



THE STATE OF NEW HAMPSHIRE  
BEFORE THE  
NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Liberty Utilities (Granite State Electric) Corp.  
d/b/a Liberty

Investigation into Compensation of Energy Storage Projects for Avoided  
Transmission and Distribution Costs

Docket No. IR 20-166

January 11, 2021

A. Introduction

HB 715-FN became law on September 12, 2000, adding new chapter RSA 374-H, titled “Energy Storage.” This new chapter required the Commission to open a proceeding to investigate how to compensate energy storage projects for avoided transmission and distribution costs while participating in wholesale energy markets. Below are the comments of Liberty Utilities (Granite State Electric) Corp.

B. Establishment of Accurate and Efficient Price Signals

Establishing accurate and efficient price signals for storage is complicated. Public policy should encourage the many uses of storage, such as peak shaving and reliability, along with the different types of storage, such as batteries, thermal, and pumped hydroelectric, and should also promote carefully weighing the costs and benefits of these uses to deliver the most cost effective solution for the given problem.

Important uses for storage include (1) increasing reliability for customers, (2) peak reduction at the distribution circuit level and (3) at the transmission level. Utilization of storage for increasing reliability will not have the same benefits as utilization for peak shaving, nor will storage be available all hours of the day for both reliability and peak reduction at the same time. Public policy should provide flexibility to allow the utilities to determine the highest and best use of the particular storage application.



C. Compensation

Compensation of energy storage projects should focus on providing the most benefits to customers. Compensation may be in the form of level or reduced transmission rates for customers by reducing the peak at ISO New England, and it may come in the form of direct payments by ISO New England to the utilities for bidding in-front-of-the-meter storage into the ISO New England market. The decision to bid into the ISO New England market, however, involves much more than simply weighing the benefits to New Hampshire; it also encompasses the other New England utilities and the public policies from those other New England states. The policies that the Commission may adopt from this docket, or perhaps other legislative endeavors, should recognize that New Hampshire is not an island when determining whether storage should, or should not, be participating in the market.

D. Encouragement of Utility and Non-Utility Investments

Barring a statute that requires storage investments, encouraging utilities to invest in storage should start with the Commission's support for grid modernization investments that include storage and that take a long view of the benefits to be realized by the steady implementation of storage. Absent such support, utilities will remain apprehensive to invest in the infrastructure necessary to optimize the benefits of storage, and will thus default to the traditional poles-and-wires solutions to keep the lights on.

E. Establishing a Bring Your Own Device Program

Establishing a bring-your-own-device (BYOD) program has its benefits and its challenges. The benefits may be simply allowing customers to permit the utility or a third party to bid their consumer-owned storage into the market while receiving a payment for that energy from the bidding entity. The costs to the program are challenging. For example, the BYOD program would have to address which entity pays the customer for that credit, and how the payment is treated if the period during which the entity bid into the market was not at the peak hour. In that example, the benefits to reducing the peak hour costs were not received, yet the customer has been paid for the energy from their storage. Also challenging is that a BYOD program requires customers to be compensated sufficient enough to allow an entity, either the utility or a third party, to link through software



customer-owned equipment to their distributed energy resource without control of when or how much energy is taken and be beneficial to the customer and still providing system benefits. For example, a customer's investment in storage without solar is merely for backup power during outages, and the cost of a storage system is greater than simply connecting a standby or portable generator. Thus customers without solar are less likely to install storage unless the compensation for participating in a BYOD program over the duration of the program compares favorably to the consumer's costs while providing a reasonable payback period.

F. Necessary Statutory Changes

Statutory changes may be necessary in order for the benefits of utility investments in storage solutions to be realized to the greatest possible extent. For example, clarifying that energy storage is a separate category of investment from "distributed electric generation" and/or "electric generation equipment," which is plainly the case, would make clear that utility investments in storage projects should not be limited under RSA 374-G:4(II), which stipulates that utilities may only invest in "distributed electric generation" of up to 6% of the utility's total distribution peak load.