$286.84	0.142	\$295.36	0.142	\$315.24	0.142	\$271.22	\$1,168.66
40642	REG	0.093	\$187.86	0.093	\$193.44	0.093	\$206.46	0.093	\$177.63	\$765.39
40644	REG	0.081	\$163.62	0.081	\$168.48	0.081	\$179.82	0.081	\$154.71	\$666.63
40647	REG	0.103	\$208.06	0.103	\$214.24	0.103	\$228.66	0.103	\$196.73	\$847.69
40654	REG	0.186	\$375.72	0.186	\$386.88	0.186	\$412.92	0.186	\$355.26	\$1,530.78
40655	REG	0.36	\$727.20	0.360	\$748.80	0.360	\$799.20	0.360	\$687.60	\$2,962.80
40656	REG	1.002	\$2,024.04	1.002	\$2,084.16	1.002	\$2,224.44	1.002	\$1,913.82	\$8,246.46
40681	REG	0.096	\$193.92	0.096	\$199.68	0.096	\$213.12	0.096	\$183.36	\$790.08
40684	REG	0.096	\$193.92	0.096	\$199.68	0.096	\$213.12	0.096	\$183.36	\$790.08
40695	REG	0.101	\$204.02	0.101	\$210.08	0.101	\$224.22	0.101	\$192.91	\$831.23
40696	REG	0.1	\$202.00	0.100	\$208.00	0.100	\$222.00	0.100	\$191.00	\$823.00
40718	REG	0.1	\$202.00	0.100	\$208.00	0.100	\$222.00	0.100	\$191.00	\$823.00
40744	REG	0.326	\$658.52	0.326	\$678.08	0.326	\$723.72	0.326	\$622.66	\$2,682.98
Total		10.539	\$21,288.78	10.539	\$21,921.12	10.950	\$24,309.00	10.400	\$19,864.00	\$87,382.90

MRA Clearing Price (\$/kW-month)	\$2.020	\$2.080	\$2.220	\$1.910
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c. Pay-For-Performance Revenue during CSC Events

In addition to revenue received through the MRAs, the solar DG resources participating in the FCM were eligible to receive revenue through Pay-For-Performance (PFP) if a CSC occurred. Under the current ISO-NE market rules, all resources that obtain a CSO in the FCM are eligible for pay-for-performance and are awarded payment/penalty based on their performance during a CSC event, relative to their balancing-ratio adjusted CSO.⁵ Resources that do not have an active CSO in the FCM during a CSC event, but that are commercially operational and registered as assets in the Energy Market, are also eligible for PFP payments if they export energy to the grid during a CSC event.

During CCP 10 (i.e., June 1, 2019 through May 31, 2020) there were no CSC events and therefore no PFP revenue. Thus, there was \$0.00 of incremental revenue earned from PFP.

d. Forecast of Net FCM Proceeds for CCP 11 (June 1, 2020 to May 31, 2021)

Table 3 below provides a forecast of the revenue for the period of June 1, 2020 to May 31, 2021.⁶ Not all solar facilities obtain a CSO every month. For instance, if a facility appears to be underperforming relative to its qualified capacity or displaying evidence of sustained outages, the Company may choose to forego acquiring a CSO for that resource in a given month in order to appropriately manage risk.

Table 3: FCM Capacity Base Revenue for CCP 11

Resource ID	Program	June 2020		July 2020		August 2020		September 2020		Total Revenue
		CSO (MW)	Capacity Base Payment (\$)	CSO (MW)	Capacity Base Payment (\$)	CSO (MW)	Capacity Base Payment (\$)	CSO (MW)	Capacity Base Payment (\$)	
38833	DGSC	0.208	\$312	0.208	\$416	0.208	\$366	0.208	\$647	\$1,741
38834	DGSC	0.938	\$1,407	0.938	\$1,876	0.938	\$1,651	0.935	\$2,908	\$7,842
38842	DGSC	0.000	\$0	0.000	\$0	1.315	\$2,314	0.692	\$2,152	\$4,467
38843	DGSC	0.980	\$1,470	0.980	\$1,960	0.980	\$1,725	0.980	\$3,048	\$8,203

⁵ The balancing ratio is equal to the bulk-system load during a CSC event divided by the total capacity supply obligation for all FCM resources in ISO-NE. For instance, if load was 20 GW and the total cleared CSO across the FCM was 30 GW, the balancing ratio during that particular event would be 0.667. During CSC events, resources with a CSO are awarded a performance payment if their metered energy generation in real-time is in excess of the balancing ratio multiplied their CSO.

⁶ The solar facilities are qualified as summer-only Intermittent Settlement Only Resources and can only obtain a Capacity Supply Obligation in the summer performance months of June – September.

The Narragansett Electric Company d/b/a National Grid
RIPUC Docket No. 4676
Forward Capacity Market Annual Performance Report CCP 10
July 30, 2020
Page 5 of 7

38853	DGSC	0.230	\$345	0.000	\$0	0.194	\$341	0.225	\$700	\$1,386
38855	DGSC	0.162	\$243	0.000	\$0	0.000	\$0	0.000	\$0	\$243
38858	DGSC	0.506	\$759	0.506	\$1,012	0.506	\$891	0.506	\$1,574	\$4,235
38860	DGSC	0.210	\$315	0.210	\$420	0.210	\$370	0.210	\$653	\$1,758
38861	DGSC	0.131	\$197	0.131	\$262	0.131	\$231	0.131	\$407	\$1,096
38862	DGSC	0.214	\$321	0.214	\$428	0.214	\$377	0.214	\$666	\$1,791
38864	DGSC	0.132	\$198	0.132	\$264	0.132	\$232	0.132	\$411	\$1,105
38865	DGSC	0.451	\$677	0.451	\$902	0.451	\$794	0.428	\$1,331	\$3,703
38867	DGSC	0.080	\$120	0.000	\$0	0.080	\$141	0.040	\$124	\$385
38868	DGSC	0.493	\$740	0.493	\$986	0.406	\$715	0.493	\$1,533	\$3,973
38869	DGSC	0.000	\$0	0.000	\$0	0.143	\$252	0.000	\$0	\$252
38881	DGSC	0.203	\$305	0.203	\$406	0.203	\$357	0.203	\$631	\$1,699
38883	DGSC	0.493	\$740	0.493	\$986	0.493	\$868	0.493	\$1,533	\$4,126
38884	DGSC	0.422	\$633	0.422	\$844	0.422	\$743	0.211	\$656	\$2,876
38885	DGSC	0.400	\$600	0.000	\$0	0.400	\$704	0.400	\$1,244	\$2,548
38925	REG	0.089	\$134	0.000	\$0	0.089	\$157	0.089	\$277	\$567
38949	REG	0.105	\$158	0.105	\$210	0.104	\$183	0.105	\$327	\$877
38950	REG	0.106	\$159	0.106	\$212	0.101	\$178	0.106	\$330	\$878
40632	DGSC	0.483	\$725	0.000	\$0	0.408	\$718	0.366	\$1,138	\$2,581
40640	REG	0.083	\$125	0.083	\$166	0.083	\$146	0.083	\$258	\$695
40641	REG	0.143	\$215	0.143	\$286	0.143	\$252	0.143	\$445	\$1,197
40642	REG	0.108	\$162	0.000	\$0	0.000	\$0	0.108	\$336	\$498
40644	REG	0.103	\$155	0.103	\$206	0.103	\$181	0.095	\$295	\$837
40647	REG	0.117	\$176	0.117	\$234	0.115	\$202	0.114	\$355	\$966
40654	REG	0.211	\$317	0.211	\$422	0.211	\$371	0.211	\$656	\$1,766
40655	REG	0.312	\$468	0.312	\$624	0.312	\$549	0.282	\$877	\$2,518
40656	REG	1.180	\$1,770	1.180	\$2,360	1.121	\$1,973	1.180	\$3,670	\$9,773
40659	REG	0.377	\$566	0.377	\$754	0.377	\$664	0.377	\$1,172	\$3,155
40667	REG	0.409	\$614	0.409	\$818	0.409	\$720	0.433	\$1,347	\$3,498
40675	REG	0.095	\$143	0.095	\$190	0.095	\$167	0.098	\$305	\$804
40676	REG	0.086	\$129	0.086	\$172	0.086	\$151	0.086	\$267	\$720
40681	REG	0.096	\$144	0.096	\$192	0.096	\$169	0.096	\$299	\$804
40684	REG	0.096	\$144	0.096	\$192	0.096	\$169	0.096	\$299	\$804
40695	REG	0.112	\$168	0.112	\$224	0.112	\$197	0.112	\$348	\$937
40696	REG	0.112	\$168	0.112	\$224	0.112	\$197	0.112	\$348	\$937
40718	REG	0.115	\$173	0.115	\$230	0.108	\$190	0.115	\$358	\$950

40744	REG	0.392	\$588	0.392	\$784	0.392	\$690	0.392	\$1,219	\$3,281
40998	REG	0.439	\$659	0.439	\$878	0.439	\$773	0.439	\$1,365	\$3,674
41000	REG	0.115	\$173	0.115	\$230	0.115	\$202	0.115	\$358	\$963
41033	REG	0.116	\$174	0.116	\$232	0.116	\$204	0.116	\$361	\$971
41034	REG	0.122	\$183	0.122	\$244	0.122	\$215	0.122	\$379	\$1,021
41039	REG	0.120	\$180	0.120	\$240	0.120	\$211	0.120	\$373	\$1,004
41042	REG	0.953	\$1,430	0.953	\$1,906	0.953	\$1,677	0.953	\$2,964	\$7,977
41304	REG	0.648	\$972	0.648	\$1,296	0.648	\$1,140	0.648	\$2,015	\$5,424
Total		13.696	\$20,544	12.144	\$24,288	14.612	\$25,717	13.813	\$42,958	\$113,508
		\$1.500		\$2.000		\$1.760		\$3.110		

Note: The MRAs for June, July, August, and September 2020 have already occurred and the forecast of Net FCM Proceeds is based on the MRA results, which include both the MRA clearing price and the CSOs (MW values) obtained by each resource for each month.

The above represents monthly FCM Capacity Base Payments (which is the CSO MW multiplied by the MRA clearing price). Additionally, all capacity resources are eligible to earn performance payments or penalties under the FCM Pay-For-Performance rule,⁷ which is determined by the solar facility's performance during a CSC, if any occur during the relevant CCP.⁸

III. Incremental Administrative Costs

The administrative costs reported in Table 4, below, cover FCA-14 qualification activities between June 1, 2019 and May 31, 2020. These costs were incurred because an external contractor was hired to assist with FCA qualification tasks, and internal costs involved the preparation of qualification materials as well as the ongoing monitoring of facilities and portfolio management activities.

⁷ The Pay for Performance rule went into effect on June 1, 2018. For a detailed description of ISO-NE's implementation of the new rules, please refer to ISO-NE's compliance filing on the rule change, "ISO New England Inc., Docket Nos. ER14-2419-002, EL14-52-000; 30-Day Compliance Filing to Revise Tariff section III.13.7," at https://www.iso-ne.com/static-assets/documents/2014/11/er14-2419-002_11-3-14_two-settlement_market_compliance_filing.pdf.

⁸ Solar DG resources with a CSO can only earn penalties if a CSC occurs during the summer performance months of June to September in which they have a CSO. In all other months, the solar DG resources are eligible to earn Performance Incentive payments if a CSC occurs coincident with solar production, but cannot earn penalties, as the resources do not have a CSO in those months.

Table 4: Incremental Administrative Costs (June 1, 2019 to May 31, 2020)

Category	DG Standard Contract Program	REG Program	Total
Internal Labor	\$2,284	\$5,506	\$7,789
Internal Overhead	\$1,493	\$3,061	\$4,555
External Contractor Services	\$50,000	\$0	\$50,000
Total Incremental Labor Resource Expense	\$53,777	\$8,567	\$62,344

IV. Company Incentive and Customer Share of Net FCM Proceeds

The Company is allowed to retain 10% of Net FCM Proceeds from the solar DG portfolio, with customers receiving the remaining Net FCM Proceeds, after the administrative costs are deducted. As shown in Table 5, customers will receive net proceeds from CCP 10.

Table 5: Customer Share of Net FCM Proceeds (June 1, 2019 to May 31, 2020)

Category	Proceeds
Net FCM Proceeds	\$87,383
10% Company Incentive	-\$8,738
Administrative Costs	-\$62,344
Customer Share of Net FCM Proceeds	\$16,301

V. Conclusion

This concludes the Company's Annual Performance Report. If you have questions, please contact the Company for more information.