



**Sustainable
Energy
Advantage, LLC**

Rhode Island Renewable Energy Growth Program:

**Potential Approach for Mitigation of REG Project Owner
Federal Tax Credit Risk Associated with Long Interconnection
Construction Periods for 2023 Program Year**

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Sustainable Energy Advantage, LLC
Mondre Energy, Inc.

Reminder RE: Institutional Roles Associated with the Renewable Energy Growth Program

- Under the [Renewable Energy Growth Act](#), the Distributed Generation (DG) Board is explicitly charged with setting Ceiling Prices, based on factors listed in R.I.G.L. § 39-26.2-5(d)(1)-(5)
 - In that process, the **Office of Energy Resources** (OER) serves as dedicated staff to the Board, and serves as the Board's main liaison with the consulting team (SEA and Mondre Energy, Inc.). The consulting team's scope in recommending Ceiling Prices are limited to the factors discussed in § 39-26.2-5(d)(1)-(5) (the same factors the Board can utilize)
 - **Narragansett Electric Co (d/b/a National Grid)** is charged with developing and/or revising language in the REG tariffs, as well as development/revision of solicitation and enrollment rules and procurement of projects in line with the rules (and statute)
- The **Public Utilities Commission** (per R.I.G.L. § 39-1-3) has the sole authority to approve modifications to National Grid tariffs (which include the DG interconnection tariff, which governs interconnection to the distribution system)
- The **Federal Energy Regulatory Commission** (FERC) has the sole authority to approve changes to sections of the ISO-NE tariff surrounding Affected System Operator (ASO) studies, or changes to New England Power's Local Network Service (LNS) tariff (also part of the ISO-NE tariff)
- **Bottom Line:** OER and the DG Board **cannot recommend changes to interconnection policy or tariffs** through the annual Ceiling Price process, but **can recommend approaches related to Ceiling Price design** related to interconnection and interconnection cost issues



Stakeholder Feedback Regarding Impacts of Interconnection on Projects

- Since 2019, REG stakeholders have indicated that interconnection delays have (as in other jurisdictions) increased as a result of increased DG penetrations, which lead to longer timelines associated with both transmission-level and distribution-level interconnection studies and construction.
- This feedback from stakeholders includes, but is not limited to:
 - **Increased distribution study timelines and costs** (whether individually/for groups)
 - The increasing likelihood that any projects ≥ 1 MW will be **included in transmission-level Affected System Operator (ASO) studies** (along with associated costs and risks)
 - The increasing risk that projects (as in Massachusetts) **run the risk of being assessed extremely high (\$100/kW-\$2,000/kW) system modification costs** as a result of either ASO or distribution-level studies, and of being subject to **delays of up to 4-5 years**
 - The increasing **assessment of Direct Assignment Facilities (DAF) charges** by New England Power
 - The potential that projects facing unusually long interconnection delays may, as a result of not reaching commercial operation, **lose eligibility for the higher federal Investment Tax Credit (ITC)** at a “safe harbored” value of between 22% and 30% (and would be **required to accept 10%**, per current tax law)
- **Consulting Team Assessment:** A large number of currently-proposed projects (including those already constructed) subject to these delays, costs and uncertainties could potentially be canceled



Practical Challenges Related to Accounting for Potentially Increased Transmission Interconnection Costs in Ceiling Prices

1. Lack of (current) clarity from PUC following Docket 5077 regarding approach to Direct Assignment Facility (DAF) charges/other more complex questions of distribution or transmission interconnection cost allocation in the case of very costly transmission/distribution upgrades functionally caused by a group of projects (rather than just one “cost causer”)
 - **Impact/Implication:** Unclear what degree to which system modification costs may ultimately be shared, and thus unclear how to account for said cost sharing in the Ceiling Prices
2. Lack of finalized ASO results for any project in Rhode Island (as of this writing)
 - **Impact/Implication:** Inhibits accounting for actual transmission system modification costs and their prevalence amongst REG projects
3. Ongoing risk following initial ASO study of requirements for re-study following the attrition of other projects
 - **Impact/Implication:** Can render finalized study results unable to fully and finally account for actual cost of eventual system modification needs



Bigger-Picture Challenges/Concerns Related to Accounting for Potentially Increased Transmission Interconnection Costs in Ceiling Prices

4. Risk associated with (functionally) socializing costs of siting in locations that National Grid has said that development of >1 MW projects have a risk of requiring substantial costly upgrades
 - **Impact/Implication:** Increasing interconnection costs to account for transmission system modifications more broadly could incentivize development in inappropriate locations that require large and costly transmission upgrades
5. Strict “cost causation” methodology utilized by ISO-NE for transmission system modifications that focuses on the individual “cost causing” project
 - **Impact/Implication:** Difficult to know/understand how common it is that an individual project or projects will actually incur such system modification costs (or for developers to know how much they might possibly be)
6. The risk of project attrition resulting from project delays unrelated to system modification costs
 - **Impact/Implication:** Even if Ceiling Prices were increased to account for ASO impacts, the long delays (up to 4-7 years as observed in MA) might still not incentivize the project to reach commercial operation



Challenge/Concern Regarding Interaction of Current Rules with Emerging Interconnection Realities

- REG rules provide an indefinite extension for projects that are “mechanically complete” at the time of Output Certification, but...
 - “Safe harbor” deadlines in the federal tax credits provide for a firm requirement to be “placed in service” or otherwise lose eligibility for (in the case of the ITC) the expanded credit values of 26% and 22% by December 31, 2025
 - There is **no corresponding requirement that National Grid must interconnect projects by project “safe harbor” deadlines**, and developers cannot easily or clearly compel them or New England Power (the ASO) to act in a timely fashion
 - The ITC and ILoPTC, as upfront credits, provide a large proportion of the net present value of the project
- **Without an adjustment to their compensation rates**, a loss of tax credit eligibility at the safe-harbored rate would require projects to be re-priced, and there would be a credible risk that projects at risk of losing their ITC/ILoPTC eligibility by not being “placed in service” in time would be canceled.



Federal Investment Tax Credit (ITC) Eligibility and “Safe Harbor” Deadlines

- **Credit Amount:** provides a 26% Year 1 credit for eligible costs associated with Solar projects for both individual and “begin(ning)...construction” through December 31, 2022, and a 22% Year 1 credit for eligible costs associated with Solar projects “begin(ning)...construction” through **December 31, 2023**
- **Safe Harbor Eligibility:** Projects able to demonstrate compliance with the Five Percent Safe Harbor or Physical Work Test in [IRS Notice 2018-59](#) (currently) qualify for credits at “safe harbored” 26% and 22% values by being “**placed in service**” **no later than December 31, 2025**
- **Treatment Post-Safe Harbor Date:** The value for projects financed by business taxpayers unable to meet the December 31, 2025 deadline will receive (under current law) is a 10% credit,
 - NOTE: The value available to projects financed by individual taxpayers is 0%.



Federal Investment Tax Credit in Lieu of Production Tax Credit (ILoPTC) Eligibility and “Safe Harbor” Deadlines

- Currently allows any projects eligible for the Production Tax Credit (PTC) to qualify as “energy property” under the ITC at a 30% value if they “begin...construction” no later than December 31, 2021 (but limits Wind projects to 60% of that value)
- Functionally, this allows 2021 PY Anaerobic Digestion (AD) projects to receive a 30% credit and allows Wind projects to receive an 18% credit (30%*60%), and can “safe harbor” that credit value for up to four years as long as a project undertakes “continuous program of construction” (per [IRS Notice 2013-29](#))
- Projects unable to maintain a “continuous program of construction” following December 31, 2025 will receive no credit (0%)
- **NOTE:** Except for Small Scale Hydroelectric projects, the REG Ceiling Prices assume all eligible projects (except Small Scale Hydroelectric) can fully monetize available federal tax credits



Current REG Certificate of Eligibility Timelines

- Small- and Medium-Scale Solar Projects
 - No Output Certification required, but projects lose Certificate of Eligibility within 24 months if not operational
- All Other Projects
 - Output Certification must be provided within 24 months for Solar and Wind projects (excl. hydro and Anaerobic Digestion, which have 48 and 36 months, respectively), including that **both the project and “all interconnection facilities necessary for operation” must be completed**
 - Initial six-month extension available for no additional performance guarantee deposit, plus additional six-month extension for additional performance guarantee deposit equal to ½ of initial deposit, but no further extensions available
 - Importantly “interconnection facilities necessary for operation” **does not** include EDC or ASO-side upgrades, meaning that **projects that are constructed and otherwise able to certify mechanical completion projects have essentially unlimited allowance**



Initial Proposed Approach for 2023 Ceiling Price Development

- Allow projects ≥ 1 MW for which their statutory/IRS-determined “safe harbor” placed-in-service deadline has lapsed (resulting from ASO-related **circumstances beyond their control**) the option to have their compensation rate adjusted to account for tax credit eligibility loss
 - However, **value would be scaled based on the percentage difference between Ceiling Price and as-bid PBI value** (to preserve proportionate initial benefits of competition from Open Enrollment results)
- Eligibility would be subject to:
 - Successful Output Certification (as described herein and in the Solicitation and Enrollment Rules);
 - Certifying (to National Grid’s satisfaction) that:
 - The project has undertaken appropriate efforts to maintain “safe harbor” eligibility (as required by all relevant IRS Notices)
 - The project only awaits ASO/transmission system-related modifications with ASO-related construction or other delays beyond its control



Formula for Potential Solar Compensation Rate Adjustment (¢/kWh)

2023 PY Accepted PBI Rate +

$$\left(\left(\frac{2023 \text{ Ceiling Price}_{10\% ITC} -}{2023 \text{ Ceiling Price}_{Final \text{ Approved}}} \right) * \left(1 - \left(\frac{2023 \text{ Ceiling Price}_{Final \text{ Approved}} - 2023 \text{ PY Accepted PBI Rate}}{2023 \text{ PY Accepted PBI Rate}} \right) \right) \right)$$



Formula for Potential Non-Solar Compensation Rate (As Adjusted) (¢/kWh)

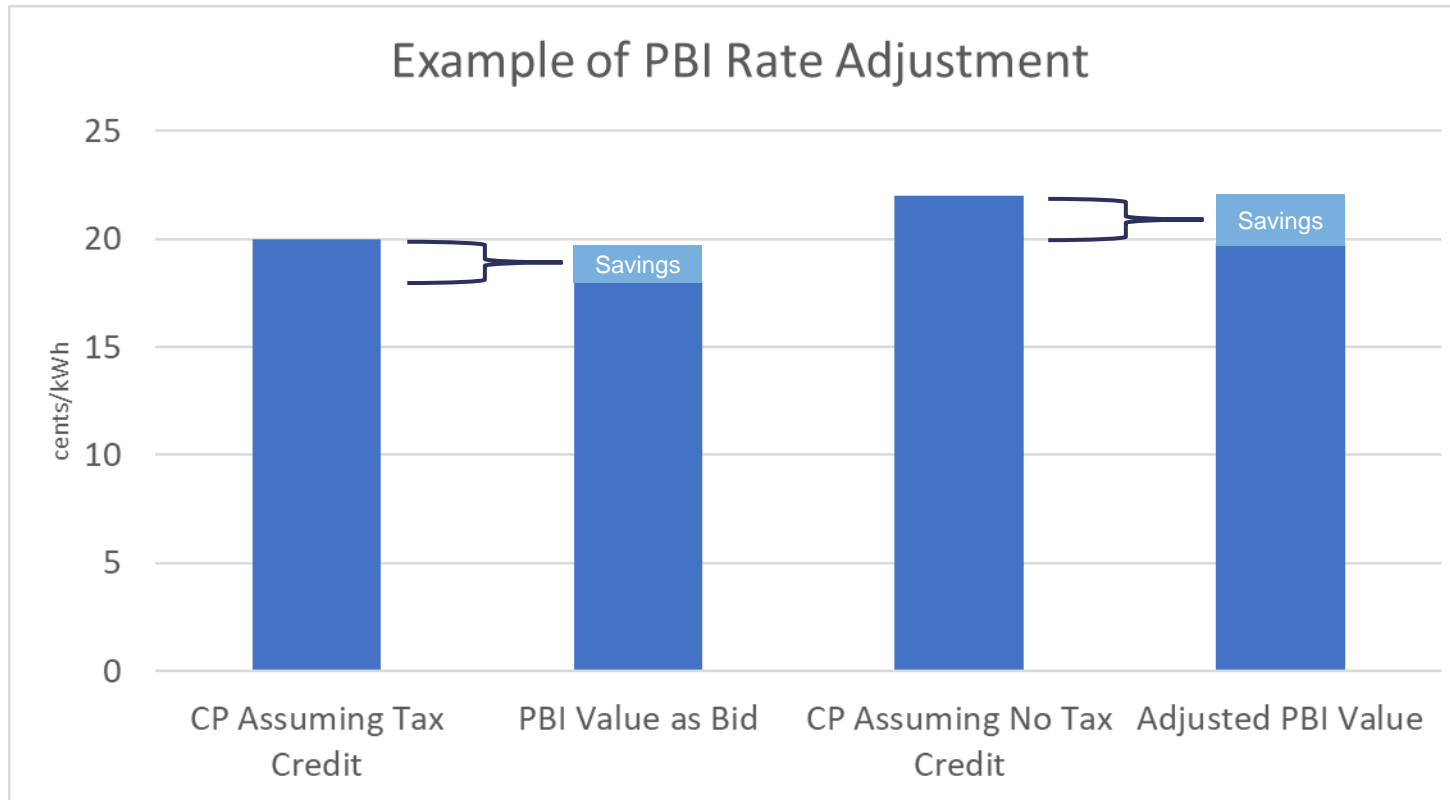
2022 PY Accepted PBI Rate +

$$\left(\frac{2022 \text{ Ceiling Price}_{No \text{ ILoPTC}} - 2022 \text{ Ceiling Price}_{Final \text{ Approved}}}{2022 \text{ Ceiling Price}_{Final \text{ Approved}}} \right) * \left(1 - \left(\frac{2022 \text{ Ceiling Price}_{Final \text{ Approved}} - 2022 \text{ PY Accepted PBI Rate}}{2022 \text{ PY Accepted PBI Rate}} \right) \right)$$



Example of Adjusted Compensation Rate

- An illustrative example of how the adjustment would be applied is shown below



Note: Values above are illustrative

Big picture takeaway:
Proposed adjustment would preserve cost-savings from bids below the CP value on a proportional basis while providing sufficient PBI to offset expiration of ITC eligibility



Questions/Requests for Stakeholders (1)

- 1) If a version of the Build Back Better Act (the budget reconciliation legislation currently under consideration in Congress) with a long-term federal tax credit extension for eligible REG projects is ultimately enacted, the proposal described herein may be rendered moot, given that projects may face system modification delays that are significantly shorter than their eligibility term for federal tax credits.
 - a) Do you agree with this characterization? Why or why not?
- 2) What types of documents do you believe your firm could provide to National Grid in order to certify:
 - a) The date by which the project availed itself of safe harbor eligibility; and
 - b) That the project maintained its “safe harbor” eligibility for federal tax credits until the time of eligibility expiration?



Questions/Requests for Stakeholders (2)

- 3) Has your firm ever dealt with a distribution interconnection study and/or construction delay long enough to place your tax credit safe harbor eligibility at risk? If so, please describe the circumstances (e.g., the project size, renewable energy class, along with safe harbor eligibility and interconnection timelines).
- 4) Are there other approaches unrelated to either federal tax credits or accounting for the cost of either transmission or distribution interconnection in the Ceiling Prices you believe can and should be implemented during the 2023 program year?



Request for Comments

- Please submit written comments on the four questions discussed on the previous pages **no later than the close of business October 8, 2021** to jkennerly@seadvantage.com. **Comments not submitted in a PDF attachment or not submitted on company letterhead will not be considered.**





Sustainable Energy Advantage, LLC
161 Worcester Road, Suite 503
Framingham, MA 01701
<http://www.seadvantage.com>

Jim Kennerly

☎ 508-665-5862

✉ jkennerly@seadvantage.com

Toby Armstrong

☎ 781-219-7299

✉ tarmstrong@seadvantage.com

Jason Gifford

☎ 508-665-5856

✉ jgifford@seadvantage.com