March 14, 2025

Via electronic filing: Thomas.Ferguson@mass.gov

RE: 83E Round 1 Comments

Mr. Thomas Ferguson
Energy Storage Programs Manager
Massachusetts Department of Energy Resources
100 Cambridge Street, 9th Floor
Boston, MA, 02114

Dear Mr. Ferguson

Nexamp appreciates the opportunity to respond to the 83E Round 1 Stakeholder Questions issued on February 21, 2025.

As the largest developer, owner, and operator of community solar assets in the U.S., Nexamp has been at the forefront of efforts to make clean energy affordable and accessible for all Americans. Many of our community solar projects include energy storage. We are also developing a significant standalone energy storage pipeline across various jurisdictions. By managing all aspects of a project's lifecycle in-house—from development, engineering, and construction through operations and customer management—Nexamp brings rapid renewable energy deployment and high-quality jobs to the communities we serve. In 2015, Nexamp launched the first open-to-all community solar program that eliminates credit checks, up-front fees, and long-term commitments to help customers save up to 20% on annual electricity costs.

Nexamp supports many of the comments submitted by ACT, SEIA, and Advanced Energy United. We offer additional detail and thoughts on the questions posed below:

1. Procurement Schedule:

    a. The factors the RFP Drafting Parties should consider when designing the schedule for the 83E Round 1 solicitation, including deadlines for bid submission and selection of projects for negotiation. Please include as much specificity in key schedule milestones and timing as well as justification for preferred dates.

    b. How the 83E schedule could be designed to best align with other energy storage procurements being conducted or planned in neighboring New England states.

Response: For the Round 1 solicitation, drafting parties should focus on issuing the RFP as soon as practicable and aligned with the requirements of the 83E legislation. To avoid any delay in the initial Round 1 procurement Nexamp recommends focusing on Massachusetts only and not attempting to align with other New England states. Nexamp also recommends that the drafting parties provide an overall timeline for the next three years of 83E procurements to provide needed clarity and runway to potential bidders. Beyond the Round 1 procurement, drafting parties should structure procurement milestones to be aligned with ISO-NE study milestones, which will allow projects to receive feedback from ISO-NE before bidding into the 83E procurement.

2. Environmental Attributes:

a. The environmental attributes in addition to Clean Peak Energy Certificates ("CPECs") that could be procured from your project.

Response: The first round of 83E procurements should focus on CPECs only aligned with direction in the 83E legislation. In the future, energy storage can provide value beyond CPECs in the form of energy services such as T&D deferrals and/or NWAs for capacity needs, reduced fossil-fuel peaker reliance, GHG emissions reduction (assuming renewable grid penetration/integration). Additionally, agreements can be structured to allow utility ESS dispatch rights to maximize carbon reductions.

3. Clean Peak Qualification:

a. Any barriers to energy storage facilities qualifying for the Clean Peak Standard ("CPS") or other attribute-generating program.

b. Whether you have been awarded a Clean Peak Program Statement of Qualification ("SoQ") for the project you intend to bid into this solicitation.

i. If not, whether you anticipate having a SoQ prior to bidding your project.

Response: The clean peak SoQ is received very late stage in project development and should not be a gating item to project participating in the 83E procurements.

4. Eligible Bids:

a. Project's technology type (e.g., lithium ion, flow batteries, thermal, etc.), and how it meets the defined Section 83E criteria.1

b. Appropriate minimum and/or maximum bid size, both in terms of MW and Attributes.

c. Minimum delivery requirements (e.g., a certain number of CPECs delivered that is a function of Qualified Energy Storage Systems ("QESS") capacity); the frequency with which that requirement must be met (e.g., over entire contract, yearly, quarterly); and inclusion of an operational schedule in the bid to support delivery feasibility.

d. Appropriate project maturity requirements.

Response: Nexamp supports the ACT, SEIA, Advanced Energy United response to this question and emphasizes the comment that DOER to allow transmission and distribution resources to participate in procurements.

5. Facilitating the Financing of Projects:

a. How the requirement from Section 83E—that this solicitation provide a "cost-effective mechanism for facilitating the financing of beneficial, reliable energy storage systems"—could be applied under this RFP.

i. Standards the RFP should set to confirm that projects are using this solicitation to facilitate financing.

ii. How those standards could be applied to existing projects to allow their participation in this RFP.

b. The application of tax credits, for example the Investment Tax Credit and associated guidance, towards the financing of new projects, including whether your project would still be fully financeable if these credits are not available.

Response: Nexamp, and surely most everyone in the industry, views the ITC as a crucial means to having a project successfully financed. As such, the lack of ITC would increase the financial hurdles that companies like Nexamp and the rest of the industry would face. DOER should have a plan in place for the case where the ITC, tariffs, or inflation change significantly.

c. The approximate percentage of your capital costs met by:

Response: Approximate percentages of capital costs for storage projects are met by:

i. CPECs revenue: 45%

ii. Energy/Energy Arbitrage: 40%

iii. Ancillary Services (Regulation, etc.): 0%

iv. Forward Capacity Market: 15%

d. The risks associated with each revenue over the life of the project.

Response: Clean Peak: Treated as a merchant revenue. There is uncertainty regarding the market price for CPECs and the program structure (timing of windows, applicability of multipliers, utility compliance). Contracting clean peak revenue directly with the utility will mitigate these risks. Given that clean peak makes up the largest share of revenue for the project, a potential contract for clean peak revenue would make the largest impact on derisking the overall project to investors.

Energy Arbitrage: Risk is due to price volatility and operational uncertainties. The operator must be able to accurately predict real time price spikes to maximize energy arbitrage revenue. There will be a question of whether the current clean peak seasonal windows typically align with the highest priced energy hours to maximize arbitrage value while generating CPECs.

Forward Capacity Market: Uncertainty with capacity accreditation for energy storage resources.

e. Please comment on the following examples of lifetime values pictured below from the Massachusetts Charging Forward report and how they may correspond to your project

f. How a project's participation in the ISO-NE market affects its bid. Please specifically comment on how any ISO-NE operational obligations will impact the creation of CPECs.

g. How a project and potential awarded contract will contribute to short- and long-term affordability for ratepayers in the Commonwealth.

Response: A potential contract award will provide stability and reduced risk associated with clean peak revenue. Shifting this significant piece of the project revenue stack from merchant to contracted will result in a lower cost of capital for energy storage projects and ultimately lead to more projects built in Massachusetts. More energy storage assets in the state providing grid services is a cost-effective way to bolster the electric infrastructure, and thus providing benefit to the ratepayers in the Commonwealth.

6. Commercial Operation Date:

a. Any appropriate commercial operation date for Section 83E Round 1.

Response: Nexamp supports the ACT, SEIA, Advanced Energy United response to this question.

7. Resource Types:

a. Whether this procurement should allow for both transmission and distribution connected resources.

b. The appropriate resource mix in Section 83E Round 1 procurement between distribution connected QESS and transmission connected QESS.

i. If both distribution- and transmission-connected QESS are to be procured in Section 83E Round 1, please comment on:

1. The need, if any, for a carveout for either distribution- or transmission-connected QESS; and

2. The need, if any, for separate bidding criteria between distribution- and transmission connected QESS to be considered by the RFP drafting parties.

Response: Both transmission and distribution resources should be allowed. They should be procured in separate tranches as transmission and distribution resources have different attributes, project maturity feasibility, and other characteristics. Distribution connected resources are subject to higher charging costs that will result in higher required revenue from a clean peak contract.

8. Contract Length and Form:

a. The contract length, for a period of up to 30 years, that should be considered under Section 83E Round 1 and associated reasoning, including how the contract term will facilitate the financing of the project, how the term aligns with useful life, augmentation schedules, etc.

Response: Minimum contract term of 15 years required; 20 years is preferred and aligns with the useful life and warranties of an energy storage system.

b. Given the degradation of battery performance over time, how contractual provisions for operational security should be constructed to assure optimal/maximum performance for the duration of the contract.

Response: A developer should bid both a $/CPEC price and an annual schedule CPECs generated. The cost to the utility is the product of the two, and the developer can make their own assumption about degradation, availability, performance, etc. that is specific to the technology being utilized and incorporate those into the annual CPEC generated which they would be held to contractually. For distribution-connected QESS, how the EDCs would develop manageable contract agreements, including but not limited to defined aggregations with one negotiated contract.

9. Safety:

a. Which safety standards should be required as a minimum baseline.

b. The safety systems, insurance requirements, relationships with emergency responders and host communities, emergency response plans, and any other necessary protections to keep adjacent communities safe.

Response: The MA fire code is NFPA 1, which requires that energy storage systems comply with NFPA 855 2023. NFPA 855 outlines requirements for safety systems, emergency response plans, and necessary protections for community safety. The insurance companies are very focused on aligning their requirements to NFPA 855 as well , with the standard deemed as a best practice standard/guide across the United States. Nexamp recommends reviewing the results of the New York inter agency task force for recent best practices in fire safety, relationships with emergency responders and communities, and other protections and safeguards.

10. Project Viability and Other Qualitative Factors:

a. Any risks associated with uncertainty related to tariffs on imports that may impact the supply chain for energy storage systems. Similarly, any risks associated with uncertainty related to the domestic supply chain.

i. What strategies can be implemented to minimize these risks and increase project viability.

Response: The industry is dealing with increased uncertainty on tariffs related to energy storage systems due to the increasingly hostile geopolitical landscape and tariff war. The global supply chain is reliant on China specifically for the large majority of the LFP battery cells used to make battery energy storage systems. As such, U.S federal policy with respect to trade with dictate alongside lithium carbonate commodity volatility will dictate the CAPEX associated with energy storage projects. U.S. federal policy under the Inflation Reduction Act outlined a path for domestic manufacturing, however, the United States BESS manufacturing landscape is playing “catch-up” to the dominant Chinese BESS industry and has had issues building manufacturing facilities expeditiously and cost effectively in comparison with other countries, with some companies abandoning their domestic manufacturing plans outright. Under the current geopolitical landscape, the U.S. will need to ramp up its domestic manufacturing capabilities to ensure more stability in the BESS supply chain. Longer term contracts (i.e. 20 years) can help mitigate some of these concerns and provide more financing certainty. While a degree of uncertainty will always exist, a quicker contracting period and path to construction would help mitigate these risks. Bonuses could also be considered in bid evaluation for domestic content.

b. The key elements that should be considered in evaluating project viability, including any minimum requirements for participating in the RFP. Please specifically comment on:

i. Site control

Response: Site control should be required in order to submit a bid.

ii. Interconnection studies

Response: Interconnection Service Agreement should be in hand for distribution connected projects, for transmission connected the project should have received its System Impact Study.

iii. Technical and logistical viability

Response: Technology requirements should be that the product is a commercially mature and proven technology.

iv. Ability to finance the project.

Response: Bidder should prove ability to finance a project as demonstrated through at least 5 years of financing projects

v. Bidder experience

Response: Bidder experience should be considered in bid evaluation through review of team resumes and other projects that they have successfully completed and operate.

c. Any other considerations that should be considered when drafting the RFP that would impact project viability.

Response: Bidder should provide a demonstrated permitting pathway to be evaluated in the bid.

d. How the above factors are considered in CPS Qualification.

Response: The requirements for CPS Qualification are more stringent and require projects to be much farther along in the development process (final SQA requires permission to operate from the utility) than what should be required in the 83E RFPs.

11. Grid Resiliency and Transmission Needs:

a. How Section 83E Round 1 may be designed to best encourage investments and commitments that maximize grid resiliency and fulfill transmission needs in specific geographic locations. Please be as specific as possible in describing resiliency and transmission needs.

Response: Nexamp supports the ACT, SEIA, Advanced Energy United comments in response to this question.

12. Interconnection Capability Requirement

a. Please comment on your current interconnection status or plan. What interconnection status, level and maturity should be required by the RFP?

Response: See response to Question 10.b.

13. Economic Development, Workforce, and Diversity, Equity & Inclusion (DEI):

a. How Section 83E Round 1 could be designed to best encourage investments and commitments that maximize economic benefits to the Commonwealth, particularly for transitioning fossil fuel communities, support workforce harmony, and advance DEI goals.

Response: Nexamp supports the ACT, SEIA, Advanced Energy United comments in response to this question.

14. Environmental Justice:

a. How Section 83E Round 1 could be designed to best encourage project design and investments that avoid negative impacts on, and direct positive benefits of the project to, Environmental Justice ("EJ") communities.

Response: Nexamp supports the ACT, SEIA, Advanced Energy United comments in response to this question.

15. Energy Storage Industry:

a. Any trends in or around the energy storage industry that may impact the Section 83E Round 1 procurement and how the RFP Drafting Team should account for them.

Response: Nexamp supports the ACT, SEIA, Advanced Energy United comments in response to this question.

16. Future RFPs:

a. Whether and how the RFP drafting team should consider inclusion of energy services in future 83E RFP Rounds, both in terms of how future RFPs would be similar or different from 83E Round 1's RFP, which is only for environmental attributes.

b. The use of indexing or other adjustment mechanism.

Response: See response to question 2. Additionally, Nexamp encourages DOER to consider contracting models such as tolling agreements or index storage credits that will facilitate realization of the many benefits of storage resources to the grid.

17. Other: a. Any additional comments that you believe should be known by or would be helpful to the RFP drafting team

Response: The 83E mid duration procurements will undoubtedly provide a much-needed boost to energy storage development in the Commonwealth. Since the Round 1 procurement is a CPEC only procurement, and CPECs will undoubtedly play a critical role in the next two phases of procurements, Nexamp believes it's important to flag some more conceptual items for consideration and improvement of the CPEC program. The first being clarity of methodology for determination of ISO-NE peaks and the protocol for revisions in the case of data discrepancies or ISO-NE adjustments.

The second is Nexamp encourages DOER to consider a more holistic approach to assigning CPEC value to monthly system peaks. For example, in a case where a month has two very similar peaks on separate days falling within the CPEC window, the way the program is currently designed, value is only assigned to one peak. The reality is that systems operating on the other day, which may have the slightly lower peak, is providing nearly identical value to the grid, and this is not assigned any value in the current program construct. We encourage DOER in their next Clean Peak review to consider methods to compensate storage in a way that is more aligned with the true value and constraint relief that the system is experiencing.

Finally, related to the second point above, the way CPS is currently set up, it's trying to compensate storage to make it profitable to build. CPEC values are based it on storage costs—CAPEX, warranty, O&M, IX, etc.—and revenues (CPS, capacity, IRA), and it's trying to make the CPS value just enough to make the total revenues higher than the total costs so that developers can build it. These costs can vary greatly, especially interconnection costs, and this is a tricky calculation to get right since the revenue stack can be hard to accurately predict and there is not a large margin for error. As a result, CPS value hasn't tipped the scales to incent storage development in MA.

Alternatively, the CPS value should be based on the value the assets are providing to the grid. Including reduced tariffs, reduced distribution grid build out, reduced work on lines, reduced reactive power and thermal constraints. Structuring a program based on value provided to the grid, rather than on overcoming costs, would result in more successful storage deployment.

Thank you for the opportunity to provide comment. Please do not hesitate to reach out if there are any questions.

Thank you,

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