

STATE OF NEW HAMPSHIRE
BEFORE THE NEW
HAMPSHIRE PUBLIC UTILITIES COMMISSION

Docket No. DE 21-004

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

2021 Least Cost Integrated Resource Plan

Technical Statement of Jay E. Dudley, Ronald D. Willoughby & Joseph J. DeVirgilio

Regarding Liberty's 2021 LCIRP and LCIRP Supplement

New Hampshire Department of Energy, Division of Regulatory Support

&

River Consulting Group, Inc.

February 17, 2023

On September 16, 2022, the New Hampshire Department of Energy (DOE or Department) filed testimony with Public Utilities Commission (PUC or Commission) in this proceeding concluding, among other things, that Liberty Utilities (Granite State Electric) Corp d/b/a Liberty's (Liberty or "the Company") 2021 Least Cost Integrated Resource Plan ("2021 LCIRP" or "Plan") was not in compliance with regard to criteria set out in RSA 378:39 involving environmental, economic, and health-related impacts. Accordingly, the Department recommended that Liberty file a supplemental filing that addresses those criteria in accordance with the expectations of the Commission as expressed in Order No. 26,225 dated March 13, 2019, in Docket DG 17-152 (Order).¹

On October 24, 2022, the parties met in a scheduled technical session to discuss DOE's testimony and responses to related data requests. The result of that discussion was that Liberty would prepare and file a supplemental filing with the PUC instead of rebuttal testimony to address the Department's concerns. On December 12, 2022, the Company filed a supplement to its 2021 LCIRP ("Supplement"). DOE reviewed the Supplement and concluded it was deficient in terms of load forecasts which had not been updated. As a result, a subsequent technical session was held on January 20, 2023, where Liberty agreed to provide the updated load information in

¹ See Order No. 26,225 at 7, which states in relevant part, "We direct Liberty to submit a supplemental filing, including supplemental testimony, to address each of the specific elements required under RSA 378:38 and RSA 378:39 that are not already addressed in its LCIRP, with adequate sufficiency to permit the Commission's assessment of potential environmental, economic, and health-related impacts of each option proposed in the LCIRP."

response to DOE data requests. The Company filed its responses on February 3, 2023, providing the requested updated load forecasts (attached as Attachment TS-JED/RDW/JJD-1 Data Requests DOE Set 10). For the reasons explained below, subject to DOE's additional recommendations involving Liberty's adoption of a 10-year historical base period for load forecasting, review of planned capital investments, and vegetation management in the Charlestown/Bellows Falls service area, the Department recommends that the Commission accept the supplemental filing and approve the Company's 2021 LCIRP, inclusive of the Supplement.²

I. Compliance with RSA 378:39

Pursuant to the Commission's Order, utilities are expected to provide in their LCIRP's an adequate assessment of each of the criteria under RSA 378:39 to allow the Commission to perform a sufficient review of potential environmental, economic, and health-related impacts of options proposed in each utility's LCIRP.³ Upon reviewing Liberty's supplemental filings, the DOE finds the following:

Environmental Impacts:

Liberty has undertaken the following initiatives to accomplish certain environmental goals:

- Liberty focuses much of its efforts in this area within its capital planning and evaluation process where safety and environmental impacts play an integral role as a part of planned capital investments. During the planning, estimating, and design stages for a project, the Company's engineering department has the responsibility of identifying any environmental impacts related to a project. If any environmental issues are identified, Liberty's Environmental Engineer is consulted to review and provide solutions and mitigation planning to address those issues. In the event that negative environmental impacts are encountered, such as impacts on wetlands or increased reliance on fossil fuel generation, it is up to the project managers to decide on possible mitigation measures or whether the project should move forward. The Company's Environmental Engineer is also responsible for providing technical environment training and guidance to Liberty's engineering group.⁴
- In terms of program participation, Liberty continues to purchase Renewable Energy Certificates as part of its energy procurement process to meet Renewable Portfolio Standard requirements. The Company also implements energy efficiency programs, offers net metering tariffs, and undertakes integration of grid modernization technologies. Liberty states that all of these efforts provide economic and environmental

² The Department is aware of a PUC Order issued in Docket No. DG 19-126, i.e., Order No. 26,664 (August 8, 2022). The Department continues to consider the meaning and scope of that order, and of related Order 26,688 (September 19, 2022) and Order No. 26,689 (September 19, 2022) (denying motions for rehearing and "clariff[y]ing" Order No. 26,664). However, in reviewing Liberty's 2021 LCIRP and 2021 LCIRP Supplement, the Department has continued to apply those criteria in place prior to August 8, 2022.

³ See footnote 1.

⁴ Supplement at 2-3; also see 2021 LCIRP at Bates 36-37.

benefits by supporting jobs in the renewables industry and reducing reliance on fossil fuel generation sources.⁵

Economic Impacts

Liberty emphasizes that its efforts to provide safe and reliable service is a key element in supporting economic development and growth in New Hampshire:

- Liberty states that its distribution planning takes local economic growth into consideration as new customers move into its service areas. According to the Company, this represents approximately \$2 to \$3 million in annual investments to build new services consisting of both small and large customer growth. Large commercial customers looking to locate their businesses in Liberty's territory expect safe and reliable electric service with the capacity to meet their needs. This in turn provides for business growth and job growth in those areas.⁶ Although the trend in customer growth for Liberty has been fairly level in recent years, the Company has experienced a recent uptick in growth in the Salem area provided by the Tuscan Village development which represents both residential and commercial expansion.

Health Impacts

The Company states that with the advent of market restructuring and the elimination of utility ownership of generating assets in New Hampshire, any health impacts are now directly related to Liberty's selection and implementation of planned capital investments:

- Liberty represents that identification and evaluation of health impacts comes into play during distribution planning and review of individual projects. This review is augmented through the involvement of local and State officials during the permitting process. The Company reports that health impacts have been sporadic for the utility due to limited instances of encountering health issues with most projects.⁷
- Liberty believes that one of the direct health benefits of its implementation of energy efficiency programs is lowering asthma rates and providing other health-related benefits due to better indoor and outdoor air quality.⁸

II. Liberty's Responses to DOE Recommendations

Load Forecasts

During the Department's review of the 2021 LCIRP, DOE discovered that Liberty neglected to consider in its load forecasts the significant new load coming online in Salem as a

⁵ 2021 LCIRP at Bates 11.

⁶ *Id.* at 3-4.

⁷ *Id.* at 4; Supplement at 4.

⁸ 2021 LCIRP at Bates 95.

result of the Tuscan Village development (currently projected by the Company to be 25.8 MW).⁹ At a technical session held on October 24, 2022, the Department requested that Liberty provide a revised load forecast in the Supplement to include the new load growth from Tuscan Village along with any other new load coming online in Salem. The Company responded in its Supplement that since this new load was coming online over a period of years, “making out-of-model adjustments would not be appropriate given the moving target timeline of when all of the load will be served.”¹⁰ As a result, Liberty did not update its load forecast in the Supplement to account for the new load increases projected for Salem. At a subsequent technical session held on January 20, 2023, the Department and Liberty discussed (and DOE believes reached consensus) that a revised load forecast to include spot load additions in Salem was needed. Liberty provided the requested updated load forecast in response to DOE Data Requests – Set 10. Upon review, the Department finds the revised load forecast to be acceptable with its inclusion of 22MW projected for the Tuscan Village development and the expected addition of 20MW for a new manufacturing facility to be located in Salem during the forecast period.¹¹

In addition, the Department proposed in its direct testimony that Liberty commit to replacing its existing current forecast method which relies on 20-year load historical weather data period with a 10-year historical weather data period.¹² The Department remains concerned that utilization of the 20-year period by Liberty promotes more frequent replacement of distribution infrastructure. The Company indicated in discovery its willingness to convert to the 10-year historical period and a once in 10-year probability of occurrence so as to be in line with other New Hampshire utilities but has yet to formally commit to the change.¹³ Therefore, the Department’s recommendation to the Commission to approve Liberty’s 2021 LCIRP and Supplement shall be contingent upon Liberty’s agreement to adopt the 10-year historical weather data period and a once in 10-year probability of occurrence as a basis for future load forecasts.

Planned System Investments

At the technical session held on January 20, 2023, the Company represented that it would provide the Department with a detailed list of planned capital projects for the five-year planning period prior to the end of January. On February 17, 2023, (the date this Technical Statement was due to be filed), Liberty provided the list of projects by year which in total agrees with the 5-year capital budget provided in the Plan at Bates 57. This more detailed capital budget is provided as Attachment TS-JED/RDW/JJD-2. The Department’s recommendation to the Commission to approve Liberty’s 2021 LCIRP should not be read as an endorsement of the individual projects in the detailed list provided on February 17, because the Department has not had an opportunity

⁹ See Direct Testimony of Dudley, Willoughby, Devirgilio dated September 16, 2022, at Bates 20, 37, 39, and 46.

¹⁰ Supplement at Bates 7. Also see Attachment TS-JED/RDW/JJD-1 DOE Data Requests Set 10, DOE 10-1 c., sometimes referred to by Liberty as “spot loads.”

¹¹ Attachment TS-JED/RDW/JJD-1 DOE Data Requests Set 10, Attachment DOE 10-1.b.xlsx. Also, in response to DOE 10 c., Liberty explains that it had incorrectly assumed that its consultant had included the new Tuscan Village development in the original LCIRP forecast.

¹² Direct Testimony of Dudley, Willoughby, Devirgilio dated September 16, 2022, at Bates 19-20.

¹³ *Id.* at Attachment JED/RDW/JJD-2 DOE Data Request Staff 1-37.

to review the list. In any event, all capital projects should continue to be subject to prudence review after completion.

Future of Energy Pricing

In the Department's direct testimony filed in this docket, the Department highlighted the fact that developing impacts on natural gas supply and global markets due in part to the recent war in Ukraine, and corresponding impacts on New England's natural gas supply, rendered Liberty's original 2021 assessment of the energy markets under RSA 378:38-Supply Options out of date.¹⁴ As a result, DOE asked Liberty to update its energy supply assessment in the Supplement. Upon review, the Department is satisfied with Liberty's response in the Supplement and believes that it adequately addresses the supply issues currently confronting the utility and the region.

Participation in Docket IR15-296 and Continued Involvement in Grid Modernization

The Department is satisfied with Liberty's response to this recommendation and finds that Liberty has demonstrated its continued interest in grid modernization and in addressing this evolving issue in its next LCIRP.¹⁵

Review of Non-Wires Solution Evaluation

After the Department's initial review of the Company's implementation of Non-Wires Solutions (NWS), the Department raised concerns that Liberty's efforts in this area were not sufficiently robust.¹⁶ The Department recommended that Liberty modify its selection criteria since the current 24-month timeline and the +\$500,000 threshold appeared to be too restrictive. Liberty agreed and represented in the Supplement that it would re-visit its NWS criteria and look to identify and provide greater consideration for those options that come in under those thresholds.¹⁷

Tree Trimming/Charlestown & Bellows Falls

In the Department's direct testimony, the Department reported that the Company filed a letter with the Commission in this docket on February 28, 2022, describing what it characterized as a "dire reliability picture" for the Charlestown/Bellow Falls service area.¹⁸ The issue involves a high rate of outages experienced by Liberty over the last five years along the 43-12L1 and 43-12L2 circuits due to frequent tree strikes. Liberty later filed a report on the issue with the

¹⁴ Direct Testimony of Dudley, Willoughby, Devirgilio dated September 16, 2022, at Bates 30 and 46.

¹⁵ Supplement at Bates 8.

¹⁶ Direct Testimony of Dudley, Willoughby, Devirgilio dated September 16, 2022, at Bates 16, 28, and 47.

¹⁷ Supplement at Bates 9.

¹⁸ Direct Testimony of Dudley, Willoughby, Devirgilio dated September 16, 2022, at Bates 41-45.

Commission on May 2, 2022, providing greater detail about the problem. The Department discussed the issue with Liberty during several scheduled technical sessions and obtained additional information through discovery. Throughout that process, Liberty has consistently stated that the ultimate solution to resolve the tree strike problem is by reconductoring portions of circuits 43-12L1 and 43-12L2 with spacer cable. In the Supplement, the Company states that it is adequately monitoring the condition of the circuit corridors in the field and that full trimming of the 43-12L1 circuit is planned for 2023, but Liberty also asserts that without reconductoring of the circuits the frequency of the outages will remain despite increased tree trimming efforts.¹⁹

The Department continues to believe that the proposed reconductoring of the 43-12L1 and 43-12L2 circuits does not represent the least cost option available to Liberty, nor does it provide the most viable solution to the outage problem. DOE reiterates that an accelerated trimming effort on the 43-12L2 circuit to bring it back on the trimming cycle schedule, coupled with danger tree removal or off-cycle trimming of overhanging danger limbs through supplemental hot-spot trimming based on routine field inspections, offers the best overall solution and can be accommodated within Liberty's existing vegetation management budget.

That said, the Department does not believe that an LCIRP docket is the best venue for an in-depth study of all the complex variables posed by this issue. Liberty has indicated that it intends to file a rate case in late Spring 2023 at which time DOE can conduct a full and more thorough review (or, the review would take place in a subsequent rate setting docket if those reconductoring costs are not covered by the 2023 rate case). Therefore, the Department does not condition its recommendation for approval of the LCIRP and the Supplement on Liberty's acceptance and adoption of DOE's recommendations on tree trimming versus reconductoring, and expects that the Company would not oppose DOE's ability to raise this issue again in a future rate case (or future rate setting docket where the reconductoring costs are proposed for recovery). As stated earlier, all capital projects should continue to be subject to prudence review after completion.

III. Department's Summary Recommendations

Based on the Company's initiatives outlined above, and the additional information reviewed by the Department as provided by Liberty in the supplemental filing and its responses to DOE 10-1, the Department concludes that Liberty has met its burden of adequately addressing RSA 378:37, 38, and 39 criteria; however, the Department respectfully requests that the Commission approve the Department's recommendations that Liberty: (i) adopts a 10-year historical weather data period and a once in 10-year probability of occurrence as a basis for future load forecasting, and (ii) defer consideration of issues related to vegetation management in the Charlestown/Bellows Falls service area until the next rate case (or subsequent rate setting docket), all as discussed above.

¹⁹ Supplement at Bates 10 and Attachment TS-JED/RDW/JJD-3 DOE Data Request 9-13.

In addition, as the Department previously stated in its direct testimony filed on September 16, 2022, that in the view of the Department the Company's 2021 LCIRP is also compliant with the requirements of RSA 378:37 and RSA 378:38. The Department notes that as a small utility not owning or operating any emitting sources of generation, Liberty can only mitigate those environmental, health, and economic impacts over which it has measurable control. While this does not relieve Liberty from its obligations as a public utility under RSA 378:38 and 39, and other provisions of state and federal law to address and mitigate impacts that may arise from its operations in providing electrical service, it is relevant that Liberty is not vertically integrated. In the opinion of the Department, Liberty has shown that it is reasonably addressing and mitigating those impacts as described in its supplemental filing and the 2021 LCIRP.

Therefore, it is the Department's recommendation that, subject to DOE recommendations summarized above, the Commission should approve Liberty's 2021 LCIRP, inclusive of the 2021 LCIRP Supplement, as consistent with RSA 378:38 and :39 requirements.