

**STATE OF RHODE ISLAND  
PUBLIC UTILITIES COMMISSION**

**IN RE: 2020 RENEWABLE ENERGY GROWTH –** :  
**CLASSES, CEILING PRICES, AND CAPACITY** :  
**TARGETS AND 2020 RENEWABLE ENERGY** : **DOCKET NO. 4983**  
**GROWTH PROGRAM – TARIFFS AND SOLICITATION** :  
**AND ENROLLMENT PROCESS RULES** :

**REPORT AND ORDER**

**I. Overview**

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).<sup>1</sup> 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.”<sup>2</sup> The PUC also needs to approve annual Tariffs, Solicitation, and Enrollment Rules filed by National Grid.

On October 22, 2019, the Distributed Generation Board (DG Board) filed with the PUC a Report and Recommendations Relating to the 2020 Renewable Energy Growth Classes, Ceiling

---

<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: <http://www.ripuc.ri.gov/eventsactions/docket/4892page.html> or at the PUC’s office at 89 Jefferson Blvd., Warwick, RI 02888.

<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: <https://www.eia.gov/todayinenergy/detail.php?id=11471> (last visited Nov. 18, 2019).

Prices, and Capacity Targets (2020 Report).<sup>3</sup> On November 15, 2019, National Grid filed with the PUC its proposed 2020 Renewable Energy Growth Program Tariffs, Solicitation, and Enrollment Process Rules.<sup>4</sup> On February 18, 2020, after an exchange of discovery and two evidentiary hearings, the PUC approved the renewable energy classes and associated ceiling prices, as revised on January 10, 2020. As part of its decision, by a vote of 2-1, the PUC approved a ceiling price adder, on a pilot basis, for carport installations. The PUC also approved an overall 2019 program target of 46.488 MW.<sup>5</sup>

Also on February 18, the PUC approved a portion of National Grid's revised Tariffs, Solicitation, and Enrollment Process Rules with additional modifications made during the Open Meeting to clarify provisions related to the definition of carports, the availability of the adder, and other items addressed satisfactorily through discovery, but which needed to be incorporated into the tariff. The PUC, however, also requested additional information on the proper crediting of customers and on the calculation of National Grid's remuneration. On March 6, 2020, the PUC ordered additional modifications to National Grid's Tariffs, Solicitation, and Enrollment Process Rules related to the calculation of the value of net metering under the Renewable Energy Growth Program. The modifications resulting from both decisions were filed on March 12, 2020, and approved following a Technical Session conducted on March 16, 2020, with one clarification provided by PUC staff that was accepted by the parties.<sup>6</sup> A final compliance filing was made on March 19, 2020.

---

<sup>3</sup> Report and Recommendations Relating to the 2019 Renewable Energy Growth Classes, Ceiling Prices, and Capacity Targets. On January 10, 2020, the DG Board filed revised ceiling prices to reflect the extension of various federal tax credits for certain types of projects.

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

<sup>5</sup> The target includes the 40 MW statutory allocation plus unused capacity from the Program Years 2016-2018. Kearns Test. at 20.

<sup>6</sup> Technical Session Tr. at 16-17. (Mar. 16, 2020).

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

### **A. Classes**

The DG Board proposed eleven 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. Small Solar I had a tariff length of fifteen years. OER's witness, Christopher Kearns testified that the change in the 2020 Program Year from twenty years to fifteen for this class was based on installer feedback and a predominance of customers selecting fifteen-year tariffs in prior years.<sup>7</sup> In addition, new to the 2020 Program Year, the wind categories were combined into one class because no applications had been received in the small wind category for the past several years.

### **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 utilizes the CREST model, a publicly available discounted cash flow analysis tool. According to witness Jim 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>8</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. Projects enrolled in the Small Solar classes

---

<sup>7</sup> Kearns Test. at 20.

<sup>8</sup> Kennerly Test. at 46.

receive the ceiling price while projects in all other classes are enrolled through a competitive bid solicitation.<sup>9</sup>

New for the 2020 Renewable Energy Growth Program Year, the DG Board recommended an added incentive for solar carport installations (carport adder). Under the proposal, solar carport projects would be bid into the appropriate solar category (large or commercial scale). If the project was chosen for enrollment, the project would be granted \$0.06/kWh above the bid price submitted for that project.<sup>10</sup>

On January 10, 2020, the DG Board submitted revised ceiling prices to reflect changes in the federal tax laws made at the end of December 2019.<sup>11</sup> The revisions applied to wind and anaerobic digestion systems. The solar ceiling price proposals remained unchanged from the October 22, 2019 filing.

After a review of the record, the PUC approved the base ceiling prices as revised by the DG Board on January 10, 2020, 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>12</sup> The uncontroverted evidence in the record supported a finding that the proposed ceiling prices for all proposed classes were consistent with the statutory requirements.<sup>13</sup> A majority of the PUC approved a carport adder of \$0.06/kWh for one year. The PUC noted that it was unclear from the record whether this was the

---

<sup>9</sup> Kearns Test. at 20-21.

<sup>10</sup> DG Board Recommendations at 14.

<sup>11</sup> Revised Ceiling Prices (Jan. 10, 2020); <http://www.ripuc.ri.gov/eventsactions/docket/4983-DGB-Memo-RevCP%201-10-20.pdf>.

<sup>12</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 should 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 DG 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 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>13</sup> The approved classes, targets, and ceiling prices are attached to this order as Appendix A.

“right” amount but, given that all parties agreed on it, accepted that basing the adder price on the level set in Massachusetts provided sufficient justification. Using the adder approved in Massachusetts should also provide additional, comparable data for future benefit cost analyses.

### **C. Targets and Allocations**

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 Program has an annual target of 40 MW with an overall goal of 400 MW through the end of the Program in 2029.<sup>14</sup> The DG Board proposed a total target of 46.488 MW to include terminated projects that had been awarded capacity from the 2016-2018 program years that were made available since the capacity was set for the 2019 program year.<sup>15</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. For the 2020 Program year, there was proposed to be 6.950 MW of capacity available for fixed priced projects and 39.538 MW available for competitive bid. According to Mr. Kearns, approximately 85% of the Program capacity would be subject to competitive bid.<sup>16</sup> As the year progresses, some classes may be under-enrolled while others reach

---

<sup>14</sup> Kearns Test. at 20-21. 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.

<sup>15</sup> *Id.*

<sup>16</sup> Kearns Test. at 21.

their cap. Following the results of the third enrollment, the DG board may reallocate capacity where there is a higher demand.<sup>17</sup>

After a review of the targets and allocations, the PUC approved the DG Board's recommendations but with the caveat that the carport allocation and adder would be a pilot. Instead of approving the proposal to set aside 2 MW for commercial carports and 4 MW for large carports in the third enrollment, the PUC allowed carports to enroll in all three solicitations subject to a 6 MW cap (2 MW for commercial and 4 MW for large). The PUC was persuaded by the parties that carport projects may not be ready for the first two enrollments, and thus approved a carveout. However, given the nature of the approval of the carport adder as a pilot, the PUC intentionally limited the enrollment of the higher-cost installations. In the event there is unused capacity in the carport category after the results of the third enrollment are known, the DG Board may reallocate the capacity to other categories.

#### **D. Guidance for Future Proposals**

The carport adder was filed under R.I. Gen. Laws § 39-26.6-22. The statute allows an adder to achieve “other public policy objectives that provide identifiable benefits to customers.” The specific public policy identified in the testimony for the carport adder was to protect undeveloped land - greenfields and open space – by promoting renewable development on disturbed properties, specifically, parking lots. The carport adder received strong and unopposed support from various stakeholders, including the Division, OER, the League of Cities and Towns, the Rhode Island Chapter of the American Planning Association, Save the Bay, the Nature Conservancy, the Rhode Island Audubon Society, and Northeast Clean Energy Council. National

---

<sup>17</sup> *Id.* at 14.

Grid also supports the adder. Much of this support assumed that the adder will protect forests and other greenspace by encouraging development of renewable energy on disturbed land.

As with last year's Program, the proposal is specific to one type of solar installation. This year, the DG Board provided a basic qualitative benefit-cost analysis (BCA) in support of the adder. However, the consultant acknowledged it was somewhat speculative. The consultant further noted that the money necessary to fund a more thorough analysis was not available. Furthermore, the record failed to support any assumption that the availability of the adder would discourage development of renewables on undeveloped land and open space.

Given the limited proof, it was difficult to determine from the record exactly how or if the carport adder will advance the public policy of disincentivizing renewable developments on greenspace. For example, there was no suggested baseline against which performance of the pilot would be measured. Thus, it is difficult to understand how any purported benefits could be quantified. Moreover, there was a dearth of evidence showing how the proposed carport adder might benefit electric customers.

It did appear, at least, that the adder will enhance the economics of carports installed on disturbed property. In a program of limited capacity, the development of carports on parking lots will development of carports on parking lots means that other land that could have been used for such development will be spared. Therefore, the evidence in the record was sufficient — albeit just barely — to approve a carport adder on a pilot basis.

The purpose of the pilot will be to gather additional information to support use of locational incentives to provide identifiable public policy benefits. The pilot also will provide an opportunity for a more in-depth BCA using the Docket No. 4600 Guidance Document. And, it is critically important that the parties recognize that the PUC is approving the adder for one year only. If next

year the parties again propose the carport adder, or any other adder, they will need to make a much stronger case show how it meets public policy objectives and provides identifiable benefits to electric customers.

If the DG Board wishes to proceed with a carport adder or any other public policy adder in 2021, they must follow the following process consistent with R.I. Gen. Laws § 39-26.6-22. First, National Grid should work with the DG Board to develop a cogent explanation of how any public policy goal they select is consistent with the statutory guidelines and with the goals established in Docket No. 4600. Accordingly, they might do well to avoid an installation-specific adder, such as simply promoting the development of more carports. They would be better positioned were they to choose something like promoting optimal siting of solar away from greenspace by incentivizing RE Growth projects on parcels of disturbed land or brownfields.

Second, once the public policy goals have been agreed upon, National Grid should design the scope of any proposal, work with OER's consultant to develop any proposed adders, and design a pilot for consideration by the DG Board. In developing any proposals, National Grid should use the Docket No. 4600 Guidance Document and provide a cost benefit analysis. Additionally, while R.I. Gen. Law § 39-26.6-22 may allow for a proposal that includes an adder based on cost, or on the economics of a project, ideally, any adder should be based on the net benefits conferred by the proposed adder. National Grid should include the proposal in its filing for the relevant program year. In other words, the burden of proof to support the proposal will be on the Company. If National Grid proposes an adder to meet locational or technical goals, it will be held to the same standard as outlined here. In addition, the DG Board should ask for sufficient funding in its annual budget request to allow SEA to fully review the pilot and provide meaningful input during the 2021 Program Year filings.

Basing the adder on the value of the net benefits it would confer would likely allow for a proposal that better meets the public policy goals than an installation-specific adder. In other words, a carport adder attempts to incentivize one installation type to achieve a goal. It may be that there are other types of installations that could achieve the same outcome. Putting the responsibility on National Grid to develop the proposal is consistent with the statutory guidance in R.I. Gen. Laws § 39-26.6-22. In addition, because National Grid would receive remuneration from the adder, it makes sense that National Grid should be responsible for doing the additional work required to develop the proposal and support it with quantitative analysis makes sense.

Finally, the statute requires that public policy adders provide identifiable benefits to customers. Any proposal included in future Renewable Energy Growth Program filings for public policy adders under R.I. Gen. Laws § 39-26.6-22 must show that the adders provide benefits to National Grid electric customers. This is the same concept that the PUC identified in Order 23838 issued in Docket No. 4604 related to OER's funding request for consultation services related to the Renewable Energy Growth Program. There the PUC wrote:<sup>18</sup>

It is the General Assembly that decides how societal benefits are funded. In some cases, such as the long-term contracting standard, where the PUC is required to consider economic benefits, the General Assembly has directed utility customers to pay for societal benefits. Here, the General Assembly has directed the PUC to consider additional costs where there is a benefit to customers.

Recent legislation has provided for generous subsidies to encourage the rapid buildout of renewable energy resources.<sup>19</sup> The results have been successful beyond most expectations. One result has been increasing, sometimes acrimonious, tensions between renewable development and

---

<sup>18</sup> Order 23838 at 5 (June 3, 2020); [http://www.ripuc.ri.gov/eventsactions/docket/4604-OER-Ord23838\\_\(6-3-2020\).pdf](http://www.ripuc.ri.gov/eventsactions/docket/4604-OER-Ord23838_(6-3-2020).pdf).

<sup>19</sup> Much of the rapid buildout is due to projects enrolled in net metering.

local siting objectives.<sup>20</sup> While it is important now to attempt to mitigate in some way the impact of ever-increasing renewable developments on greenspace and the State's natural resources, electric customers did not cause these impacts.<sup>21</sup> Unless electric ratepayers will derive some equal or greater benefit from higher program costs that are designed to alleviate a societal problem, ratepayer funds should not be used to fix these societal problems.<sup>22</sup>

## **E. Tariffs, Solicitation, and Enrollment Process Rules**

### **1. 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 March 12, 2019, and March 19, 2019, inclusive of the modifications ordered by the PUC, 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 place, they include the ceiling prices and term lengths for each tariff, and they include the statutory prohibitions on project segmentation. The approved modifications are discussed below.

---

<sup>20</sup> Without advanced planning, the rapid expansion of any type of development may be expected to cause tension with local siting objectives.

<sup>21</sup> Investors seek the highest returns and thus drive development projects to sites with the lowest development costs. Failure to account for the preservation value of certain areas in development costs is the source of the problem. The PUC does not have jurisdiction over the costs of land development. Moreover, the entirety of the problem is related to all development types (e.g., housing, business, transportation, etc.), much of which are beyond the PUC's jurisdiction.

<sup>22</sup> The PUC's discussion in this case is similar to what the PUC included in Order No. 23838:

This is not to say that the PUC does not believe there are important benefits to conservation activities. To the contrary, the PUC believes that various loopholes in State law are having adverse impacts on forests and open space and that these impacts can be quantified. However, the PUC's ratemaking authority has limitations. One of those limitations is that utility rates need to reflect costs caused and benefits realized by utility customers because they are utility customers."

Order No. 23838 at 6, n.9.

## **2. Modifications to the 2020 Renewable Energy Growth Program Tariffs, Solicitations, and Enrollment Process Rules**

OER and National Grid proposed changes to the tariffs and enrollment rules. The PUC also ordered modifications to the tariffs or enrollment rules after a review of the filings. The following describe the new requirements or modifications that were ordered by the PUC or proposed by the parties and approved by the PUC.

### **a. Disclosure Form**

OER witness Shauna Beland noted that legislation was introduced in the Rhode Island General Assembly to develop a solar consumer disclosure form. Although the bill did not pass, OER developed a Solar Photovoltaic (PV) Consumer Protection Disclosure Form for use in the Program. Ms. Beland explained that the form was developed with input from National Grid and solar developers. All small-scale Renewable Energy Growth projects, residential and non-residential, will be required to use the form.<sup>23</sup> The PUC approved inclusion of this requirement in the Enrollment Rules.

### **b. Carport Definition**

National Grid included a definition of carports in its tariffs. The definition was discussed by OER witnesses in their testimony.<sup>24</sup> It was designed to allow a developer to bid a solar project that included both a portion of roof-mount solar and a portion of solar carport in one bid. The portion of the output from the carport would receive the adder through a formula included in the proposed tariffs and enrollment rules.<sup>25</sup>

---

<sup>23</sup> Beland Test. at 29-30.

<sup>24</sup> Kearns Test. at 14-15.

<sup>25</sup> Beland Test. at 30-31; National Grid Solicitation and Enrollment Process Rules for Solar (Greater than 25 kW), Wind, Hydro, and Anaerobic Digester Projects at 9-10.

A majority of the PUC amended the definition of carports to include the word “permanent” before “parking area.” OER had agreed to this change in discovery. This change was important to ensure the parking area remains a parking area for the duration of the project’s enrollment in the Renewable Energy Growth Program in order for the customer to receive the incentive payments.<sup>26</sup>

### **c. Project Development Costs – Carports**

As part of the Renewable Energy Growth Program enrollment, National Grid collects project development cost data. This data is used in the development of future ceiling prices. Based on testimony in the record, the carport project development costs would likely be higher due to the additional steel needed to support the solar panels compared to a traditional ground mount or roof mount project. Therefore, total project costs for carports shall be tracked separately from other solar installations and shall not be used in setting the ceiling prices for future years. Rather, the carport costs may be used to inform the magnitude of an adder, should one or more be proposed. Any adder should meet the principle of least cost.

### **d. Electric Services Bulletin Reference**

Customers enrolled in the Program are required to install a second meter to record the production from the project. The meter is typically located next to the existing service meter. In its proposed tariffs, referencing the location of the second meter, National Grid included a reference to its Electric Service Bulletin 750 to suggest an alternative location for the second meter. In response to a question from the PUC about incorporating an outside document into the tariff,

---

<sup>26</sup> The approved solar carport definitions is:

The portion of the direct current (DC) nameplate capacity for a Solar DG Project that is installed above a permeable and/or non-permeable existing or new permanent parking area and associated access and walkway areas (as recognized by the local municipal building and/or zoning department, which is installed in a manner that maintains the function of the area beneath the carport.

National Grid clarified that it did not wish to incorporate the Energy Service Bulletin by reference into the tariff. National Grid proposed to remove the reference.

The metering provision would still provide that the meter be located adjacent to the existing service meter “or in another location as approved by the Company pursuant with the Company’s specifications and policies on metering.” National Grid characterized the Electric Service Bulletin as setting forth good utility practice to provide technical guidance to customers and their electricians and engineers as to how to design and implement connection with the electric power system in accordance with the National Electric Code and distribution company work practices. The Electric Service Bulletins are updated at least annually with changes needed to implement new National Electric Code provisions and changes in Company practice. The PUC typically does not review and approve these documents.<sup>27</sup>

At the hearing, National Grid witness Ian Springsteel testified that the Electric Service Bulletins can be accessed online and downloaded by electricians and engineers. They are updated in June of each year. Many of the changes are not significant in nature, but National Grid witness Vishal Ahirrao explained that substantive changes, such as those related to IEEE Standard 1547,<sup>28</sup>

---

<sup>27</sup> National Grid Response to PUC 1-22.

<sup>28</sup> IEEE stands for the Institute of Electrical and Electronics Engineers. Standard 1547 covers:

The technical specifications for, and testing of, the interconnection and interoperability between utility electric power systems (EPSs) and distributed energy resources (DERs) are the focus of this standard. It provides requirements relevant to the performance, operation, testing, safety considerations, and maintenance of the interconnection. It also includes general requirements, response to abnormal conditions, power quality, islanding, and test specifications and requirements for design, production, installation evaluation, commissioning, and periodic tests. The stated requirements are universally needed for interconnection of DER, including synchronous machines, induction machines, or power inverters/converters and will be sufficient for most installations. The criteria and requirements are applicable to all DER technologies interconnected to EPSs at typical primary and/or secondary distribution voltages.

IEEE Standards Association, 1547-2018 – IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces; <https://standards.ieee.org/standard/1547-2018.html> (last visited June 8, 2020).

include an effective date and implementation plan. Customers are advised of such substantive changes at quarterly distributed generation meetings.<sup>29</sup>

No comments were received on this proposal to include or exclude the language. According to testimony, Electric Service Bulletins have been in place for years and electricians and engineers know to reference and follow them. The proposed language to include reference to the Electric Service Bulletin has not been included in the past and the PUC has received no formal complaint about reliance on the bulletins. The PUC has not previously reviewed or ruled on work practices covered by the Electric Service Bulletins. National Grid's witnesses indicated that advance notice is provided through quarterly meetings where substantive changes are to be included. Therefore, the PUC approved the revised language.

**e. Crediting of A-60 Customers Enrolled in Shared Solar and Community Remote Distributed Generation**

Community Remote Distributed Generation and Shared Solar facilities are those owned by a third party which then allocates credits to other National Grid customers under certain rules. Such projects were first included in the 2017 Program year. In 2018, the PUC approved a change to the design of the low-income electric rate which the Company has since determined requires a clarification on how those customers would be credited if they enroll in Community Remote Distributed Generation or Shared Solar.<sup>30</sup> Currently, no customers receiving the A-60 discount rate are enrolled in these programs making this an opportune time to decide the question of the appropriate crediting.

---

<sup>29</sup> Hr'g. Tr. at 26-32 (Feb. 6, 2020).

<sup>30</sup> Customers qualify for the A-60 discount rate through participation in certain assistance programs with income qualifications. They are billed at the same rate as other residential customers but receive a 25-30% discount off the total bill.

In order to provide clarity to the crediting of A-60 customers enrolled in these programs, National Grid, after conferring with OER and the DG Board, proposed to calculate an A-60 customer's annual usage at 70-75% of their actual usage. The discounted usage calculation was designed to match the customer's discount rate. Under this proposal, the customer would receive the full value of credits applied to their electric bill based on the discounted historical average. The proposed method, according to Mr. Springsteel, should allow a customer to use all of their credits during the course of a year and, as long as the customer is paying less for the credits than the credits are worth, the customer will be ensured of a total cost savings. He explained that if National Grid applied the credits based on 100% of historic usage and then applied the customer's bill discount, the customer would not receive the full value of the credits he or she is paying for. Conversely, if National Grid applied the credits at 100% of the historic usage level after the bill discount, the customer would be left with credits they would not be able to monetize.

Through discovery, National Grid agreed that there were other methods that could be employed and that this method, in certain circumstances, leaves the project owner having to enroll more A-60 customers in order to achieve full subscription and to achieve the project owner's expected income than it would if it enrolled non discount residential customers. The concern was that, because of this, customers on the A-60 rate may be less attractive to project owners than customers in other rate classes. However, on balance, the proposal supported by OER and the Division appeared reasonable.

#### **f. Expansion of Residential Renewable Energy Systems**

According to Mr. Springsteel, some customers with existing solar facilities on their homes have expressed interest in expanding the size of their systems. As long as their three-year average usage has increased since the installation of the first system to justify a larger system, they may

expand. A net metering system can be expanded up to that usage. However, a Renewable Energy Growth system needs to be electrically separate from an existing net metering system.

Mr. Springsteel explained that National Grid's billing system cannot automatically bill a customer on both programs on the same rate class. The Company proposed to set up the Renewable Energy Growth system on a separate commercial account and provide payment for the output of the system at the same incentive rate for the remaining term of the applicable tariff. The other option would be to manually bill each of the customers, but at a \$60 monthly cost per bill. National Grid would likely seek to recover such costs through the Renewable Energy Growth administrative cost recovery provision. Mr. Springsteel testified that when National Grid upgrades its billing software, the ability to bill customers on multiple programs will be something required of the new program.<sup>31</sup>

The filing and discovery showed that residential customers adding a Renewable Energy Growth system to an existing renewable system would be charged a higher customer charge each month. This would somewhat reduce the value of the credits provided under the Renewable Energy Growth Program. However, manual billing would result in increased cost to all customers. Therefore, the PUC found that National Grid's proposal was a reasonable balance between participating customer interests and all other customers. No comments were received in opposition to the proposal.

#### **g. Clarification of Prohibition on Segmentation**

The RE Growth Program prohibits segmenting larger projects into smaller projects. There are specific criteria for this in the statute and tariffs. National Grid proposed to clarify that multiple projects should be allowed to enroll in the Program at the same time on contiguous parcels without

---

<sup>31</sup> Springsteel Test. at 15-167

violating the anti-segmentation provision if, combined, they would fall into the same size class as they would if proposed separately. In his testimony, Mr. Springsteel advised that the clarification in the tariff would typically apply to multifamily dwellings and multiple commercial buildings on the same parcel owned by the same entity.<sup>32</sup> The PUC approved this clarification as consistent with the law.

#### **h. Connection of Energy Storage Systems**

In his testimony, Mr. Springsteel explained that installers have inquired about how energy storage systems can be connected to Renewable Energy Growth systems to allow the battery to be charged by the solar facility for customer reliability benefits. Under the Program, participants have a production meter connected to the renewable energy system and a separate load meter to read the customer's usage from the electric grid. National Grid proposed language that allows Program participants to add an energy storage system where the battery may be primarily connected to either the photovoltaic array or the main service panel. However, the battery must be isolated from the other service point except when the power is out, or the owner chooses to island. When that connection is made, the energy must be directed to the battery so that it does not pass through the Renewable Energy Growth photovoltaic production meter. According to Mr. Springsteel, this configuration will allow a customer to realize the full benefits from the renewable energy system during a power outage while also preventing them from receiving credits for energy they are directly consuming.<sup>33</sup> No comments were received in opposition to the proposal. After reviewing the testimony and responses to discovery, the PUC approved the proposal, finding it to be consistent with the Program.

---

<sup>32</sup> Springsteel Test. at 10.

<sup>33</sup> Springsteel Test. at 14-15.

### **i. Net Metering Valuation for Program Participants**

Two issues were raised on the value of net metering under the Program. The first was whether National Grid was applying the bill credits correctly in the situation where a customer receives bill credits and residual cash payments. Per R.I. Gen. Laws § 39-26.6-20(e)(2), customers under this compensation structure are supposed to receive bill credits calculated based on the net metering rate. Any excess performance-based incentive credits are paid by check mailed to the customer. After a review of the applicable statutes and interpretations provided by National Grid, the PUC ordered that effective May 1, 2020, customers receiving both bill credits and residual cash payments would have those bill credits calculated in accordance with the net metering value calculation set forth in R.I. Gen. Laws § 39-26.4-2(19) and not at the full retail rate.

In support of its original calculation at the full retail rate, National Grid noted that behind-the-meter net metering customers with only one bidirectional meter are credited with the full volumetric retail rate and that is how the RE Growth credits had been calculated. The PUC recognizes that where it is impossible to meet a statutory requirement, there may be a reason to deviate. However, in this case, where there are two meters, National Grid can and should be applying the correct credit.

On March 12, 2020, National Grid filed a compliance tariff that was reviewed at the March 16, 2020 Technical Session. After ensuring that the affected customers would receive the same total compensation under the change as they would under the prior tariff language, the PUC approved the revised tariff as being compliant with the March 3, 2020 decision.

The second issue is the proper interpretation of R.I. Gen. Laws § 39-26.6-20(d)-(e) on the proper crediting of Program participants if the net metering credit were to exceed the tariff's performance-based rate paid out to Program participants. The Renewable Energy Growth tariff

rate is a ceiling price. It is the rate a customer with a small system is paid. There is no competition for this rate. To date, the ceiling price has always been greater than the net metering credit. This could change in the future. National Grid has taken the position that if this happens, customers with a small-scale solar project would receive a credit higher than the ceiling price. This was the subject of testimony at the February 6, 2020 hearing and of post-hearing data requests. The PUC has never directly addressed that portion of the tariff.

The PUC believes the time is ripe for ruling on this issue prior to the 2021 RE Growth Program Year. An examination of this matter was originally scheduled to be explored at the March 16, 2020 Technical Session, but it was removed from the agenda due to technical limitations brought on by COVID-19. The PUC was required to limit gatherings of people and had to conduct the Technical Session with witnesses participating via telephone. This is a technical issue of statutory interpretation and policy. It is still an open issue and will be addressed by the PUC subsequent to the issuance of this order.

Accordingly, it is hereby

(23849) ORDERED:

1. The 2020 Renewable Energy Growth Program Classes, Ceiling Prices, and Targets, filed by the Distributed Generation Board on October 22, 2019, as amended on January 10, 2020, are hereby approved.
2. Carports may enroll in all three solicitations subject to a 6 MW cap (2MW for commercial and 4 MW for large). In the event there is unused capacity in the carport category, the Distributed Generation Board may reallocate the capacity to other categories as they have done in the past.

3. The Narragansett Electric Company d/b/a National Grid's Renewable Energy Growth Program Tariff for Residential Customers, filed on March 12, 2020, is hereby approved for effect April 1, 2020.
4. The Narragansett Electric Company d/b/a National Grid's Renewable Energy Growth Program Tariff for Non-Residential Customers, filed on March 12, 2020, is hereby approved for effect April 1, 2020.
5. The Narragansett Electric Company d/b/a National Grid's Renewable Energy Growth Enrollment Rules for Residential Customers, filed on March 19, 2019, is hereby approved for effect April 1, 2020.
6. The Narragansett Electric Company d/b/a National Grid's Renewable Energy Growth Enrollment Rules for Non-Residential Customers, filed on March 19, 2019, is hereby approved for effect April 1, 2020.
7. Total project costs for carports shall be tracked separately from other solar installations and shall not be used in setting the ceiling prices for future years.
8. 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, 2020, PURSUANT TO OPEN MEETING DECISIONS ON FEBRUARY 18, 2020, MARCH 3, 2020, AND MARCH 16, 2020. WRITTEN ORDER ISSUED JUNE 23, 2020.

PUBLIC UTILITIES COMMISSION



---

Margaret E. Curran, Chairperson



---

Marion S. Gold, Commissioner

---

\*Abigail Anthony, Commissioner

On February 18, 2020, Commissioner Anthony voted in favor of the classes, ceiling prices, future guidance, and separate tracking of carport installation costs. She dissented from the carport adder. She abstained from the quantification of the adder and from the initial votes on the Tariffs and Enrollment Rules. On March 3, 2020, the votes were unanimous with Commissioner Anthony voting to approve the Tariffs as being consistent with the prior decisions of the majority of the Commission and voting to require additional modifications to the Enrollment Rules. On March 16, 2020, approval of the revised Enrollment Rules was unanimous. A separate dissent is attached.

**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 Rhode Island Supreme Court for a Writ of Certiorari to review the legality and reasonableness of the decision or order.

## **Dissenting Opinion of Commissioner Anthony**

The majority identified the flaws with the Distributed Generation Board's proposal for a six-cent adder for solar power build on carport structures. The facts from the record are worth repeating. Specifically, the proposal does not quantify or qualitatively analyze potential benefits and it is unclear whether and how the proposal will create any benefits. I find these flaws to be disqualifying because the Commission cannot compare the potential benefits of the proposal to the incremental costs.

The Commission has defined the costs and benefits that should be considered in determining cost-effectiveness in Docket 4600, and the Guidance Document on the Goals, Principles and Values for Matters Involving the Narragansett Electric Company (Guidance Document) states that, "in any case that proposes new programs or capital investment that will affect National Grid's electric distribution rates, the impact of any increased ratepayer recovery should also reference the goals, rate design principles, and Benefit-Cost Framework."<sup>34</sup> The Guidance Document continues, stating, "[w]here the costs and benefits can be quantified, the proponent should provide such information and the basis for the conclusion reached. Where quantification is not possible or practical, the proponent should so explain. Regardless of whether the quantification can be fully completed, a qualitative analysis should be included."<sup>35</sup> The Guidance Document is also clear that the standards therein apply to all proponents: "[a]ny proponent of a rate, rate design, or program proposal with associated cost recovery will need to meet the same standards."<sup>36</sup> As a proponent of a new program proposal with associated cost recovery that will affect National Grid's electric distribution rates, the Distributed Generation

---

<sup>34</sup> Guidance Document at 7.

<sup>35</sup> *Id.*

<sup>36</sup> *Id.* at 3.

Board should meet the requirements identified in the Guidance Document. The proposal mentions eligible benefit categories from the Benefit Cost Framework, including interconnection cost savings, carbon sink value, and non-carbon open space value, but fails to quantify or qualitatively analyze these potential benefits.<sup>37</sup> Without this information, the Commission cannot compare the costs of the proposal to the benefits.

The Distributed Generation Board has not explained whether or how the proposal will create the benefits mentioned in its filing. With respect to the potential interconnection cost savings, the witness for the Distributed Generation Board testified that the “power system benefits are *only possible if* associated with ‘carport projects in areas closer to load or in less saturated areas,’ as such projects will likely require less distribution system upgrade cost to interconnect.”<sup>38</sup> Mr. Kennerly did not provide any testimony on the likelihood of carport locations or whether carports will be built near load at a disproportionate rate. The proposal did not include any designs to increase the likelihood that the power system benefits are created.

Mr. Kennerly’s testimony also mentioned carbon sink value and non-carbon open space value as potential benefits of the proposal. The proponent testified, however, that “[t]he carport adder for the 2020 program is *not going to prevent possible development* on privately owned properties that some stakeholders and local constituents may view or refer to as open space, green space or greenfields and don’t want to see any form of development on them.”<sup>39</sup> On behalf of the

---

<sup>37</sup> Mr. Kennerly explained that the scope of his memorandum did not include a quantitative analysis of the costs and benefits of the proposed carport adder because his budget did not include funding to do so, (H’rg. Tr. 19-20), not because a quantitative analysis is not possible.

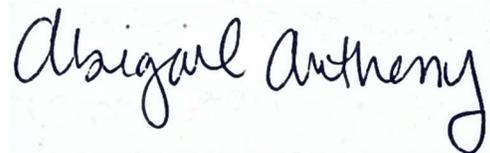
A presentation provided at the Staff Workshop on the PUC’s Docket No. 4600A Guidance Document held on November 1, 2018 specifies that a qualitative analysis should include explanations of drivers of benefits and costs; identification of independent and dependent factors; explanation of the basis of each factor and any assumptions; direction and magnitude of each factor, and confidence in each; and order of magnitude or range.

<sup>38</sup> DB Board’s Response to PUC 2-9 (emphasis added).

<sup>39</sup> DG Board’s Response to PUC 2-8c (emphasis added).

Distributed Generation Board, Mr. Kennerly explained that there is no baseline assumption regarding Renewable Energy Growth program-related development on open space.<sup>40</sup> Without a baseline, it is not possible to determine whether the societal benefits associated with open space preservation are created.

The majority cites learning value in their decision. The proponents did not offer a coherent case for the testing and learning value of the solar carport adder. The witness for the Office of Energy Resources testified that OER would observe “how the market reacts” to the adder and observe local permitting processes. The witness did not explain whether or how those observations would inform the feasibility of future programs or rate designs. Additionally, the proponents did not make a compelling case that launching a carport solar adder is necessary to make these observations. Testimony and public comment at the hearing revealed that there are at least five net metered solar carports in Rhode Island, as well at least one carport participating in the Renewable Energy Growth program. As Mr. Kearns, Mr. Kennerly, and Mr. Springsteel testified, the Massachusetts SMART program offers a six-cent adder for solar carport installations. It was clear that the proponent has not examined the experience of the existing Rhode Island carports or attempted to learn about the Massachusetts experience prior to making this proposal.

A handwritten signature in black ink that reads "Abigail Anthony". The signature is written in a cursive style and is centered on the page.

Abigail Anthony, Commissioner

---

<sup>40</sup> DG Board Response to PUC 2-8.

## Appendix A

### Approved Classes Sizes, and Ceiling Prices for 2020 RE Growth Program Year

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

<b>Renewable Energy Class</b>	<b>Eligible System Size</b>	<b>Ceiling Price (¢/kWh)</b>	<b>Allocation</b>
Small Solar I (15 Year Tariff)	1 to 10 kW DC	29.65	6.950 MW
Small Solar II	11 to 25 kW DC	23.45	
Medium Solar	26 to 250 kW DC	21.15	3 MW
Commercial Solar	251-999 kW DC	18.25	8.244 MW (1)
Large Solar	1 to 5 MW DC	13.65	18.294 MW (1)
Wind	0 to 5 MW DC	18.85	3 MW
Community Remote – Wind	0 to 5 MW DC	21.65	
Anaerobic Digestion	≤ 5 MW DC	15.35	1 MW
Small Scale Hydropower II	≤ 5 MW DC	21.45	
Community Remote – Commercial Solar	251-999 kW DC	20.99	3 MW
Community Remote – Large Solar	1 to 5 MW DC	15.70	3 MW

(1) The Solar Carport Capacity Target Nameplate (kW DC) is set aside for enrollment through all three Open Enrollments. A Customer whose DG Project includes nameplate capacity that meets the definition as a Solar Carport will be eligible for the approved Solar Carport Incentive and that capacity will be removed from the current target. Solar carport eligible projects should bid in the appropriate class.