

STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 21-3883-RULE

Proposed creation of Vermont Public Utility Commission Rule Concerning Energy Storage	
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VERMONT DEPARTMENT OF PUBLIC SERVICE SUPPLEMENTAL COMMENTS

In comments filed on March 11, 2022 in the above-captioned proceeding, the Vermont Department of Public Service (“Department”) requested additional time to evaluate Questions d. and g. from the February 16, 2022 Procedural Order issued by the Vermont Public Utility Commission (“Commission”). The Department now respectfully submits its supplemental comments regarding these two questions.

Question d. Fire Safety: If the Commission were to adopt the Department’s proposal that most criteria under 30 V.S.A. § 248 be waived for systems sited within existing buildings, would there be a regulatory incentive to develop projects within existing structures? If so, does this pose any broader concerns for public safety due to fire risk and how can the Commission best address those concerns?

The first part of the Commission’s question is not easily answered at this stage in the growth of the energy storage sector. If it transpires that the permitting process under 30 V.S.A. § 248 is the primary limiting factor in developing storage facilities, then there is an incentive to pursue the most simplified path to approval. However, it may be the case that there are factors outside the § 248 process which reduce or completely counteract that incentive. Examples might include limitations from other permitting or certification requirements, constraints in equipment size and packaging or other technical obstacles, and the availability of suitable and cost-effective sites. These factors will be better understood over time, and input from other stakeholders on the subject may prove invaluable. Nonetheless, for purposes of this discussion it is prudent to assume that the Department’s proposal would provide some degree of incentive for the development of storage projects within existing structures.

While the Department has not identified specific additional concerns, the potential fire hazards associated with energy storage should not be taken lightly. With respect to public safety, the Department suggests that the Commission can best address any fire risks through the

application of codes and standards including, at a minimum, compliance with NFPA 855. NFPA 855 is applicable to both indoor and outdoor energy storage projects.¹

Question g. Proposed Codes and Standards: Of the standards identified by the Department in their comments of December 16, 2021, (pp. 6-7), which should the Commission adopt? Should the codes and standards that the Commission adopts vary based on size, complexity, use-case, or other factors?

The list of codes and standards relevant to energy storage projects is significant and, at this point in the emergence of storage technologies, ever-changing.² This is true both in the number of standards and the complexity of associated requirements. With such breadth and depth of available options, it will be important to select the standards that are the best fit for Vermont. At this time, the Department can make a firm recommendation that the Commission adopt NFPA 855, along with the standards already included in Rule 5.500 applicable to inverter-based systems.

Before expanding the list further for Vermont, and in recognition of the complexity involved, the Department suggests that relevant standards should be examined and discussed with the benefit of additional viewpoints and expertise. To that end, the Department recommends that a technical working group be formed with the goals of (1) identifying any other standards that should be adopted and (2) avoiding unintended consequences, such as conflicting or overlapping provisions, which may arise in this context and create confusion or undesirable outcomes.

DATED at Montpelier, Vermont, this 28th day of March, 2022.

VERMONT DEPARTMENT OF PUBLIC SERVICE

By: /s/ Ben Civiletti
Ben Civiletti, Special Counsel
112 State Street
Montpelier VT 05620
(802)-622-4388
benjamin.civiletti@vermont.gov

¹ NFPA 855 can be viewed for free at: <https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=855>. NFPA 855 requires energy storage systems to be listed in accordance with UL 9540, with some exceptions.

² By way of example, a list of relevant standards can be found in the Sandia National Labs report referenced in initial comments by VPPSA/WEC: https://www.sandia.gov/energystoragesafety-ssl/wp-content/uploads/2021/06/SC-Report-by-SDO-SPRING-2021_Final.pdf.