

May 31, 2024

VIA HAND DELIVERY & ELECTRONIC MAIL

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

**RE: Docket No. 23-44-REG – 2024 Renewable Energy Growth Program
Compliance Filing – Update on Affected System Operator Interconnection Studies**

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a Rhode Island Energy (the “Company”), enclosed please find a memorandum that represents a compliance filing made pursuant to the following directives that were issued by the Public Utilities Commission (“PUC”) at an Open Meeting on April 29, 2024.

- Approved the recommended 2024 Large Solar II and III allocations subject to the following conditions:
 - Rhode Island Energy shall provide the Commission with an update no later than May 31, 2024, on the status of Affected System Operator interconnection studies. As a component of that update, Rhode Island Energy will also provide an update of the volume of projects expected to be eligible to bid into the 2024 program year for each of the Renewable Energy Growth large solar classes.
 - Rhode Island Energy shall make a recommendation to the Commission and OER on whether it believes healthy competition may be achieved within these class allocations.

Robinson+Cole

Luly E. Massaro, Commission Clerk
Rhode Island Public Utilities Commission
May 31, 2024
Page 2

- Regardless of Rhode Island Energy's recommendation, if Affected System Operator interconnection studies are further delayed, Rhode Island Energy will remove the capacity allocated to the Large Solar II and III classes from the PY 2024 total allocation.

Thank you for your attention to this filing. If you have any questions or concerns, please do not hesitate to contact me at 401-709-3337.

Very truly yours,



Leticia C. Pimentel

Enclosures

cc: Docket No. 23-44-REG Service List

Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate were 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.

Heidi J. Seddon

May 31, 2024

Date

Docket No. 23-44-REG – Renewable Energy Growth Program for Year 2024
The Narragansett Electric Company & RI Distributed Generation Board
Service List updated 3/4/2024

Parties' Name/Address	E-Mail	Phone
The Narragansett Electric Company d/b/a Rhode Island Energy Andrew S. Marcaccio, Esq. Celia B. O'Brien, Esq. 280 Melrose Street Providence, RI 02907	AMarcaccio@pplweb.com;	401-784-4263
	COBrien@pplweb.com;	
	JScanlon@pplweb.com;	
	CAGill@RIEnergy.com;	
	KRCastro@rienergy.com;	
	ERussell@rienergy.com;	
	RConstable@rienergy.com;	
	BLJohnson@pplweb.com;	
	KMCampbell@pplweb.com;	
	HDGonsalves@pplweb.com;	
LKurdgelashvili@pplweb.com;		
Leticia Pimentel, Esq. Robinson & Cole LLP One Financial Plaza, 14th Floor Providence, RI 02903	lpimentel@rc.com;	401-709-3337
	hseddon@rc.com;	
National Grid Thomas Kender Adam Crary	Thomas.Kender@nationalgrid.com;	
	Adam.Crary@nationalgrid.com;	
DG Board / Office of Energy Resources Albert Vitali, Esq. Division of Legal Services One Capitol Hill, 4 th Floor Providence, RI 02908	Albert.Vitali@doa.ri.gov;	401-222-8880
	Nancy.Russolino@doa.ri.gov;	
	Christopher.Kearns@energy.ri.gov;	
	Shauna.Beland@energy.ri.gov;	

	Abigail.Hasenfus@energy.ri.gov ;	
	Karen.Bradbury@energy.ri.gov ;	
	William.Owen@energy.ri.gov ;	
	Karen.Stewart@commerceri.com ;	
Jim Kennerly	jkennerly@seadvantage.com ;	
	jgifford@seadvantage.com ;	
	Tarmstrong@seadvantage.com ;	
Division of Public Utilities and Carriers Margaret L. Hogan, Esq.	Margaret.L.Hogan@dpuc.ri.gov ;	401-780-2120
	christy.hetherington@dpuc.ri.gov ;	
	John.bell@dpuc.ri.gov ;	
	Paul.roberty@dpuc.ri.gov ;	
	Joel.munoz@dpuc.ri.gov ;	
	Ellen.Golde@dpuc.ri.gov ;	
Mike Brennan 500 North Boundary St. Raleigh, NC 27604	mikebrennan099@gmail.com ;	919-219-2957
Gridwealth Development Seth H. Handy, Esq. Handy Law, LLC 42 Weybosset Street Providence, RI 02903	seth@handylawllc.com ;	401-626-4839
	conor@handylawllc.com ;	
	ispringsteel@gridwealth.com ;	
A. Quincy Vale, Esq. MassAmerican Energy LLC dba Gridwealth 33 Union Avenue Sudbury, MA 01776	qvale@gridwealth.com ;	617-694-5181
File an original & 9 copies w/ Luly E. Massaro, Commission Clerk Cynthia Wilson-Frias, Commission Counsel Public Utilities Commission 89 Jefferson Blvd. Warwick, RI 02888	Luly.massaro@puc.ri.gov ;	401-780-2107
	Alan.nault@puc.ri.gov ;	
	Todd.bianco@puc.ri.gov ;	
	Cynthia.WilsonFrias@puc.ri.gov ;	
	Christopher.Caramello@puc.ri.gov ;	
Interested Parties:		
Paul Rhodes	PRhodes@gridwealth.com ;	
Matt Sullivan, Green Development	ms@green-ri.com ;	
Hannah Morini, Green Development	hm@green-ri.com ;	
Doug Sabetti	doug@newportsolarri.com ;	

Fred Unger	unger@hrtwd.com ;	
Charlie Grant, Essex Capital Partners	cgrant@essexcapitalpartners.com ;	
Stuart Flanagan, NPTRE-Newport Renewables	sflanagan@nptre.com ;	
Seth Handy, Esq.	seth@handylawllc.com ;	
Maya Gibbs	mgibbs@ameresco.com ;	
Paul Raducha	praducha@ameresco.com ;	

MEMORANDUM

To: Luly E. Massaro, Clerk, Public Utilities Commission, and
Christopher Kearns, Acting Commissioner, Rhode Island Office of Energy
Resources

From: Kenneth Campbell, Rhode Island Energy, Senior Energy RFP Specialist
Regulatory Affairs; and
Mark Garland, Rhode Island Energy, Supervisor Customer Energy
Integration for Rhode Island Distributed Generation Connections

Date: May 31, 2024

Subject: PUC Docket No. 23-44-REG – Compliance Filing - Update on Affected
System Operator Interconnection Studies & Recommendation on
Competition in Large Solar II and III Classes

Purpose

The purpose of this memorandum is to provide the Public Utilities Commission (“PUC”) and the Office of Energy Resources (“OER”) (a) with an update (i) on the status of Affected System Operator (“ASO”) interconnection studies; and (ii) on the volume of projects expected to be eligible to bid into the 2024 program year for each of the Renewable Energy Growth (“REG”) Program Large Solar Classes; and (b) to make a recommendation to the PUC and OER on whether the Narragansett Electric Company d/b/a Rhode Island Energy (the “Company” or “Rhode Island Energy”) believes healthy competition may be achieved in the Large Solar II and III allocations within the 2024 Renewable Energy (“RE”) Growth Program.

ASO Interconnection Study Update

The Western Rhode Island (“WRI”) Area Affected System Operator (“ASO”) Study #3 commenced as of August 17, 2021, when the Company¹ officially received all Power Systems Computer Aided Design (“PSCAD”) and Power System Simulator for Engineering (“PSSE”) models that aligned with the Company’s Source Requirement Document (“SRD”). The timeline for the overall WRI ASO #3 System Impact Study was expected to take 6-12 months. The Company and New England Power (“NEP”) were initially targeting to have all study

¹ At this time, The Narragansett Electric Company was owned by National Grid USA. On May 25, 2022, PPL Energy Holdings, LLC purchased 100 percent of the outstanding common stock of The Narragansett Electric Company from National Grid. As a result, The Narragansett Electric Company became an indirect fully owned subsidiary of PPL Corporation.

components completed by the end of October 2022. Due to the large amount of attrition from WRI ASO #1 and #2, the WRI ASO #3 study was put on hold in early 2022 to restudy ASO #1 and #2. This Attrition Study was completed and presented to NEPOOL Reliability Committee Meeting on April 27, 2022. The analysis for WRI ASO #3 resumed soon after, and the first round of simulations was completed in March 2023. The PSCAD analysis showed an unacceptable response for several DER projects relating to voltage issues. Two solutions were to implement a Transmission Solution for a Synchronous Condenser or adjust the PSCAD and Stability model settings for the corresponding DER projects. The Company identified settings changes as the lowest cost solution and began working with the developers to resolve the PSCAD and Stability model responses.

The setting changes required multiple revisions because the developers also made changes to their models that caused the models to not align with the SRD. The Company screened the models and notified the developers of the deficiencies for each submittal. The developers required many submittal attempts before the requested setting changes and model deficiencies were resolved. This effort was completed in November 2023, and all ASO #3 models have been deemed fully functional.

The original Study Scope for WRI ASO #3 was approved by ISO-NE in 2021. However, ISO-NE requested this be revised in December 2023 to incorporate project changes and updated assumptions to reflect new modeling practices. ISO-NE requested that Rhode Island Energy restart the study using new base cases and study assumptions. ISO-NE reviewed the study scope and provided comments to the Company on March 26, 2024. ISO-NE also determined the ASO #3 study needs to respect an ongoing FERC Queue Position (“QP”) study by adding the QP’s Stability and PSCAD models as well as the outputs from that study to the WRI ASO #3 System Impact Study base cases. The FERC QP experienced several issues regarding Stability and PSCAD model issues, so their study is still ongoing and has an expected completion date within the next two months. The Company has added the FERC QP models to the WRI ASO #3 cases and is continuing with the Steady-State analysis and prepping the Stability and PSCAD cases for analysis. Rhode Island Energy is targeting to complete the next round of analysis for ASO #3 in August 2024.

Update of the Volume of Projects Within Large-Scale Solar Classes II and III

Please see the below Table 1 which provides a list of the projects expected to be eligible to bid into the 2024 program year for each of the RE Growth Program Large-Scale Solar II and III Renewable Energy Classes.

Projects in ASO #3 That Could Potentially Bid into RE Growth in PY2024		
External Project ID	External Developer ID	Calculated Project Capacity (kW DC)
1	A	5,005
2	B	6,370
3	A	6,370
4	C	6,435
5	A	7,280
Large-Scale Solar II Total:		31,460
6	A	10,010
7	C	13,000
8	C	13,000
9	D	13,000
10	D	13,000
Large-Scale Solar III Total:		62,010
* From Docket No. 23-44-REG, from DG Board and OER Filings, from SEA Schedule 4, Slide 12, the DC:AC ratio of 1.3 was utilized here.		

Recommendation on Competition

The Company was ordered to make a recommendation on whether the recommended class capacity allocations for the Large-Solar II and Large-Solar III Classes as proposed by OER and the Rhode Island Distributed Generation Board (“DG Board”) would result in healthy competition, given the updated potential projects list currently in ASO #3. The Company considers two criteria to be necessary to result in healthy competition. First, each bidder must perceive that there is at least one more bidder in order to incentivize them to bid their lowest price. Second, the bidders must have a perception that there is not sufficient capacity for all projects to win a Conditional Certificate of Eligibility. In addition, the Company recognizes that developers of projects of this size are more likely to conduct revenue forecasts for net metering versus RE Growth when deciding whether it is worthwhile to apply to RE Growth.

The Company considered these two minimum criteria in two analyses to assess whether the recommended class capacity allocations as proposed by OER and the DG Board would result in healthy competition.

First, the Company considered the different scenarios in which bids could be awarded to the potential Large-Scale Solar II and III projects. For Large-Scale Solar II, if Developer B and C (as noted in the Table 1) won their bids for a combined capacity of approximately 12.8 MW, there would be no more competition in the class because the remaining three projects are being developed by the same developer. In addition, if one of the three developers does not want to switch from net metering to RE Growth, due to their revenue forecast or other reasoning, and the developer with the smaller capacity wins their bid for a single project, there will be no more competition in the class for the same reason. Therefore, the Company recommends that the Program Year 2024 megawatt allocation for Large-Scale Solar II be set at 10 MW DC, which will enable one project to be awarded.

For Large-Scale Solar III, External Project ID #6 is on the border of Large-Scale Solar II and III, depending on the DC:AC ratio utilized. Assuming that the External Project ID #6 does not bid into Large-Scale Solar III, both Developer C and D have two similar projects that they could bid into RE Growth, which means there could be competition up to approximately 26 MW. The Company recommends that the Program Year 2024 megawatt allocation for Large-Scale Solar III remain the same as was originally proposed by the DG Board and OER.

Second, the Company relied on the historic percentage of solar projects awarded through RE Growth (rather than applying for net metering) as a proxy for the expected proportion of total potential project capacity that may be bid into RE Growth. The Company utilized its response to PUC Data Request 1-12 in Docket No. 23-44-REG to create the Table 2 below. Table 2 compares the total selected capacity in MW DC for each RE Growth Program Year, compared to the received net metering applications in MW DC. The 5-year average percentage of projects that are selected in RE Growth is 17%. For Large-Scale Solar II, 17% of the total potential project capacity of 31.5 MW is approximately 5.4 MW, and for Large-Scale Solar III, 17% of the total potential project capacity of approximately 62.0 MW is approximately 10.5 MW. This analysis further supports our above recommendation.

Renewable Energy Growth Program Selected MW vs Net Metering Application MW					
Year	RE Growth Selected MW DC	Net Metering Received MW AC	Net Metering Received MW DC	Total MW DC	% of RE Growth Selected MW DC vs Total MW DC
2019	49.0	227.0	295.1	344.1	14.2%
2020	44.0	180.0	234.0	278.0	15.8%
2021	52.0	122.0	158.6	210.6	24.7%
2022	34.0	65.0	84.5	118.5	28.7%
2023	8.0	100.0	130.0	138.0	5.8%
Total:	187.0	694.0	902.2	1,089.2	
Average:	37.4	138.8	180.4	217.8	17.2%

*From Docket No. 23-44-REG, from Rhode Island Energy's Response to PUC Data Request Set 1, from PUC 1-12, our team has created the table, which shows the Renewable Energy Growth Program selected MW DC for the previous five Program Years and compares it to the received Net Metering MW DC over the same time period.

** From Docket No. 23-44-REG, from DG Board and OER Filings, from SEA Schedule 4, Slide 12, the DC:AC ratio of 1.3 was utilized here.

The Company recommends that the allocation for Large-Scale Solar II be reduced from 35 MW DC to 10 MW DC because the Company finds that healthy competition – using the Company criteria set above — may be at risk. Setting the Program Year 2024 megawatt allocation for Large-Scale Solar II at 10 MW DC will enable one project to be awarded. The recommendation to restrict the megawatt allocation plan for Large-Scale Solar II is relatively low risk, given that the beginning of Program Year 2025 is only a few months away from Program Year 2024’s third open enrollment. If sufficient competition is seen, this information can be utilized in determining the megawatt allocation for Program Year 2025.

Based on the current status of the ASO #3 studies, the Company does agree with the DG Board’s and OER’s recommendation for the Program Year 2024 megawatt allocation for Large-Scale Solar III class of 15 MW DC.