

**STATE OF RHODE ISLAND
PUBLIC UTILITIES COMMISSION**

IN RE: 2022 RENEWABLE ENERGY GROWTH – :
CLASSES, CEILING PRICES, AND CAPACITY :
TARGETS AND 2022 RENEWABLE ENERGY : **DOCKET NO. 5202**
GROWTH PROGRAM – TARIFFS AND SOLICITATION :
AND ENROLLMENT PROCESS RULES :

REPORT AND ORDER

I. Overview and Motion to Intervene

In 2014, to facilitate and promote grid-connected generation of renewable energy within The Narragansett Electric Company d/b/a National Grid’s (National Grid or Company) load zone (generally Rhode Island), the Rhode Island General Assembly enacted the Renewable Energy Growth Program (Program).¹ Under the Program, each year the Public Utilities Commission (Commission) is required to approve: (1) the classes of renewable energy projects that can participate in the Program; (2) the target amount of capacity that National Grid may enroll in each class; and (3) the ceiling prices the projects may seek from what is generally known as a “feed-in tariff.”² The Commission is also required to approve annual Tariffs, Solicitation, and Enrollment Rules filed by National Grid.

On November 29, 2021, the Distributed Generation Board (DG Board) filed with the Commission a Report and Recommendations Relating to the 2022 Renewable Energy Growth Classes, Ceiling Prices, and Capacity Targets (2022 Report). The filing was amended on

¹ R.I. Gen. Laws § 39-26.6-1 to 27. Unless otherwise noted, all filings in this matter can be accessed at <https://ripuc.ri.gov/eventsactions/docket/5202page.html>; or at the Commission’s office at 89 Jefferson Blvd., Warwick, RI 02888.

² The Distributed Generation Board and Office of Energy Resources (OER) recommend classes, targets, and ceiling prices to the Commission. Projects in the small classes are paid at the ceiling prices. All other classes must bid into the program up to the ceiling price. An explanation of a feed-in tariff can be found on the U.S. Energy Information Administration’s website at: <https://www.eia.gov/todayinenergy/detail.php?id=11471> (last visited February 16, 2023).

December 15, 2021.³ On November 15, 2021, National Grid filed with the Commission its proposed 2022 Renewable Energy Growth Program Tariffs, Solicitation, and Enrollment Process Rules.⁴

Following a full review of the filings made by the DG Board, National Grid, and the Division, at an Open Meeting held on March 29, 2022, after an exchange of discovery and two evidentiary hearings, the Commission approved all classes with the exception of medium 1 and medium 2 solar, approving instead, a single medium solar class 26kW-250kW; approved all targets except medium 1 and medium 2 solar, combining the allocations totaling 5 MW to the single medium solar class; and approved all ceiling prices as recommended by DG Board except the ceiling price for medium 1 and medium 2, instead approving 24.45 cents per kWh for the single medium class.

The Commission approved National Grid's tariffs and enrollment rules with the modifications made to the classes, targets, and ceiling prices. The modifications to the tariffs and enrollment rules were filed on March 31, 2022.

II. Classes, Ceiling Prices, and Capacity Targets

A. Classes

The DG Board proposed fourteen renewable energy classes, including different sized solar, wind, anaerobic digestion, hydropower, and community remote distributed generation. Except for the Small Solar I category, the tariff length for each technology and type was twenty years. As in the 2022 Program Year, Small Solar I had a tariff length of fifteen years.⁵

³ Report and Recommendations Relating to the 2022 Renewable Energy Growth Classes, Ceiling Prices, and Capacity Targets (Nov. 29, 2021); Amended Report and Recommendations Relating to the 2022 Renewable Energy Growth Classes, Ceiling Prices, and Capacity Targets (Dec. 15, 2021). The filing did not change the proposed classes, targets, or ceiling price, but corrected the original testimony.

⁴ Renewable Energy Growth Program Tariffs, Solicitation, and Enrollment Process Rules and accompanying testimony and schedules of Ian Springsteel.

⁵ DG Board Recommendation at 9.

The Commission found that while the proposed classes were consistent with the law, based on testimony from the Division of Public Utilities' witness, Michael Brennan, and evidence presented at the hearing held on February 24, 2022, there should only be one medium class size.⁶ As a result, the Commission determined that with the exception of two different sized medium classes, the proposed classes were reasonable. The Commission approved thirteen classes, rejecting the splitting of the previously approved medium class into two smaller categories. As in prior years, a single medium solar class of greater than 25 kW to 250 kW was approved.⁷

The Commission reviewed the rationale for bifurcating the commercial class into two, where there was concern that because the mid-sized projects were used for the model, larger projects that can benefit from economies of scale might be over-compensated. For 2022, SEA modeled the ceiling prices based on the maximum size for each category. This should address those specific concerns. Addressing the proposed bifurcation of the medium class, the Commission expressed concern that the rationale provided was not supportable under least cost procurement principles. In DG Board witness Kennerly's amended testimony, he explained that the bifurcation of the medium class was to incentivize development on rooftops which is closer to load and more likely to avoid siting conflicts.⁸ However, based on the hearing testimony and discovery, the record reflected that projects in the medium size category are usually located on rooftops.⁹ National Grid data for the period 2018-2020 shows that most commercial projects up to 500 kW are on rooftops and not ground mounted.¹⁰ Because the evidence showed that projects

⁶ See Brennan Test. at 7-8; Hr'g. Tr. at 210-212, 218-235.

⁷ The DG Board had recommended splitting the medium solar class based on discussion during the open meeting approving the 2021 Renewable Energy Growth Program. Kennerly Test. at 30-31.

⁸ Kennerly Amended Test. at 31.

⁹ Hr'g. Tr. at 223-228.

¹⁰ JK Schedule 1 at 51 (Projects that are 500 kW or less are usually on medium to large rooftops); JK Schedule 2 at 11 (National Grid data from 2018-2020 presented to the DG Board shows that most Commercial projects are sited on rooftops).

in the medium category are typically located on rooftops anyway, it was unclear to the Commission how subdividing the medium category was necessary to meet the stated principles. Furthermore, under the principles of least cost procurement, the goal should be for the least cost projects being developed first in the largest market size. Creating more subdivisions shrinks market, reduces competition, and reduces market efficiency, leading to higher costs than necessary to achieve the state policy. For all of these reasons, the Commission approved the continuation of the single medium solar size ranging from greater than 25 kW to 250 kW.

B. Ceiling Prices

The DG Board sets a proposed ceiling price for each Program Year through a facilitated stakeholder process. The DG Board and OER contract with a consultant, Sustainable Energy Advantage, LLC (SEA). SEA utilizes the CREST model, a publicly available discounted cash flow analysis tool. According to witness Jim Kennerly of SEA, the CREST model “is designed to calculate the cost of energy, or minimum revenue per unit of production, necessary for the modeled project to cover its expenses, service its debt obligations (if any), and meet its equity investors’ assumed minimum required after-tax rate of return.”¹¹ The Commission has previously accepted the CREST model and its results for setting ceiling prices in both the Distributed Generation Standard Contracts and Renewable Energy Growth Program tariffs. Projects enrolled in the Small Solar classes receive the ceiling price while projects in all other classes are enrolled through a competitive bid solicitation.

In his amended testimony, Mr. Kennerly explained that the main drivers of downward pressure on ceiling prices included region-wide installed cost reductions based on information received following the 2021 enrollment results; reduced O&M costs for small and large solar

¹¹ Kennerly Amended Test. at 21.

projects; increased proxy sizes used for modeling in each class; increased assumed post-tariff compensation value; and increased assumed project useful lives. Drivers of upward pressure on ceiling prices included continued supply chain constraints resulting from the COVID-19 pandemic; increased installed capital cost for small solar projects; reduced capacity factors for small solar projects; increased annual degradation rates for solar projects less than 1 MW in size; increased interest rate on term debt for small solar; increase land and site lease costs for medium and large solar projects; increased insurance costs for solar projects greater than 25 kW; and changes to the financing assumptions used for small solar projects.¹²

The Commission found that the ceiling prices were set in a manner consistent with the law and approved the ceiling prices as recommended by the DG Board except for the original proposal of 26.65 cents per kWh for the originally proposed medium solar I class. The ceiling price for the single medium solar class greater than 25 kW to 250 kW was approved at 24.45 cents per kWh. Mr. Brennan had raised questions about the assumptions used regarding tax liability of certain customers who receive compensation in the form of a check in addition to bill credits.¹³ Information provided in responses to record requests that suggested the assumptions used were reasonable.¹⁴ However, the Commission directed SEA to review that further when setting the proposed 2023 ceiling prices. Additionally, Mr. Brennan suggested that the ceiling prices did not reflect the appropriate value of post-tariff revenue that a Renewable Energy Growth project owner could realize after the term of the tariff, particularly as a net metering customer.¹⁵ After hearing the issue, the Commission found that there was insufficient information in the record to support

¹² Kennerly Amended Test. at 24-27; Other drivers of cost changes were included at pages 28-30.

¹³ Brennan Test. at 8-9.

¹⁴ OER Response to RR-7; National Grid Response to RR-1.

¹⁵ Brennan Test. at 4-6.

any adjustment to the proposed ceiling prices but directed SEA to further review this issue when setting of the proposed 2023 ceiling prices.

C. Targets and Allocations

In accordance with R.I. Gen. Laws § 39-26.6-4(a)(1), the DG Board made recommendations to the Commission regarding annual solicitation targets for each of the proposed renewable energy classes. The Program has an annual target of 40 MW with an overall goal of 400 MW through the end of the Program in 2029.¹⁶ The DG Board proposed a total target of 61.2 MW to include terminated projects that had been awarded capacity from the 2017-2020 program years that were made available since the capacity was set for the 2021 program year.¹⁷ The DG Board explained that any additional MW capacity remaining after the third enrollment of the 2021 program year would be allocated to the Small Solar Class.¹⁸ Small Solar categories are enrolled on a continuous open enrollment through a first come, first serve basis. The remaining classes are enrolled through a competitive bid process that occurs three times during the program year.¹⁹

For the 2022 Program Year, the DG Board recommended an identical allocation to each class as in the 2021 Program Year except for Community Remote Distributed Generation

¹⁶ DG Board Recommendations at 14-15. This proposed allocation requires an interpretation of § 39-26.6-12(c)(5) which provides that from the year 2020 through the year 2029, the annual target for each program year will be an additional 40 MW (nameplate) above the preceding Program year's annual target. The most reasonable interpretation is to read the first use of "annual target" as 40 MW over the prior year's cumulative target and to read the second use of "annual target" to mean the amount necessary in that program year to reach the prior year's cumulative target plus 40 MW. The language in subsections (c)(1)-(4) provides that in each of the first four years, there is a fixed target of 40 MW. Then in year five (2019), there was a total target designed to achieve 160 MW. The statutory language changes for the years 2020-2029 to provide for an "additional 40 MW above the annual target for the preceding program year" instead of a fixed number. The 2019 annual target was set at 55.330 MW. The stated goal of the proponents of the amended language in 2017 was to expand the Renewable Energy Growth Program by 400 MW. Therefore, the use of 40 MW over the prior year was intended to refer to the prior year's cumulative program target. Thus, 2019 was 160 MW, 2020 would be 200 MW, 2021 would be 240 MW, etc. The annual program year target enrollment for each year 2020 through 2029 would be 40 MW plus carryover from the prior program years.

¹⁷ *Id.*

¹⁸ *Id.* at 17.

¹⁹ *Id.* at 16. Previously, the DG Board has explained that as the year progresses, some classes may be under-enrolled while others reach their cap. Following the results of the third enrollment, the DG Board has reallocated capacity where there is a higher demand.

Commercial Solar which was allocated a total of 6.0 MW split between the two commercial solar class sizes, doubled from the 2021 Program Year, and the proposed bifurcated medium solar classes which each received 2.5 MW allocations for a total medium solar allocation of 5.0 MW. Large solar was proposed to be 8% higher with a 24.25 MW allocation. The CRDG class receives an automatic statutory adder of up to 15% above the non-CRDG equivalent class. As in prior years, the DG Board recommended allowing the full 15%.

After a review of the targets and allocations, the Commission unanimously approved the proposed targets and allocations except for the medium solar allocations which, consistent with its decision to approve a single medium solar class of greater than 25 kW to 250 kW, was allocated 5.0 MW.²⁰

D. Tariffs, Solicitation, and Enrollment Process Rules

1. Approval of the Tariffs, Solicitation, and Enrollment Process Rules

The Tariffs, Solicitation, and Enrollment Process Rules, which were amended to recognize the discontinuation of a solar carport incentive, filed on November 15, 2021, with compliance filings made on March 31, 2022, reflecting the Commission's modifications to the classes, ceiling prices, and targets, made at the March 29, 2022 Open Meeting, are consistent with R.I. Gen. Laws § 39-26.6-5. The tariffs (1) provide a multi-year stream of performance-based incentives to eligible renewable distributed generation projects for a term of years; (2) set forth the rights and obligations of the owner of the distributed generation project and the conditions upon which payment of performance-based incentives will be paid; and (3) contain reasonable non-price conditions. The approved Solicitation and Enrollment Rules include how the solicitations take

²⁰ The approved classes, targets, and ceiling prices are attached to this order as Appendix A.

place, they include the ceiling prices and term lengths for each tariff, and they include the statutory prohibitions on project segmentation.

Accordingly, it is hereby

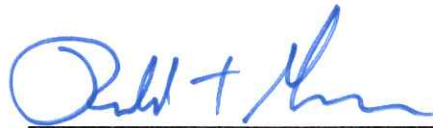
(24606) ORDERED:

1. The 2022 Renewable Energy Growth Program Classes and Ceiling Prices filed by the Distributed Generation Board on December 15, 2021, are hereby approved except for the Medium Solar I and Medium Solar II which shall be combined into one Medium Solar Class sized greater than 25 kW to 250 kW.
2. The 2022 Renewable Energy Growth Program Targets filed on December 15, 2021 are approved except for the Medium Solar I and Medium Solar II which shall be combined into one Medium Solar Class sized greater than 25 kW to 250 kW and allocated 5.0 MW.
3. The Narragansett Electric Company d/b/a National Grid's Renewable Energy Growth Program Tariff for Residential Customers, filed on March 31, 2022, reflecting the March 29, 2022 Open Meeting decision, is hereby approved for effect April 1, 2022.
4. The Narragansett Electric Company d/b/a National Grid's Renewable Energy Growth Program Tariff for Non-Residential Customers, filed on March 31, 2022, reflecting the March 29, 2022 Open Meeting decision, is hereby approved for effect April 1, 2022.
5. The Narragansett Electric Company d/b/a National Grid's Renewable Energy Growth Enrollment Rules for Residential Customers, filed on March 31, 2022, reflecting the March 29, 2022 Open Meeting decision, is hereby approved for effect April 1, 2022.

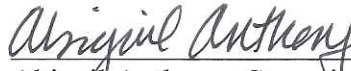
6. The Narragansett Electric Company d/b/a National Grid's Renewable Energy Growth Enrollment Rules for Non-Residential Customers, filed on March 31, 2022, reflecting the March 29, 2022 Open Meeting decision, is hereby approved for effect April 1, 2022.
7. The parties shall comply with all other orders and directives of the Public Utilities Commission as set forth in this order.

EFFECTIVE AT WARWICK, RHODE ISLAND ON APRIL 1, 2022, PURSUANT TO AN OPEN MEETING DECISION ON MARCH 29, 2022. WRITTEN ORDER ISSUED FEBRUARY 23, 2023.

PUBLIC UTILITIES COMMISSION



Ronald T. Gerwatowski, Chairman



Abigail Anthony, Commissioner



John C. Revens, Jr., Commissioner



NOTICE OF RIGHT OF APPEAL: Pursuant to R.I. Gen. Laws § 39-5-1, any person aggrieved by a decision or order of the Commission may, within seven days from the date of the order, petition the Rhode Island Supreme Court for a Writ of Certiorari to review the legality and reasonableness of the decision or order.

Appendix A

Approved Classes Sizes, and Ceiling Prices for 2022 RE Growth Program Year

Renewable Energy Classes (20 Year Tariff Terms unless otherwise noted), Eligible System Sizes, Ceiling Prices, MW Allocation

Renewable Energy Class	Eligible System Size	Ceiling Price (¢/kWh)	Allocation
Small Solar I (15 Year Tariff)	1 to 15 kW DC	31.05	6.950 MW
Small Solar II	>15 to 25 kW DC	27.55	
Medium Solar	>25 to 250 kW DC	24.45	5.0 MW
Commercial Solar I	>250 to 750 kW DC	19.25	4.0 MW
Commercial Solar II	>750 to 1 MW DC	15.75	8.0 MW
CRDG – Commercial Solar I	>250 to 500 kW DC	22.14	3.0 MW
CRDG – Commercial Solar II	>500 to 1 MW DC	18.11	3.0 MW
Large Solar	>1 to 5 MW DC	10.95	24.25 MW
CRDG – Large Solar	>1 to 5 MW DC	12.59	3 MW
Wind	≤ 5 MW DC	22.40	3 MW
CRDG – Wind	≤ 5 MW DC	24.60	
Anaerobic Digestion	≤ 5 MW DC	25.55	1 MW
Small Scale Hydropower	≤ 5 MW DC	37.15	