# STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS PUBLIC UTILITIES COMMISSION

IN RE: 2019 RENEWABLE ENERGY GROWTH –

CLASSES, CEILING PRICES AND CAPACITY

TARGETS AND 2019 RENEWABLE ENERGY : DOCKET NO. 4892

GROWTH PROGRAM – TARIFFS AND SOLICITATION

AND ENROLLMENT PROCESS RULES :

#### REPORT AND ORDER

### I. Overview

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), in 2014, the Rhode Island General Assembly enacted the Renewable Energy Growth Program (Program). Under the program, each year the Public Utilities Commission (PUC) 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." The PUC also needs to approve annual Tariffs, Solicitation, and Enrollment Rules filed by National Grid.

On October 19, 2018, the Distributed Generation Board (DG Board) filed with the PUC a Report and Recommendations Relating to the 2019 Renewable Energy Growth Classes, Ceiling Prices, and Capacity Targets (2019 Report).<sup>3</sup> On November 15, 2018, National Grid filed with the

<sup>&</sup>lt;sup>1</sup> R.I. Gen. Laws § 39-26.6-1 to 27. Unless otherwise noted, all filings in this matter can be accessed at: <a href="http://www.ripuc.ri.gov/eventsactions/docket/4892page.html">http://www.ripuc.ri.gov/eventsactions/docket/4892page.html</a> or at the PUC's office at 89 Jefferson Blvd., Warwick, RI 02888.

<sup>&</sup>lt;sup>2</sup> The Distributed Generation Board and Office of Energy Resources (OER) recommend classes, targets, and ceiling prices to the PUC. 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: <a href="https://www.eia.gov/todayinenergy/detail.php?id=11471">https://www.eia.gov/todayinenergy/detail.php?id=11471</a> (last visited Nov. 18, 2019).

<sup>&</sup>lt;sup>3</sup> Report and Recommendations Relating to the 2019 Renewable Energy Growth Classes, Ceiling Prices, and Capacity Targets.

PUC its proposed 2019 Renewable Energy Growth Program Tariffs, Solicitation, and Enrollment Process Rules.<sup>4</sup> After an exchange of discovery and two evidentiary hearings, on February 15, 2019, the PUC approved twelve renewable energy classes and associated ceiling prices. The PUC did not approve new proposed classes or ceiling price for solar carports. The PUC also approved an overall 2019 program target of 55.330 MW, representing the revised target filed by the Office of Energy Resources (OER) on February 6, 2019.<sup>5</sup>

On March 1, 2019, the PUC subsequently approved revised target allocations for the twelve approved energy classes.<sup>6</sup> On that same date, the PUC also approved National Grid's revised Tariffs, Solicitation, and Enrollment Process Rules with additional modifications made during the February 15, 2019 Open Meeting to clarify provisions related to the suspension or forfeiting of payments to projects and definitions of Project Development Cost. National Grid's final approved Tariffs, Solicitation, and Enrollment Process Rules were filed on March 8, 2019.<sup>7</sup>

## II. Classes, Ceiling Prices, and Capacity Targets

#### A. Classes

The DG Board originally proposed fourteen renewable energy classes. With the exception of two new carport classes, each renewable energy class was for a different size technology. For the first time, the DG Board proposed two classes of the same technology, size and tariff duration with different ceiling prices. Commercial Solar and Commercial Solar Carport were each sized at 251 to 999 kW. Likewise, Large Solar and Large Solar Carport were both sized at 1 to 5 MW.

2

<sup>&</sup>lt;sup>4</sup> Renewable Energy Growth Program Tariffs, Solicitation, and Enrollment Process Rules.

<sup>&</sup>lt;sup>5</sup> OER's Response to RR-5.

<sup>&</sup>lt;sup>6</sup> OER's and Distributed Generation Board's Recommendation to Reallocate 6.5MW from the Initially Proposed Solar Carport Categories to other Categories. The approved classes, targets, and ceiling prices are attached to this order as Appendix A.

<sup>&</sup>lt;sup>7</sup> Final Compliance Filing.

OER witness Christopher Kearns testified that the carport classes were added because development of solar carports is more expensive than traditional ground mount or roof mount solar. He maintained that the DG Board had the authority to propose identically sized renewable energy classes using the same technology under R.I. Gen. Laws § 39-26.6-7 which allows the DG Board to recommend the addition, elimination, or adjustment of renewable energy classes. He also explained that solar carports possess a space-utilization element that other commercial and large solar projects may lack. During the hearing, Mr. Kearns testified that the purpose of the carport class was to address local siting concerns associated with clear-cutting large tracts of forested areas. 9

However, DG Board witness James Kennerly testified that the solar carport proposal was unlikely to defer development of ground-mount solar. <sup>10</sup> During discovery, witnesses for OER and the Board confirmed that:

Carports do not use a different electric generation technology (e.g. photovoltaic cells) than ground mounted or roof mounted solar. However, carports do rely on different mounting technology (e.g., a taller and more durable structure upon which the PV modules are mounted and which allows the system to provide shading or other cover). The DG Board's consultant found no reason to assume (all system design/engineering factors being equal and based on solar industry stakeholder feedback discussed in DG 2019 Packet - Page 087) that the PV system's performance would significantly differ from typical roof or ground mounted system operation at the same system tilt and/or azimuth. <sup>11</sup>

Following discovery, a hearing, and a review of legal briefs, the PUC found that the statutory language of the Renewable Energy Growth Program prohibited the creation of two separate classes of the same size using the same renewable energy resource (in this case, solar)

<sup>&</sup>lt;sup>8</sup> Kearns Test. at 5-6; *See* DG Board Response to PUC 1-17, explaining that the objective of the carport proposal was part of the state's renewable energy policy objectives to take into account local solar dynamics that have arisen from commercial and large-scale solar projects.

<sup>&</sup>lt;sup>9</sup> Hr'g. Tr. at 120 (Jan. 28, 2019).

<sup>&</sup>lt;sup>10</sup> *Id*. at 129.

<sup>&</sup>lt;sup>11</sup> DG Board Response to PUC 1-16.

with different ceiling prices. The PUC found that the section of the law relied on by the DG Board and OER, specifically R.I. Gen. Laws § 39-26.6-7, equates solar classes to size. <sup>12</sup> The PUC opined that the more appropriate method to encourage the construction of solar carports would be through an incentive on the solar ceiling price rather than a different ceiling price. <sup>13</sup>

Furthermore, the PUC found, even if the law governing the Renewable Energy Growth Program could be read liberally to allow the DG Board's interpretation and thus, a new carport class, the proponents failed to prove that the proposed ceiling price would result in a reasonable rate. First, the ceiling price for carports was based on limited data from Massachusetts that may have relied on a different definition of carport. Second, while the witnesses were clear that the reason for the creation of the separate solar carport class was to address local siting concerns associated with ground mount solar, they also indicated that the addition of this class was unlikely to drive investment away from ground mount solar. In effect, the proposal before the PUC appears to simply be a higher cost option in addition to a lower cost option for the same technology. Because they failed to prove that the purported purpose would be realized, the proponents did not meet the burden of proving that the additional cost was reasonable.

\_

<sup>&</sup>lt;sup>12</sup> The DG Board may also add classes of other renewable energy technologies, as it has done in the past with anaerobic digestion and hydropower. R.I. Gen. Laws § 39-26.6-8. Referencing R.I. Gen. Laws § 39-26.6-27, the PUC also noted that where the General Assembly meant for two different ceiling prices to apply to the same size and type of technology (solar), it created a carve out.

R.I. Gen. Laws § 39-26.6-22 states that National Grid may propose incentive payments to achieve public policy objectives that provide identifiable benefits to customers. Any future proposal to provide an incentive adder to the solar ceiling price should include an analysis of the problem the proposal is seeking to solve and the identifiable benefits customer will receive.

<sup>&</sup>lt;sup>14</sup> R.I. Gen. Laws § 39-26.6-14 states that "[n]othing in this chapter shall be construed to derogate from the statutory authority of the commission...including, but not limited to, the authority to protect ratepayers from unreasonable rates."

<sup>&</sup>lt;sup>15</sup> In fact, it was later determined that the proposed ceiling prices did not take into account data from at least one carport that had been developed in Rhode Island without the adder. DG Board Response to PUC Post-Hearing Data Request 2.

<sup>&</sup>lt;sup>16</sup> Hr'g. Test. at 120, 129 (Jan. 28, 2019); Hr'g. Tr. at 58-60 (Jan. 29, 2019).

## **B.** Ceiling Prices

The DG Board sets a proposed ceiling price for each Program Year through a facilitated process. The DG Board and OER contract with a consultant, Sustainable Energy Advantage, LLC (SEA). SEA uses the CREST model, a publicly available discounted cash flow analysis tool. According to witness James Kennerly, an SEA employee, 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 or return."<sup>17</sup> The PUC has previously accepted the CREST model and its results for setting of ceiling prices in both the Distributed Generation Standard Contracts and Renewable Energy Growth Program tariffs. The proposed ceiling prices for most classes in the 2019 Program Year are below the prices for the same categories in the 2018 Program Year. Projects enrolled in the Small Solar classes receive the ceiling price while projects in all other classes are enrolled through a competitive bid solicitation and may receive less than the ceiling price. <sup>19</sup>

After a review of the record, the PUC approved the ceiling prices, finding them to be consistent with the requirements of R.I. Gen. Laws § 39-26.6-5, which references R.I. Gen. Laws § 39-26.2-5.<sup>20</sup> Except for the carports that were rejected, the uncontroverted evidence in the record supported a finding that the proposed ceiling prices for all proposed classes.

1.5

<sup>&</sup>lt;sup>17</sup> Kennerly Test. at 6 (Bates page 045).

<sup>&</sup>lt;sup>18</sup> DG Report and Recommendations at 8 (Bates page 010).

<sup>&</sup>lt;sup>19</sup> *Id.* at 13 (Bates page 015).

<sup>&</sup>lt;sup>20</sup> The two statutes require that the ceiling price for each technology should be a price that would allow a private owner to invest in a given project at a reasonable rate of return, based on recent reported and forecast information on the cost of capital, and the cost of generation equipment. The calculation of the reasonable rate of return for a project shall include where applicable any state or federal incentives including but not limited to tax incentives. The Renewable Energy Growth Program states that in setting the ceiling prices, the board may specifically consider: (1) Transactions for newly developed renewable-energy resources, by technology and size, in the ISO-NE control area and the northeast corridor; (2) Pricing from bids received during the previous program year; (3) Environmental benefits, including, but

## C. Targets

In accordance with R.I. Gen. Laws § 39-26.6-4(a)(1), the DG Board made recommendations to the PUC regarding annual solicitation targets for each of the proposed renewable energy classes. The Renewable Energy Growth Program set overall annual targets of 25 MW in the first year and 40 MW in each of years two through four. In this fifth year of the program, the annual target was mandated to include the addition of any shortfall in the previous Distributed Generation Standard Contracts program.<sup>21</sup> Therefore, the overall capacity target for the 2019 Program Year for all renewable energy classes was proposed as 55.330.<sup>22</sup>

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. 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 may reallocate capacity to classes where there is a higher demand.<sup>23</sup>

Following the PUC's rejection of separate carport classes, the DG Board filed an amended set of targets, reallocating the capacity that was previously assigned to the carports. The DG Board explained that after considering several options, the DG Board accepted OER's recommendation

not limited to, reducing carbon emissions; (4) For community remote distributed generation systems, administrative costs and financial benefits for participating customers; (5) System benefits; and (6) Cost effectiveness.

<sup>&</sup>lt;sup>21</sup> DG Board Report and Recommendations at 13 (Bates page 015).

<sup>&</sup>lt;sup>22</sup> OER's Response to PUC RR-1.

<sup>&</sup>lt;sup>23</sup> DG Board Report and Recommendations at 15 (Bates page 017). R.I. Gen. Laws § 39-26.6-12 states, "[i]f the electric-distribution company, the office, and the board mutually agree, they may reallocate megawatts during an enrollment from one class to another without commission approval if there is an over-subscription in one class and an under-subscription in another, provided that the annual MW target is not being exceeded, except as provided in § 39-26.6-7." National Grid has previously opined that the statutory reference contained in § 39-26.6-12 should refer to § 39-26.6-17 instead of 39-26.6-7. R.I. Gen. Laws § 39-26.6-17 provides, "the electric distribution company, in consultation with the board and the [OER] may voluntarily exceed an enrollment period limit as long as it does not exceed the annual target for the applicable program year. At its election, the electric distribution company may exceed an annual target for the applicable program year after review by the board and approval by the [PUC]." For reasons articulated in National Grid's statutory analysis, the PUC agrees. National Grid Response to PUC 3-3 (Docket No. 4847); http://www.ripuc.ri.gov/eventsactions/docket/4847page.html.

that the 6.5 MW of capacity that was initially proposed for solar carports be evenly distributed (1.3 MW) to each of the other five solar classes, except for the community remote classes. The DG Board approved the recommendation on February 25, 2019. The reallocation is consistent with the principles and objectives used by the DG Board for previous annual Program filings, including: (1) having a predictable annual capacity/targets for different classes for project development; (2) achieving cost effectiveness where feasible among the classes; (3) allocating capacity to where there are strong market demand/applications; and (4) new with this year's filing, considering the solar siting dynamics with local municipalities.<sup>24</sup> The PUC approved the revised targets finding them to be reasonable.

#### III. Tariffs, Solicitation, and Enrollment Process Rules

## A. Approval of the Tariffs, Solicitation, and Enrollment Process Rules

The tariffs, solicitation, and enrollment process rules, as amended through the PUC process and filed on February 26, 2019, 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 Solicitation and Enrollment Rules include the manner in which the solicitations take place, they include the ceiling prices and term lengths for each tariff, and they include the statutory prohibitions on project segmentation.

<sup>&</sup>lt;sup>24</sup> DG Board's Compliance Filing.

## B. Modifications to the 2019 Renewable Energy Growth Program Tariffs, Solicitations, and Enrollment Process Rules

Over the past few years, there has been a concern with the quality of the installation of projects participating in the program. OER has contracted with the Cadmus Group to conduct inspections of a portion of the installations each year. Cadmus has continued to identify deficiencies in installations, the effects of which range from poor placement of facilities to dangerous installations.<sup>25</sup> Cadmus included six recommendations that were accepted by OER and National Grid. Four of the recommendations were included in the 2019 Enrollment Rules. The final recommendations were not included for PUC review. <sup>26</sup> The following describe the new requirements which were approved by the PUC.

## 1. Suspension of Payments to Enrolled Projects

One of the challenges for OER and Cadmus was lack of consistent access to facilities for inspections. There were no consequences to participants for either denying access or ignoring requests for access. Therefore, commencing with the 2019 program, the approved tariffs provide consequences for denial of access. The approved language resulted from several requests for clarification that now result in clear and consistent application of the intended consequence.

Commencing with the 2019 Program Year, participants who do not make their facilities available for inspection within 90 days from the date of an OER request for inspection will have their payments suspended until inspection is allowed. Continued failure to allow the facility to be inspected may result in termination of the certificate of eligibility after 180 days from the date

<sup>&</sup>lt;sup>25</sup> Study of Renewable Energy Installation Quality in the Renewable Energy Growth Program; Study of Renewable Energy Installation Quality in Rhode Island – Round 2 Final Report.

<sup>&</sup>lt;sup>26</sup> The first, the creation of a Minimum Technical Requirements document, was to be the product of National Grid, OER and Cadmus. The second, building and electrical inspector training, was broader than the Renewable Energy Growth Program.

OER requested the inspection.<sup>27</sup> When payments are suspended or withheld for any reason, up to 90 days of performance based incentives and bill credits will be available to be paid once the suspension is cured; the value of all generation that occurred prior to 90 days of the cure will be forfeited. The language, as clarified during this proceeding provides clear expectations for participation in the program. It also allows the Company to enforce the tariff while also allowing the participant adequate time to cure a defect and still receive the suspended payments.

### 2. Mandatory Training and Registration

Self-installers and new installers who have not installed a Renewable Energy Growth Small Scale project prior to the 2019 Program Year will be required to complete a mandatory training webinar prior to submitting an interconnection application. The training materials were to be developed by National Grid, OER, and Cadmus. A certificate of completion would be evidence that the training had been completed.<sup>28</sup>

R.I. Gen. Laws § 5-65-1 requires a registered contractor or firm with a contractor's registration to perform work associated with solar installations. The Enrollment Rules require renewable energy firms holding RI Generation Contractors registration provide their registration number.<sup>29</sup>

The latter provision addresses concerns that the projects need to be installed by qualified individuals consistent with state law. Hopefully, the former provision requiring training will address some of the more common installation errors previously found by Cadmus during its inspections.

<sup>&</sup>lt;sup>27</sup> RIPUC No. 2151-F, Sheet 9, Tariff 2151-F, Sheet 17 (Issued Mar. 8, 2019).

<sup>&</sup>lt;sup>28</sup> 2019 Solicitation and Enrollment Process for Small-Scale Solar Projects at Section 1.2.2.2.

<sup>&</sup>lt;sup>29</sup> 2019 Solicitation and Enrollment Process for Small-Scale Solar Projects at Section 3.3; 2019 Solicitation and Enrollment Process for Solar (Greater than 25kW), Wind, Hydro, and Anaerobic Digester Projects Section 3.3.

## 3. Project Development Costs

The interconnection application contains a data field for total project cost. The DG Board indicated that this field has not been filled out accurately by all developers. In order to address the inconsistency, the 2019 Enrollment Process Rules require the field to be filled out as a prerequisite to the application being deemed complete. The PUC approved this change after requiring National Grid to include definitions of project development costs in the Enrollment Process Rules.<sup>30</sup> The PUC also found that National Grid had provided adequate information on how they would protect private information, particularly that shared with OER or its consultants.<sup>31</sup>

Accordingly, it is hereby

(23827) ORDERED:

- 1. The 2019 Renewable Energy Growth Program Classes, Ceiling Prices, and Targets, filed by the Distributed Generation Board on February 26, 2019, are hereby approved.
- The Narragansett Electric Company d/b/a National Grid's Renewable Energy Growth
  Program Tariff for Residential Customers, filed on March 8, 2019, is hereby approved
  for effect April 1, 2019.
- The Narragansett Electric Company d/b/a National Grid's Renewable Energy Growth
  Program Tariff for Non-Residential Customers, filed on March 8, 2019, is hereby
  approved for effect April 1, 2019.
- 4. The Narragansett Electric Company d/b/a National Grid's Renewable Energy Growth Enrollment Rules for Residential Customers, filed on March 8, 2019, are hereby approved for effect April 1, 2019.

10

<sup>&</sup>lt;sup>30</sup> 2019 Solicitation and Enrollment Process for Small-Scale Solar Projects at Section 2.2.2; 2019 Solicitation and Enrollment Process for Solar (Greater than 25kW), Wind, Hydro, and Anaerobic Digester Projects Section 2.1.3.

<sup>&</sup>lt;sup>31</sup> National Grid's Responses to PUC 1-7 and RR-3.

5. The Narragansett Electric Company d/b/a National Grid's Renewable Energy Growth Enrollment Rules for Non-Residential Customers, filed on March 8, 2019, are hereby approved for effect April 1, 2019.

EFFECTIVE AT WARWICK, RHODE ISLAND ON APRIL 1, 2019,
PURSUANT TO OPEN MEETING DECISIONS ON FEBRUARY 15, 2019 AND
MARCH 1, 2019. WRITTEN ORDER ISSUED MAY 7, 2020



PUBLIC UTILITIES COMMISSION

Margaret E. Curran, Chairperson

Marion S. Gold, Commissioner

Abigail Anthony, 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 PUC may, within seven days from the date of the order, petition the Supreme Court for a Writ of Certiorari to review the legality and reasonableness of the decision or order.

Approved Classes, Sizes, and Ceiling Prices for 2019 RE Growth Program Year Renewable Energy Class, Eligible System Sizes, Ceiling Prices, MW Allocation

Appendix A

Renewable Energy Class	Eligible System Size	Ceiling Price (¢/kWh)	Allocation
Small Solar I (15	1 to 10 kW DC	28.45	12.23 MW
Year Tariff) Small Solar I (20 Year Tariff)	1 to 10 kW DC	24.95	
Small Solar II	11 to 25 kW DC	27.65	
Medium Solar	26 to 250 kW DC	26.55	6.8 MW
Commercial Solar	251-999 kW DC	17.85	7.3 MW
Large Solar	1 to 5 MW DC	15.15	11.3 MW
Small Wind	10-999 kW DC	24.05	0.4 MW
Large Wind	1 to 5 MW DC	19.35	6 MW
Community Remote  - Large Wind	1 to 5 MW DC	21.65	
Anaerobic Digestion	≤5 MW DC	20.85	1 MW
Small Scale Hydropower II	≤ 5 MW DC	27.15	
Community Remote  - Commercial Solar	251-999 kW DC	20.53	5 MW
Community Remote  - Large Solar	1 to 5 MW DC	17.42	5.3 MW