Comments on Presentation for Public Stakeholder Meeting No. 1 (Sept. 10, 2024)

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Rhode Island Energy respectfully submits these questions and comments in response to Rhode Island Office of Energy Resources' (OER) consultant Sustainable Energy Advantage (SEA) per SEA's request for comments at its presentation at OER's Solar Stakeholder meeting on September 10, 2024.[1] The Rhode Island Energy team is willing and eager to discuss anything related to the development of the ceiling prices, adders, subtractors, MW allocation plan, or anything else related to the Renewable Energy Growth (REG) program with OER and SEA – please reach out to schedule time. Thanks in advance for your consideration of our questions and comments!

1. On Slide 27, SEA states, "SEA identified that it failed to re-calculate adders following the optimization of debt inputs in the final draft of ceiling prices for the nonadder cases of Large Solar II-IV." Following this, SEA states that optimized debt reduced the ceiling price for non-adder Large-Scale Solar II-IV cases from second to final draft pricing. Could you please confirm whether the PUC-approved ceiling prices for Large Solar II-IV in Program Years 2025 and 2026 are correct, and if not, whether OER will propose modified ceiling prices?

2. On Slide 27, SEA indicates that projects on a Brownfield/Superfund site have a capacity factor decrease of 2.5% relative to projects sited elsewhere? Could you please cite your sources for this assumption as well as the upfront Permitting Costs? What are the primary driver(s) behind this relative decrease in capacity factor? Same questions for the 5% decrease for landfills.

3. On Slide 28, why did the Large Solar II ceiling price increase from 3.60 cents/kWh to 4.00 cents/kWh in the revised adder value? Also, why did the brownfield/superfund site decrease from 3.60 to 1.30?

4. Regarding Slide 28, what is the reasoning behind targeting Large Solar I and II only in a pilot program?

5. Regarding Slide 28, an example: for a 4,999 kW solar system under Large Solar I, with a "revised adder" of 4.30 cents/kWh, the generator would be estimated to earn an additional ~$244,800/year in addition to energy purchased at their bid price. (4,999kW x 13% (capacity factor) x 8760 (hours in one year) x 4.30 cents/kWh) for building solar on a landfill site. Please confirm whether these adders would be for the 18-month pilot (slide 25) or the entire length of the 20-year contract.

6. What is the definition of a brownfield site as it applies the proposed adders for the REG program?

7. Under what criteria would the success of a pilot program of this nature be evaluated?

[1] Presentation slide deck: https://files.constantcontact.com/7046f265301/d3a5e051-21dc-414b-910c-d539a8213ab4.pdf.

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From: Michael Brennan, Consultant to the Division
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Comments to SEA on Pilot Program for Adders

The Division appreciates the opportunity to provide comments and feedback on a potential pilot program for adders associated with preferred siting. As a starting point, the Division notes that the PUC has ordered that the purpose of such a pilot should be to "align improved siting in the RE Growth program with other programs and ratepayers' interests". The Division believes that it is imperative that OER clearly outline the specific objectives of the pilot program, including collection of any measurable data regarding costs; identification of barriers, risks, and opportunities to optimize such a program; and quantification of benefits to ratepayers and society. Furthermore, the program must be designed to align the objectives of improved siting to ratepayer interests, while leveraging and complimenting other programs. The Division also recommends that the pilot program be limited to a specific timeline of enrollment periods (potentially spanning more than one program year) so that potential participants have a clear understanding of the opportunity to participate. OER is proposing an 18-month pilot, which seems reasonable, but this may need to be extended to allow for the program to operate over two full program enrollment years (and should consider the availability of other funding sources and the timing for securing such funding). Finally, as a condition of participation in the pilot, the program participants should be required to disclose to OER and RIE: details regarding incremental capital and ongoing operating costs; additional permitting requirements; land use restrictions; ongoing monitoring, testing and reporting required; production modeling and any other data or information requested by OER and RIE. The Division notes the recent groundbreaking event for a Landfill solar project in Bristol, RI. To the extent that data regarding this project, or other existing solar on Landfill projects (e.g. costs, expected production) can be used to inform the elements of a potential RE Growth pilot program for Landfill and Brownfield adders, the Division requests that that data be made available.

The Division requests that, for the size of the proposed program (20 MW proposed), the incremental costs of the adder be clearly identified using reasonable assumptions about the type, timing and size of the potential projects. These assumptions could be bounded by high- and low-cost scenarios.

An updated BCA should accompany any proposal for the pilot program. This updated BCA should be performed on the basis of the incremental costs (and benefits) of projects receiving an adder, compared to an identically sized project that would not qualify for the adder. This BCA should connect the benefits assumed with those benefits identified in RI GL 39-26.6-22:

a. Identifiable system benefit
b. Reliability benefit
c. Cost savings to the distribution system
d. Conservation benefit,
e. Climate resilience benefit

It should be noted that the law states that these are specifically intended to represent a "benefit in that geographical area". The Division interprets this to mean that these benefits should be closely tied to the geographical area in which the proposed project is to be located.

Comments directed to the prompts and topics from the presentation on 9/10/2024:

1) Revised adders (slides 15 and 16)
    a. The Division continues to believe that the land lease costs for brownfields, superfund sites and landfills should be lower than those assumed for greenfield sites.
    b. The difference between the adder amount for brownfields/ superfund sites for Large Solar I and II is puzzling (the larger sites require and adder that is 23% higher than the smaller sites). This result seems counterintuitive and may be driven solely by the change in the final CP's for Large Solar II-IV. For the pilot program, the Division recommends a single adder value be developed for all projects in a certain category regardless of whether they are Large Solar I or II.
    c. The adder values proposed should be considered a maximum value. The pilot program should include a mechanism to adjust the final adder value based on the actual costs of the project and effects of other sources of funding (see below).
2) Scaled Adders
    a. The Division supports an approach to the pilot program, which could be extended to any permanent program recommendations, in which the final adder amount determined based on a project specific analysis using the CREST model with the following inputs updated:
        i. Estimated costs associated with final project design, reduced by any incentives/ funding received from non-REG sources
        ii. Estimated costs for land lease, insurance, project management and O&M based on final project design and any negotiated agreements
        iii. Final first year kWh production estimates based on final project design

iv. Final estimates of investment tax / production tax credit values including any bonus credits
v. No changes would be made to other inputs to the CREST model
vi. The difference between the calculated CP for the project in question would then be compared to the standard CP for the project category (e.g. Large Solar I) to determine the final adder value, not to exceed the maximum values published for the preferred site adder. For example, if an actual Large Solar I project on a Landfill resulted in a calculated CP of 20 cents and the standard Large Solar CP for that Program Year was 17 cents, the adder value would be set at 3 cents for the 20 year term (as opposed to 4.3 cents as represented in the table on slide 16 of the presentation).

3) Funding Sources
   a. REF Brownfields PV Program – the Division requests more information on what it would take to modify the program rules, or allow for exceptions for the pilot program, such that this program could provide a valuable source of funding. For example, the $175,000 to $250,000 of available funding could pay for all of the incremental permitting costs identified on slide 15 and a portion of the remaining incremental costs.
   b. DEM Brownfields Fund - The Division is interested in seeing the feedback from other stakeholders on this. In particular, would it be possible to design the proposed pilot program timeline to align with DEMs RFP process? Would DEM consider a special RFP for this pilot program to explore the benefits of integrating this program with REG?
   c. RIIB Brownfield Revolving Loan Fund – as this program is only available to projects that are already remediated, this program is not being considered. Given the restrictions inherent in OER/SEAs interpretation of adder eligibility driven by the status of remediation, the Division seeks more information from OER/ SEA and other stakeholders, including DEM[1], regarding the potential universe of candidate sites for the Landfill and Brownfield/Superfund adder program. What are the characteristics that would make a site both eligible for the adder and a good candidate. For example, it seems that for Landfill sites, this would only include sites that are nearing closure and that have a definitive plan in place for remediation and capping including having secured funding, all required approvals in hand and a definitive timeline set. The complete development of such a list of potential sites could be one of the objectives and outcomes of the pilot program, but even before proposing and approving the pilot program, it would be useful to know how many potential sites are available and how many buildable acres this comprises.

[1] https://dem.ri.gov/environmental-protection-bureau/land-revitalization-and-sustainable-materials-management/solar-ri-closed-landfills

d. Bonus ITC – The Division notes that one industry stakeholder took exception to the assessment by OER/ SEA that this will be readily available to the "majority" of brownfields in RI. The Division would like to learn more from DEM and OER/ SEA on the analysis that was done to support this to understand what potential obstacles exist that would disqualify projects from being eligible for the bonus tax credit. Additionally, it would be very helpful for stakeholders to present more evidence of these obstacles/ risks associated with bonus credit eligibility, using examples if available.

4) Other Program Design
   a. Incentive Format
      i. Upfront adders - have the potential to reduce risks associated with an adder tied to performance ($/kWh) from the standpoint of the project owner. This could lower the required cost of the adder but increases risks associated with achievement of purported benefits. Furthermore, the upfront nature of the adder creates a front-loaded cost to ratepayers that may not be desired.
      ii. $/ acre incentive – an adder based on acres provides a strong incentive to a developer to optimize the use of the land available to balance maximum solar production potential with cost to build. This adder may be problematic given significant differences in site characteristics. It would also require specific definitions of what acreage is eligible for the adder (i.e. total site acreage, portion of site actually used for panel/ inverter footprint). The Division notes that the adder program recommended last year did contemplate rules regarding situations in which a project is partially located on a landfill/ brownfield and partially located on greenfield land.
      iii. Actual Remediation Cost – see above, the Division is supportive of a mechanism that scales the final adder based on actual incremental remediation costs and final project design (i.e. final production estimates) including the impacts of any funding sources outside of the RE Growth program. The Division believes this should be a performance-based adder ($/kWh).
   b. Greenfield Subtractor – This approach is appealing in that it encourages preferred siting without the increased costs to ratepayers that would accompany an adder-based format. Whether this approach would result in more siting on preferred parcels would be primarily driven by whether a sufficient number of projects on preferred sites are financially viable without an adder (i.e. at the baseline CP for a given class). This approach would require a very clear definition of the characteristics of sites that would be deemed "Greenfield" and the mechanism for assessing this subtractor penalty. The Division would be potentially supportive of such an approach. To the extent that SEA has knowledge of other jurisdictions in which a subtractor/ penalty is assessed for non-preferred sites, the Division requests

that this information be shared with stakeholders. The Division notes that Core Forests already have protection in the law and recommends that, if such a subtractor is approved and implemented, efforts should be made to monitor the number of projects on preferred sites and on Greenfield sites that subsequently apply for and are enrolled in RE Growth to determine if the Greenfield Subtractor is having the desired impact.

c. Size / Duration – see above for comments on duration. If a pilot program for the adders is approved, the Division is supportive of the proposed size of the pilot (limited to 20 MW) and the split, which allows for a single Large II project and at least 2 Large I projects. The Division also notes that a Large Solar II project will require project sites that are 25 to 50 acres in size (assuming 5 acres/ MW) – it is unclear to the Division how many potential landfill, superfund/brownfield sites exist that would be suitable candidates for this adder program at this size (see previous comments regarding this matter). The pilot program should be useful in assessing this. The Division requests that SEA provide an estimate of the potential range of total adder payments over the 20-year tariff term assuming the full 20 MW is subscribed during the pilot program.

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October 17, 2024

RIE Comments on Remediation Adder Proposal

Rhode Island Energy respectfully submits these questions and comments in response to Rhode Island Office of Energy Resources' (OER) consultant Sustainable Energy Advantage (SEA) per SEA's request for comments at its presentation at OER's Solar Stakeholder meeting on September 10, 2024.[1] The Rhode Island Energy team is looking forward to discussing the development of adders for solar PV projects on preferred sites requiring remediation. Thanks in advance for your consideration of our questions and comments.

Please note we include reference information following our comments.

General Comments

First, we note that the scope of costs that should be considered in a pilot are project costs; using funds collected from electric customers for remediating preferred sites requiring remediation is not an appropriate use of funding.[2]

Second, we discuss a potential misalignment in purpose of the adder pilot, which is contemplated on slide 16. Rhode Island Energy agrees that one objective of the adder pilot in development is to "design an incentive that does not overcompensate projects who may qualify for non-REG incentives relative to their cost" (slide 16). Slide 16 concludes "Thus, focus will be on the amount of non-ratepayer money that would be assumed to be accounted for in the adder design." In our read of this statement, SEA seems to imply that the adder would be above and beyond existing incentives (funding and/or financing). However, this statement seems to go beyond the Commission's purpose statement.

From the Commission's order in Docket Number 23-44-REG: "The purpose of the pilot should be to align improved siting in the Renewable Energy Growth program with other programs and ratepayers' interests." This purpose statement suggests that any adder pilot should place the Renewable Energy Growth program on a level playing field relative to other compensation programs such that the incentive provided to a project sited on a preferred site requiring remediation is not the decision-making driver between which compensation program the developer enrolls. We agree that the pilot should not overcompensate, but we disagree that the pilot should differentially compensate and believe, consistent with the Commission's order, that the compensation should be the same as the compensation available through different programs.

Taking this logic one step further: SEA describes four programs to support development on brownfields. Neither the Rhode Island Department of Environmental Management's Brownfields

[1] Presentation slide deck: https://files.constantcontact.com/7046f265301/d3a5e051-21dc-414b-910c-d539a8213ab4.pdf.

[2] Note this is consistent with the REF Brownfields Program "Costs associated with remediation of the project location are not eligible for funding." https://commerceri.com/wp-content/uploads/2021/05/Brownfield-RFP-FINAL-4.28.20.pdf

Remediation and Economic Development Fund (DEM's Brownfield Fund), the Rhode Island Infrastructure Bank's Brownfield Revolving Loan Fund (RIIB Brownfield Fund), nor the Federal Investment Tax Credit Bonus for "energy community" brownfield projects (Federal ITC Energy Community Bonus) are restricted to either net metering or the Renewable Energy Growth Program. However, the Rhode Island Commerce's Renewable Energy Fund Brownfields PV Program (REF Brownfield Program), which has a dollar-per-watt incentive value with a total incentive cap of $250,000 per project for direct ownership and $175,000 per project for third party ownership, may not be used for RE Growth projects at this time. Starting with the Commission's directive to align improved siting within the Renewable Energy Growth program with incentives for improved siting within other programs, it follows that the Commission's objective would be achieved if the exact same incentive design, including the cap, were to be available to projects compensated through the Renewable Energy Growth Program. One clear-cut way to achieve this outcome would be for the REF Brownfields Program to change its rules such that projects compensated through the Renewable Energy Growth Program would be eligible for the REF Brownfields PV Program.[3]

Rhode Island Energy appreciates SEA's framework of exploring the applicability of each funding or financing source outside of the Renewable Energy Growth Program and organizes its comments similarly.

DEM's Brownfields Fund

Rhode Island Energy offers two suggestions to aid in collecting data about the usability of DEM's Brownfields Fund. First, a question could be added to the Open Enrollment application to help determine which funds applicants pursue. Second, we suggest DEM provide records about awardees to Rhode Island Energy so that we could sort by compensation program. This suggestion would enable SEA to use the actual population of awardees which would mitigate biases related to self-reporting and small sample size in relation to SEA's proposed data collection methodology.

REF Brownfield Program

Rhode Island Energy points out that the fact that program rules currently prohibit funding Renewable Energy Growth projects does not prohibit changes to rules; rules may be changed prior to the start of a pilot on April 1. Further, we request REF program administrators explore this option.

RIIB Brownfields Fund

Rhode Island Energy would support an expansion of eligible financing to include project costs.

Federal ITC Energy Community Bonus

Rhode Island Energy concurs with SEA's proposed approach to apply ten percent bonus ITC in the calculation of the Brownfield adder.

Comments regarding pilot design

[3] Indeed, that the Commission asked a question related to REF rule changes *may* hint that this is a possible solution to the objective the Commission seeks to achieve (see PUC 2-43 in Docket 24-06-EE).

Rhode Island Energy recommends SEA set the adder as low as practicable, so a developer has incentive to control costs as much as possible.

We appreciate the detail provided in slide 27 but have the following questions:

- What is included in the upfront capital costs?
- Are permitting costs the same as last year?
- Wouldn't higher permitting costs fall into the bucket of remediation costs?
- Could SEA please share the underlying data behind the percentage differential in the table on this slide?
- Would the Land/Site Lease for Landfills and Brownfield/Superfund sites be less than in non-adder cases?
- What is the basis for the capacity factor (CF) reduction on a landfill and brownfield/superfund in comparison to a greenfield?
- Does SEA anticipate trackers or bifacial modules on large scale systems which would increase CF?

We note that an adder that is structured as a dollar-per-kilowatt-hour would be administratively easier for Rhode Island Energy, however, the Company could strategize and implement a solution for the specific program design that is ultimately approved by the Commission.

We also recommend that DEM, as the authority on siting, make all siting determinations, including if a project is on a preferred site requiring remediation, and what percentage of panels are within the preferred site requiring remediation compared to the total project's panels.

Relevant excerpts for reference (with emphasis added)

RIGL § 39-26.6-22. Zonal and other incentive payments

In order to provide the electric distribution company and the board with the flexibility to encourage distributed-generation projects to be located in designated geographical areas within its load zone where there is an identifiable system benefit, reliability benefit, or cost savings to the distribution system in that geographical area, or conservation benefit, or climate resilience benefit in that geographical area, the electric distribution company, the board, or the office, shall propose to include an incentive-payment adder to the bid price of any winning bidder that proposes a distributed-generation project ***in the preferred sites that require remediation***. The company, board, or office can also propose disincentive subtractors for projects outside of preferred sites. The electric distribution company also may propose other incentive payments to achieve other technical or public policy objectives that provide identifiable benefits to customers. Any incentive-payment adders must be approved by the commission, and shall not be counted as part of the bid price when the bids are selected at an enrollment event. [emphasis added]

Docket 23-44-REG Order

The proposed landfill and brownfields adders are rejected. Parties may file a new pilot proposal at least 105 days prior to the proposed commencement of the pilot. ***The purpose of the pilot should be to align improved siting in the Renewable Energy Growth program with other programs and ratepayers' interests.*** At a minimum, the proposal shall consider the design of the incentive, the level of compensation, total program size, and alignment with other sources of funding for similar policy outcomes including, but not limited to the Renewable Energy Fund's Brownfield incentive, Rhode Island Infrastructure Bank Brownfields Revolving Loan Fund, and DEM's Brownfield Site Preparation and Remediation Grant. [emphasis added]

SEA Initial Proposal

https://files.constantcontact.com/7046f265301/d3a5e051-21dc-414b-910c-d539a8213ab4.pdf

Docket 24-06 PUC 2-43

Request: Has RIE petitioned Commerce RI to change its regulations and/or program rules to allow for REF grants for a. battery storage systems for existing renewable generation systems, b. battery storage systems paired with RE Growth generation systems?

Response: Although the Company has not formally petitioned Commerce RI to allow for REF grants for battery storage systems paired with existing renewable generation systems or for battery storage systems paired with Renewable Energy Growth generation systems, it is the Company's understanding that the REF, which is co-administered by Commerce RI and Rhode Island Office of Energy Resources ("OER"), is actively considering revisions to its energy storage adder program. OER is actively soliciting responses to a public survey, which includes the open-ended question, "What feedback for the REF/OER team would you have for the incentive amount in light of the proposed Connected Solution changes in docket No. 24-06-EE?" The Company supports REF providing grants for solar paired with battery energy storage. The Renewable Energy Fund ("REF") offers a grant for new solar and battery paired systems: REF-StorageAdder-RFP-FINAL-.pdf (commerceri.com).

Comments on Presentation for Public Stakeholder Meeting No. 2 (Oct. 16, 2024)

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TO: **Sustainable Energy Advantage (SEA) on behalf of Rhode Island Office of Energy Resources (OER) and the Distributed Generation Board (DG Board)**

FROM: **Rhode Island Energy**

DATE: **October 9th, 2024**

SUBJ: **RE Growth - Response to Initial Proposed Program Year 2025 Megawatt Allocation Plan**

Rhode Island Energy respectfully submits the following comments in response to SEA's Renewable Energy Growth (RE Growth) Program initial proposed Program Year 2025 (PY25) Megawatt Allocation Plan. Rhode Island Energy is dedicated to providing safe, reliable, affordable, and sustainable energy to our customers. As such, Rhode Island Energy reviews the initial proposed PY25 Megawatt Allocation Plan with the dual objective of (i) using our expertise to be a productive partner in advancing Rhode Island's climate and clean energy mandates and (ii) vetting program costs on behalf of our customers. Our review has a focus on competition and cost, in alignment with R.I. Gen. Laws §39-26.6-2, which states "The program shall be designed to finance the development, construction, and operation of renewable energy distributed-generation projects over five (5) years through a performance-based incentive system that is designed to achieve specified megawatt targets at reasonable cost through competitive processes" (emphasis added). Rhode Island Energy has replicated SEA's initial proposed PY25 Megawatt Allocation Plan below in Table 1.

SEA's Initial Proposed Megawatt Allocation Plan		
Renewable Energy Class	**Plan A (MW)**	**Plan B (MW)**
Small Scale I (0 - 15kW)	10	10
Small Scale II (>15 - 25kW)		
Medium Scale (>25 - 250kW)	7	7
Commercial Scale I (>250 - 500kW)	10	10
Commercial Scale II (>500 - <1000kW)	12.5	12.5
Large Scale I (1 - <5MW)	25	15
Large Scale II (5 - <10MW)	30	0
Large Scale III (10 - <15MW)	30	0
Large Scale IV (15 - <39MW)	0	0

Table 1

Rhode Island Energy appreciates the opportunity to provide data to SEA to inform their initial proposed PY25 Megawatt Allocation Plan, and the meetings that followed to discuss the data to ensure that it was being properly interpreted. Rhode Island Energy generally agrees with the approach to have a "Plan A" and "Plan B" PY25 Megawatt Allocation Plan, depending on the status of the Western Rhode Island Area Affected System Operator (ASO) Study #3. The initially proposed "Plan A" PY25 Megawatt Allocation Plan would be contingent upon ASO #3 completion at least 45 days prior to the PY25 Third Open Enrollment, and the megawatt allocation for Large-Scale Solar II, III, and IV would only be available in the PY25 Third Open Enrollment. If ASO #3 is not completed within that timeframe, then the "Plan B" PY25 Megawatt Allocation Plan would be effective. Rhode Island Energy also agrees with the recommendation that the

"Plan B" PY25 Megawatt Allocation Plan provide no megawatts of allocation for Large-Scale Solar II, III, and IV.

Regarding the solar renewable energy classes under 1 MW DC, Rhode Island Energy has competition and reasonable cost concerns, based on the historical enrollments in the RE Growth Program and probable high standard Performance-Based Incentive (PBI) rates. As shown in Table 2 below, the average total annual capacity of awarded projects in Medium-Scale Solar is 4.2 MW, with awarded capacities in 2022 and 2023 being significantly lower than the annual enrollment targets, and trending a similar way in 2024. A PY25 megawatt allocation of 7 MW may be too high to result in healthy competition. Similarly, the average total annual capacity of awarded projects in Commercial-Scale Solar is 5.3 MW, with awarded capacities from 2020 through 2023 not reaching the annual enrollment target and are trending a similar way in 2024. As such, a PY25 megawatt allocation of 22.5 MW may be too high to result in healthy competition. Small-Scale Solar projects, on the other hand, receive the standard PBI rate, which based on the estimations for Program Year 2025 from Docket 23-44-REG, were significantly higher than in the past. In summary, to allow for healthy competition and to balance the affordability and clean energy goals of the RE Growth Program, Rhode Island Energy recommends that SEA reduce the PY25 megawatt allocations for solar renewable energy classes under 1 MW DC to the minimum amount permissible pursuant to R.I. Gen. Laws §39-26.6-12.

Renewable Energy Growth Program: Solar <1MW Historical Program Participation						
Year	Small-Scale Solar (1-25 kW)		Medium-Scale Solar (26-250 kW)		Commercial-Scale Solar (251-999 kW)	
	Awarded Projects (MW)	Annual Enrollment Target (MW)	Awarded Projects (MW)	Annual Enrollment Target (MW)	Awarded Projects (MW)	Annual Enrollment Target (MW)
2015	3.4	3.0	2.7	4.0	4.1	5.5
2016	7.2	5.5	4.5	5.0	7.6	8.0
2017	7.1	6.6	3.6	3.0	5.3	5.0
2018	7.3	6.6	3.1	3.0	5.1	5.0
2019	5.8	12.2	7.2	6.8	8.4	7.3
2020	5.8	7.0	5.7	3.0	7.0	8.2
2021	12.9	7.0	6.4	5.0	7.2	12.0
2022	10.3	7.0	3.8	5.0	4.6	12.0
2023	0.6	9.0	1.9	5.0	0.4	12.0
2024*	2.0	9.0	2.6	5.0	3.8	18.0
Average	**6.2**	**7.3**	**4.2**	**4.5**	**5.3**	**9.3**
Max	**12.9**	**12.2**	**7.2**	**6.8**	**8.4**	**18.0**

*2024 only includes data from the 1st and 2nd open enrollments. For 2024 Small-Scale Solar, Awarded Projects is as of 10/8/2024.
**Data in this table is mainly derived from Docket 23-44-REG, Rhode Island Energy's Responses to PUC Data Requests, PUC 2-4.

Table 2

Regarding the Large-Scale Solar II renewable energy class megawatt allocation under Plan A, based on discussions with SEA, Rhode Island Energy agrees that eleven projects should be considered likely to be eligible to bid into PY25, pending ASO #3 completion as mentioned above. Historically, only a small percentage of projects are selected for RE Growth versus the number of net metering applications received. Table 3 below compares the total selected capacity in MW DC for each RE Growth Program Year to the received net metering applications in MW DC. The 5-year average percentage of projects that are selected in RE Growth, compared to the sum of selected RE Growth projects and net metering applications, is 17%. Although this number varies significantly year-to-year and depends on how the ceiling price and standard PBI rates compare to the energy market forecasts, among other factors, it is clear that a smaller proportion of projects historically chose RE Growth over net metering. Rhode Island

Energy believes it is reasonable to assume that if the PY25 Megawatt Allocation Plan allowed for two to three projects to be awarded in Large-Scale Solar II, there may be healthy competition.

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

*From Docket No. 23-44-REG, from Rhode Island Energy's Response to PUC Data Request Set 1, from PUC 1-12, our team has created the table, which shows the Renewable Energy Growth Program selected MW DC for the previous five Program Years and compares it to the received Net Metering MW DC over the same time period.
** From Docket No. 23-44-REG, from DG Board and OER Filings, from SEA Schedule 4, Slide 12, the DC:AC ratio of 1.3 was utilized here.

Table 3

Regarding the Large-Scale Solar III renewable energy class megawatt allocation under Plan A, it seems that three projects should be considered likely to be eligible to bid into PY25, pending ASO #3 completion. Two of those projects are being developed by one developer. In addition, there are three projects that could possibly be eligible to bid into PY25, as they are not related to ASO #3, but it is unclear on how likely that may be. Rhode Island Energy believes it is reasonable to assume that if the PY25 Megawatt Allocation Plan allowed for one project to be awarded in Large-Scale Solar III, there may be healthy competition.

Table 4 below provides the initial proposed PY25 Megawatt Allocation Plan and a calculation of the minimum and maximum number of bids, per renewable energy class, that would be needed to meet the assigned megawatt allocation. For comparison, the number of bids received in PY24, and the associated number of kilowatts, is provided. The PY24 numbers are inclusive of the first and second open enrollments, except for small-scale solar, which is current as of October 9, 2024.

Renewable Energy Class	PY25 MW Allocation Plan A/B	Plan A - Min Quantity of Projects To Meet MW Allocation	Plan A - Max Quantity of Projects To Meet MW Allocation	Quantity of Projects Bid in 2024 Program Year*	kW Bid in 2024 Program Year*
Large Scale IV (15 - <39MW)	0	-	-	-	-
Large Scale III (10 - <15MW)	30/0	2	3	N/A	N/A
Large Scale II (5 - <10MW)	30/0	3	6	N/A	N/A
Large Scale I (1 - <5MW)	25/15	5	25	1	3,300
Commercial Scale II (>500 - <1000kW)	12.5	12.5	25	5	4,560
Commercial Scale I (>250 - 500kW)	10	20	40	4	1,586
Medium Scale (>25 - 250kW)	7	28	280	17	2,612
Small Scale II (>15 - 25kW)*	10	400	1389***	265**	2,042**
Small Scale I (0 - 15kW)*					
*Except for Small-Scale Solar, only includes 1st and 2nd open enrollments. **As of 10/9/24. ***Assuming historic average size 7.2kW.					

Table 4

Rhode Island Energy has conducted a high-level analysis on the potential cost-to-customer impacts of the initial proposed PY25 Megawatt Allocation Plan below in Table 5, if 100% of the megawatt allocation is built, and that the PY25 ceiling price is awarded (except for Small-Scale Solar, where the PY24 Standard PBI rate was utilized). This is for illustrative purposes only. Rhode Island Energy will conduct a more detailed analysis when a final draft of the PY25 Megawatt Allocation Plan is provided.

Renewable Energy Class	PY25 MW Allocation Plan A/B	2025 Ceiling Price	Tariff Term	Plan A: Program Annual Cost	Plan A: Est Market Value	Plan A: Est Annual Net Cost
Large Scale IV (15 - <39MW)	0	17.45	20	$ -	$ -	$ -
Large Scale III (10 - <15MW)	30/0	17.45	20	$ 6,924,649	$ 3,517,483	$ 3,407,165
Large Scale II (5 - <10MW)	30/0	17.45	20	$ 6,924,649	$ 3,517,483	$ 3,407,165
Large Scale I (1 - <5MW)	25/15	18.05	20	$ 5,968,955	$ 2,931,236	$ 3,037,718
Commercial Scale II (>500 - <1000kW)	12.5	23.75	20	$ 3,796,913	$ 1,417,088	$ 2,379,825
Commercial Scale I (>250 - 500kW)	10	28.55	20	$ 3,651,431	$ 1,133,670	$ 2,517,761
Medium Scale (>25 - 250kW)	7	31.95	20	$ 2,840,802	$ 788,134	$ 2,052,669
Small Scale II (>15 - 25kW)*	10	33.15	20	$ 1,945,640	$ 520,246	$ 1,425,394
Small Scale I (0 - 15kW)*		36.45	15	$ 2,139,323	$ 520,246	$ 1,619,078
					Total - Plan A	$ 19,846,774
					Total - Plan B	$ 11,817,357
*The 2025 Ceiling Price for Small-Scale Solar is actually the Standard PBI rate for PY24. **The capacity factors used in the Program Annual Costs are from Docket 23-44-REG, from the RI DG Board and OER Filings, from SEA Schedule 5, slides 25-26. ***Assuming Small Scale I and II have an even megawatt split. ****Est. Market Value utilizes $0.05042/kWh for energy and $0.03822/kWh for RECs, from page 55 of Docket 23-24-REG.						

Table 5

Thank you for your time and collaboration in this effort.

October 22, 2024

Solect Energy comments and feedback on the 2025 REG Program

Attention: Mr. Cal Brown (cbrown@seadvantage.com),

cc:
Toby Armstrong (tarmstrong@seadvantage.com)
Shauna Beland (shauna.beland@energy.ri.gov)
Karen Bradbury (karen.bradbury@energy.ri.gov)

Dear Mr. Brown,

Thank you for requesting feedback and data with respect to the 2025 Rhode Island REG Program.

Solect Energy is a developer, integrator, financier and operator of commercial scale solar and energy storage systems serving private and public customers in the Northeast and Mid-Atlantic United States. Many of the projects Solect develops in Rhode Island are at the building, with experience participating in the REG programs primarily in the Medium Scale, and Commercial Scale 1 and 2 categories.

With the rise in building decarbonization road mapping, and beneficial electrification underway in Rhode Island, we anticipate growing demand for load-sited solar projects. While REG is limited to Front of Meter configuration, it still provides economic benefit to the building owner and provides benefits to the grid by offsetting demand at load centers.

Given the current Group Studies' impact on larger scale solar projects and the expected delays for ISAs to be issued, it appears quite likely that the capacity in the Large-Scale categories will go unused. We recommend the Board considers re-allocating the MW capacity in those Large categories to other categories including Medium and Commercial 1 and 2. This can be done if the Large categories are indeed undersubscribed, and at a quantity of MWs that does not exceed budgeted program costs in 2025. This will have the benefit of allowing more C&I and load sited projects to be deployed, continue the progress towards decarbonizing the Rhode Island grid, and not create a budget deficit.

We have some precedent for such a model when in prior years, we benefitted from a reallocation from an underutilized Anaerobic Digestion capacity to solar, enabling one more project to come online through the REG program.

In the longer term, we strongly recommend modifying the REG program to allow for Behind the Meter applications. In such as configuration, the off taking load will supply its electricity from the solar, and the building owner – public and private – can count the MWs towards it's decarbonization attainment. Financially, the Value of Energy consumed at the site can be subtracted from the total tariff amount, and the

balance in the form of an Incentive can be paid directly to the system owner. This will have an impact that benefits the end user, the grid, and have no adverse impact on ratepayers.

We appreciate your consideration of the recommendations provided and welcome any questions or opportunities to discuss in further detail.

Thank you!

Matt Shortsleeve
Senior Vice President

solectenergy™
Smart Solar. Smart Business.

STATE OF RHODE ISLAND

DIVISION OF PUBLIC UTILITIES & CARRIERS
Accounting Section
89 Jefferson Boulevard
Warwick, Rhode Island 02888
(401) 941-4500
(401) 941-9248 - Fax

Memo

To: Cal Brown, Toby Armstrong, Shauna Beland and Karen Bradbury

From: Margaret L. Hogan, Esq., Michael Brennan, Joel Munoz, and John Bell

Date: October 23, 2024

Re: Stakeholder Presentation conducted October 16, 2024

The Division appreciates the opportunity to participate in the stakeholder presentation on October 16, 2024. SEA specifically requested comments on the following:

- SEA requests data and feedback on the following issues relating to Small Solar I and II Prices:
  - Current interest rates, tenor, and loan fees applicable to Small Solar I and II loans
  - Incremental labor costs associated with the change in law requiring licensed electricians to perform all the installation and maintenance of solar racking
  - Current escalation rates assumed through O&M contracts
- SEA requests feedback on the draft MW allocation plan
- SEA requests feedback on extending the Adder Pilot Program to projects under 1 MW

The Division respectfully submits the following comments and observations:

Small Solar

The Division reserves the right to provide further comments based on any changes made to the proposed administratively set prices as presented on October 16, 2024. Given that SEA is still gathering data on interest rates and other financing costs for small solar projects, labor costs and O&M escalation, it is entirely possible that the final

recommendations made will be considerably different than the amounts presented on October 16. The Division has also requested that SEA provide the CREST model and the input sheet for Small Solar I and II.

The Division understands that in calendar year 2024, small solar projects have tended to overwhelmingly favor the net metering program over the RE Growth program. This is despite the fact that the RE Growth compensation rate for 2024 (36.45 cents per kWh for Small Solar I and 33.15 cents per kWh for Small Solar II) are considerably higher than the current renewable net metering credit rates[1]. Even assuming that net metering customers expect high rates of future increases in the net metering credit rates, the level of compensation currently available in the RE Growth program does not appear to be the primary factor that is depressing participation.

MW Allocation Plan

The Division observes that the final decision in Docket 23-44-REG required that "Rhode Island Energy shall provide to the DG Board for consideration of the Program Year 2025 components the following information based on SEA's allocation and ceiling price proposals during the development process: (1) overall cost of program; (2) value of market products (should include impact of other procurement activities); (3) net cost to ratepayers and bill impacts." The same final decision required that the DG Board "shall file a new recommended allocation plan for Program Year 2025 by November 15, 2024."

The Division would like to have an opportunity to see the results of the RIE analysis of the overall costs of the program and impacts to ratepayers before finalizing comments on the proposed allocations. The Divisions appreciates the basis for SEA's preliminary recommendations for two allocation plans based on the outcomes of ASO#3 and is interested to see what responses RIE provides to this aspect of the allocation plan.

Pilot Program for Adders for Landfills/ Brownfields

The Division refers to comments made in September. In addition to those comments, the Division offers the following additional comments and observations:

- The Division agrees with the conclusion that the data on project upfront costs is the most impactful to project economics. That said, data on the expected annual production from the system and key cost data related to land costs and operating costs (especially those operating costs that are uniquely related to the project being located on a brownfield or landfill) are also critical to the economics of these projects. Furthermore, this data should be readily available at the time that the project applies to be a part of the pilot program and can be updated as the project progresses through construction and into commercial operations. This data must be collected.

[1] Per data from Rhode Island Energy the most recent 12 and 24 month average renewable net metering credit rates are: 23.17 and 23.29 cents for A16 Customer, 22.91 and 23.04 cents for A60 Customers and 21.14 and 22.01 cents for C06 Customers.

- The Division continues to support the recommendations made in our September comments regarding a single proposed adder for each category of projects eligible for the pilot (Landfill and Brownfield). The Division believes that this adder should be set at the lower of the two prices calculated for the Large I and Large II categories (i.e. 4.0 cents for Landfills and 1.3 cents for Brownfields). It is not clear on what set of facts and inputs would create a situation in which the required adder is higher for a larger scale project than for a smaller scale project as is the case with the current recommendation for Brownfields (1.3 cents for Large I and 1.6 cents for Large II). Any insight that SEA can provide regarding this unexpected result would be helpful.

- This pilot program should be designed to encourage the selection of optimal sites that can take advantage of other funding sources in keeping with the final decision order that "At a minimum, the proposal shall consider the design of the incentive, the level of compensation, total program size, and alignment with other sources of funding for similar policy outcomes including, but not limited to the Renewable Energy Fund's Brownfield incentive, Rhode Island Infrastructure Bank Brownfields Revolving Loan Fund, and DEM's Brownfield Site Preparation and Remediation Grant." As such, the Division recommends that the selection process must consider the extent to which projects have pursued and secured these funding sources.

- Whether the Division's proposal to scale the actual adder awarded to each project is accepted or not, the ability to "back calculate" the actual required adder based on the final actual costs and production characteristics of each project (including the impact of other funding sources) exists. Rhode Island Energy will ultimately be responsible for administering an approved pilot program and must gather this data as part of the administration of this pilot. Since a key objective of such a pilot is to assess the reasonableness of the proposed adders, the Division believes that these calculations must be made and will form the basis for any recommendations for a more permanent program for adders related to preferred siting.

- The final proposal for the pilot program in terms of the size in MW and the level of adders provides the basis for SEA to estimate the total, life of project, cost of these adders using a range of highest cost adders (all landfill) and lowest cost adders (all brownfield). This range of total costs over the 20-year tariff should be provided as part of the proposal.

Rhode Island Energy™
a PPL company

TO: **Sustainable Energy Advantage (SEA) on behalf of Rhode Island Office of Energy Resources (OER) and the Distributed Generation Board (DG Board)**

FROM: **Rhode Island Energy**

DATE: **October 24, 2024**

SUBJ: **RE Growth - Response to 10/16 Research, Analysis, & Discussion in Support of First Draft 2025 Program Year Small Solar Prices, MW Allocation, and Adder Pilot Recommendations**

In addition to the comments provided by Rhode Island Energy on 10/9/24 and 10/17/24 regarding the Renewable Energy Growth Program Year 2025 MW Allocation Plan, Small Scale Solar Prices and Adder Pilot Recommendations, Rhode Island Energy respectfully submits the following comments and questions on the information presented by SEA at OER's Solar Stakeholder Meeting on 10/16/24.

1. On Slide 10 of SEA's October 16th, 2024 presentation, SEA states that for Small Solar I and II, SEA will "continue to utilize the *median* installed cost data from NY, CT and MA programs, Energy Sage quotes, REF quotes, REG enrollments, and Lawrence Berkeley National Laboratory (LBNL) regional data." In Docket 23-44-REG, in the Rhode Island Distributed Generation Board (DG Board) and Office of Energy Resources (OER) filings, in the "Recommendations for the 2024-2026 Renewable Energy Growth Program Years" dated December 20, 2023, on page 36, regarding inputs for upfront capital costs for use in the CREST model for resources under 5 MW, SEA stated "Historically, SEA has aimed to incent projects that represent the lowest quartile of project costs, or in the case of the 2023 program year, an average of the lowest quartile and median costs, from other jurisdictions."

   RIE recommends that SEA utilize the historical approach, where the lowest quartile costs, or average of the lowest quartile and median costs, are used instead of the median costs. RIE also recommends providing a written evaluation of the difference in ceiling prices based on both lowest quartile and median costs for comparison.

2. In addition to the Median installed costs, does SEA consider sample size of the data sources? For example, on slide 37, for Small Solar II (partial year 2024), sample size of RI REF is 3, vs. NY - NYSERDA Solar Electric Programs, which has 898 projects for 2024. RIE recommends weighing sample size into the installed costs assumptions as they will have a noticeable impact on those assumptions, especially with RI REF being cost outliers at 39% higher than NYSERDA Solar Electric Programs and having only three projects as a sample size. As the installed costs are a significant input to the CREST model, these sample sizes of each are impactful to the recommend ceiling prices.

3. On Slide 15, SEA states that "Interest rates on 10 and 20-year treasury bonds have declined by over 100 basis points relative to the inputs assumed for 2025 during the 2024 ceiling price development process." Although SEA has not seen reduced rates in lenders that offer public rate quotes, would it be reasonable to assume that some decrease in interest rate for Small

Solar I and II projects would be expected, instead of no change in interest rates compared to the Program Year 2024 development process. As projects eligible to apply to the Renewable Energy Growth program must not have yet secured financing, the interest rates secured by eligible 2025 projects is very likely to be lower than the interest rates available for projects eligible in 2024, yet the values used for 1st Draft are the same as presented for 2025 PY on October 24, 2023 (slide 14)[1]. RIE recommends that these interest rates are updated to more current values or the values are estimated by the same or similar methodology that was used last year.

4. How does SEA estimate the land lease costs for adder-eligible projects and greenfield sites? What data sources are used for the cost of land leased? Have you utilized any studies or consulted with real estate professionals? Can anonymized data on the land lease costs in comparison to greenfield sites be provided? (Slide 24)

5. In comments provided on 10/9/24, Rhode Island Energy recommended that SEA reduce the PY25 megawatt allocations for solar renewable energy classes under 1 MW DC to the minimum amount permissible pursuant to R.I. Gen. Laws §39-26.6-12, which is 30 MW. RIE still believes that a MW allocation of ~30MW is both in line with historic participation and may drive a more competitive process. Table 1 below is RIE's recommended MW allocation plan for projects less than 1MW. Table 2 below provides the historic awarded MW in each of these classes which is used as the basis for the recommend MW allocation (This is the same as Table 2 provided in the 10/9/24 comments to SEA). As this is not the only possible solution, RIE welcomes further discussion.

RIE's Recommended Megawatt Allocation Plan		
Renewable Energy Class	**Plan A (MW)**	**Plan B (MW)**
Small Scale I (0 - 15kW)	9	9
Small Scale II (>15 - 25kW)		
Medium Scale (>25 - 250kW)	6	6
Commercial Scale I (>250 - 500kW)	7	7
Commercial Scale II (>500 - <1000kW)	8	8

Table 1

[1] https://ripuc.ri.gov/sites/g/files/xkgbur841/files/2023-12/2344-SEA%20Schedule%203_0.pdf

Renewable Energy Growth Program: Solar <1MW Historical Program Participation						
Year	Small-Scale Solar (1-25 kW)		Medium-Scale Solar (26-250 kW)		Commercial-Scale Solar (251-999 kW)	
	Awarded Projects (MW)	Annual Enrollment Target (MW)	Awarded Projects (MW)	Annual Enrollment Target (MW)	Awarded Projects (MW)	Annual Enrollment Target (MW)
2015	3.4	3.0	2.7	4.0	4.1	5.5
2016	7.2	5.5	4.5	5.0	7.6	8.0
2017	7.1	6.6	3.6	3.0	5.3	5.0
2018	7.3	6.6	3.1	3.0	5.1	5.0
2019	5.8	12.2	7.2	6.8	8.4	7.3
2020	5.8	7.0	5.7	3.0	7.0	8.2
2021	12.9	7.0	6.4	5.0	7.2	12.0
2022	10.3	7.0	3.8	5.0	4.6	12.0
2023	0.6	9.0	1.9	5.0	0.4	12.0
2024*	2.0	9.0	2.6	5.0	3.8	18.0
Average	**6.2**	**7.3**	**4.2**	**4.5**	**5.3**	**9.3**
Max	**12.9**	**12.2**	**7.2**	**6.8**	**8.4**	**18.0**
*2024 only includes data from the 1st and 2nd open enrollments. For 2024 Small-Scale Solar, Awarded Projects is as of 10/8/2024. **Data in this table is mainly derived from Docket 23-44-REG, Rhode Island Energy's Responses to PUC Data Requests, PUC 2-4.						

Table 2