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July 26, 2023

VIA ELECTRONIC MAIL

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

**RE: Docket No. 4676 – The Narragansett Electric Company d/b/a Rhode Island Energy
Forward Capacity Market (FCM) Annual Performance Report**

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a Rhode Island Energy (the “Company”), enclosed please find the Company’s Forward Capacity Market (“FCM”) Annual Performance Report regarding solar photovoltaic distributed generation (“Solar DG”) facilities from its Distributed Generation Standard Contracts (“DGSC”) and its Renewable Energy Growth (“RE Growth”) programs within the ISO New England Inc. (“ISO-NE”) FCM Capacity Commitment Period (“CCP”) 13. This filing is being made in accordance with Commission Order No. 23289 in Docket No. 4676.

Thank you for your attention to this filing. If you have any questions or concerns, please do not hesitate to contact me at 401-784-4263.

Sincerely,

A handwritten signature in blue ink, appearing to read "Andrew S. Marcaccio".

Andrew S. Marcaccio

Enclosure

cc: Docket 4676 Service List
Jon Hagopian, Esq.
John Bell, Division

**The Narragansett Electric Company d/b/a Rhode Island Energy
Forward Capacity Market Annual Performance Report
Capacity Commitment Period 13
Submitted July 26, 2023**

I. Introduction

This is the annual performance report (Annual Performance Report) of The Narragansett Electric Company d/b/a Rhode Island Energy (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) 13. 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, the Company is providing the following results regarding performance of these DG facilities in the FCM:

1. Net FCM Proceeds (approximately \$174,374);
2. Incremental Administrative Costs (\$19,250); and
3. Company Incentive (\$17,437) and Customer Share of Net FCM Proceeds (\$137,687).

This Annual Performance Report addresses solar DG performance from June 1, 2022 through May 31, 2023, which aligns with CCP 13.

II. Calculation of Net FCM Proceeds

a. Introduction

Revenue for CCP 13 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 13. We then present projections for the Company's FCM proceeds for CCP 14.

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)-13² and FCA-14.³ 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 was able to monetize this capacity prior to CCP 13 and CCP 14 through participation in the MRAs.⁴ This Annual Performance Report represents the first capacity commitment period in which the resources were delivering on CSOs obtained in a primary auction. It reflects monthly base revenue earned for these assets through both the FCA as well as via additional activities in the MRAs for June through September 2022. The primary auction for commitment period 13 cleared at \$2.0011 / kW-month.

Table 1, below, summarizes the MRA clearing prices for the June through September 2022 and the Company’s cumulative CSOs across its qualified solar DG assets.

Table 1: Summary of FCA and MRA Results -- June 2022 through September 2022

Month	CSO (MW)	MRA Clearing Price (\$/kW-month)
June 2022	11.005	\$0.500
July 2022	10.786	\$0.600
August 2022	10.356	\$0.500
September 2022	9.753	\$0.780

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 and includes both CSOs from the FCA and MRA. CSOs for individual resources are provided in Table 2, below.

² FCA-13 covers the time period for Capacity Commitment Period 13 (CCP 13), which extends from June 1, 2022 to May 31, 2023.

³ FCA-14 covers the time period for Capacity Commitment Period 14 (CCP 14), which extends from June 1, 2023 to May 31, 2024.

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, below, summarizes the total FCM capacity base monthly revenue earned by the Company for each resource in CCP 13. Capacity base monthly revenue for each resource is calculated by multiplying the CSO by the average FCA and/or MRA price received and multiplying by 1,000 (in order to convert from \$/kW to \$/MW).

Table 2: FCM Capacity Base Revenue Earned for CCP 13

Resource ID	Program	June 2022		July 2022		August 2022		September 2022		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	0.150	\$606	0.163	\$619	0.186	\$616	0.121	\$601	\$2,443
38834	DGSC	0.881	\$3,249	0.938	\$3,249	0.938	\$3,249	0.712	\$3,222	\$12,969
38842	DGSC	1.536	\$4,815	1.551	\$4,815	1.482	\$4,691	1.055	\$4,555	\$18,875
38843	DGSC	0.980	\$2,918	0.980	\$2,918	0.980	\$2,918	0.742	\$2,872	\$11,627
38853	DGSC	0.232	\$741	0.232	\$741	0.232	\$741	0.185	\$741	\$2,964
38855	DGSC	0.133	\$0	0.162	\$0	0.162	\$0	0.162	\$0	\$0
38858	DGSC	0.508	\$1,889	0.611	\$1,889	0.523	\$1,889	0.396	\$1,889	\$7,554
38860	DGSC	0.210	\$692	0.210	\$692	0.210	\$692	0.175	\$692	\$2,766
38861	DGSC	0.107	\$437	0.127	\$437	0.089	\$426	0.064	\$425	\$1,725
38862	DGSC	0.203	\$695	0.171	\$668	0.159	\$682	0.152	\$692	\$2,737
38864	DGSC	0.132	\$391	0.132	\$388	0.130	\$380	0.092	\$360	\$1,519
38865	DGSC	0.440	\$1,554	0.451	\$1,554	0.451	\$1,554	0.385	\$1,554	\$6,217
38867	DGSC	0.103	\$476	0.083	\$454	0.111	\$486	0.076	\$475	\$1,891
38868	DGSC	0.474	\$1,672	0.493	\$1,672	0.454	\$1,662	0.365	\$1,625	\$6,631
38869	DGSC	0.216	\$737	0.223	\$737	0.223	\$737	0.174	\$737	\$2,949
38881	DGSC	0.199	\$749	0.216	\$749	0.210	\$747	0.167	\$747	\$2,991
38883	DGSC	0.493	\$1,623	0.493	\$1,623	0.493	\$1,623	0.414	\$1,623	\$6,490
38884	DGSC	0.416	\$1,673	0.457	\$1,660	0.376	\$1,642	0.287	\$1,619	\$6,594
38885	DGSC	0.474	\$1,642	0.454	\$1,575	0.474	\$1,625	0.349	\$1,566	\$6,408
38925	RE Growth	0.088	\$0	0.089	\$0	0.089	\$0	0.061	\$0	\$0
38949	RE Growth	0.096	\$0	0.105	\$0	0.103	\$0	0.078	\$0	\$0
38950	RE Growth	0.094	\$0	0.106	\$0	0.100	\$0	0.071	\$0	\$0
40632	RE Growth	0.393	\$2,008	0.393	\$2,012	0.393	\$2,012	0.314	\$1,925	\$7,957
40640	RE Growth	0.082	\$0	0.082	\$0	0.077	\$0	0.060	\$0	\$0
40641	RE Growth	0.130	\$593	0.130	\$585	0.128	\$580	0.091	\$555	\$2,314
40642	RE Growth	0.101	\$421	0.101	\$415	0.101	\$416	0.078	\$404	\$1,655
40644	RE Growth	0.074	\$380	0.080	\$378	0.058	\$373	0.044	\$352	\$1,483
40647	RE Growth	0.108	\$445	0.108	\$442	0.108	\$443	0.101	\$440	\$1,769
40654	RE Growth	0.170	\$831	0.180	\$831	0.169	\$823	0.169	\$795	\$3,279
40655	RE Growth	0.306	\$1,547	0.306	\$1,538	0.306	\$1,544	0.219	\$1,468	\$6,097
40656	RE Growth	1.083	\$4,466	1.083	\$4,432	1.083	\$4,418	0.859	\$4,314	\$17,630

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Resource ID	Program	June 2022		July 2022		August 2022		September 2022		Total Capacity Base Revenue (\$)
		CSO (MW)	Capacity Base Payment (\$)	CSO (MW)	Capacity Base Payment (\$)	CSO (MW)	Capacity Base Payment (\$)	CSO (MW)	Capacity Base Payment (\$)	
40657	RE Growth									
40659	RE Growth	0.377	\$1,403	0.377	\$1,420	0.377	\$1,407	0.298	\$1,382	\$5,612
40660	RE Growth									
40661	RE Growth									
40662	RE Growth									
40663	RE Growth									
40665	RE Growth									
40667	RE Growth	0.352	\$1,758	0.389	\$1,749	0.343	\$1,734	0.246	\$1,679	\$6,920
40669	RE Growth									
40671	RE Growth									
40672	RE Growth									
40673	RE Growth									
40674	RE Growth									
40675	RE Growth	0.100	\$380	0.100	\$380	0.100	\$377	0.078	\$370	\$1,507
40676	RE Growth	0.078	\$380	0.078	\$380	0.078	\$380	0.078	\$380	\$1,520
40677	RE Growth									
40679	RE Growth									
40680	RE Growth									
40681	RE Growth	0.024	\$0	0.024	\$0	0.024	\$0	0.024	\$0	\$0
40682	RE Growth									
40684	RE Growth	0.096	\$0	0.096	\$0	0.096	\$0	0.084	\$0	\$0
40694	RE Growth									
40695	RE Growth	0.110	\$426	0.110	\$426	0.110	\$424	0.093	\$422	\$1,697
40696	RE Growth	0.106	\$426	0.106	\$425	0.106	\$419	0.088	\$419	\$1,689
40697	RE Growth									
40701	RE Growth									
40702	RE Growth									
40718	RE Growth	0.110	\$437	0.110	\$430	0.110	\$431	0.094	\$424	\$1,721
40744	RE Growth	0.371	\$1,487	0.381	\$1,467	0.369	\$1,480	0.314	\$1,465	\$5,898
40998	RE Growth	0.420	\$0	0.420	\$0	0.420	\$0	0.400	\$0	\$0
41000	RE Growth	0.089	\$0	0.094	\$0	0.094	\$0	0.094	\$0	\$0
41026	RE Growth	0.000	\$0	0.000	\$0	0.000	\$0	0.000	\$0	\$0
41031	RE Growth	0.000	\$0	0.000	\$0	0.000	\$0	0.000	\$0	\$0
41033	RE Growth	0.112	\$0	0.112	\$0	0.112	\$0	0.112	\$0	\$0
41034	RE Growth	0.113	\$0	0.113	\$0	0.113	\$0	0.091	\$0	\$0
41039	RE Growth	0.115	\$0	0.115	\$0	0.115	\$0	0.114	\$0	\$0
41042	RE Growth	0.910	\$0	0.953	\$0	0.953	\$0	0.689	\$0	\$0

Resource ID	Program	June 2022		July 2022		August 2022		September 2022		Total Capacity Base Revenue (\$)
		CSO (MW)	Capacity Base Payment (\$)	CSO (MW)	Capacity Base Payment (\$)	CSO (MW)	Capacity Base Payment (\$)	CSO (MW)	Capacity Base Payment (\$)	
41304	RE Growth	0.635	\$0	0.648	\$0	0.648	\$0	0.648	\$0	\$0
Avg. Price (\$/kW-month)		14.730	\$43,944	15.136	\$43,748	14.766	\$43,620	11.763	\$42,787	\$174,100
Total		\$2.983		\$2.890		\$2.954		\$3.637		

c. Pay-For-Performance Revenue during CSC Events

In addition to revenue received through the FCA and 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 13 (i.e., June 1, 2022 through May 31, 2023) there was one CSC event on December 24, 2022. Although the event took place in the evening and during a non-summer month where the projects did not have an active obligation in the market, any performance during this time was able to earn a performance incentive. Thus, there was \$274.20 of incremental revenue earned from PFP.

d. Forecast of Net FCM Proceeds for CCP 14 (June 1, 2023 to May 31, 2024)

Table 3 below provides a forecast of the revenue for the period of June 1, 2023 to May 31, 2024.⁶ 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. Some projects have an obligation from the primary auction, FCA14, while others only had the option to obtain a CSO in the monthly reconfiguration auctions, leading to several different prices. The average price is listed in Table 3 for reference.

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.

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Resource ID	Program	June 2023		July 2023		August 2023		September 2023		Total Revenue
		CSO (MW)	Capacity Base Payment (\$)	CSO (MW)	Capacity Base Payment (\$)	CSO (MW)	Capacity Base Payment (\$)	CSO (MW)	Capacity Base Payment (\$)	
40663	RE Growth									\$0
40665	RE Growth									\$0
40667	RE Growth	0.365	\$729	0.354	\$708	0.327	\$654	0.464	\$928	\$3,021
40669	RE Growth									\$0
40671	RE Growth									\$0
40672	RE Growth									\$0
40673	RE Growth									\$0
40674	RE Growth									\$0
40675	RE Growth	0.100	\$200	0.100	\$200	0.094	\$188	0.100	\$200	\$788
40676	RE Growth	0.100	\$200	0.100	\$200	0.100	\$200	0.100	\$200	\$800
40677	RE Growth									\$0
40679	RE Growth									\$0
40680	RE Growth									\$0
40681	RE Growth	0.000	\$0	0.000	\$0	0.000	\$0	0.000	\$0	\$0
40682	RE Growth									\$0
40684	RE Growth	0.000	\$0	0.000	\$0	0.000	\$0	0.000	\$0	\$0
40694	RE Growth									\$0
40695	RE Growth	0.112	\$225	0.112	\$224	0.112	\$224	0.000	\$0	\$673
40696	RE Growth	0.110	\$221	0.110	\$220	0.103	\$206	0.000	\$0	\$647
40697	RE Growth									\$0
40701	RE Growth									\$0
40702	RE Growth									\$0
40718	RE Growth	0.101	\$203	0.101	\$202	0.099	\$198	0.000	\$0	\$603
40744	RE Growth	0.392	\$786	0.392	\$784	0.376	\$752	0.177	\$354	\$2,677
40998	RE Growth	0.413	\$830	0.413	\$826	0.413	\$826	0.000	\$0	\$2,482
41000	RE Growth	0.109	\$219	0.109	\$218	0.109	\$218	0.000	\$0	\$655
41026	RE Growth	0.000	\$0	0.000	\$0	0.000	\$0	0.000	\$0	\$0
41031	RE Growth	0.000	\$0	0.000	\$0	0.000	\$0	0.000	\$0	\$0
41033	RE Growth	0.104	\$209	0.104	\$208	0.103	\$206	0.000	\$0	\$623
41034	RE Growth	0.108	\$217	0.108	\$216	0.108	\$216	0.000	\$0	\$649
41039	RE Growth	0.115	\$231	0.115	\$230	0.115	\$230	0.000	\$0	\$691
41042	RE Growth	0.953	\$1,916	0.953	\$1,906	0.953	\$1,906	0.000	\$0	\$5,728
41304	RE Growth	0.564	\$1,134	0.564	\$1,128	0.411	\$822	0.000	\$0	\$3,084
Total		13.693	\$27,435	13.417	\$26,844	12.724	\$25,458	9.820	\$19,650	\$99,386
Average Price (\$/KW-month)		\$2,004		\$2,001		\$2,001		\$2,001		

Note: The MRAs for June, July, and August, 2023 have already occurred and the forecast of Net FCM Proceeds is based on the weighted average FCA and MRA results, which include both the FCA and 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 FCA and MRA clearing prices). 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 FCM activities between June 1, 2022 and May 31, 2023. 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.

Table 4: Incremental Administrative Costs (June 1, 2022 to May 31, 2023)

Category	DG Standard Contract Program	REG Program	Total
Internal Labor	\$0	\$0	\$0
Internal Overhead	\$2,581	-\$605	\$1,976
External Contractor Services	\$8,637	\$8,637	\$17,274
Total Incremental Labor Resource Expense	\$11,218	\$8,032	\$19,250

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.

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 13.

Table 5: Customer Share of Net FCM Proceeds (June 1, 2022 to May 31, 2023)

Category	Proceeds
Net FCM Proceeds	\$174,374
10% Company Incentive	\$17,437
90% Customer Share of FCM Proceeds	\$156,936
Administrative Costs	\$19,250
Net Benefits to Customers (90% Customer Share minus Administrative Costs)	\$137,687

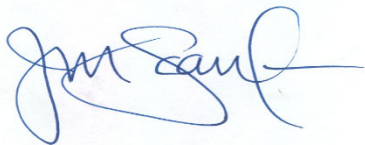
V. Conclusion

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

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

July 26, 2023

Date

**Docket No. 4676 Rhode Island Energy – Forward Capacity Market Proposal
Service List updated 8/1/22**

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