



Rhode Island REG Program:

Research, Analysis, & Discussion in Support of
Second Draft 2026 Program Year Prices

September 17, 2025

Sustainable Energy Advantage, LLC

Overview of 2026 REG PY Considerations

- During 2024 PY development process:
 - PUC approved three-year set of ceiling prices for all classes other than Small Solar I and II → **Need to set Small I and II for this year's pricing development**
 - PUC declined to approve a three-year MW allocation plan → **Need to propose new 2026 MW allocation plan**
- In addition, passage of the One Big Beautiful Bill Act (OBBBA) has resulted in changes to federal tax provisions impacting renewable energy more broadly → **SEA to consider implications for all ceiling prices**

Timeline for 2026 CP Development Process

- **July 30** – First stakeholder meeting re: first draft Small Solar I and II prices
- **August 6** – Comments in response to first stakeholder meeting due
- **August** – SEA completes research regarding expected impact of OBBBA on REG-eligible projects
- **September 17 (you are here)** – Second stakeholder meeting re:
 - Second draft Small Solar I and II prices
 - Draft 2026 MW Allocation Plan
 - First draft of analysis re: OBBBA implications for solar >25 kW
- **Late September** – Revisions to analysis in response to stakeholder feedback, request for additional feedback, if necessary
- **September 29** – Presentation to DG Board re: analysis thus far
- **October 27** – Final recommendations presented to DG Board
- **November** – Filing before PUC



Findings Related to Federal Tax Policy



Policy Context - The One Big, Beautiful Bill Act (1)

- July 4 - [Public Law 119-21 \(H.R. 1\) – The One Big, Beautiful Bill Act](#) (OBBBA) signed into law, rolling back many of the tax credits and programs created by [Public Law 117-169 – Inflation Reduction Act of 2022](#) (IRA), most notably:
 - Section 70506 Terminates the [Residential Clean Energy Credit](#) as of December 31, 2025 → **Impacts host-owned Small Solar I**
 - Sections 70512 and 70513 terminate the [Clean Electricity Production Credit](#) (CEPC) and [Clean Electricity Investment Credit](#) (CEIC) for certain projects → **Impacts Small Solar II and larger**. Impacted projects include:
 - Facilities **placed in service after December 31, 2027**, except for facilities that begin construction within 12 months of the Law’s enactment (i.e., July 4, 2026)
 - Facilities that commenced construction after December 31, 2025, with “material assistance” from a “prohibited foreign entity,” subject to safe harbor tables issued no later than December 31, 2026

Policy Context - The One Big, Beautiful Bill Act (2)

- August 15 – U.S. Department of the Treasury issued [Guidance](#) regarding the definition of “begin construction”
 - **Solar 1.5 MW_{AC} and above**
 - Projects must verify that construction has begun before July 4, 2026, by passing the “physical work test”
 - Does not include preliminary activities such as securing financing, obtaining permits, or excavating to change the contours of the land
 - **Solar below 1.5 MW_{AC}**
 - May qualify as having begun construction if at least 5% of costs were incurred
 - May also qualify for the tax credits by passing the physical work test as described above
 - **Continuity requirement**
 - All facilities must maintain continuous construction to retain tax credit eligibility
 - Delays including severe weather, permitting, interconnection, and equipment shipments are exempt from the continuity requirement
 - Safe-harbored facilities must be placed in service no more than four calendar years after the calendar year during which construction began
 - For projects taking more than four calendar years to complete construction, the Treasury will determine whether the facility met the continuity requirement according to the “relevant facts and circumstances.”

Scope of Research

- SEA's research targeted developers and financiers active in RI to better understand the implications for 2026 REG program → 11 interviews conducted to date
- SEA's research focused on the following topics and questions:
 - Ability to qualify projects of various scales for ITC safe harbor (construction and/or COD)
 - Impact of Treasury guidance regarding the definition of "begin construction"
 - New financing structures/products likely to emerge post-OBBBA
 - Ability to leverage 100% bonus depreciation for projects losing ITC eligibility and/or projects retaining ITC eligibility
 - Impact of Foreign Entity of Concern (FEOC) requirements on project cost and timelines
 - Interaction with ITC domestic content bonus
- **Research is ongoing, and SEA welcomes further comments and/or interviews on the above topics**

Findings: ITC Safe Harbor

- Most respondents reported that qualification for either of the ITC safe harbor pathways was feasible for PY 2026 projects
 - Commence construction safe harbor: Possible to begin physical work off-site prior to REG Certificate of Eligibility (COE), though less likely for smaller projects
 - COD 2027 safe harbor: Majority of respondents reported COD prior to EOY 2027 was likely achievable, especially for projects under 1 MW
- **M.I.: Assume that Small Solar II and above can reasonably qualify for 30% ITC in 2026 PY**
 - **However, SEA's research suggests that non-small solar projects in PY 2027 will not be able to qualify for the ITC**
 - **➔ CPs in PY 2027 process will need to account for post-OBBBA financing structures**



Findings: FEOC Compliance (1)

- Cost of FEOC compliance: Stakeholders report **range of \$50–200/kW**, with spread driven by supplier choices, risk tolerance, and project segment
 - **Modules and inverters** drive most FEOC compliance cost
- Most impact expected for projects developed in 2026 as demand puts pressure on compliant supply
- Interactions with domestic content (DC) adder:
 - **FEOC is a requirement; DC is optional economics** – Respondents generally treat **DC** as a **separate business case** that may or may not be economically viable (depending on project specifics)
 - Several sources said the **DC adder tends to be a “wash”** after paying for pricier modules **plus** audit/CPA paperwork; **many won’t chase DC** after already absorbing FEOC costs
 - FEOC compliance cannot be leveraged for DC in many cases → i.e., FEOC compliance represents separate cost incremental to DC compliance
- **M.I.:**
 - **Adopt incremental cost of:**
 - **\$150/kW for Small Solar II, Medium Solar, Commercial Solar,**
 - **\$100/kW for Large Solar I, Wind**
 - **\$50/kW for Large Solar II through IV**
 - **Reflects expectations that economies of scale will reduce compliance costs for larger projects**
 - **NOTE: No incremental cost assumed for Small Solar I, since no tax credits granted after 12/31/2025**
 - **SEA assumes that Hydro and AD will not be impacted by FEOC, given less reliance on Chinese manufacturers relative to solar, but welcomes feedback on this issue**



Findings: FEOC Compliance (2)

- Respondents also noted that tax equity investors are likely to apply a risk premium to their “baseline” rate of return to account for FEOC risk
 - Treasury guidance on FEOC tables yet to be issued → significant uncertainty driving high perceived risk
- **M.I.: Adopt incremental 25 basis point (bps) increase in Tax Equity IRR for Medium Solar, Commercial Solar, Large Solar, and Wind**

Findings: 100% Bonus Depreciation

- OBBA makes permanent the **100% bonus depreciation** option for energy production facilities placed in service before January 1, 2031
- In prior years' research efforts, despite the availability of bonus depreciation, market participants indicated **most tax equity investors that claim an investment credit did not utilize bonus depreciation**, to reduce risk by distributing their tax-driven investments over higher volume of projects → SEA assumed five-year schedule of the Modified Accelerated Cost Recovery System (MACRS) for depreciation
- Respondents reported that investors continue to primarily utilize 5-year MACRS for projects that can retain ITC eligibility
- Respondents also reported that, for projects losing ITC eligibility, new financial products/structures utilizing 100% bonus depreciation are likely to emerge, but such offerings have yet to be developed (and are more likely to be available in 2027 Program Year and thereafter)
- **M.I.:**
 - **SEA will continue to assume 5-year MACRS for now, given the assumption that projects eligible for 100% bonus will continue to qualify for ITC in 2026**
 - **However, SEA anticipates (though is not 100% certain) that much more significant financing and CapEx adjustments will be made by project sponsors and financiers once tax credits are assumed to be gone from the capital stack**



Small Solar I – Tax Credit Interactions

- For first draft Small Solar pricing, SEA assumed that Small Solar I would lose tax credit eligibility, given the class is historically dominated by host-owned projects impacted by the elimination (effective 12/31/2025) of 25D Residential Clean Energy Credits
- In its comments, the DPUC and RI Energy both noted that Third-Party Owned (TPO) projects, or small commercial projects under 10 kW could still qualify for the ITC in 2026 → concern that such projects would receive windfall profit under a price assuming no ITC
- Certain respondents noted the development of leasing products to retain ITC → potential that market could shift to TPO in 2026
 - However, changes in business models take time and historically REG Small Solar I is 95+% host-owned → elimination of host-owned support could significantly hinder program performance
- **M.I.: OER has directed SEA to develop differentiated price for Small Solar TPO vs Host Owned projects**
 - **Projects eligible for the ITC (TPO or commercially cited) would receive such price, preventing overcompensation if market is able to pivot to TPO**
 - **No separate MW allocation → preserves market flexibility**



Small Solar I – Third Party Owned Inputs

- Small Solar I TPO projects are expected to have similar finance inputs to larger TPO projects
 - This assumption is substantiated by market research conducted for the MA Department of Energy Resources in 2023
- **M.I.: Adopt the following inputs for Small Solar I TPO**
 - **Inputs revised relative to host-owned shown below**
 - **For complete details, see Appendix A**

	Small I (Host Owned)	Small I (TPO)
Lender's Fee (% of total borrowing)	4.25%	2.3%
Target After-Tax Equity IRR	7%	10.6%
ITC	0%	30%
Federal Tax	7.33%	21%
State Tax	2.89%	9%

Price Recommendations



Non-Small Solar: Scope of Revisions

- Costs associated with FEOC compliance are the result of a clear, discrete change in federal law and expected to produce upward cost pressure → objective threshold for proposing updated CPs vs general market changes
- As such, we present the modeled impact on CPs for all renewable energy classes, assuming such costs are included
- As ordered by the PUC in [Docket 25-13-REG](#), in proposing updated CPs for non-small solar, SEA considered the “totality of costs” impacting such classes beyond the incremental impacts of FEOC requirements alone
- Given such inputs are subject to the most year-to-year variance, SEA’s research also incorporated updates to
 - Financing inputs (specifically, interest rates)
 - Capital cost inputs

Small Solar - Summary Results (¢/kWh)

- Draft 2026 prices for Small Solar I and II are provided below

Class	Tariff Term	Size Range kW (Modeled Size kW)	2025 Approved Price	2026 1 st Draft Revised Price	2026 2 nd Draft Revised Price	% Change (2025→2026)
Small Solar I (Host-owned)	15	≤15 (5.8)	33.85	39.45	38.35	13.3%
Small Solar I (TPO)	15	≤15 (5.8)	N/A	N/A	28.35	N/A
Small Solar II	20	>15-25 (25)	32.35	28.05	28.65	-11.4%

Non-Small Solar - Summary Results (¢/kWh)

Technology	Tariff Term	Size Range kW (Modeled Size kW)	2026 CP (Approved)	Proposed 2026 CP	% Change
Medium Solar	20	>25-250 (250)	31.35	35.15	12.1%*
Commercial I	20	>250-500 (500)	28.35	29.85	5.3%
Commercial I CRDG	20	>250-500 (500)	31.25	32.75	4.8%
Commercial II	20	>500-1,000 (1,000)	23.55	24.55	4.2%
Commercial II CRDG	20	>500-1,000 (1,000)	26.35	27.45	4.2%
Large Solar	20	>1,000-5,000 (5,000)	17.85	18.35	2.8%
Large Solar-CRDG	20	>1,000-5,000 (5,000)	20.52	21.10	2.8%
Large Solar II	20	5,000-<10,000 (9,999)	17.25	17.35	0.6%
Large Solar III	20	10,000-<15,000 (14,999)	17.25	17.85	3.5%*
Large Solar IV	20	15,000-<39,000 (20,000)	17.25	17.55	1.7%*
Wind	20	<=5,000 (3,000)	19.85	20.35	2.5%
Wind CRDG	20	<=5,000 (3,000)	21.75	22.25	2.3%

*Note: The % change for these classes does not reflect the change in pure economics from the 2024 process, as the approved CPs for these classes were revised downward by the PUC relative to OER's recommended values to ensure directionally consistent economies of scale → inflates the % change



Discussion: Impact on Investor Returns

- The PUC's [Written Order](#) in [Docket 23-44-REG](#) specifies that changes to CPs already approved in the 2024-2026 program plan will require that the requesting party must “provide evidence that the established prices will not result in the statutorily “reasonable rate of return”
- Overall, updated inputs for non-small solar classes result in a modest increase in the calculated CP (~3% increase)
- However, modest revisions to revenue can produce material changes in sponsor IRR
 - Tax equity seen as increasingly competitive → lack of flexibility re: acceptable tax equity IRR
 - Result = SEA assumes that revenue shortfall will primarily be felt by sponsor IRR
- Example: for Large Solar, failure to adopt modeled 3% increase in CP could result in 15% reduction in sponsor equity IRR (11% → 9.3%), assuming tax equity and debt return remain unchanged
- **Request for Feedback: What is a reasonable variance around the 11% IRR target?**

Additional Stakeholder Feedback and Modeling Implications



Installed Cost Assumptions & Methodology (1)

- To improve the accuracy of CAPEX inputs, SEA made the following adjustments for Draft 2 prices:
 - Incorporation of updated CT RRES data through August 2025
 - Incorporation of PV CAPEX data from CT Energy Storage Solutions program
 - Removal of datapoints for projects electing to pursue the domestic content bonus, as such projects are expected to have elevated installed cost relative to a “vanilla” project
 - Reduction of prevailing wage and RI-specific cost adders to reduce the potential for double-counting with costs embedded in historical installed costs (see Appendix B)
- **Modeling Implication (M.I.):**
 - **Small Solar I and II 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**
 - **Medium, Commercial, and Large Solar continue to utilize average of median and 75th percentile costs for NY Sun, CT NRES, MA SMART, REG Open Enrollment Data, and regional data from LBNL**

Installed Cost Assumptions & Methodology (2)

- In its comments, RI Energy requested additional clarification regarding how the data from installed cost databases is transformed to produce the estimate used in modeling

- Step 1: Collect database-specific estimates for 2024 and 2025 (year to date)
 - For Small solar: collect the median installed cost from each dataset provided in Appendix B
 - For non-small solar: Average the median and 75th percentile costs reported from each dataset provided in Appendix B
- Step 2: Transform 2024 and 2025 estimates to 2026 equivalent using NREL ATB + AEO PPI

Metric	Category	2024 → 2026 Adjustment	2025 → 2026 Adjustment
2025 AEO Wholesale Price Index	N/A	-0.7%	-0.4%
2024 NREL ATB YoY CAPEX Cost Decline	Small	-1.7%	-0.9%
	Non-Small	-2.9%	-1.5%
Net Adjustment	Small	-2.4%	-1.2%
	Non-Small	-3.5%	-1.8%

- Step 3: Calculate the average 2026 estimate across all datasets
 - SEA notes that at this step, certain datasets with limited sample size are either excluded or combined with other datasets in calculating the average, based on SEA's best judgment
 - See notes in Appendix B tables for details regarding such exclusions
- Step 4: Add cost adjustments provided in Appendix B to reflect incremental costs SEA assumes are not included in state databases

Installed Cost Assumptions & Methodology (3)

- RI Energy also requested additional information regarding how the \$30/kW electrician labor adder (see Appendix B) was calculated, and how it compares to actual labor cost trends in Rhode Island
 - This cost adder was informed by stakeholder feedback during the 2025 PY development process, in addition to modeling leveraging residential solar labor cost estimates provided by NREL in its Q1 2023 Solar and Storage Cost Benchmarking Report
 - Please see [slide 9](#) and [slide 6](#) from SEA's presentations delivered during the 2025 PY development process, in addition to [page 19](#) from SEA's direct testimony for additional details
 - SEA has not revisited this analysis in the 2026 PY development process, but welcomes additional comments or data on incremental electrician labor costs
 - However, in Draft 2, SEA has reduced the cost adder based on the share of installed cost data points coming from RI in 2025 (which SEA assumes includes such costs already)

Installed Cost Summary Results (1)

- Installed cost results for all renewable energy classes are shown below
- Results are consistent with economies of scale and show significant cost declines for Small Solar

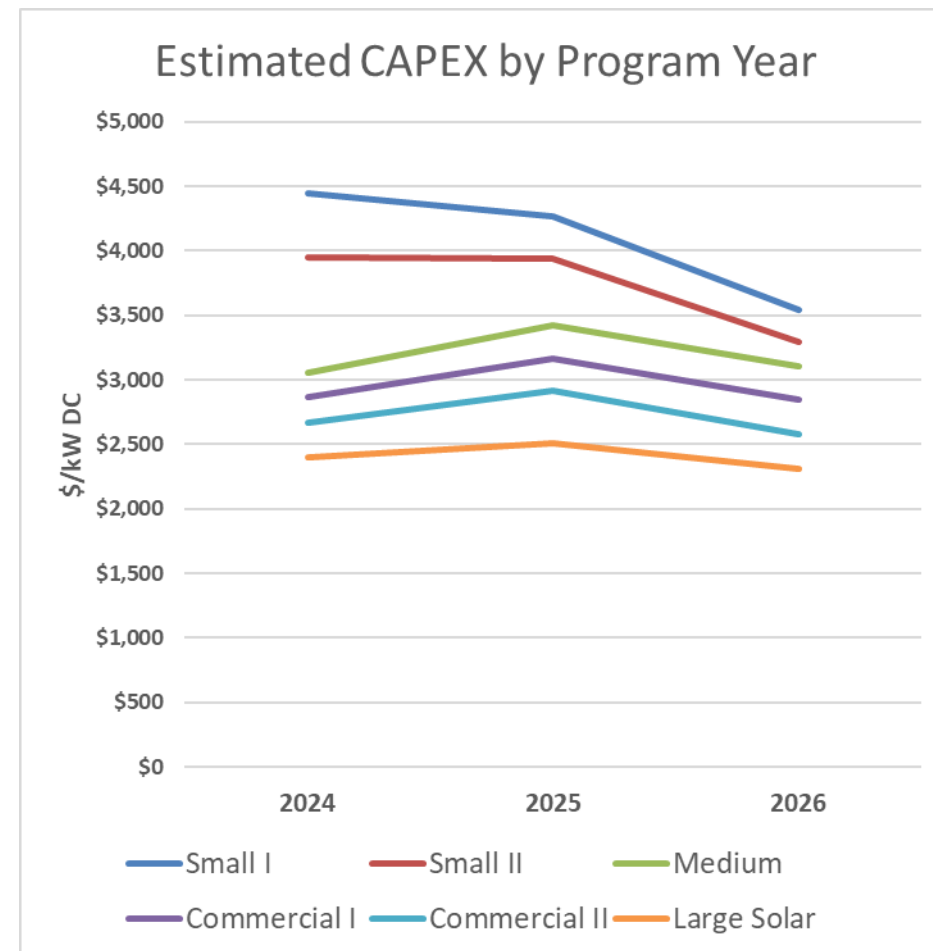
	2025 PY Adopted	2026 PY – Updated Estimate	% Change – 2025 Adopted → 2026
Small Solar I	\$4,270	\$3,539	-17.1%
Small Solar II	\$3,942	\$3,443	-12.7%
Medium Solar	\$3,016	\$3,374	11.9%
Commercial Solar I	\$2,821	\$3,054	8.3%
Commercial Solar II	\$2,627	\$2,728	3.8%
Large Solar I	\$2,365	\$2,462	4.1%

*Table values corrected from the version presented, which did not include all cost adjustments reflected in Appendix B

Installed cost figures include certain adjustments to account for added costs not contained in state databases (e.g., RI-specific labor laws) – See Appendix B

Installed Cost Summary Results (2)

- In its comments, DPUC requested further details on what may drive steeper declines for Small Solar
 - Possible that small solar's quick lead time → more recent cost data showing more aggressive cost decline to come
 - Also possible Small Solar had most significant room for cost optimization/market consolidation, supply chain and inflationary pressures could drive "survival of fittest" in datasets
- Prior slide's comparisons focused on 2025 adopted inputs → mixed comparison, as 2025 Small Solar inputs were updated in 2025, whereas non-small solar set in 2024 PY process
 - When comparing proposed 2026 inputs to updated 2025 data, cost declines are significant across all classes
 - Results are consistent with recent [NREL findings](#) (See p. 20), validating trends



Large Solar II-IV CAPEX

- For Large Solar II-IV, limited sample size makes reliance on regional reported costs difficult → rely on bottom-up modeling conducted by NREL regarding expected changes in YoY CAPEX
 - Specifically, SEA utilized the expected change in utility-scale CAPEX from 2024 → 2026 as reported by the 2024 NREL ATB (-4.5%)
 - In addition, we layer on the [2025 EIA AEO](#) forecasted change in the Producer Price Index from 2024 → 2026 to account for inflation(-0.6%), given NREL ATB is in real dollars
- **M.I.: Model Large Solar II-IV CAPEX as 5.2% lower than 2024 inputs**
 - **This results in a steeper cost decline than was modeled in the 2024 process, which is then offset by the addition of FEOC costs → minimal net change**

Class	2026 PY Adopted	2026 PY – Updated Estimate (inc. FEOC)	% Change
Large Solar II	\$2,109	\$2,113	0.2%
Large Solar III	\$2,021	\$2,027	0.3%
Large Solar IV	\$1,973	\$1,981	0.4%



Operating Expense Assumptions

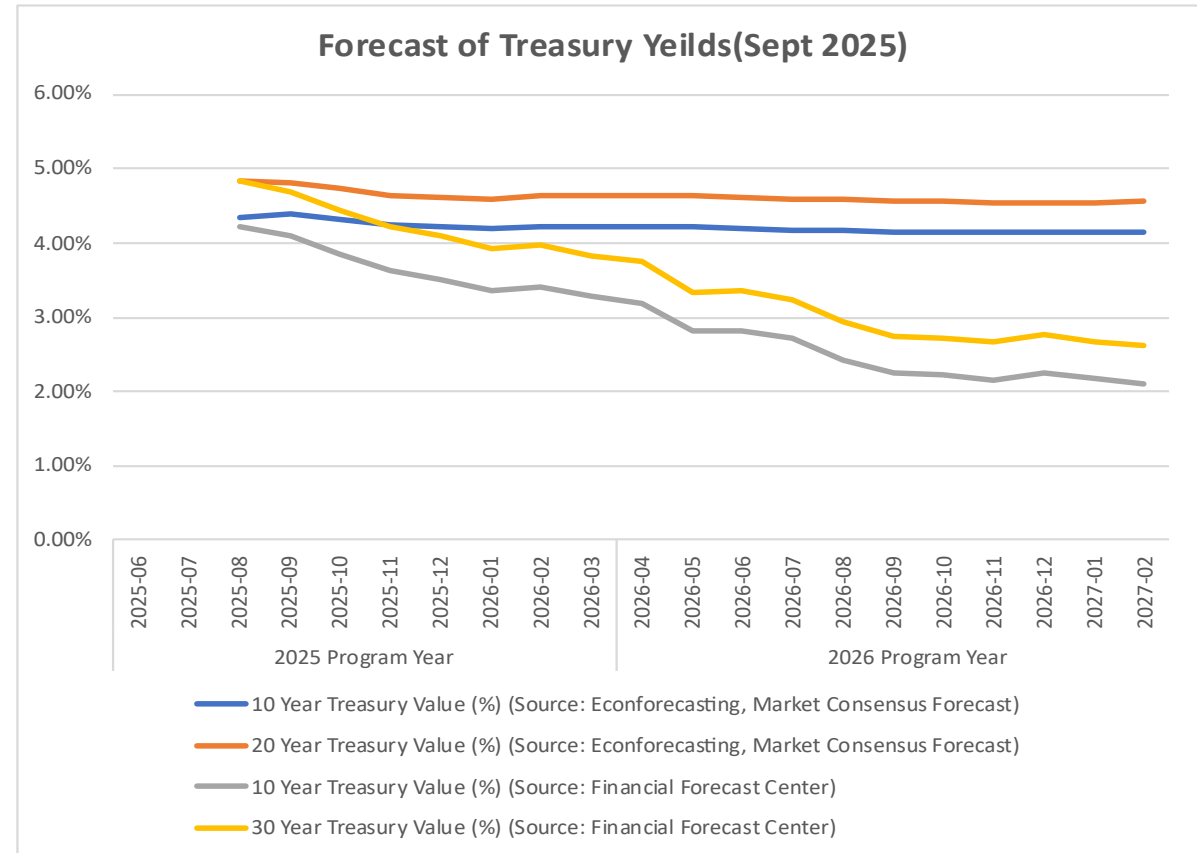
- **Inverter Replacement Costs**

- In SEA's July 30 stakeholder presentation, we note developers suggested that inverter replacement costs for Small Solar I and II not covered by warranty are as high as \$150/kW, but did not provide any documentation of such costs
- SEA has received no documentation to date
- **M.I.: No change for now given a lack of documented evidence, SEA will consider revisions in final draft pricing, and specifically seeks documented examples of quotes for inverter replacement**



Interest Rates (1)

- Consistent with SEA’s approach during the 2024-2026 program development process, SEA utilizes forecasted 10- and 20-year Treasury yields as a basis for future interest rate expectations
 - Based on the debt term assumed, SEA blends between 10- and 20-year yields (e.g., 10-year yield used for Small Solar)
- However, the Market Consensus Forecast SEA previously relied upon presents an outlook that suggests current rates will be sustained, consistent with a scenario where the economy **does not** slip into a recession
- Forecast from Financial Forecast Center provides outlook more consistent with a scenario where the economy **does** fall into a recession
- Federal Reserve (“the Fed”) [estimates](#) risk of recession within 12 months (based on degree of yield curve inversion) is currently ~28%
- **M.I.: Adopt blended average of both forecasts using recession risk reported by the Fed (thus reducing interest rate on term debt outlook)**
 - **Going forward, SEA intends to consider the odds of recession in its methodology for calculating interest rates**



Interest Rates (2)

- Using the Blended Average Forecast, inputs are derived as follows:

	Small Solar I/II	Medium/Commercial Solar	Large Solar	Wind
Debt Term (Years)	10	13	15	15
Expected Average Risk-Free Rate 2026 PY (Extracted September 2025)	3.71%	3.84%	3.92%	3.92%
Risk Premium	3.25%	3.25%	3.25%	3.50%
Total Interest Rate	6.96%	7.09%	7.17%	7.41%

- For Small Solar, These values are **lower** than those recommended by OER in PY 2025 (8.38% for both Small Solar I and II), but **higher** than those adopted by the PUC in PY 2025 (6.91% for Small Solar I and 6.78% for Small Solar II) given that the PUC chose to adopt Draft 1 pricing.
 - The higher cost of debt for longer terms is driven by the fact that longer-term securities have a more significant time dimension of risk for financiers
 - Difference in Small I and II interest rates vs 2025 PY is the result of higher expected risk-free rates than previously assumed (which are based on US Treasury yields, per previous slide)
- For Non-small solar, these values are slightly higher than those adopted in modeling during the 2024-2026 CP development process

Post-Tariff Revenue

- In its comments, RI Energy inquired about the reasonableness of assuming post-tariff REC revenue at \$5/REC, noting that the 2024 [Avoided Energy Supply Costs in New England \(AESC\)](#) study forecasts RI Class I REC values of ~\$30/REC in 2038
 - SEA agrees that this assumption should be revisited, given the general shift towards scarcity in Class I markets
 - However, consistent with SEA's treatment of post-tariff energy revenue, it is important to discount to reflect risk and uncertainty from an investor perspective
 - **M.I.: Adopt 2038 AESC value of \$31.04/REC, with 40% discount consistent with energy value treatment → \$18.6/REC assumed post-tariff**
- In its comments, RI Energy requested additional details regarding the post-tariff energy value forecast contained in the CREST model
 - SEA utilized an internal forecast of RI Energy's C-06 and A-16 rates, developed for its 2023 benefit cost analysis of RI DG programs
 - The forecasted value is then discounted by 40% to reflect future revenue uncertainty and a further 20% to reflect recent change in law that provides virtual net metering credits at 80% of the full net metering rate
 - SEA is considering shifting to utilizing AEO 2025 retail rate forecasts instead, as a more simple, transparent method, and welcomes feedback on this issue

MW Allocation Plan



2026 MW Allocation Plan Development Process

- To develop the draft 2026 MW allocation plan, OER attempted to balance the objectives of ensuring healthy program competition with providing a robust plan that would not unnecessarily constrain the deployment of DG
- SEA's research focused on evaluating the competitive dynamics of each renewable energy class given the current IC queue
- In doing so, SEA (in consultation with RI Energy) considered:
 - The number of unique developers with projects in the interconnection pipeline in each class, and the relative share of capacity owned by each developer
 - The total capacity of projects expected to be able to bid into the 2026 PY, based on
 - Each project's stage in the interconnection pipeline
 - Each project's involvement in ASO studies
 - The ability for net metering projects at various interconnection stages to choose between NM and REG

Interactions with ASO studies

- In PY 2025, a “Plan A” and “Plan B” MW allocation plan was approved to address uncertainty regarding the timing of ASO #3’s finalization
- Subsequent ASO studies are either highly likely to conclude prior to the 2026 PY (ASO #3b) or highly unlikely to conclude prior to the 2026 PY (ASO #4) → less need for Plan A/B construct in 2026 PY
- However, collaboration with RIE on this question is ongoing

Stakeholder Comments on MW Allocation

- In its comments, RI Energy requested additional information regarding the 25 MW proposed for Large Solar I
 - In doing so, RI Energy noted that “without ASO 4 being complete, only one project would be eligible to bid into this class.”
- SEA’s analysis has already excluded all ASO 4 projects, as it is unclear if the study will be completed prior to the Third Open Enrollment
- Based on SEA’s analysis of RI Energy’s IC data, there appears to be sufficient eligible capacity to support a 25 MW allocation
- However, there is uncertainty regarding how much of the currently eligible capacity may bid into the 2025 PY or participate in net metering prior to the 2026 PY → No changes relative to initial draft, SEA to monitor 2025 Third Open Enrollment outcomes

Draft 2026 MW Allocation Plan

- Consistent with PY 2025, SEA plans to complete a benefit-cost analysis of the proposed plan after OER's recommended program plan is finalized
- Consistent with PY 2025, SEA assumes that all Large Solar capacity would be offered in the Third OE
 - Maximizes chances that ASO #4 concludes prior to enrollment
 - **SEA requests feedback on this issue**

Renewable Energy Class	2026 MW Draft Allocation
Large Scale IV (15 - <39MW)	0
Large Scale III (10 - <15MW)	15
Large Scale II (5 - <10MW)	20
Large Scale I (1 - <5MW)	25
Commercial Scale II (>500 - <1000kW)	8
Commercial Scale I (>250 - 500kW)	7
Medium Scale (>25 - 250kW)	9
Small Scale II (>15 - 25kW)	6
Small Scale I (0 - 15kW)	
Total	90

Next Steps



Request for Comments

- Comments on the issues discussed in this presentation are due on **September 24**
- Specific issues SEA would appreciate feedback on include:
 - ITC safe harbor assumptions (slide 8)
 - FEOC cost adjustments / applicability to non-solar projects (slides 9-10)
 - Applicability of 100% bonus depreciation for projects retaining ITC eligibility (slide 11)
 - Differentiated pricing for Small Solar I, Third Party Owned, and applicable inputs (slides 12-13)
 - Reasonable variance around the target 11% IRR modeled (slide 18)
 - The timing of solicitations applicable to Large Solar (slide 34)
 - Any other issues discussed here, or relevant to the design of PY 2026 incentives
- Please send written comments **in a PDF attachment** (preferably on organizational letterhead if applicable) to Toby Armstrong (tarmstrong@seadvantage.com), copying Jacob Nichols (jnichols@seadvantage.com), Shauna Beland (shauna.beland@energy.ri.gov), and William Owen (william.owen@energy.ri.gov).

Appendix A: Detailed Cost, Performance and Financing Assumptions



Summary: Solar ≤25 kW Financing Assumptions

	Small I - Host Owned (1-15 kW)			Small I - TPO (1-15 kW)			Small II (15-25 kW)		
	<i>2025 Adopted</i>	<i>2026 1st Draft</i>	<i>2026 2nd Draft</i>	<i>2025 Adopted</i>	<i>2026 1st Draft</i>	<i>2026 2nd Draft</i>	<i>2025 Adopted</i>	<i>2026 1st Draft</i>	<i>2026 2nd Draft</i>
Federal Investment Tax Credit (%)	30%	0%	0%	N/A	N/A	30%	30%	30%	30%
% Debt	43.4%	60.1%	60.2%	N/A	N/A	47.0%	45.2%	45.3%	45.8%
Debt Term (years)	13	10	10	N/A	N/A	10	10	10	10
Interest Rate on Term Debt	6.91%	7.58%	6.96%	N/A	N/A	6.96%	6.78%	7.58%	6.96%
Lender's Fee (% of total borrowing)	4.25%	4.25%	4.25%	N/A	N/A	2.3%	2.3%	2.3%	2.3%
Target After-Tax Equity IRR	7%	7%	7%	N/A	N/A	10.6%	12.5%	12.5%	12.5%

Summary: Solar Cost & Production Assumptions

	Small I (Host Owned)	Small I (TPO)	Small II
Nameplate Capacity (kW)	5.8	5.8	25
Capacity Factor	13.4%	13.4%	13.4%
Annual Degradation	1.0%	1.0%	1.0%
Useful Life (Years)	25	25	25
Total Capital Cost (\$/kW)	\$3,539 [\$4,270]	\$3,539	\$3,443 [\$3,942]
Fixed O&M (\$/kW-yr)	\$29	\$29	\$24
O&M Escalation Factor	2.0%	2.0%	2.0%
Non-O&M Escalation %	2.0%	2.0%	2.0%
Insurance (% of Cost)	0.0%	0.0%	0.0%
Project Management (\$/yr)	\$0	\$0	\$0
Site Lease (\$/yr)	\$0	\$0	\$0
Property Tax/PILOT (\$/kW)	\$0	\$0	\$5

* Values in [Purple Brackets] represent 2025 ceiling price inputs

Summary: Revised Non-Small Solar Assumptions

	Corrected from the version presented	Interest Rate	Target After-Tax Equity IRR	% Debt
	Total Capital Costs			
Medium Solar	\$3,374 [\$2,971]	7.09% [6.95%]	10.6% [10.5%]	48.1%
Commercial Solar I	\$3,054 [\$2,779]	7.09% [6.95%]	10.5% [10.3%]	47.2%
Commercial Solar I CRDG	\$3,154 [\$2,879]	7.09% [6.95%]	10.5% [10.3%]	47.2%
Commercial Solar II	\$2,728 [2,588]	7.09% [6.95%]	10.5% [10.3%]	46.5%
Commercial Solar II CRDG	\$2,828 [\$2,688]	7.09% [6.95%]	10.5% [10.3%]	46.5%
Large Solar	\$2,462 [\$2,328]	7.17% [7.03%]	10.2% [10%]	45.0%
Large Solar CRDG	\$2,562 [\$2,428]	7.17% [7.03%]	10.2% [10%]	45.0%
Large Solar II	\$2,113 [\$2,109]	7.17% [7.03%]	10.2% [10%]	50.5%
Large Solar III	\$2,027 [\$2,021]	7.17% [7.03%]	10.2% [10%]	55.3%
Large Solar IV	\$1,981 [\$1,973]	7.17% [7.03%]	10.2% [10%]	55.3%
Large Wind	\$3,648 [\$3,548]	7.42% [7.25%]	10.3% [10.1%]	42.8%
Large Wind CRDG	\$3,748 [\$3,648]	7.42% [7.25%]	10.3% [10.1%]	42.8%

- Values in [Purple Brackets] represent previously approved 2026 ceiling price inputs
- For all other CP inputs, see Appendix A of [2024-2026 Program Year Ceiling Price Recommendations](#)

Appendix B: Detailed Capital Cost Data for Solar Projects



Small Solar I Installed Cost Summary Statistics

Small Solar I, Installed Costs											
0-15 kW											
Time Period		2024 (Full Year)						2025 (Partial Year)			
Dataset	Sample Size	Average (\$/kW)	Median (\$/kW)	25th Percentile (\$/kW)	75th Percentile (\$/kW)	N	Average (\$/kW)	Median (\$/kW)	25th Percentile (\$/kW)	75th Percentile (\$/kW)	
MA SMART (Qualified & Operational)	156	\$4,007	\$3,786	\$3,287	\$4,425	11	\$3,339	\$3,009	\$2,855	\$3,574	
CT RRES	9,703	\$3,865	\$3,854	\$3,352	\$4,336	4,592	\$3,765	\$3,752	\$3,240	\$4,229	
CT CGB ESS	123	\$3,592	\$3,723	\$3,098	\$4,019	93	\$3,294	\$3,170	\$2,995	\$3,371	
NY - NYSERDA Solar Electric Programs	12,985	\$3,967	\$3,769	\$3,108	\$4,607	5,316	\$4,132	\$3,944	\$3,273	\$4,800	
RI Small Scale REG	78	\$4,216	\$4,179	\$2,979	\$5,333	21	\$3,353	\$2,510	\$2,034	\$4,917	
RI REF	150	\$4,542	\$4,080	\$3,622	\$5,467	46	\$3,827	\$3,573	\$3,190	\$4,097	
Energy Sage - RI Accepted*	N/A	Withheld	Withheld	Withheld	Withheld	N/A	Withheld	Withheld	Withheld	Withheld	
EnergySage - MA Accepted Bids*	N/A	Withheld	Withheld	Withheld	Withheld	N/A	Withheld	Withheld	Withheld	Withheld	
EnergySage - NY Accepted*	N/A	Withheld	Withheld	Withheld	Withheld	N/A	Withheld	Withheld	Withheld	Withheld	
EnergySage - CT Accepted*	N/A	Withheld	Withheld	Withheld	Withheld	N/A	Withheld	Withheld	Withheld	Withheld	
EnergySage - ME Accepted*	N/A	Withheld	Withheld	Withheld	Withheld	N/A	Withheld	Withheld	Withheld	Withheld	
EnergySage Accepted Averages	N/A	\$3,062	\$3,008	\$2,917	\$3,164	N/A	\$2,911	\$2,855	\$2,788	\$2,985	
LBNL Tracking the Sun Advance Dataset RI	299	\$4,360	\$3,966	\$3,498	\$5,055	N/A	No Data	No Data	No Data	No Data	
LBNL TTS - All NE States	18,976	\$4,480	\$4,140	\$3,278	\$5,350	N/A	No Data	No Data	No Data	No Data	

*NOTE: SEA has withheld the state-specific summary statistics, since these values represent the output of non-public datasets that are normally provided for a fee that were generously provided to SEA by EnergySage specifically for this analysis.

Small Solar II Installed Cost Summary Statistics

Small Solar II, Installed Costs											
15-25 kW											
Time Period		2024 (Full Year)						2025 (Partial Year)			
Dataset	Sample Size	Average (\$/kW)	Median (\$/kW)	25th Percentile (\$/kW)	75th Percentile (\$/kW)	N	Average (\$/kW)	Median (\$/kW)	25th Percentile (\$/kW)	75th Percentile (\$/kW)	
MA SMART (Qualified & Operational)	61	\$3,371	\$3,349	\$2,680	\$3,741	2**	\$3,517	\$3,517	\$3,253	\$3,781	
CT RRES	1,087	\$3,538	\$3,544	\$2,989	\$4,100	696	\$3,399	\$3,368	\$2,899	\$3,909	
CT CGB ESS	34	\$3,664	\$3,664	\$3,065	\$3,907	18	\$3,245	\$3,199	\$2,954	\$3,571	
NY - NYSERDA Solar Electric Programs	1,354	\$3,378	\$3,185	\$2,773	\$3,719	618	\$3,385	\$3,115	\$2,800	\$3,809	
RI Small Scale REG	3***	\$4,336	\$4,965	\$3,839	\$5,147	N/A	No Data	No Data	No Data	No Data	
RI REF	21	\$3,624	\$3,370	\$3,017	\$3,923	13	\$3,406	\$3,350	\$3,188	\$3,729	
Energy Sage - RI Accepted*	N/A	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	N/A	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	
EnergySage - MA Accepted Bids*	N/A	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	N/A	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	
EnergySage - NY Accepted*	N/A	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	N/A	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	
EnergySage - CT Accepted*	N/A	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	N/A	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	
EnergySage - ME Accepted*	N/A	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	N/A	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	<i>Withheld</i>	
EnergySage Accepted Averages	N/A	\$2,802	\$2,814	\$2,708	\$2,891	N/A	\$2,795	\$2,787	\$2,742	\$2,831	
LBNL Tracking the Sun Advance Dataset RI	17	\$3,569	\$3,496	\$3,017	\$3,796	N/A	No Data	No Data	No Data	No Data	
LBNL TTS - All NE States	2,527	\$3,527	\$3,265	\$2,800	\$4,000	N/A	No Data	No Data	No Data	No Data	

*SEA has withheld the state-specific summary statistics, since these values represent the output of non-public datasets that are normally provided for a fee that were generously provided to SEA by EnergySage specifically for this analysis.

**Excluded from analysis due to small sample size

***Averaged with 2024 RI REF due to small sample size

Medium Solar Installed Cost Summary Statistics

Medium Solar, Installed Costs											
>25-250 kW											
Time Period		2024 (Full Year)						2025 (Partial Year)			
Dataset	Sample Size	Average (\$/kW)	Median (\$/kW)	25th Percentile (\$/kW)	75th Percentile (\$/kW)	N	Average (\$/kW)	Median (\$/kW)	25th Percentile (\$/kW)	75th Percentile (\$/kW)	
MA SMART (Qualified & Operational)	86	\$2,908	\$2,571	\$2,225	\$3,392	9	\$2,152	\$2,145	\$2,021	\$2,175	
CT Residential Renewable Energy Solutions	35	\$3,501	\$3,512	\$2,912	\$3,838	N/A	No Data	No Data	No Data	No Data	
NY - NYSEDA Solar Electric Programs	412	\$3,371	\$3,200	\$2,672	\$3,776	172	\$3,316	\$3,149	\$2,582	\$3,807	
CT NRES	195	\$2,822	\$2,706	\$2,375	\$3,062	N/A	No Data	No Data	No Data	No Data	
RI REG	23	\$2,648	\$2,554	\$2,460	\$3,001	4	\$2,845	\$2,687	\$2,559	\$3,290	
RI REF	19	\$3,238	\$3,150	\$2,650	\$3,700	12	\$3,144	\$3,040	\$2,405	\$3,418	
LBNL Tracking the Sun Advance Dataset RI	14	\$3,271	\$3,352	\$2,814	\$3,549	N/A	No Data	No Data	No Data	No Data	
LBNL TTS - All NE States	586	\$3,215	\$2,997	\$2,454	\$3,600	N/A	No Data	No Data	No Data	No Data	

Commercial Solar Installed Cost Summary Statistics

Commercial Solar, Installed Costs											
>250-1 MW											
Time Period		2024 (Full Year)						2025 (Partial Year)			
Dataset	Sample Size	Average (\$/kW)	Median (\$/kW)	25th Percentile (\$/kW)	75th Percentile (\$/kW)	N	Average (\$/kW)	Median (\$/kW)	25th Percentile (\$/kW)	75th Percentile (\$/kW)	
MA SMART (Qualified & Operational)	19	\$3,063	\$2,668	\$2,102	\$3,948	N/A	No Data	No Data	No Data	No Data	
NY - NYSERDA Solar Electric Programs	43	\$2,148	\$2,130	\$1,892	\$2,455	30	\$2,633	\$2,240	\$2,031	\$2,813	
CT NRES	7	\$2,546	\$2,259	\$2,066	\$2,750	N/A	No Data	No Data	No Data	No Data	
RI REG	7	\$3,644	\$3,648	\$3,248	\$4,012	N/A	No Data	No Data	No Data	No Data	
LBNL Tracking the Sun Advance Dataset RI	N/A	N/A	N/A	N/A	N/A	N/A	No Data	No Data	No Data	No Data	
LBNL TTS - All NE States	104	\$2,469	\$2,265	\$1,999	\$2,793	N/A	No Data	No Data	No Data	No Data	

Large Solar Installed Cost Summary Statistics

Large Solar, Installed Costs											
1-5+ MW											
Time Period		2024 (Full Year)						2025 (Partial Year)			
Dataset	Sample Size	Average (\$/kW)	Median (\$/kW)	25th Percentile (\$/kW)	75th Percentile (\$/kW)	N	Average (\$/kW)	Median (\$/kW)	25th Percentile (\$/kW)	75th Percentile (\$/kW)	
MA SMART (Qualified & Operational)	2	\$1,746	\$1,746	\$1,693	\$1,799	N/A	No Data	No Data	No Data	No Data	
NY - NYSEDA Solar Electric Programs	28	\$1,919	\$1,735	\$1,641	\$2,158	9	\$1,964	\$1,720	\$1,660	\$2,038	
CT NRES	27	\$2,335	\$2,255	\$2,034	\$2,683	N/A	No Data	No Data	No Data	No Data	
RI REG	1	\$2,275	\$2,275	N/A	N/A	N/A	No Data	No Data	No Data	No Data	
LBNL Tracking the Sun Advance Dataset RI	N/A	No Data	No Data	No Data	No Data	N/A	No Data	No Data	No Data	No Data	
LBNL TTS - All NE States	34	\$2,050	\$1,895	\$1,507	\$2,495	N/A	No Data	No Data	No Data	No Data	

Solar Cost Adjustments

- The following costs are added onto the “base” costs derived through state databases (all in \$/kW)

					Corrected from version presented
IC Cost Adder	IC Cost Adj.	Meter Relocation Adj.	Prevailing Wage Adj.	Electrician Labor Adj.	FEOC Compliance Adj.
Small Solar I	N/A	N/A	N/A	\$26**	\$150 (TPO Only)
Small Solar II	N/A	N/A	N/A	\$28**	\$150
Medium Solar	N/A	\$65*	N/A	\$25**	\$150
Commercial Solar I	N/A	\$33*	N/A	\$30	\$150
Commercial Solar II	N/A	N/A	N/A	\$30	\$150
Large Solar I	\$263	N/A	N/A***	\$30	\$100

*Adjusted downward from the full value of \$120 for Medium and \$65 for Commercial I, as 5 of 11 data sources contributing to CAPEX estimates are RI-specific, and are assumed to contain such costs already

**Adjusted downward from full value of \$30 to reflect share of databases reflecting RI-specific 2025 costs, which are assumed to include cost adj already

*** Removed given majority of projects in installed cost databases assumed to comply in 2024/2025



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