Via Electronic Mail and First Class Mail

January 30, 2020

Luly Massaro
Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

Re: Docket No. 5000 - Investigation into the Treatment of Storage as an Electric Distribution System Resource

Dear Ms. Massaro,

The Northeast Clean Energy Council ("NECEC") appreciates the opportunity to submit comments to the Rhode Island Public Utilities Commission in Docket 5000 on the topic of energy storage. NECEC is a clean energy business, policy, and innovation organization whose mission is to create a world-class clean energy hub in the Northeast, delivering global impact with economic, energy and environmental solutions. NECEC is the only organization in the Northeast that covers all of the clean energy market segments, representing the business perspectives of investors and clean energy companies across every stage of development. NECEC members span the broad spectrum of the clean energy industry, including clean transportation, energy efficiency, wind, solar, energy storage, microgrids, fuel cells, and advanced and "smart" technologies.

The Commission has identified six broad topics it will investigate over the course of this docket. Our comments focus on grid charging and ownership of capacity and ancillary service values.

Grid Charging

The ability for energy storage systems to charge from the grid allows participation in a greater number of markets and programs that can deliver value to the grid and ratepayers, and lead to further deployment of energy storage. For instance, allowing a storage system that is co-located with a net metering system to charge from the grid enables the potential for greater ISO-NE capacity commitments and participation as a Continuous Storage Facility, thus delivering deeper benefits. Program design and proper metering can ensure that the project is only compensated through the net metering program for the energy that is generated by the renewable facility. NECEC and our members would welcome the opportunity to discuss program design elements and metering arrangements for grid-charging storage co-located with renewable net metering facilities.

Capacity and Ancillary Services Rights

Standalone energy storage

Energy storage has become more cost-competitive and attractive to customers as it is has fulfilled more use cases and, by extension, has taken advantage of additional value streams. It is important that storage systems be able to access an array of markets in order to respond to price signals and maximize the value and services they can provide. When responding to price signals, energy storage systems is benefit not only their customers, but ratepayers as a whole through decreased capacity commitments, deferred infrastructure upgrades, and reduced emissions. It is therefore imperative that the owner of an energy storage has the right to capture capacity and ancillary services value streams.

When the storage owner is not able to realize capacity or ancillary services values because ownership of those values rests with another entity, such as the electric distribution company ("EDC"), the value of the system is diminished and the private sector incentive to invest in and deploy energy storage systems is jeopardized or even eliminated. EDC control over energy storage capacity rights inherently implies some degree of EDC control over the charge and discharge behavior of an energy storage system, compromising owners' control over their assets and chilling energy storage investment. There exists a split incentive in which the EDC desires the storage system be dispatched to satisfy the capacity obligation and the customer desires the energy storage system be dispatched to capture other value streams, such as reducing demand charges. Rather than ensuring that the system operates to maximize the total value, this scenario will necessarily prioritize one value stream over the other, even if that value stream does not provide the greatest benefit. This is a suboptimal outcome for all parties and should be avoided.

To be clear, developers are unlikely to secure financing for storage projects if they cannot control the operations of the storage system. Financing is contingent on certain value streams materializing and, if the storage owner cannot control the dispatch of the battery, many value streams are lost and projects will find a more challenging path to financing and construction. If the EDC retains the right to the capacity from the storage asset, then the EDC will require dispatch control, compromising the value proposition for the private sector to invest in and deploy energy storage systems.

Paired storage (e.g. with solar)

Storage paired with non-dispatchable renewable generation, such as solar or wind, has the potential to unlock greater flexibility from those resources. Pairing renewables with storage allows generated electricity to be stored and dispatched when it is most beneficial to the system from a peak-shaving, cost-saving, or emissions-reducing perspective. To ensure that storage is able to optimize the dispatch of the resource with which it is paired, the capacity and ancillary rights for both the storage resource *and* the generating resource must rest with the system owner. Due to market barriers relating to ISO-NE rules, metering, and accounting, EDC holding

title to solar capacity in co-located solar-plus-storage configurations would prevent some of the most promising applications of pairing solar and storage. We note that the issue of capacity rights ownership for paired systems was considered by the Massachusetts Department of Public Utilities ("DPU"). Specifically, the DPU found that capacity rights of the storage system should always reside with the system owner,[1] while the capacity rights for the co-located generation could be purchased from the EDC by the system owner using a pre-determined formula (with the exception of Class I net metering facilities, i.e. 60 kw or less, which retain capacity rights in all circumstances).[2] Most notably, the DPU found that "allowing a Facility Owner of an [Energy Storage System ("ESS")] paired with a NM or SMART facility to retain title to the capacity rights associated with the ESS is consistent with the Commonwealth's energy policies and goals of cost-effectively promoting ESS and renewable energy deployment…..in addition, the Department finds that a Facility Owner holding title to the capacity rights associated with an ESS paired with a NM or SMART facility (in conjunction with the buyout option discussed in Section VI) could avoid potential conflicts with current ISO-NE rules regarding registration of paired asset."[3] If the Commission wishes to optimize the use of energy storage participating in state incentive programs for the benefit of ratepayers, it could consider creating operational requirements for storage. NECEC would welcome the opportunity to discuss program and operational requirements that are not unduly burdensome and enable energy storage deployment while maximizing ratepayer benefits.

Conclusion

NECEC appreciates the opportunity to provide comment in this proceeding. Energy storage will be an integral part of meeting Rhode Island's goal of 100% renewable energy in the electric sector by 2030. It is thus important that the regulatory treatment of storage allows a private market to develop. Grid charging for energy storage co-located with a renewable energy system would allow firm commitments in ISO-NE capacity markets. Also, capacity rights must remain with the storage owner in order to ensure that projects are able to secure financing. We look forward to engaging further with the Commission and stakeholders on this topic, and in the docket generally.

Sincerely,

Peter Rothstein
President

Jeremy McDiarmid
Vice President, Policy & Government Affairs

[1] Massachusetts Department of Public Utilities, D.P.U. 17-146-B, Order, at 21-22
[2] *Id.* at 38-43
[3] *Id.* at 21

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