STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: February 2, 2021 **AT (OFFICE):** NHPUC

- **FROM:** Thomas C. Frantz, Director, Electric Division Kurt F. Demmer, Utility Analyst, Electric Division Elizabeth R. Nixon, Utility Analyst, Electric Division
- SUBJECT: DE 17-189 Liberty Battery Storage Pilot Program Staff Recommendation Regarding January 22, 2021 Technical Statement Filing
 - **TO:** Dianne H. Martin, Chairwoman Kathryn M. Bailey, Commissioner Debra A. Howland, Executive Director
 - CC: David K. Wiesner, Director, Legal Division

Recommendation Summary

On January 22, 2021, Liberty Utilities (Granite State Electric) Corp. (Liberty) filed a technical statement providing updated information regarding the installation and operation of meters and batteries for its approved battery pilot program and requesting a Commission "interpretation" that customers with solar installations should be allowed to charge from the electric grid at any time. Commission Staff (Staff) does not agree with Liberty's request that net-metered solar customers be permitted to charge from the electric grid at any time, because that would be inconsistent with statutory provisions that restrict net metering to renewable energy sources. Liberty's request does not assure that solar customer's batteries will export only renewable energy to the electric grid for net metering purposes.¹ Staff also has concerns regarding Liberty's implementation of the pilot program and deviations from program features described in the approved Settlement Agreement and relevant Commission orders. Staff therefore recommends that the Commission direct Liberty to provide a detailed update, in writing and at a hearing, addressing program status, timeline, compliance with conditions, and variances in implementation from the approved Settlement Agreement and relevant Commission orders. The hearing would address the updated program information and provide an opportunity for the Commission, parties, and Staff to question Liberty regarding the status of the pilot.

¹ During a forecasted peak event when Liberty discharges the battery, the power from the battery exported to the grid does not have to be renewable energy because the customer is compensated for the battery discharge. Even though the customer is compensated in the same manner as under the alternative net metering, the customer is not actually net metering during those limited discharge periods.

Background Information

On January 18, 2019, the Commission issued Order No. 26,209 approving the Settlement Agreement² regarding a two-phase battery storage pilot program for Liberty. On March 9, 2020, the Commission issued Order No. 26,337 approving an extension of the deadline for Phase 1 battery installation subject to certain specified conditions, based on those recommended in Staff's memorandum dated February 13, 2020 and agreed to by Liberty on February 20, 2020. On March 9, 2020, Liberty requested confidential treatment of portions of the cybersecurity report and a rule waiver for the filing of paper copies only of the unredacted version of that report. The Commission granted both in Order No. 26,366. On June 15, 2020, the Commission issued Order No. 26,364 further extending the deadlines associated with Phase 1 battery installations, consistent with Liberty's request filed on May 26, 2020. The approved conditions from Order Nos. 26,337, 26,364, and 26,366 are as follows:

- Liberty must begin installing the meters within one week of the effective date of Order No. 26,337 and have all meters installed and operational by June 30, 2020 to begin collecting electricity usage data prior to battery installation.
- A minimum of 100 batteries must be installed and operational by August 31, 2020 (an additional extension from June 30, 2020), with the remainder of the batteries, up to 200, installed and operational by October 31, 2020 (a further extension from September 30, 2020).
- Liberty must notify Staff once it has approved and has binding contracts with the first 50 customers, signaling that it will begin installing the batteries.
- Liberty must notify Staff once the first 100 batteries are installed and operational.
- Liberty must notify the Commission of the number of meters³ installed as of June 30, 2020.
- Liberty must file the supporting documentation for its cybersecurity evaluation, subject to appropriate claims of confidential treatment.
- The analysis of actual Phase 1 results will include the program changes and updates and reflect the actual benefits and costs of implementation.
- Liberty must modify the customer materials to reflect that customers will no longer receive an advance notice of dispatch events.
- In the event the first 100 batteries were not installed, operational, and available for dispatch by July 1, 2020, then Phase 1 would be extended through August 31, 2022.

² The Settlement Agreement was executed by Liberty, the City of Lebanon, the New Hampshire Sustainable Energy Association (now known as Clean Energy New Hampshire), the Conservation Law Foundation, the Acadia Center, the Office of the Consumer Advocate, and Commission Staff.

³ The meters required for the pilot are two-way bi-directional net meters with cellular communications in order for Liberty to receive granular interval data through its cellular provider, Verizon Wireless.

Based on information provided to Staff in October 2020, Liberty had installed 95 meters by June 30, 2020 and three additional meters by July 10, 2020. Liberty also notified Staff and other parties by email on November 30, 2020 that the 100th battery had been installed and became operational on November 24, 2020.

On January 22, 2021, Liberty filed a technical statement providing certain updated information regarding the installation and operation of meters and batteries and requesting an "interpretation" by the Commission that participating customers with solar installations should be permitted to charge their batteries from the electric grid at any time. According to Liberty, that is the correct interpretation because Liberty will always be in control of the customers' batteries and its control was the relevant condition imposed under the approved Settlement Agreement. The Technical Statement stated, that as of the date of its filing, 98 customers had meters installed and operational, 66 customers had batteries installed and operational, 22 of whom are solar customers, 6 additional customers had batteries installed but not connected to the grid and fully operational, and 7 other solar customers had withdrawn from the program.

Staff's Review and Analysis

Staff has reviewed Liberty's January 22nd Technical Statement, the approved Settlement Agreement, and the Commission's orders in this docket. As explained further below, Staff does not agree with Liberty's request to permit solar net-metered customers to charge from the electric grid at any time. Staff also has concerns regarding Liberty's implementation of the pilot and the number of deviations from the program features specified in the Settlement Agreement and in the Commission's relevant orders.

In particular, Staff is concerned that required notifications have not been made, deadlines have passed without request for extension, program terms have been modified, and customers may not have been adequately educated and informed about material pilot program terms. For example, Staff was not notified of binding contracts with 50 customers, triggering the beginning of installation of the first 100 batteries. The August 31, 2020 deadline for minimum Phase 1 battery installation was not met, nor the October 31, 2020 deadline for completion of battery installation for Phase 1. Also, important features of pilot implementation have changed, such as the fact that solar customers can no longer exercise any control over their batteries as was originally provided for in the approved Settlement Agreement, and solar customers have not been adequately educated on the terms of the pilot, including battery charging and discharging requirements.

Staff is well aware of the current state of emergency associated with the COVID-19 pandemic, but does not believe that all of the program implementation delays and changes may be attributed to the effects of the pandemic. In fact, Liberty agreed to a revised schedule in the midst of the pandemic, but additional delays occurred both before and during the pandemic. Staff therefore is unconvinced that the pandemic is responsible for more than a few months of delay, which should have been accounted for in the extensions granted in Order No. 26,337 and Order No. 26,364.

With respect to solar net-metered customers' battery charging, Liberty's technical statement explains that, under the approved Settlement Agreement, net-metered customers can charge from the grid only when their batteries are under Liberty's control. Liberty describes customer concerns and dissatisfaction with that restriction, now that Liberty – through Tesla's software – is always in control of the batteries. As a means of resolving those problems, Liberty asks the Commission to interpret the approved Settlement Agreement provisions to permit the batteries of participating net-metered solar customers to be charged from the electric grid at any time, "twenty-four hours per day, 365 days per year."

Staff does not agree with Liberty's proposed interpretation of the approved Settlement Agreement, and believes that permitting the batteries of participating net-metered customers to be charged from the grid without restriction is inappropriate and may not be in compliance with the governing statute. Under the net metering statute and rules, only customers generating electricity using renewable energy sources are eligible to net meter. Pursuant to RSA 362-A:1-a, II-b and N.H. Admin. R., Puc 902.05, an "eligible customergenerator" is defined, in relevant part, as

an electric customer who owns, operates, or purchases power from an electrical generating facility *either powered by renewable energy or which employs a heat led combined heat and power system*, with a total peak generating capacity of up to and including one megawatt, that is located behind a retail meter on the customer's premises, is interconnected and operates in parallel with the electric grid, and is used to offset the customer's own electricity requirements.

(emphasis added). Under Puc 902.25, "renewable energy" is defined as "electricity produced by renewable sources including geothermal, tidal or wave, wind, solar, landfill gas, hydro, biomass, bio-oil, biosynthetic gas, and biodiesel resources." Electricity drawn from the grid typically includes power generated by sources that are not renewable, such as natural gas, nuclear, coal, or oil.

If a solar customer with batteries that charge from the electric grid is allowed to net meter, then that customer-generator could be exporting non-renewable power to the grid from the batteries during periods when no peak event has been forecasted. The customer would effectively be net metering with non-renewable power during those periods, in contravention of the statute and rules. Unless Liberty can assure the Commission that the power exported to the grid from the batteries of net-metered customer-generators, except during a forecasted peak event, is exclusively renewable energy, then such customers should not be permitted to have their batteries charged from the grid without restriction, in order to comply with the statute and rules.

Conclusion and Recommendation

Based on Staff's review of Liberty's January 22nd Technical Statement, the approved Settlement Agreement, and Order Nos. 26,209, 26,337, and 26,364, Staff recommends

that the Commission direct Liberty to file a detailed status update describing all material changes to its pilot program implementation, including changes to the pilot terms, deadlines missed, treatment of solar customers, number of meters and batteries installed and the applicable dates, and compliance with other applicable conditions. Staff further recommends that, following the filing of that update, the Commission hold a hearing to address the updated program information with an opportunity for the Commission, parties, and Staff to question Liberty regarding the status of the pilot.

Executive.Director@puc.nh.gov aboyd@acadiacenter.org allen.desbiens@eversource.comamanda.noonan@puc.nh.gov bargetsinger@keyesfox.com brianna@cleanenergynh.org bwaugh@townandcitylaw.com clifton.below@gmail.com crauscher@sunrun.com david.wiesner@puc.nh.gov donald.kreis@oca.nh.gov eemerson@primmer.com elizabeth.nixon@puc.nh.gov heather.tebbetts@libertyutilities.com jack@revisionenergy.com jvanrossum@clf.org karen.cramton@puc.nh.gov karen.sinville@libertyutilities.com kelly@cleanenergynh.org kurt.demmer@puc.nh.gov leo.cody@libertyutilities.com madeleine@cleanenergynh.org maureen.karpf@libertyutilities.com michael.sheehan@libertyutilities.com nkrakoff@clf.org ocalitigation@oca.nh.gov paula.maville@lebcity.com richard.chagnon@puc.nh.gov Stephen.Hall@libertyutilities.com steven.mullen@libertyutilities.com tad.montgomery@LebanonNH.govtirwin@clf.org tom.frantz@puc.nh.gov