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**By email to Thomas.Ferguson@mass.gov**

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**Subject**: **83E Round 1 Comments**

Mr. Ferguson:

On February 21, 2025, the Massachusetts Department of Energy Resources ("DOER"), the Massachusetts Electric Distribution Companies ("EDCs"), and the Attorney General's Office ("AGO") (collectively "RFP Drafting Parties") issued a request for public comments on a first-round solicitation for mid-duration energy storage ("MDES") projects under Section 83E ("83E Round 1"). RENEW Northeast, Inc. ("RENEW")[1] appreciates the opportunity to submit these comments on 83E Round 1. RENEW members own existing pumped-hydro projects and are developing new energy storage systems in the Commonwealth. According to ISO New England ("ISO-NE"), almost 17 gigawatts of energy storage are in its interconnection queue.[2]

83E Round 1 will help projects interconnecting to the grid overcome significant barriers to obtaining investment. The current Clean Peak Standard ("CPS") makes financing projects difficult due to the lack of price certainty for long-term Clean Peak Energy Certificates ("CPECs"). Giving developers the ability to compete for contracts can eliminate this shortcoming. Without long-term contractual commitments with creditworthy counterparties, these projects cannot be financed and will not be built.[3] This is an especially important point as

[1] The comments expressed herein represent the views of RENEW and not necessarily those of any particular member of RENEW. RENEW Northeast (www.renewne.org) unites environmental advocates with developers and operators of the region's largest clean energy projects to coordinate their ideas and resources with the goal of increasing environmentally sustainable power generation in New England from the region's abundant renewable energy resources.
[2] ISO-NE, NEPOOL Participants [COO] Committee Report 60-66 (March 2025), https://www.iso-ne.com/static-assets/documents/100021/march-2025-coo-report.pdf
[3] *See* DOER, *Charging Forward: Energy Storage in a Net Zero Commonwealth A Report of the Department of Energy Resources in Consultation with the Massachusetts Clean Energy Center* 21-22 (Submitted to the Joint Committee on Telecommunications, Utilities & Energy submitted in fulfilment of the requirements of Section 80 of Chapter 179 of the Acts of 2022) [hereinafter Report].

storage projects are potentially facing decreased wholesale market revenue potential due to the expected change from average to marginal accreditation in the ISO-NE capacity market.[4]

Given the long-lead time to procure, permit, and build projects, the procurement for MDES to occur by July 31, 2025, must ensure energy storage projects seeking to achieve commercial operation in 2027 or 2028 execute long-term contracts within the next year if they are to secure financing and adhere to their development schedules.

## I. Responses

### 1. Procurement Schedule

Massachusetts should not delay 83E Round 1 to run it jointly or in parallel with another New England state or states. If the RFP Drafting Parties will be procuring attributes issued under the CPS, the uniqueness of CPECs to Massachusetts would make it challenging or impossible to have a joint or parallel procurement. In fulfillment of the Section 83E requirements, the RFP should be issued by July 31, 2025, for the entire 1,500 megawatts of energy storage. By February 15, 2026, the electric distribution utilities ("EDCs") should submit contracts from 83E Round 1 to the Department of Public Utilities ("DPU") for approval.

### 2. Environmental Attributes

According to Section 83E, the procurement of 1,500 megawatts of mid-duration storage by July 31, 2025, must be for environmental attributes only. RENEW supports procurement of CPECs as the sole attribute to be procured in 83E Round 1.

### 3. Clean Peak Qualification

225 CMR 21.05 requires DOER issue a Statement of Qualification that "The Clean Peak Resource shall be interconnected with or offset load otherwise served by the Distribution System, or shall be interconnected with the Transmission System in the Commonwealth of Massachusetts. Clean Peak Resources must demonstrate that they generate, dispatch, or discharge electricity to the electric distribution system in Massachusetts." Most new projects bidding into a DOER solicitation will not yet have a Clean Peak Statement of Qualification ("SoQ"), as projects need either Permission to Operate ("PTO") and/or Authorization to Interconnect ("ATI") per the SoQ Required Documents list. Projects typically receive PTO or ATI 4-6 months prior to their commercial operation date ("COD"), meaning they will not be able to receive a SoQ prior to bidding.

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[4] *See e.g.*, ISO-NE, *Capacity Auction Reforms Continued Discussion of Project Scope* 15, 42 (August 6, 2024), https://www.iso-ne.com/static-assets/documents/100014/a02_mc_2024_08_06_scope_considerations_car_iso_presentation.pdf (This would compound the challenges of already low Forward Capacity Market ("FCM") auction clearing prices as well as the recent elimination of the ISO-NE FCM 7-year price lock capacity auctions).

**4. Eligible Bids**

All energy storage systems, as defined in section 1 of chapter 164 of the General Laws, meeting the mid-duration energy storage definition and having technology that is technically viable should be eligible to bid.

DOER should offer flexibility on minimum delivery requirements by allowing for sale of 100 percent of forecasted CPECs on an annual basis based on a multi-year average to allow for factors outside of the supplier's control.

**5. Facilitating the Financing of Projects**

The RFP should address potential regulatory risks such as elimination of, or changes to, the federal Investment Tax Credit ("ITC") for storage and challenges with spikes in inflation as well as the threat of federal tariffs on imports. DOER can borrow from language in offshore wind contracts for ideas on how to implement these protections. Contracts should contain a clause that eliminates or reduces the termination penalty if there are substantial changes to federal tax incentives, domestic content requirements, or import tariffs.

**6. Commercial Operation Date**

COD requirements in a contract for energy storage must recognize the length of time for a project to pass the interconnection queue and local and state permitting. While new battery storage facilities do not take long to construct, both the estimated cost and time to construct interconnection facilities and network upgrades identified in the ISO-NE interconnection study process appear to have grown substantially in recent years. Recent timelines for standard upgrades such as reconductoring a short portion of a transmission line have reached five years with little to no explanation from ISO-NE for the extended timeframe.

The qualitative criteria should contain a preference for later stage projects.

**7. Resource Types**

The RFP should *not* have a carve-out or a separate RFP for smaller sized projects. If DOER does decide to create separate procurement goals for transmission and distribution connected resources, it should ensure that there is robust competition for each category. To facilitate this, DOER should analyze existing queue data for distribution and transmission connected resources, and size carve-outs relative to the number of mature projects with interconnection agreements.

**8. Contract Length and Form**

Long-term contracts provide greater revenue certainty, reducing investor exposure to commodity market price risk. That results in lower financing costs, enabling projects to benefit consumers by bidding lower on a per unit basis. Contracts should have terms of at least 15 years.

RENEW recommends 20-year terms as it is consistent with the expected useful life of energy storage systems.

DOER should provide a draft of the RFP for public comment with responses due at least 60 days prior to the RFP issue date to allow time for DOER to consider stakeholder feedback.

**9. Safety**

As energy storage developers will need to comply with state and local safety laws, the RFP should not set safety requirements. Energy storage facilities are built with expert-certified batteries and specially engineered enclosures that are designed to meet the nation's most rigorous and extensive safety standards. The U.S. battery energy storage industry uses a suite of important certifications and standards that guide the safe design, installation, and operation of battery energy storage facilities. Standards are regularly updated based on advice, applied lessons, and research from leading safety experts, fire professionals, fire protection engineers, and scientists. They help ensure that battery energy storage facilities can perform their roles as designed, which ensures the electric grid is stable, affordable, and reliable for Massachusetts communities and businesses.

The energy storage industry actively promotes the adoption and enforcement of the latest national fire safety standards. The industry has supported the integration or adoption of National Fire Protection Association ("NFPA") Standard 855 (Standard for the Installation of Stationary Energy Storage Systems) in nearly a dozen states. It supports efforts for up-to-date uniform best practices for evaluating and mitigating fire hazards.

**10. Project Viability and Other Qualitative Factors**

The evaluation weighting should be allocated 65 percent to quantitative and 35 percent to qualitative criteria. NYSERDA, for example, has a 60/40 price/non-price split for scoring bids in its forthcoming "bulk" battery storage procurement.[5] The generous amount of system benefits from energy storage systems justifies allocating increased weight to qualitative benefits compared to renewable energy generation procurements.

RENEW supports assigning qualitative points for project maturity based on a project's demonstration of advanced interconnection and permitting status. A project with a signed interconnection agreement should receive more points than a project still undergoing studies. This approach will still allow Cluster Study projects to bid.

The bidder should have an interconnection request filed with ISO-NE or distribution system operator so it can understand the maximum expected interconnection costs for the bidding project. Additional bonus points should be awarded to projects with a completed system

[5] New York Public Service Commission, Case 18-E-0130, NYSERDA Bulk Energy Storage Implementation Plan Proposal, Sec. 2.5 Bid Evaluation Weighting and Criteria (October 18, 2024).

impact study ("SIS") or signed Large Generator Interconnection Agreement ("LGIA") and evidence of filing or approval of key permits.

The bidder should be required to demonstrate it has control over the project site, property rights for a substantial portion of the property necessary for the interconnection with a plan for acquiring the rest of the required property rights. It must have an unconditional right to acquire control granted by the property owner.

The bidder should be required to demonstrate financial, technical, managerial, and construction experience and fitness with successful development, construction, and operation of a similar type and scale of project.

Procurements should be designed to prevent unsophisticated bidders from offering unrealistic bid prices and winning contracts for projects that can never be built at those prices. The RFP Drafting Parties should require a bid deposit in the form of cash or a letter of credit that is held until a project reaches its COD or is refunded if a bid is not selected or an awarded project is terminated. Bidders should be given two options: (1) site control, the interconnection application filed, and a deposit of $7,000 per megawatt capped at $700,000 per project; or (2) site control, system impact study completed, and a deposit of $3,500 per megawatt capped at $350,000 per project. Bidders should be required to demonstrate having achieved defined thresholds on site control, status of interconnection agreements, and environmental field studies.

**11. Grid Resiliency and Transmission Needs**

Bids should receive points under the qualitative scoring criteria reflecting their benefits for local and in-state grid reliability and resilience as directed by Section 83E(c).

**12. Economic Development, Workforce, and Diversity, Equity & Inclusion (DEI)**

For new and existing energy storage units alike, bids should receive points under the qualitative scoring criteria reflecting their benefits for economic and workforce development in Massachusetts.

**13. Environmental Justice**

The RFP should recognize that a major benefit from energy storage is its ability to displace dirty and expensive fossil fueled peaking power plants ("peakers").[6] In general, RENEW supports qualitative evaluation criteria that value community benefits, which can include environmental justice benefits as well as broader community benefits.

The *Charging Forward* study supports issuance of energy storage procurements beginning this year and continuing at annual intervals during this decade with its finding that "4-

[6] *See e.g.*, Strategen Consulting, LLC, *Long Island Fossil Peaker Replacement Study* 39 (2020), https://www.strategen.com/strategen-blog/long-island-fossil-peaker-replacement-study

hour FTM systems show positive social benefits in nearly all installation years."[7] The Study observes how energy storage can likely lower "the state's reliance on peakers, which operate infrequently but provide critical support during hours with the highest customer demand, often at the cost of high amounts of greenhouse gas emissions and high prices. In addition to the greenhouse gas benefits, the ability of storage to displace peakers will create equally and sometimes more valuable local air quality benefits, associated with reductions in particulate matter and its precursors."[8] Studies have shown that in the near-term, the benefits of reducing these kinds of pollutants that are associated with carbon emissions, but not captured in the social cost of carbon, are significant because of the benefits to human health resulting from reducing these emissions.[9] The real health benefits of these projects to Massachusetts residents should be considered in evaluating net benefits. Massachusetts should consider avoided pollutants and associated health benefits for all project configurations.

Natural gas pipeline constraints, the requirements of gas local distribution companies ("LDCs") holding firm pipeline capacity, and the physical requirements to maintain reliable pipeline operation critically limit gas supplies available to gas-only resources at peak times. We have seen that natural gas and oil generation are vulnerable to several winter cold and storms.[10] By accelerating the switch from fossil fuels to energy storage at peak times, Massachusetts can increase reliability by lessening its dependence on these volatile commodities.

**14. Energy Storage Industry**

DOER should also recognize the major value proposition for energy storage to the grid for peak shaving and energy shifting within a day, which can be best served by high-efficiency energy storage technologies such as lithium-ion.[11] RENEW urges DOER to finalize its separate procurement authority under the CPS, which it started in 2021, for a future procurement of 2-hour duration battery energy storage.[12]

With increasing renewable energy deployment, the Report also found an increasing need over time for energy storage technologies with longer durations such as long duration energy storage "(LDES") and multi-day storage ("MDS") technologies.[13] These resources consist of existing pumped hydro and new technologies that are quickly commercializing. Today, they can

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[7] Energy and Environmental Economics, Inc., *Charging Forward: Energy Storage in a Net Zero Commonwealth*, 8 [hereinafter "Study"].
[8] *Id.* at 82.
[9] *See e.g.*, Collingsworth, Jessica, Steve Clemmer, Paula Garcia, James Gignac, J.C. Kibbey, Sandra Sattler, and Youngsun Baek. 2018. Soot to Solar: Illinois' Clean Energy Transition. Cambridge, MA: Union of Concerned Scientists. http://www.ucsusa.org/resources/soot-solar-0
[10] North American Electric Reliability Corp., *December 2022 Winter Storm Elliott Grid Operations: Key Findings and Recommendations* (September 21, 2023), https://www.ferc.gov/news-events/news/presentation-ferc-nerc-regional-entity-joint-inquiry-winter-storm-elliott. (highlighting Winter Storm Elliott in December 2022 as the fifth cold-weather outage event in 11 years).
[11] Report, *supra* note 3, at 18.
[12] 225 CMR 21.05(8); DOER, *EDC Procurement Final Straw Proposal* (July 19, 2021) [hereinafter Straw Proposal].
[13] Report, *supra* note 3, at 18.

provide significant benefits for renewable energy integration and resource adequacy. We encourage DOER to begin working on the procurement of these resources by engaging with operators, developers, and manufacturers to understand what types of support for these resources are needed to achieve Massachusetts' policy goals.

**15. Future RFPs**

In this request for comments and in response to DOER's review of the Massachusetts clean energy procurement models, individual RENEW members may comment on geographic eligibility requirements for energy storage resources and the form of contracting offered to them for procurements after 83E Round 1. RENEW members may also comment on the need to provide opportunities for 2-hour battery energy storage under the procurement authority granted to DOER under the CPS.[14] The form of contracting for future RFPs needs to consider specific energy storage technologies and the capabilities the state is seeking to achieve. The variety of offtake revenue contracts for energy storage projects has expanded rapidly. For large or transmission-level resources, arrangements have taken the form of energy storage tolling agreements, capacity sales agreements, hybrid agreements, and indexed agreements. An energy services contract could be tailored to procure storage performance characteristics, including longer durations, not captured by CPEC procurements. Because energy storage facilities with different durations provide unique benefits to the grid and ratepayers, DOER should consider, to the fullest extent possible, flexibility in the preferred method of contract to maximize grid-enhancing and economic development benefits for the state.

DOER should consider whether ISO-NE's cluster study timelines and the new state permitting process timeline should be a factor in setting the milestones with future Section 83E procurements.

## II. Conclusion

Thank you for considering RENEW recommendations on 83E Round 1. This important procurement will enable the financing of projects and ensure they are providing their cost-effective energy benefits in time to meet the Commonwealth's 2030 clean energy and legal greenhouse gas reduction requirements.

Sincerely,

/s/ Francis Pullaro

Francis Pullaro
President
RENEW Northeast

/s/ Bennett Fuson

Bennett Fuson
Director of Energy Storage
American Clean Power Association

[14] Straw Proposal, *supra* note 12.