

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

Docket No. DE 19-064

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty
Distribution Service Rate Case

**DIRECT TESTIMONY
OF
ANTHONY STRABONE
AND
HEATHER M. TEBBETTS**

April 6, 2022



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1 **I. INTRODUCTION AND BACKGROUND**

2 **Q. Mr. Strabone, please introduce yourself.**

3 A. My name is Anthony Strabone, my business address is 9 Lowell Road, Salem, New
4 Hampshire, and I am employed by Liberty Utilities Service Corp. (“LUSC”). I am the
5 Senior Manager of Electrical Engineering for LUSC and I am responsible for the electric
6 capital work plan of Liberty Utilities (Granite State Electric) Corp. (“Liberty”), whereby I
7 manage engineering and construction resources for capital projects.

8 **Q. Please describe your educational background and training.**

9 A. I graduated from Merrimack College in 2004 with a Bachelor of Science degree in
10 Electrical Engineering. I received a Master’s of Business Administration from Southern
11 New Hampshire University in 2006. I received a Project Management Professional
12 (PMP) Certification in 2017 from the Project Management Institute. In 2019, I received
13 my license as a Professional Engineer in the State of New Hampshire.

14 **Q. Please describe your professional background.**

15 A. I joined Liberty in November 2014. Prior to my employment at Liberty, I was employed
16 by Public Service Company of New Hampshire (“PSNH”) as a Substation Supervisor in
17 Substation Maintenance from 2010 to 2014. Prior to my position in Substation
18 Maintenance, I was a Substation Engineer in Substation Engineering from 2008 to 2010
19 and an Engineer in the System and Planning Strategy department from 2004 to 2008.

20 **Q. Have you previously testified before the Commission?**

21 A. Yes, on numerous occasions.

1 **Q. Ms. Tebbetts, please state your full name, business address, and position.**

2 A. My name is Heather M. Tebbetts, my business address is 15 Buttrick Road, Londonderry,
3 New Hampshire, and I am employed by LUSC. I am the Manager of Rates and
4 Regulatory Affairs and am responsible for providing rate-related services for Liberty.

5 **Q. Please describe your educational background and training.**

6 A. I graduated from Franklin Pierce University in 2004 with a Bachelor of Science degree in
7 Finance. I received a Master's of Business Administration from Southern New
8 Hampshire University in 2007.

9 **Q. Please describe your professional background.**

10 A. I joined Liberty in October 2014. Prior to my employment at Liberty, I was employed by
11 PSNH as a Senior Analyst in NH Revenue Requirements from 2010 to 2014. Prior to my
12 position in NH Revenue Requirements, I was a Staff Accountant in PSNH's Property Tax
13 group from 2007 to 2010 and a Customer Service Representative III in PSNH's Customer
14 Service Department from 2004 to 2007.

15 **Q. Have you previously testified before the Commission?**

16 A. Yes, I have testified on numerous occasions before the Commission.

17 **II. PURPOSE OF TESTIMONY**

18 **Q. What is the purpose of your testimony?**

19 A. The purpose of our testimony is to request a decrease in distribution rates, to be effective
20 July 1, 2022, as approved in Order No. 26,376 (June 30, 2020) in this docket. This is the

1 third approved step adjustment described in the Settlement Agreement in this docket and
2 pertains to certain projects placed in service during the calendar year 2021.

3 **III. CAPITAL PROJECTS**

4 **Q. Please explain each project for which the Company is seeking to commence cost**
5 **recovery in this third step adjustment, as provided for in the Settlement Agreement.**

6 A. The Company seeks recovery for each of the capital projects discussed below that were
7 placed in service during 2021. The breakdown of budget and spending by year is
8 provided on page 1 of each of Attachments 2 through 19.

9 **Q. Before discussing the details of each project, please explain why the proposed**
10 **requests for cost recovery for each project may differ from the figures in the**
11 **respective project close out forms.**

12 A. Project close out forms are one of several types of documents attached to this testimony
13 that support the prudence of the 2021 projects described below, the others being business
14 cases, capital expenditure forms, and change orders, if necessary. Project close out forms
15 are completed on an annual basis and address the spending for that particular project for
16 that calendar year. They do not include any spending on that project from prior years.
17 Therefore, when a project incurs costs during more than one calendar year, its costs will
18 be reflected in more than one project close out form.

19 This annual process occurs because all ongoing projects receive a new project number
20 each year, using the Company's established naming convention. For example, a project

1 opened in 2019 and named “8830¹-19xx XYZ Substation” will receive a new project
2 number in 2020 of “8830-20xx XYZ Substation” for that same substation project. Each
3 year the Company will prepare a project close out form for every open project number
4 that addresses all costs incurred during that calendar year, until a project is completed and
5 put into service. Then, when calculating the full cost of a project to support a request for
6 recovery, the Company will draw from all of the applicable annual close out forms.
7 Therefore, the total amount reflected in a single year’s project close out form may not
8 match the amount for which the Company ultimately seeks recovery.

9 “Blanket” projects follow the same logic. A blanket project number is used for a task
10 that the Company routinely performs every year, such as Meter Replacements or Public
11 Requirements (work requested by municipalities and the state every year to, for example,
12 move poles and wires for road widening projects). Rather than having a separate project
13 number for every one of these municipal and state projects (there are often hundreds),
14 there is a Public Requirements Blanket project number to cover all such jobs, and each
15 specific job within that blanket will be issued a “work order” number, the costs for which
16 will roll up into the overall Public Requirements Blanket project number.

17 Some of the specific tasks, or “work orders” in the Company’s vernacular, are not
18 completed and placed into service in a single calendar year. Those work orders will incur
19 costs during the first calendar year, but since the work is not complete and placed into
20 service during that first calendar year, additional costs will be incurred in subsequent

¹ The “8830” prefix identifies the project as a Granite State Electric matter within the Company’s accounting system. “8840” indicates an EnergyNorth project.

1 calendar years. The spending for that specific work order will thus be reflected in the
2 appropriate blanket project's close out forms for each calendar year during which the
3 specific work order incurred costs.

4 Similar to the substation project example above, when a multi-year work order operating
5 under a blanket project number is placed into service, its costs are summed from each of
6 the applicable blanket project's annual close out forms, and that total is the amount for
7 which the Company will seek recovery.

8 **Q. Attachment 1, page 2, has a column titled Total Spend. Please explain what is**
9 **populated in this column.**

10 A. As noted above, not all work orders taken out under project numbers go into service in
11 the same year they are started. In this proceeding, the Company is seeking cost recovery
12 only for capital projects that were placed into service in 2021 under the listed project
13 numbers in Attachment 1, page 2. Some of these project numbers have actual spending
14 of less than the budget amounts provided in the description of each project below and on
15 page 1 of each project's backup documentation, Attachments 2 through 19. Those
16 projects incurred costs under work orders that started in prior years but did not go into
17 service until 2021. The spending for those prior years was captured in the business cases,
18 change order forms if necessary, and prior-year project close out forms. Any spending
19 for those work orders in 2021 is captured in the 2021 business cases, change order forms
20 if necessary, and project close out forms.

1 **Q. Please explain blanket projects.**

2 A. As discussed above, blanket projects are those projects that have numerous work orders
3 taken out for smaller jobs, sometimes hundreds of them. For example, charges arise from
4 municipal requests for jobs such as relocating poles for road widening (Public
5 Requirements Blanket) and from damage to equipment (Damage Failure Blanket) that
6 were unknown until the request arrives at the Company or the equipment fails. Each year
7 the Company looks at spending from previous years to determine an appropriate spending
8 amount, or budget, for these blankets. For example, in 2017 and 2018, the final spending
9 for the Public Requirements Blanket was \$414,432 and \$441,939, respectively. The 2019
10 budget was set at \$520,000, above the spending for the previous two years, yet the total
11 charges for 2019 came in at \$668,186. These are difficult budgets to set due to the
12 emergent nature of the work and the unknown quantity and cost of those requests when
13 the budget is established. Also, the Company does not have the option to defer these
14 requests due to their nature, as can be done with other types of work orders such as
15 replacing conductors for reliability (Enhanced Bare Conductor project).

16 **Q. Are there projects in this filing that were substituted for projects listed in the**
17 **Settlement Agreement?**

18 A. No. Attachment 2 to the Settlement Agreement listed the 2019 and 2020 projects to be
19 recovered through the 2020 step filing, only. The 2021 list was included in the 2020 Step
20 Adjustment filing on April 6, 2021, Attachment 12. The Settlement Agreement provided
21 flexibility to substitute projects with the following limitations:

1 Liberty reserves the right to substitute projects into Attachment 2 so long
2 as any new projects are not growth projects and are not related to the
3 Rockingham Substation or the 115kV transmission line.

4 Settlement Agreement in Docket No. DE 19-064, Hearing Exhibit 37, at 4.

5 There are seven projects totaling \$2.6 million listed in Attachment 12 to the 2020 Step
6 Adjustment filing that are not included in this filing, with the Company substituting other
7 projects in their place. The added projects are not growth projects and are not related to
8 the Rockingham Substation or the 115kV transmission line, in compliance with the
9 language quoted above.

10 The list of projects being removed from the list filed on April 6, 2021, is provided in the
11 table below and described in detail following the table.

Planned Project	2021 Planned In Service Amount
Battery Pilot	\$600,000
Golden Rock Substation	\$400,000
Golden Rock Underground	\$160,000
Tuscan Village EV Chargers	\$400,000
SCACA & Distribution Automation	\$200,000
Install 9L2 9L3 Tie Line	\$356,405
URD Cable Replacement	\$500,000
Total	\$2,616,405

12

- 1 • Battery Pilot – The total charges for 2021 did not include the final Tesla invoice,
2 but included CIAC, which created negative total charges. The final Tesla invoice
3 was processed in January 2022 and the final costs of Phase One will be included
4 in the Company’s next rate case.

- 5 • Golden Rock Substation – this project was originally scheduled to occur in 2021.
6 The scope of this project was to install a new 19L2 breaker position at the
7 substation. The project was deferred due to project schedule delays associated
8 with the construction of Liberty’s 115 kV supply line, which included
9 coordination with National Grid’s construction of the interconnection point. Due
10 to National Grid’s project delays, Liberty performed an analysis of the electric
11 system in the Salem area and determined that the 19L2 breaker position could not
12 be installed. The 13kV bus at the substation is required to be out of service to
13 accommodate construction of this feeder addition, however, this would have
14 constrained the system in the Salem Area and resulted in planning criteria
15 violations during N-1 contingencies. If a failure had occurred on the supply line
16 with the Golden Rock substation out of service to install the breaker position, the
17 Company would not have been able to isolate load and its contingency planning
18 would be at risk. The Company decided it was best to postpone the substation
19 portion of the project until 2022. All 2021 spending was for engineering only.

- 20 • Golden Rock Underground – The scope of this project was to install the
21 underground distribution cable that would connect the substation to the overhead
22 distribution system. This work coincided with the Golden Rock substation work
23 and as such had to be delayed until 2022.

- 24 • Tuscan Village EV Chargers – The Company purchased the chargers and had the
25 installation ready to go, but the Town of Salem denied the building permit in
26 November 2021. The Planning Board reviewed the request for the installation in
27 February 2022 and approved the request. The stations will be installed in Q2
28 2022.

- 29 • SCADA & Distribution Automation – The scope of this project was to perform
30 engineering design work for the Remote Terminal Unit (RTU) replacement at
31 Spicket River and Mount Support substations. Both of the RTUs at the
32 substations are obsolete and past their useful life. The scope of work also
33 included the actual replacement of the RTU at the Spicket River substation. The
34 replacement of the RTU at Mount Support was always planned for 2022. The
35 Company postponed the project until 2022 due to competing projects with
36 internal crews.

- 1 • Install 9L2 9L3 Tie Line – The total 2021 carryover was \$32,571, not \$350,000 as
2 anticipated, and as such the Company is removing this project from the 2021 step
3 adjustment request and will recover the full amount, including the \$32,571 in its
4 next rate case.

- 5 • URD Cable Replacement – The scope of this project was to replace underground
6 residential development cable (URD) in residential developments that commonly
7 fail. The Company decided to reassess and reprioritize its existing list of URDs
8 needing full replacement. As such, the 2021 project was put on hold and the
9 Company will review the URD projects in 2022.

10 The Company substituted \$2.1 million of investment in other projects as replacement for
11 the projects listed above from the 2020 Step Adjustment filing as shown in the table
12 below:

Replacement Project	Actual 2021 In Service Amount
Lebanon Pole Pile	\$345,099
General Equipment Blanket	\$188,456
Street Light Blanket	\$98,979
IT Systems & Equipment	\$379,187
DTN Weather Upgrade	\$182,483
Meter Test Board	\$248,313
Salem Garage	\$667,641
Total	\$2,110,158

13

1 **Q. Please describe the particular projects for which the Company seeks recovery in this**
2 **second step adjustment.**

3 A. Following are the nineteen projects for which the Company seeks to commence cost
4 recovery on July 1, 2022:

5 **1. 8830-1958 Install Service to Tuscan Village Attachment 2**

6 This project installed a new UG conduit loop system along Tuscan Village Park to supply
7 new growth in the commercial development. The project consisted of providing service
8 to a customer located on the south parcel of Tuscan Village. The scope of work included
9 installation and acceptance testing of approximately 2,000 feet of 1,000 MCM CU EPR
10 15 kV jacketed primary cable and 4/0 neutral, installation and acceptance testing of
11 approximately 200 feet of 3C-4/0 underground cable, and installation of PME-9
12 switchgear. The Company also installed 600 feet of 3C-4/0 underground cable to connect
13 the customer to its 150 kVa transformer for service.

14 The Company also installed and completed acceptance testing of approximately 1,500
15 feet of 3C-4/0 underground cable for the de-watering of the southern parcel of the Tuscan
16 Village.

17 Tuscan cost-sharing for Central Village – the scope of this project was to install
18 necessary infrastructure inside Tuscan Village which consisted of underground conduits,
19 manholes, underground primary and secondary cable, switchgear, and transformers.

20 During the detailed design phase of the underground manhole and duct system for Tuscan
21 Village, the Company identified several areas within the development that would require
22 additional conduits to be installed in the future to provide the necessary underground

1 infrastructure to install distribution feeders to serve area load outside the Tuscan
2 Development in future years. Tuscan and the Company agreed there would be cost
3 savings to install these conduits now prior to the area being developed as opposed to
4 installing the underground infrastructure later and incurring costly pavement restoration
5 fees. Tuscan and the Company also mutually agreed to utilize the same civil contractor
6 and share costs for this work as this would eliminate significant schedule coordination
7 efforts and once again provide cost savings due to economies of scale.

8 The total request for cost recovery for project 8830-1958 is \$1,235,243. Please see the
9 table below for the breakdown of the budget and costs for 2021.

<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service WO</u>	<u>Request for Cost Recovery</u>
2019	\$1,200,000	\$98,244	\$98,244
2020	\$900,000	\$182,634	\$182,634
2021	\$1,000,000	<u>\$954,365</u>	<u>\$954,365</u>
		\$1,235,243	\$1,235,243

10

11 **2. 8830-2069 Golden Rock Feeder 19L2 Attachment 3**

12 The 2376W circuit supplies the Spicket River Substation and originates from Ward Hill,
13 via a pole-mounted recloser located in the Spicket River Massachusetts Right of Way.

14 Approximately 5.2 miles of the 2376W line is exposed to outages without any backup,
15 with 4.3 miles in National Grid maintenance territory and 0.9 miles in Liberty’s territory.

16 Liberty relies on National Grid to expedite repairs should an outage-related problem
17 occur. The loss of the 22.8 kV source for an outage on the 5.2-mile section would require
18 the Spicket River circuits to be backed up by existing distribution circuit ties, however,

1 area feeders are not positioned geographically to re-supply the Spicket River distribution
2 feeders. Loss of the 22.8 kV sub-transmission supply circuit to the Spicket River No.13
3 Station could cause Liberty to have up to 226 MWHrs of load at risk after restorative
4 switching occurs and for an assumed repair time of 12 hours. This violates Liberty’s
5 planning criteria of 120 MWHrs.

6 The scope of this project was to reconductor approximately 15,300 feet of overhead bare
7 wire with 477 tree wire in Spacer Cable configuration and tie it into the newly installed
8 19L2 breaker position at the Golden Rock substation. The original estimate of \$2.1
9 million was based on average contractor bids received in 2020 for similar reconductor
10 projects. The average contractor cost per foot for all bids received in 2020 was
11 \$68.79/foot. Multiplying this cost/foot by length of project and including all other
12 construction costs such as tree trimming, construction oversight, traffic control, materials,
13 and all associated burdens, resulted in an estimate of \$2.1 million. A local New
14 Hampshire contractor was the successful bidder for this project through a competitive bid
15 process. The project came in under budget due to the contractor bid price coming in less
16 than the original estimate.

17 The total request for cost recovery for project 8830-2069 is \$1,523,493. Please see the
18 table below for the breakdown of the budget and costs for 2021.

<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service</u>	<u>Request for Cost Recovery</u>
2020	\$1,300,000	\$134,456	\$134,456
2021	\$2,100,000	<u>\$1,389,037</u>	<u>\$1,389,037</u>
		\$1,523,493	\$1,523,493

19

1 **3. 8830-2086 Lebanon Pole Pole Attachment 4**

2 This project addressed the severe safety issues regarding the pole pile at the Lebanon
3 work center. Prior to building the new pole pile, employees had to climb onto a single
4 large pile to access the poles they needed for jobs. The danger to employees slipping and
5 falling or some other injury was identified and mitigated by this project, which entailed
6 the building of a number of log bunks for the poles to lay on. The Company originally
7 expected to spend \$652,750 based on the original scope of work. The scope was reduced
8 and as such the Company spent \$345,099, which is the request for cost recovery. Please
9 see the table below for the breakdown of the budget and costs for 2021.

<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service</u>	<u>Request for Cost Recovery</u>
2020	\$652,750	\$26,424	\$26,424
2021	\$652,750	<u>\$318,675</u> \$345,099	<u>\$318,675</u> \$345,099

10
11 **4. 8830-2107 General Equipment Blanket Attachment 5**

12 This blanket project covers general equipment used in execution of work for Liberty
13 Electric operations. The types of tools and equipment purchases included in this project
14 are mobile cable pullers, digital phasing meters, load break tools, and power quality
15 meters, among other items.

16 For projects under \$50,000, the Company's Liberty Way Policy & Procedures Capital
17 Expenditures Planning and Management policy does not require a business case.

18 Therefore, only a capital expenditure form is provided, along with the change order and
19 project close out forms.

1 This project was not included in the original plan and was one of several projects added
2 for 2021. The total request for cost recovery for project 8830-2107 is \$188,546. Please
3 see the table below for the breakdown of the budget and actual spend in service in 2021.

<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service</u>	<u>Request for Cost Recovery</u>
2021	\$50,000	<u>\$188,456</u>	<u>\$188,456</u>
		\$188,456	\$188,456

4

5 **5. 8830-2110 Street Light Blanket Attachment 6**

6 The Street Light blanket provides funding associated with new and/or existing lighting
7 facilities which includes installing new street lights or floodlights, replacing street lights
8 or floodlights due to size, model, or condition, installing conductor service street lights or
9 floodlights, and installing street light poles or standard poles for street lighting.

10 This project was not included in the original plan and was added to the list of 2021
11 projects for recovery in this filing. The total request for cost recovery for project 8830-
12 2110 is \$98,979. Please see the table below for the breakdown of the budget and actual
13 spend for in 2021.

<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service</u>	<u>Request for Cost Recovery</u>
2021	\$125,000	<u>\$98,979</u>	<u>\$98,979</u>
		\$98,979	\$98,979

14

1 **6. 8830-2111 Public Requirements Blanket Attachment 7**

2 Public Requirements Blanket provided funding for projects that arose during the year in
3 response to requests from municipalities and the State of New Hampshire to relocate the
4 Company’s poles, associated equipment on the poles, and guy wires to accommodate
5 various state and municipal projects, such as road widening projects. Depending on the
6 scope of the job, Liberty crews or contractors may have performed the work. For work
7 requiring contractors, the Company engaged in a competitive bid process, the bids were
8 analyzed for price, timeline, and qualifications of the contractors, and the Company
9 awarded the project to the bidder with the best solution, which, all things being equal,
10 price was usually the deciding factor.

11 The total request for cost recovery for project 8830-2111 is \$308,503, which is lower
12 than anticipated. Please see the table below for the breakdown of the budget and actual
13 spend for in 2021.

<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service</u>	<u>Request for Cost Recovery</u>
2019	\$630,000	\$14,249	\$14,249
2020	\$1,000,000	\$81,457	\$81,457
2021	\$520,000	<u>\$212,798</u>	<u>\$212,798</u>
		\$308,503	\$308,503

14
15 **7. 8830-2112 Damage/Failure Blanket Attachment 8**

16 The purpose of the Damage/Failure Blanket is to provide funding to repair damage to the
17 Company’s equipment arising from unplanned, but regularly occurring, instances such as
18 poles beyond their useful life, failed transformers, lightning strikes, animal contacts, and

1 motor vehicle accidents. Depending on the scope of the job, Liberty crews or contractors
2 may have performed the work. For work requiring contractors, the Company engaged in
3 a competitive bid process, the bids were analyzed for price, timeline, and qualifications of
4 the contractors, and the Company awarded the project to the bidder with the best solution,
5 which, all things being equal, price was usually the deciding factor.

6 The total request for cost recovery for project 8830-2112 is \$2,022,586, which is higher
7 than originally planned due to a significant amount of equipment that was found to be
8 damaged or failed during 2021. The costs span 315 work orders. Please see the table
9 below for the breakdown of the budget and actual spend for in 2021.

<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service</u>	<u>Request for Cost Recovery</u>
2020	\$1,000,000	\$66,895	\$66,895
2021	\$1,500,000	<u>\$1,955,691</u>	<u>\$1,955,691</u>
		\$2,022,586	\$2,022,586

10

11 **8. 8830-2113 Distribution Asset Replacement Blanket Attachment 9**

12 This project is associated with the replacement of line or substation assets based upon
13 inspection, and asset condition information. The costs associated with 2021 relate to the
14 replacement of poles that were condemned, undersized, and/or beyond their useful lives.
15 The Company also replaced old and failure-prone underground cable under this project.

16 The total request for cost recovery for project 8830-2113 is \$296,406, which is slightly
17 above the original plan. Please see the table below for the breakdown of the budget and
18 actual spend for in 2021.

<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service</u>	<u>Request for Cost Recovery</u>
2020	\$400,000	\$10,705	\$10,705
2021	\$200,000	<u>\$285,702</u>	<u>\$285,702</u>
		\$296,406	\$296,406

1

2

9. 8830-2114 Third Party Attachments Blanket Attachment 10

3

This blanket project provides funding for make-ready work associated with Third Party Attachments. Re-working of electrical pole-mounted equipment is required at times to accommodate requests from third party companies (e.g., Comcast) to attach to Liberty’s poles. This project funds those requests and any other requests from third parties for attachments.

7

8

The total request for cost recovery for project 8830-2114 is \$164,315, which is slightly above the planned amount. Please see the table below for the breakdown of the budget and actual spend for in 2021.

9

10

<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service</u>	<u>Request for Cost Recovery</u>
2020	\$100,000	(\$19,384)	(\$19,384)
2021	\$125,000	<u>\$183,699</u>	<u>\$183,699</u>
		\$164,315	\$164,315

11

12

10. 8830-2121 Distribution Reliability Blanket Attachment 11

13

This project provides funding for resolutions and improvements to system reliability performance. The types of work completed under this project are reconditioning due to mechanical capacity, replacing bare conductors to minimize tree-related interruptions, replacing open wire secondary with cable, replacing customer overhead service wire due

16

1 to condition, installing sectionalizing equipment, and increasing pole sizes for proper
2 spacing and/or road clearance.

3 The total request for cost recovery for project 8830-2121 is \$174,854, which is slightly
4 above the planned amount. Please see the table below for the breakdown of the budget
5 and actual spend for in 2021.

<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service</u>	<u>Request for Cost Recovery</u>
2020	\$218,000	\$42,176	\$42,176
2021	\$161,000	<u>\$132,678</u>	<u>\$132,678</u>
		\$174,854	\$174,854

6

7 **11. 8830-2124 LED Street Light Conversion Attachment 12**

8 This project provides funding to respond to Town/Municipality requests to convert
9 existing Street Lighting to LED Street Lighting. The towns of Salem and Charlestown
10 converted portions of their streetlights to LED. The costs include installing street or
11 floodlights, replacing street or floodlights due to size, model, or condition, installing
12 conductor serving the street or floodlights, and installing streetlight poles or standard
13 poles.

14 The total request for cost recovery for project 8830-2124 is \$387,666, which is above the
15 planned amount for 2021 as the projects spanned 2020 and 2021 but the lights were not in
16 service until 2021. Please see the table below for the breakdown of the budget and actual
17 spend for in 2021.

<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service WO</u>	<u>Request for Cost Recovery</u>
2020	\$200,000	\$114,064	\$114,064
2021	\$125,000	<u>\$273,602</u>	<u>\$273,602</u>
		\$387,666	\$387,666

1

2

12. 8830-2125 IT Systems & Equipment Blanket Attachment 13

3

As the Company transitions to SAP, it is beginning to streamline the operation of various

4

payment vendors. Since the payment vendors operate independently of each other, there

5

are challenges in delivering a consistent customer experience and payment product

6

offerings across the enterprise. By serving customers through a single channel, the

7

Company can expect to see operational efficiencies through call reduction, vendor cost

8

reduction, and business process improvements. With the current technological

9

innovation in the payments industry and the regulations that contribute to its evolution,

10

there is a significant shift in customer expectations of doing business with the Company.

11

Customers now expect and/or demand not only consistent and robust self-service

12

payment options but also a smoother user experience in a manner that balances security

13

and convenience.

14

The Company completed the Payment Processing Project delivering the foundation for a

15

single payment processing platform for the enterprise. The enterprise-wide cost of the

16

project was \$3,329,840 with approximately 11 percent allocated to the Company. The

17

following table provides the scope of work completed. Attachment 13 includes further

18

details of the scope.

#	Payment Channels	Tender types		
		E-Check	Credit card	Debit card
1	<u>libertyutilities.com</u> . <i>One-time payment for non-registered customers</i>	✓	✓	✓
2	<u>IVR</u> . <i>Payments via LU's Toll-Free Number</i>	✓	✓	✓
3	<u>Point of Sale (card readers)</u> . <i>Customers walking into the local office with their credit/debit cards</i>	✗	✓	✓
4	<u>Auto-Pay</u> . <i>Customers with banking info setup at LU.</i>	✓	✓	✓

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5

This project was not included in the original plan and was one of several projects substituted into the 2021 list. The total request for cost recovery for project 8830-2125 is \$379,187. Please see the table below for the breakdown of the budget and actual spend for in 2021.

<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service</u>	<u>Request for Cost Recovery</u>
2021	\$3,329,840	<u>\$379,187</u>	<u>\$379,187</u>
		\$379,187	\$379,187

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13. 8830-2146 Bare Conductor Replacement Program Attachment 14

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The scope of this project was to reconnector approximately 7,920 feet of overhead bare wire with 477 tree wire in Spacer Cable configuration. The original estimate of \$1 million was based on average contractor bids received in 2019 for similar reconnector projects. The average contractor cost per foot for all bids received in 2019 was \$74/foot. Multiplying this cost/foot by length of the project and including all other construction costs such as tree trimming, construction oversight, traffic control, materials, and all associated burdens, resulted in an estimate of \$1 million. A local New Hampshire contractor was the successful bidder for this project through a competitive bid process.

1 The project came in under budget due to the contractor bid price coming in less than the
2 original estimate.

3 The total request for cost recovery for project 8830-2146 is \$691,575. Please see the
4 table below for the breakdown of the budget and actual spend for in 2021.

<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service</u>	<u>Request for Cost Recovery</u>
2020	\$875,000	\$23,483	\$23,483
2021	\$1,000,000	<u>\$668,092</u>	<u>\$668,092</u>
		\$691,575	\$691,575

5

6 **14. 8830-2180 DTN Weather Upgrade Attachment 15**

7 The Company updated its storm tool from DTN, the subscription weather service that
8 provides the Company with weather forecasts to assist in storm restoration planning
9 efforts and providing the necessary support for determining whether an event qualifies as
10 a major storm for cost recovery purposes. Prior to the upgrade, the Company only
11 received static data provided by the meteorologists each day without any prediction of
12 hazards to our distribution system. The upgrade provides storm event modeling through
13 artificial intelligence (AI). The AI provides machine learning applied to outage
14 prediction, meteorologist-enhanced artificial intelligence, and probabilistic outcomes and
15 risk communication. Modeling hazards have provided greater detail and allowed us to
16 make better, potentially less expensive, decisions on how to respond to the storm event.

17 This project was not included in the original plan and was one of several projects
18 substituted in 2021. The total request for cost recovery for project 8830-2180 is

1 \$182,483. Please see the table below for the breakdown of the budget and actual spend
2 for in 2021.

<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service</u>	<u>Request for Cost Recovery</u>
2021	\$226,250	\$182,483	\$182,483
		\$182,483	\$182,483

3

4 **15. 8830-2185 Meter Test Board Attachment 16**

5 Liberty’s meter test board is used to test its electric meters in compliance with state and
6 federal guidelines. The board is used to test new meters purchased from the
7 manufacturer as well as meters returned from the field. The new meter board allows the
8 Company’s meter workers to be more efficient as the board is sized appropriately for the
9 meters going in and out of the meter shop. The current test board has four-meter sockets
10 and has reached its end of life. The new test board is larger and has the additional
11 functionality to test remote disconnect/reconnect functionality of the meters.

12 This project was not included in the original plan and was one of several projects added
13 to the 2021 list. The total request for cost recovery for project 8830-2185 is \$248,313.

14 Please see the table below for the breakdown of the budget and actual spend for in 2021.

<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service</u>	<u>Request for Cost Recovery</u>
2021	\$300,000	\$248,313	\$248,313
		\$248,313	\$248,313

15

1 **16. 8830-2190 Transportation Attachment 17**

2 The scope of this project provides for annual purchases of vehicles required for the
3 Company. A review and assessment of the fleet is performed in conjunction with
4 operations to determine if any fleet additions and replacements are needed based on the
5 current condition (mileage and age) of the fleet as determined in the corporate fleet
6 policy.

7 The total request for cost recovery for project 8830-2190 is \$253,649. The project is
8 underspent due to the vehicle orders not being placed in service by December 31, 2021.
9 Please see the table below for the breakdown of the budget and actual spend for in 2021.

<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service WO</u>	<u>Request for Cost Recovery</u>
2021	\$1,000,000	\$253,649	\$253,649
		\$253,649	\$253,649

10

11 **17. 8830-2191 Meter Purchases Attachment 18**

12 This project provided funding for the purchase of electric meters. These meters were
13 required to replace units that had failed in the field and for meters required to serve new
14 customers requesting service. The Company purchased 1,208 meters along with other
15 devices such as current transformers to meet the metering needs for 2021.

16 The total request for cost recovery for project 8830-2191 is \$379,368, which was over
17 budget due to the need to purchase more meters than anticipated. Please see the table
18 below for the breakdown of the budget and actual spend for in 2021.

<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service</u>	<u>Request for Cost Recovery</u>
2021	\$250,000	\$379,368	\$379,368
		\$379,368	\$379,368

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18. 8830-2192 Transformer Purchases Attachment 19

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The transformer purchases project provided funding for the purchase of electric transformers to replace units that had failed in the field and for transformers required to support electric reliability and new construction.

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The total request for cost recovery for project 8830-2192 is \$639,262, which is over budget due to the need to purchase more transformers than anticipated. Please see the table below for the breakdown of the budget and actual spend for in 2021.

7

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<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service</u>	<u>Request for Cost Recovery</u>
2021	\$420,000	\$639,262	\$639,262
		\$639,262	\$639,262

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19. 8830-2197 Salem Garage Attachment 20

11

The Salem Garage project is the expansion of the back garage at the Salem operations center to house a substation repair and testing facility. The purpose of the expansion is to provide a dedicated, secure, and safe site for substation employees to perform repairs and testing. The prior testing location at the Lebanon operations center was not adequate.

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This project was not included in the original plan and was one of several projects substituted in 2021. The total request for cost recovery for project 8830-2197 is

16

1 \$639,262. Please see the table below for the breakdown of the budget and actual spend
2 for in 2021.

<u>Year</u>	<u>Total Budget</u>	<u>Total Spend - 2021 In Service</u>	<u>Request for Cost Recovery</u>
2021	\$700,000	\$667,641	\$667,641
		\$667,641	\$667,641

3

4 **IV. PBR & ADVANCED RATE DESIGN ROADMAP**

5 **Q. As part of the Settlement Agreement in DE 19-064 was the Company required to**
6 **present performance-based ratemaking (PBR) opportunities for its next rate case to**
7 **parties?**

8 A. Yes. The Company met with parties in 2021 and presented various performance-based
9 ratemaking ideas with performance incentive mechanisms.

10 **Q. Have parties provided feedback since the presentation in September 2021?**

11 A. No, they have not. The Company has reached out to parties requesting feedback more
12 than once but has not received it as of the date of this filing. Liberty is committed to
13 continuing the discussion with parties to further refine performance-based ratemaking
14 options to be presented as part of the Company’s next base distribution rate case.

15 **Q. What is the Advanced Rate Design Roadmap?**

16 A. The Company agreed to develop an Advanced Rate Design Roadmap for its next rate
17 case that would include but not be limited to:

- 18 (1) an explanation of how Liberty plans to leverage the functionality of its
19 existing and planned investments, particularly meters, to maximize

1 ratepayer benefits, and (2) Liberty’s plans for the future of rates for
2 each customer class, including the extent to which the utility plans to
3 rely on innovative rate design techniques such as time-of-use rates,
4 critical peak pricing, etc. For each customer class, Liberty shall specify
5 the general design characteristics (e.g., number of time periods,
6 number of hours within each period, and pricing ratios between each
7 period) and the investment needed to enable the rate design, the
8 associated timeline and the nature of the rollout (e.g., opt-out versus
9 optional rate designs).

10 Settlement Agreement in Docket No. DE 19-064, Hearing Exhibit 37, at 9–10.

11 **Q. Was the Advanced Rate Design Roadmap (ARDR) part of the presentation to**
12 **parties?**

13 A. Yes. As part of the presentation in 2021 on PBR, the Company provided insight into
14 ideas for ARDR such as integrated demand-side management for electric vehicles,
15 demand response, and time-based rates, but these will be predicated on the Company
16 installing Advanced Metering Infrastructure (AMI). The rate designs will allow for the
17 potential of more robust commercial and industrial time-varying rate structures and
18 demand response programs. The Company is committed to continuing the conversation
19 on advanced rate design to be presented as part of the Company’s next base distribution
20 rate case. The Company anticipates beginning the implementation of AMI in 2023 and
21 being completed in 2025. The Company will include ARDR in its next rate case,
22 anticipated to be filed in 2023.

1 **V. REVENUE REQUIREMENT**

2 **Q. What is the revenue requirement associated with the requested capital projects?**

3 A. The total cost of all nineteen projects above for which the Company seeks recovery in
4 this filing is \$10,187,080. The associated revenue requirement, which is calculated as
5 described below and in Attachment 1, is \$1,751,403.

6 **Q. Was the Company capped at a revenue requirement?**

7 A. Yes. The total cap for the 2021 revenue requirement was \$1,800,000. The Company did
8 not reach its cap due to bids coming in lower on certain projects and under-spending for
9 others.

10 **Q. Please explain the inputs used to determine the revenue requirement.**

11 A. The investments and capital structure included in Attachment 1 are those that were in
12 service by December 31, 2021, and in the approved Settlement Agreement in this docket
13 or replaced as allowed. Page 1 of Attachment 1 provides the total costs of each project
14 and the calculation of the book depreciation rate. The property tax rate of 3.12 percent is
15 calculated using the property tax rate from the Company's last approved annual
16 Reliability Enhancement Plan/Vegetation Management Plan, which was filed in Docket
17 No. DE 21-049 and is based on FERC Form No. 1 data as of December 31, 2018. The
18 tax rates of 21 percent (federal) and 7.7 percent (state) are for the taxable period ending
19 December 31, 2021.

20 **Q. Please explain what page 2 of Attachment 1 provides for information.**

21 A. Page 2 of Attachment 1 provides the revenue requirement calculation by FERC account.

1 **Q. What information is included on page 3 of Attachment 1?**

2 A. Page 3 of Attachment 1 provides the calculation of the removal of fully recovered rate
3 case expenses and recoupment per the Settlement Agreement on Bates 7–8. Please see
4 the summary below.

2021 Capital	\$1,751,403
Less: Recoupment	\$1,939,679
Less: Rate Cases Expenses	<u>\$565,077</u>
Total Change (Decrease)	(\$753,353)

5

6 **Q. What is the bill impact to residential customers?**

7 A. A residential customer using 650 kWh per month and taking energy service from the
8 Company's default service offering will see a decrease to their monthly bill of (\$0.84), or
9 (0.55%), from \$155.00 to \$154.16 effective July 1, 2022, compared to current rates in
10 effect as of April 6, 2022.

11 **VI. DOCUMENTATION**

12 **Q. Has the Company provided supporting documentation for the projects described**
13 **above?**

14 A. Yes. Please see the following attachments for the business cases, change order forms,
15 project close out forms and a breakdown by cost element of each project's cost.

- 16 1. Attachment 2: 8830-1958 Install Service to Tuscan Village
17 a. Business Case
18 b. Change Order - N/A, project was under budget
19 c. Project Close Out – N/A, project is ongoing through 2022

- 1 2. Attachment 3: 8830-2069 Golden Rock Feeder 19L2
- 2 a. Business Case
- 3 b. Change Order – N/A, project was under budget
- 4 c. Project Close Out

- 5 3. Attachment 4: 8830-2086 Lebanon Pole Pole
- 6 a. Business Case
- 7 b. Change Order - N/A, project was under budget
- 8 c. Project Close Out

- 9 4. Attachment 5: 8830-2107 General Equipment Blanket
- 10 a. Capital Expenditure – Business case is not required for mandated
- 11 projects
- 12 b. Change Order
- 13 c. Project Close Out

- 14 5. Attachment 6: 8830-2110 Street Light Blanket
- 15 a. Capital Expenditure – Business case is not required for mandated
- 16 projects
- 17 b. Change Order
- 18 c. Project Close Out

- 19 6. Attachment 7: 8830-2111 Public Requirements Blanket
- 20 a. Capital Expenditure – Business case is not required for mandated
- 21 projects
- 22 b. Change Order – N/A, project was under budget
- 23 c. Project Close Out

- 24 7. Attachment 8: 8830-2112 Damage/Failure Blanket
- 25 a. Capital Expenditure – Business case is not required for mandated
- 26 projects
- 27 b. Change Order
- 28 c. Project Close Out

- 29 8. Attachment 9: 8830-2113 Distribution Asset Replacement Blanket
- 30 a. Capital Expenditure – Business case is not required for mandated
- 31 projects
- 32 b. Change Order
- 33 c. Project Close Out

- 1 9. Attachment 10: 8830-2114 Third Party Attachments Blanket
- 2 a. Capital Expenditure – Business case is not required for mandated
- 3 projects
- 4 b. Change Order
- 5 c. Project Close Out

- 6 10. Attachment 11: 8830-2121 Distribution Reliability Blanket
- 7 a. Capital Expenditure – Business case is not required for mandated
- 8 projects
- 9 b. Change Order– N/A, project was under budget
- 10 c. Project Close Out

- 11 11. Attachment 12: 8830-2124 LED Street Light Conversion
- 12 a. Capital Expenditure – Business case is not required for mandated
- 13 projects
- 14 b. Change Order– N/A, project was under budget
- 15 c. Project Close Out

- 16 12. Attachment 13: 8830-2125 IT Systems & Equipment Blanket
- 17 a. Business Case
- 18 b. Change Order
- 19 c. Project Close Out – N/A, project is ongoing through 2022

- 20 13. Attachment 14: 8830-2146 Bare Conductor Replacement Program
- 21 a. Business Case
- 22 b. Change Order– N/A, project was under budget
- 23 c. Project Close Out

- 24 14. Attachment 15: 8830-2180 DTN Weather Upgrade
- 25 a. Business Case
- 26 b. Change Order– N/A, project was under budget
- 27 c. Project Close Out

- 28 15. Attachment 16: 8830-2185 Meter Test Board
- 29 a. Business Case
- 30 b. Change Order– N/A, project was under budget
- 31 c. Project Close Out

1 16. Attachment 17: 8830-2190 Transportation

- 2 a. Business Case
3 b. Change Order– N/A, project was under budget
4 c. Project Close Out

5 17. Attachment 18: 8830-2091 Granite State Meter Purchases

- 6 a. Business Case
7 b. Change Order – N/A, project was under budget
8 c. Project Close Out

9 18. Attachment 19: 8830-2192 Granite State Transformer Purchases

- 10 a. Business case
11 b. Change Order – N/A, project was under budget
12 c. Project Close Out

13 19. Attachment 20: 8830-2197 Salem Garage

- 14 a. Business case
15 b. Change Order – N/A, project was under budget
16 c. Project Close Out

17 20. Attachment 21: Redline tariff

18 21. Attachment 22: Clean tariff

19 **VII. CONCLUSION**

20 **Q. Please summarize the Company's request for the step adjustment.**

21 A. Through this testimony and the attached documents, the Company has established that
22 the described projects are in service, are used and useful for the provision of electric
23 distribution service, and were completed at a reasonable cost. The requested step
24 decrease is thus just and reasonable and should be approved by the Commission with the
25 projects found to be prudent. The Company requests a decision by June 15, 2022, to
26 allow time for rates to be implemented for effect by July 1, 2022.

1 **Q. Does this conclude your testimony?**

2 **A. Yes.**