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**State of Vermont
Public Utility Commission**

**PUBLIC UTILITY COMMISSION'S COMMENTS ON THE DEPARTMENT OF
PUBLIC SERVICE'S DRAFT LEGISLATIVE REPORT ON STORAGE REGULATION**

To: Department of Public Service
From: Public Utility Commission
Re: Department draft legislative report on storage regulation
Date: November 27, 2019

On November 1, 2019, the Vermont Department of Public Service (“Department”) released a draft of its report to the Legislature regarding the regulation of storage. The report represents a significant effort on the part of the Department and stakeholders to identify issues related to storage and provide meaningful venues to address those issues.

The Vermont Public Utility Commission (“Commission”) offers these comments, as well as the attached suggested line edits,¹ to build on the work of the Department, and thanks the Department both for its hard work and for the opportunity to comment.

General framework

Under recently enacted legislation, stand-alone storage systems that are under 500 kW in size do not require a certificate of public good (“CPG”) from the Commission. If the Legislature were to provide for Commission jurisdiction over storage systems under 500 kW in size, the Commission envisions a system of *de minimis* regulation of small-scale storage to effectively address a discrete set of issues including public safety, grid stability and reliability, direct and indirect cost impacts to other customers, and decommissioning. This would minimize the burden of administrative tasks that fall upon the utilities, storage-owners, other stakeholders, and the Commission. With certain adjustments, the statutory amendments suggested by the Department would grant an appropriate level of discretion to the Commission in exercising its authority to regulate storage.

¹ In a few places, the line edits include comments to explain the Commission’s rationale for a particular recommendation.

Nexus with net-metering

In several instances, the Department refers to net-metered systems being “paired” with storage. While some net-metered customers are likely to install storage at the same location as the net-metering system, storage is not eligible to participate in Vermont’s net-metering program. As the Department recently noted in a filing regarding the Commission’s net-metering rules, net-metering is the most expensive renewable power in Vermont’s portfolio.

At every opportunity in its report, the Department should make clear that although net-metered systems may be electrically connected to storage, the storage system and the net-metered system will be viewed as totally independent from the perspective of receiving credits or regulatory review.

For the purposes of *interconnection*, the net-metered generator and the storage device may be viewed holistically by the interconnecting utility, which may consider the total exporting nameplate capacity or the specific use-case for both the net-metered system and the storage device.

In the net-metering rulemaking currently open, the Commission plans to seek comments on how to prevent storage from being used to pass off energy from the grid as though it were renewable, net-metering energy.

Grid-connected storage devices of any size raise concerns about system stability and reliability. For this reason, the Commission welcomes the inclusion of storage, even at small scales, in its open investigation into Rule 5.500 (interconnection).

In both the net-metering rulemaking and the interconnection rulemaking, the Commission plans to create an effective system for interconnecting net-metered systems that are electrically connected to storage. The Commission plans to seek comments on whether to split the interconnection process for small net-metering generators apart from the CPG registration process in ePUC. The Commission looks forward to working with stakeholders to resolve this issue through currently open rulemakings.

Inclusion of a fee

The Department’s report should recommend that if the Commission is given jurisdiction over storage systems of any size, it should be allowed to levy a reasonable fee for the issuance of CPGs, registrations, permits, or any other regulatory work required.

Aggregations

The Commission seeks to ensure that the operation of aggregated storage resources does not interfere with system stability and reliability and that, to the extent allowed under federal law, the operations of aggregators do not impose additional costs on Vermont ratepayers by charging or discharging at inopportune times. As noted in the attached redlines, the Commission suggests changes to ensure that the new language in Section 231 does not remove any of the Commission’s existing authority under Section 231.

Siting

Larger systems and systems connected to generation facilities over which the Commission has jurisdiction could pose issues with regard to the criteria enumerated in 30 V.S.A. § 248. The Commission is the proper authority to address those issues.

Under recently enacted legislation, all storage systems that are 500 kW or greater require a CPG, but stand-alone systems under 500 kW are exempt from that requirement. *See* 30 V.S.A. § 248(u). However, the Department proposes to eliminate 30 V.S.A. 248(u) and require that every storage system obtain a CPG, even if it is less than 500 kW in size.

The Commission agrees with the Department that 500 kW is too high a threshold to exempt storage projects from the need to obtain a CPG under Section 248. However, a high administrative burden would be imposed on the Commission and other stakeholders by requiring small home and business-scale systems to apply for a CPG.

The analogous program in this instance is net-metering registrations. Small net-metering systems register with the Commission, a notice is sent to the interconnecting utility, and the CPG is deemed issued, unless issues are raised by the utility or the Commission, within a specific number of days. Yet even in those *de minimis* registration cases, the Commission incurs *significant* expenses in maintaining software and staffing to process registrations.

Small battery storage systems are different because they do not implicate most of the criteria set forth in 30 V.S.A. § 248 and because they do not involve the provision of financial incentives through tariffed rates.

While the Commission sees itself as the proper authority to address grid stability and reliability and safety concerns, which can arise even for small battery storage systems, the issuance of a CPG for small systems would be unnecessary and burdensome.²

Instead, the Commission proposes to lower the 500 kW threshold for requirement of a CPG to 100 kW. In addition, the Commission proposes that the Legislature provide the Commission with statutory authority to include the regulation of storage in its rules in a fashion that requires all storage systems, even those below 100 kW, to comply with Rules 5.500 (interconnection) and 5.900 (decommissioning), which the Commission is revising or proposing to revise.

Inclusion of storage in renewable energy programs

If storage were to be included in state renewable energy programs, many complications would arise, such as compensation schemes for Standard Offer and size thresholds for RES Tier 2 projects. While there may be economic and system benefits of including storage in those programs, there are also costs and programmatic complications. These concerns should be fully

² However, as discussed above, if the Legislature determines that a CPG should be required for battery storage systems smaller than 100 kW, the report should recognize that the Commission would require additional resources.

fleshed out in a robust conversation among stakeholders before the Legislature takes any action on this item.

Conclusion

The Commission looks forward to further engagement with the Department and stakeholders to ensure that storage is integrated into Vermont's regulatory framework in a manner that protects public safety, ensures grid stability and reliability, controls costs, and maximizes the potential benefits of storage to Vermonters. The Department's report represents an important step in that process.