STATE OF RHODE ISLAND
PUBLIC UTILITIES COMMISSION

IN RE: 2023 RENEWABLE ENERGY GROWTH PROGRAM:	
CLASSES, CEILING PRICES, AND CAPACITY	**:**
TARGETS AND 2023 RENEWABLE ENERGY	**: DOCKET NO. 22-39-REG**
GROWTH PROGRAM – TARIFFS AND SOLICITATION	**:**
AND ENROLLMENT PROCESS RULES	**:**

COMMISSION'S FIRST SET OF DATA REQUESTS
DIRECTED TO OFFICE OF ENERGY RESOURCES
(Issued November 28, 2022)

1-1. On page 26 of SEA's testimony, the witnesses explained that "According to stakeholder estimates, the cost of complying with Rhode Island's new prevailing wage requirements was \$57.50/kW_{DC} for eligible solar renewable energy classes and \$130/kW_{DC} for eligible Wind renewable energy class projects." In the stakeholder survey, the following question was asked: "If the labor standards law will have an impact please estimate the incremental impact (over existing electrician requirements), on a $/kWDC basis, for a covered project." Reference 2022 R.I. Pub. Laws 381 (June 29, 2022).

a. The question asked for the incremental impact. Was the testimony on page 26, referenced above the wage cost or the incremental impact?

The testimony on page 26 refers to the incremental impact of the change in labor standards.

b. If the testimony referenced above was the incremental impact, what were the existing assumptions used to comply with the prior labor standards? How were the incremental impacts verified by SEA?

Prior to the 2023 program year ceiling price development process, SEA did not have to consider the cost of complying with labor standards that were previously in place prior to the passage of 2022 R.I. Pub. Laws 381 (June 29, 2022) as a separate input in its ceiling price calculations. This is because installation labor costs are assumed to be contained within the total installed capital cost figures that SEA collects from regional databases and REG program bid data used to inform SEA's capital cost inputs for the purpose of ceiling price development. Given that the incremental costs of the new labor standards would not yet be reflected in the installed cost data from Rhode Island or other states in the region used to calculate the 2023 ceiling prices, the change in law necessitated an adjustment to the reported installed cost figures in order to ensure that the incremental costs of the new labor standards were reflected in the 2023 program year's ceiling prices.

c. What were the other incremental costs identified by stakeholders related to the other than the prevailing wage requirements, if any?

The prevailing wage requirements represent the only incremental cost reflected in the above-discussed incremental adjustments applied to installed cost inputs.

d. The labor standards law applies to projects 3 MW and above which is a subset of a renewable energy class. What assumptions did SEA use for developing the ceiling prices for the 1MW-5MW class size?

Per feedback from the Commission during the docket hearings in prior years, and to maximize the cost-effectiveness of the program, SEA designed the recommended 2023 ceiling price for the 1-5 MW_{DC} Large Solar renewable energy class based on a proxy 5 MW_{DC} project. Since projects larger than 3 MW are required under 2022 R.I. Pub. Laws 381 to pay prevailing wages (and projects 1 MW_{AC} and larger are strongly incentivized to pay prevailing pages via stratified ITC values by the Inflation Reduction Act of 2022), the above-discussed incremental value is added to the assumed capital costs for 1-5 MW_{DC} projects.

1-2. Various adjustments were made to SEA's assumptions based on a single term sheet from a single debt financier for a portfolio of projects SEA Test. at 29, 33-36).

a. Was the portfolio of projects all for one developer?

Yes. SEA made liberal use of this term sheet to determine debt financing inputs, in light of the fact that it can be challenging to receive actual term sheets provided to developers, rather than general characterizations of financing terms from financiers.

b. What was the total size of the portfolio of projects being financed?

The agreement covered 10 projects in Rhode Island developed by the market participant in question after the date of execution of the agreement. The date of execution, and the specific sizes of the projects, were either redacted or not included.

c. What was the range of sizes for the portfolio of projects?

While the market participant in question tends to submit Medium and Commercial Solar projects into REG Open Enrollments, the specific sizes of the projects named in the agreement were not disclosed. The risk profile of the developer to the debt provider, however, is more based on the scale of the portfolio and the developer's prior experience than upon the scale of the constituent projects.

d. Was the financing being provided for the portfolio all at a single point in time?

Please refer to the answer to subpart b.

1-3. SEA witnesses indicate that there was an assumed increase in O&M costs for large solar projects based on information from a market participant (SEA Test. at 29). Please explain why information from a single market participant changes SEA's assumptions.

While our testimony is correct in stating that the specific Year 1 input value utilized was based on fixed O&M values received from a single market participant, that statement does not reflect the full scope of considerations involved in developing the Large Solar Year 1 fixed O&M input. Though this particular market participant was the only one to provide specific Year 1 fixed O&M estimates during the data collection process, SEA also considered fixed O&M inputs for solar PV projects estimated by the National Renewable Energy Laboratory (NREL, see p. 42), which found modeled values for fixed-tilt and/or ground-mounted systems falling within the Large Solar range of $15-$17/kW-yr. NREL analysis subsequently released (ca. September 2022) validated a similar range for Year 1 fixed O&M estimates (see p. 52-53).

After further consultations with this market participant, SEA determined that the Large Solar price should only reflect the base O&M estimate ($11/kW-yr), given that the other components of O&M cited by the market participant appeared to be included in other operating expense categories (such as project management and insurance).

1-4. On page 31 of SEA's testimony, the witnesses described their definition of healthy and unhealthy competition in the context of prices.

In the context of the REG program, how would you define healthy and unhealthy competition?

We define healthy competition as a state in which a wide array of market participants are induced to bid via sufficiently attractive ceiling prices, and where bidders are provided with sufficient pricing flexibility to allow for competitive dynamics to reveal the fair market price for different types of development. In a state of healthy program competition, bid offerings should reflect informed pricing for well-developed projects that have a high probability of reaching commercial operation.

Conversely, unhealthy competition can be characterized by a limited number of program participants choosing to bid (or not bid) under maximum bid prices that may not allow for bidders to submit bids that reflect the costs they are experiencing in the market. Under such a scenario, projects may bid into the program at the ceiling price and with little margin for error in their project economics, producing functionally speculative bids with a higher chance of attrition. Other projects that are unable to visualize a path forward under the ceiling price may forego program participation, leading to a lack of competition and revealed pricing.

Please describe the Solar renewable energy class results in the First and Second Open Enrollments of the 2022 program year.

The First and Second Open Enrollment of the 2022 program year yielded atypically low participation, especially from the Large Solar resource class which did not receive any eligible bids for either Open Enrollment. For comparison, the first Open Enrollment of the 2021 program year yielded 30.9 MW of selected capacity, whereas the first Open Enrollment of the 2022 program year yielded only 4 MW of selected capacity.

a. Did SEA consider non-price factors in its definition and analysis of healthy and unhealthy competition within the context of REG, such as permitting, siting, net metering compensation rates, etc.? If so, please explain. If not, why not?

Since the law places project cost-related factors at the center of the process for developing the recommended ceiling prices, SEA has placed these cost-related factors at the center of our annual analysis on behalf of OER and the DG Board, since 2011 (and all of our filings before the PUC).

SEA also considers factors not directly related to project costs to have a substantial effect on the overall project development climate in Rhode Island, as well as the number of projects eligible to bid into the Open Enrollments. Thus, we certainly do view such non-cost/"non-price" factors as contributing (though indirectly and qualitatively) to a climate of healthy or unhealthy competition within the context of the program itself. Key non-price factors our team regularly considers on a qualitative basis in developing the annual recommended ceiling prices (including during the 2023 process) include (but are not necessarily limited to):

- **Cost-effectiveness (balancing the cost of the REG program to Rhode Island ratepayers with rapidly changing market conditions, including steps taken in response to suggestions made by the Division of Public Utilities and Carriers (DPUC));**
- **Interconnection delays and cost uncertainty (for both distribution and transmission-level interconnection);**
- **Delays associated with fulfillment associated with project component supply chains (which have been compounded by both the COVID-19 pandemic and related disruptions); and**
- **Ongoing challenges and delays associated with project siting and permitting.**

b. Could the non-price factors in subpart a be factors that affected the enrollment into REG? Why or why not?

It is SEA's experience that the types of cost/price and non-cost/non-price related factors discussed in our response to subpart a have been (and remain) a constant consideration of market participants when developing a view of the Rhode Island distributed renewable energy market, as well as any projects that they may potentially choose to bid into REG Open Enrollments.

However, SEA also notes that these non-cost/non-price factors, including those related to delays and challenges associated with siting, permitting and interconnection (including Affected System Operator (ASO) and distribution group studies) were also present (and, in our view, similarly impactful on the market as a whole) during both the 2021 and 2022 program years. During 2021 and 2022, a time in which we perceived these factors to be similarly impactful in the broader market, nearly 31 MW of eligible projects (and nearly 20 MW of Large Solar) were selected the 1st Open Enrollment of 2021, versus 4 MW (and 0 MW Large Solar projects) selected in the 1st Open Enrollment of 2022.

1-5. Referencing SEA's testimony on page 39, what specific group of market participants claimed that REGrowth systems would have to be reconfigured from dual metered systems to single-metered systems? Did this claim pertain to CRDG systems?

As part of the stakeholder engagement process that SEA manages, our team received comments from Ecogy Energy, a Medium and Commercial Solar market participant, in which they articulated their view that doing so could be required, as well as comments from other participants in the same market segment along the same lines during a technical session.

We do not recall any of the stakeholders that raised the reconfiguration issue citing CRDG projects in doing so.

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