

To: Thomas Ferguson and DOER staff
Dept of Energy Resources (DOER)
thomas.ferguson@mass.gov

Jan 31, 2024

Comments on the report and recommendations for
Charging Forward: Energy Storage in a Net Zero Commonwealth.

We are members of the UMass Energy Geographies and Politics Project. We thank you for the opportunity to submit comments on the Charging Forward report and recommendations for medium and long duration storage.

Overall, we are impressed with the analysis and thought put into this report and its recommendations. We apologize that our time is very limited right now and we can only provide brief comments. Please see our comments at earlier stages of this process for wider context of our thinking. We focus in these comments on the recommendations.

p. 15 IA. Standalone Bulk Storage Programs.

We strongly recommend that the language here remain “new” and not include incremental additions to existing storage facilities—and should not count as new any storage that bumps existing storage from short to medium or medium to long duration. This exclusion should apply importantly to Northfield Mountain storage. We believe that it is not a cost-effective use of ratepayer funds, nor good ecological practice, to incentivize Northfield Mountain pumped storage to operate more than it would otherwise do based on ISO-NE markets, even if—indeed especially if—larger upper reservoir storage allows longer duration of pumping and generation.

p. 16 IB. Resiliency program

The language in adopted regulations should clarify that this entire passage refers to behind the meter storage.

p. 16 IC

We support the exclusion of the existing (and high-impact) technologies of lithium and pumped storage (though see comment below on closed loop).

p. 17 ID. Energy storage siting

We support the idea of incentives for environmental justice communities. These should be carefully applied so as not to incentivize externally driven projects in poor communities but rather internally supported projects. We suggest you consider communities that may not be located locally but are nonetheless potentially affected, for example because of traditional uses (e.g. indigenous peoples) or downstream effects.

p. 18 III. Targets

We suggest “renewables” here should emphasize variable renewables like solar and wind.

A general comment, relevant here and elsewhere. We are becoming less impressed with very strict and limited targets for specific resources and geographies, which are not always the most effective routes to GHG reduction nor ratepayer cost-effectiveness. We suggest that your targets should get at the broader issue of supply-and-demand balance that might be met through storage but could also be met through other means, including demand response and reduction. Additionally, there might be instances where out-of-state would make more sense, including for demand-side investments. Perhaps there could be a kind of calculation of cost-effectiveness that would provide a "discount" to in-state projects. It would be particularly useful if this were part of a New England-wide Least-Cost Integrated Resource Plan focusing on GHG reductions.

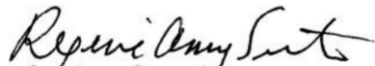
Finally, a note: We appreciate your recognition of the grave concern from environmental groups on the negative impacts of hydro pumped storage. In the future DOER staff might look at the possibility of closed-loop pump storage as a lower-impact version. Federal labs have recently been looking at the potential for closed-loop, and found some possibilities in New England (no new facilities in Massachusetts), and have also been analyzing the kinds of environmental impacts (which are generally less but nonzero). There might also be consideration, in the future of incentives, that would help transition Northfield Mtn to a closed-loop project.

Thanks very much for this work and your consideration.

Best,

A handwritten signature in cursive script that reads "Eve Vogel".

Eve Vogel
Department of Earth, Geographic, and Climate Sciences
UMass Amherst
evev@umass.edu

A handwritten signature in cursive script that reads "Regine Amy Spector".

Regine Amy Spector
Department of Political Science
UMass Amherst
regine@umass.edu