March 14, 2025

By email to Thomas.Ferguson@mass.gov

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

Subject: *83E Round 1 Comments by Form Energy*

Dear Dr. Ferguson

Form Energy appreciates the opportunity to provide responses to the Massachusetts Department of Energy Resources (DOER), the Massachusetts Electric Distribution Companies (EDCs), and the Attorney General's Office (AGO)(collectively "RFP Drafting Parties") on its solicitation for public comment on the upcoming 83E energy storage procurements. As a manufacturer of multi-day (100-hour duration) iron-air batteries, Form Energy's comments will focus mainly on future section 83E procurements of these resources.

As part of the 2023 *Charging Forward* report[1], DOER laid out strong evidence for the value of storage technologies with longer durations and pointed to the following key conclusions:

- Energy storage supports regional reliability, especially as deployment of renewable resources increases.
- LDES can provide nearly a 1:1 replacement of fossil peakers by 2030, offering both critical grid support and emission reductions in communities where these facilities are located.
- New state procurement or incentive programs are needed to close the gap between the costs of emerging LDES resources and the revenues they can receive from existing state programs and wholesale market services.
- From a reliability standpoint, it is a no-regrets investment to cultivate multi-GW-scale markets of LDES resources by 2030 to advance progress to achieving a reliable zero carbon grid in the long-term.

[1] See *Charging Forward: Energy Storage in a Net Zero Commonwealth* (Submitted to the Joint Committee on Telecommunications, Utilities & Energy in fulfilment of the requirements of Section 80 of Chapter 179 of the Acts of 2022).)[hereinafter Report].

DOER also found that these technologies must be supported now in order to build their commercial availability in a relevant timeframe. For example:

- "The Study demonstrated that the ability of energy storage to provide critical electric grid needs grows over time, meaning that these technologies must be supported now such that when the need arises, there will be commercially deployed, safe, and reliable systems ready to fulfill that need." Report at 12.

- "...many of these technologies require significant de-risking before commercialization. DOER proposes funding to support these technologies to reach commercial readiness, such that they will be on the grid and ready to provide reliable, safe operation when needed." Report at 16.

- "Given the large anticipated off-shore wind buildout, and the diversity benefits of long-duration storage on a highly renewable grid, the investment in long-duration energy storage at reasonable cost is a no-regrets action for the Commonwealth." Report at 84.

At the end of last year, the Legislature adopted and the Governor signed SB 2967, a bill promoting a clean energy grid, advancing equity and protecting ratepayers. In it, new targets were set for 750 MW of long duration energy storage (LDES) and 750 MW of multi-day storage (MDS) resources to be procured in Massachusetts by 2030.

Form Energy recommends that the RFP Drafting Parties begin developing the MDS procurement now and set flexible but progressive annual goals to meet the 2030 targets, starting in 2026.

In order to achieve the 2030 target of procuring 750 MW of MDS resources, the RFP Drafting Parties should begin engaging key stakeholders – including manufacturers, developers, and operators – right away to better understand the key differences between MDS, LDES, and the more conventional mid-duration technologies, what unique barriers they face, what types of support are best suited to these resource classes, and how to properly value the benefits for each. This information will help answer the questions of what is "commercially available" and what is "reasonably priced" when it comes to MDS. It will also inform appropriate procurement design, which necessarily will differ from the design of mid-duration procurements in Round 1 and beyond.

The RFP Drafting Parties should also establish initial procurement targets for MDS resources and issue an RFP for those initial amounts on or before June 30, 2026. This will send a market signal to developers and allow the RFP Drafting Parties to learn from those initial responses and adjust the program as needed to achieve the 2030 policy targets. Thereafter, RFPs should be issued annually until the 2030 target is achieved. These annual targets should be somewhat flexible on project size to take advantage of different types of projects that may emerge (i.e., allow procurement volumes to be flexible and lumpy, not necessarily equal each year).

Conclusion

Form appreciates the opportunity to provide these comments. We believe the time to act on these procurements is now, especially with longer lead times for project development due to siting and interconnection challenges. Multi-day storage will be essential for maintaining grid reliability in a net zero future, especially in the winter and during periods of low renewable energy availability. Multi-day storage can also lower total electric system costs by avoiding the need for new resources and providing firm capacity when other resources are scarce and energy prices are high, thus bolstering energy affordability. The deployment of these resources is a no-regrets act for the State, but market signals are needed now to support this industry as it builds commercial availability.

Please do not hesitate to reach out to me if you have any questions regarding these comments.

Sincerely,

Sarah Jackson
Senior Policy Manager, Eastern Region
Form Energy
sjackson@formenergy.com