BLUEWAVE

VIA ELECTRONIC FILING

March 14, 2025

Thomas Ferguson
Massachusetts Department of Energy Resources
100 Cambridge St., 9th Floor
Boston, MA 02114

re: Section 83E Stakeholder Questions Round 1 – BlueWave Comments

Dear Mr. Ferguson,

BlueWave appreciates the opportunity to provide these comments to the RFP Drafting Parties in response to the March 5, 2025 Request for Comments. We appreciate the RFP Drafting Parties soliciting input on how to design a procurement that results in successful procurement of energy storage resources.

BlueWave's vision is to protect our planet by transforming access to renewable energy. BlueWave is actively developing energy storage projects, including both transmission- and distribution-scale projects in Massachusetts, to ensure our grid is reliable and efficient in a clean energy future. BlueWave is proud to be a certified B Corp, scoring in the top 5% of companies assessed towards certification in Governance, and named Best for the World for Governance.

Below, BlueWave provides a response to the RFP Drafting Parties' questions.

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.

Answer: Please refer to the joint comments submitted on March 5th.

    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.

Answer: While we appreciate the potential benefits of regional collaboration, given the tight timeline to issue and conduct the 83E procurement, as well as the requirement to solicit for CPECs (which are Massachusetts-specific), it does not make sense to align with other states for this procurement.

2. **Environmental Attributes:**

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

Answer: Energy storage projects do not generate environmental attributes beyond CPECs.

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.

Answer: We do not anticipate having SoQs for the projects we plan to bid into this solicitation prior to bidding as this solicitation is necessary to facilitate the financing of our projects.

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]

Answer: For the initial procurement, BlueWave is planning to utilize lithium-ion batteries, which are well-suited to provide 4+ hours of energy at its full rated capacity.

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

Answer: BlueWave does not suggest a strict minimum or maximum bid size. However, we do encourage the RFP Drafting Parties to ensure that the solicitation results in a diversity of resources being selected. Spreading the risk of project attrition across a range of resources reduces the impact that any one project can have on progress towards our goals.

    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.

Answer: BlueWave encourages the RFP Drafting Parties to allow bidders to have discretion on the number of CPECs a project bids into the procurement. This will allow bidders to right size the number of CPECs being bid based on the resource's operational characteristics. We agree that an operational schedule to ensure the project can actually deliver the number of CPECs bid is prudent.

    d. Appropriate project maturity requirements.

Answer: BlueWave encourages the RFP Drafting Parties to differentiate maturity requirements by project interconnection level. In conjunction with our later recommendation to conduct separate procurements for distribution- and transmission-connected resources, this recognizes the inherent differences between these resources in terms of cost, risk, and timing.

Projects interconnected at the transmission level should be required to have an active interconnection queue position and unconditional site control to bid. With the first ISO New England cluster study process in its early stages, the solicitation should ensure that projects with an interconnection queue position and intending to participate in this transitional cluster are eligible to bid in order to encourage a robust and competitive solicitation. Transitional cluster projects will likely be required to make substantial interconnection payments ($5 million+) prior to bidding and this level of capital expenditure should indicate that these are serious projects.

Projects interconnected at the distribution level should be required to have higher maturity requirements in

the form of a signed Interconnection Services Agreement ("ISA") and unconditional site control to bid. This recognizes the smaller capital expenditures required to advance distributed projects and the ability for these projects to advance more quickly through the interconnection process. Requiring permits would be too high a bar for distributed projects as the permitting process can be costly and will be difficult for many projects to engage in without first having received an award that provides greater certainty on the project's revenue.

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.

Answer: Federal tax credits are important for the financing of energy storage projects. This solicitation can increase its odds of success by accounting for the current uncertainty in federal policy. Whether a project would still be financeable if the credits are not available will depend on the assumptions that underpinned the bid and whether the solicitation provides any bid price adjustment should certain federal policies change.

   c. The approximate percentage of your capital costs met by:
      i. CPECs revenue
      ii. Energy/Energy Arbitrage
      iii. Ancillary Services (Regulation, etc.)
      iv. Forward Capacity Market

Answer: Please see the response to 5.e. below.

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

Answer: The risk associated with CPEC revenue stems from the immaturity of the market. Because the CPS has yet to stimulate much development, it is difficult for developers to understand whether revenues will be steady and sufficient enough to justify developing in response to this market signal. Thus, this procurement for CPECs will allow developers to have a much firmer sense of the revenue that will come from the CPS, which will stimulate development and reduce the amount of Alternative Compliance Payments from ratepayers. A further risk in the CPS is the operational profile required of standalone storage projects to generate CPECs; the defined charging and discharging hours may not align with ISO New England energy or capacity market signals.

The risk associated with energy revenue stems from this being a completely merchant (i.e., uncontracted) revenue stream, as well as from projections for the value of energy diverging widely based on the assumptions on future electric grid conditions.

The risk associated with ancillary service revenue is similar to that of energy revenue.

The risk associated with capacity revenue is multifold. First, the implementation of Capacity Accreditation ("Effective Load Carrying Capability" or "ELCC") will reduce energy storage's qualified capacity amount; the unpredictability of future ELCC values makes it challenging for storage developers to confidently assess future market revenues. Second, the expected ISO-NE Capacity Market changes, both from a forward to a prompt capacity market and from an annual to a seasonal capacity market, make it challenging for projects to predict future capacity revenues. The capacity market in a few short years will look significantly different than the capacity markets of old that provided resources with long-term price locks to encourage development and will instead be variable on a sub-annual basis. Lastly, with ISO-NE's capacity performance requirements, risk of non-performance penalties is a risk for all capacity 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

Figure 2-12. FTM Tx Connected Benefits and Cost Stack – Developer Perspective

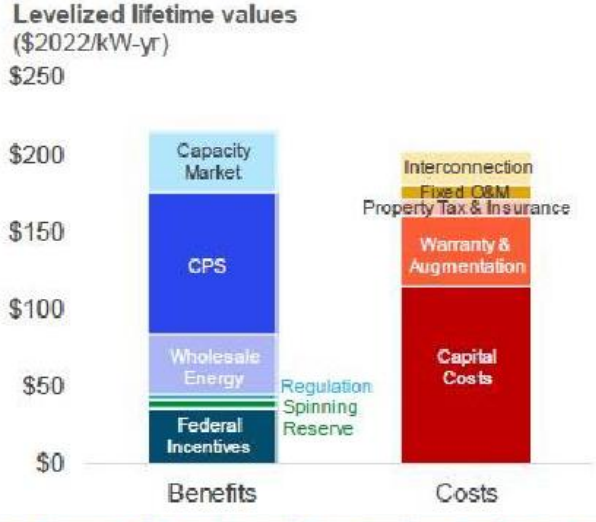
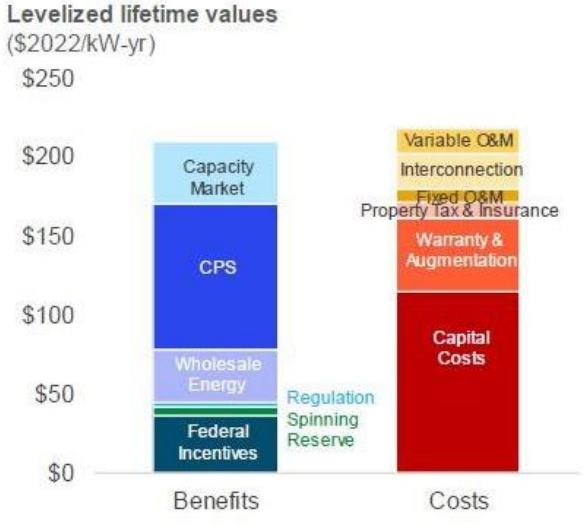


Figure 2-16. FTM Distribution Connected Benefits and Cost Stack – Developer Perspective



Answer: This is roughly in line with BlueWave's assumptions on the relative weighting of revenues. CPEC revenue remains critical to the financing of projects, and long-term contracts to solidify that revenue will generate development.

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.

Answer: Generally, participation in ISO-NE markets will not impact the creation of CPECs. One caveat is that energy price peaks and troughs might fall outside of the CPS discharge and charge windows. Another caveat is if an ISO-NE capacity event falls outside of the designated CPEC discharging hours and prevents discharging during the CPEC discharging window. We encourage the continued evolution of the CPS to align with changing ISO-NE peak conditions.

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

Answer: Energy storage projects awarded through this solicitation will provide short- and long-term affordability to ratepayers. First, by incenting the deployment of new energy storage resources, the solicitation will reduce the reliance on Alternative Compliance Payments to meet the CPS minimum obligation. Second, deployed projects will be providing energy and capacity value and other grid services beyond the CPEC value that ratepayers are purchasing, which will result in reduced wholesale market costs for ratepayers. Lastly, specifically for distribution-connected projects, there is additional uncompensated distribution value that comes from reducing utility demand during peak times of the day and year.

6. <u>Commercial Operation Date</u>:

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

Answer: BlueWave recommends that the commercial operation date be no later than the end of 2030, barring extended interconnection delays outside of a bidder's control.

7. <u>Resource Types</u>:

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

Answer: Yes. These resources each provide unique benefits to ratepayers and to the Commonwealth's climate goals that warrants the procurement of resources at both scales.

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

Answer: BlueWave recommends that the solicitation be run as two concurrent procurements, targeting a ratio of 80% transmission-connected and 20% distribution-connected energy storage.[1] As a developer of both distribution- and transmission-connected storage we recognize the inherent

[1] For comparison, New York is currently implementing a series of programs to meet its 6 gigawatt storage target. Of the front-of-the-meter resources being procured, 1,500 MW is from distribution-scale and 3,000 MW is from transmission-scale. This represents a 33% share for distribution-scale.

differences in terms of cost, benefit, timeline, and more that warrants separate procurements for each scale. The RFP Drafting Parties should not rely on published distribution queue data to size the procurements. The distribution queues suffer from data quality issues that likely underestimate the capacity of distribution-connected storage that is in queue (for instance, some standalone storage projects have been mislabeled as solar only or solar + storage in the queue spreadsheet).

To ensure that the carveouts are right-sized and that the Commonwealth makes continued progress towards its energy storage deployment goals, should either procurement result in insufficient bids to meet the target, the RFP Drafting Parties could either re-allocate the unallocated amount in a particular carveout or roll it forward to next year's procurement.

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

Answer: As discussed previously, there should be different project maturity requirements for distribution- and transmission-connected storage.

8. <u>Contract Length and Form</u>:

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.

Answer: Please refer to the joint comments submitted on March 5th.

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.

Answer: The solicitation could allow projects to bid a degradation schedule alongside their CPEC bid price, which would allow the RFP Drafting Parties to examine the relative benefits of projects based on their expected degradation.

c. For distribution-connected QESS, how the EDCs would develop manageable contract agreements, including but not limited to defined aggregations with one negotiated contract.

9. <u>Safety</u>:

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

Answer: Safety is of paramount importance as the state ramps up its energy storage deployment and we encourage the RFP Drafting Parties to align with the latest national safety certifications. That said, safety standards should generally be set by the permitting authorities, rather than through this procurement. We expect that the siting and permitting regulation development process will address safety.

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.

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.

Answer: Addressing federal uncertainty in the solicitation will be necessary for success. Bidder assumptions on ITC and tariff outcomes may drive major differences in bid pricing. We encourage the RFP Drafting Parties to design the solicitation such that bids can be compared apples-to-apples in terms of ITC and tariff assumptions, mitigating the potential for overly optimistic bids.

BlueWave also recommends that the contracts include a Change in Law provision that would allow projects to terminate the contract if there are significant changes to the ITC or tariffs. When evaluating bids, it will be important for the RFP Drafting Parties to assess project-level ITC assumptions.

    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
        ii. Interconnection studies
        iii. Technical and logistical viability
        iv. Ability to finance the project
        v. Bidder experience

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

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

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.

Answer: BlueWave encourages the RFP Drafting Parties to procure resources from across the state. Massachusetts does not face the same congestion issues that somewhere like New York City does, and there is transmission value from deployment in all regions of the state. To the extent the RFP Drafting Parties identify particular areas of the transmission grid that would benefit from storage deployment, those could be scored accordingly.

12. **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.

13. **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.

Additional Question

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

Answer: Please see the previous answer on maturity requirements.

Conclusion

Thank you for the opportunity to provide these comments. BlueWave looks forward to continuing our engagement in this process. Please contact me if you have any questions.

Sincerely,

/s/ Sean Burke _
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