STATE OF NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

DOCKET DE 19-064

IN THE MATTER OF: Liberty Utilities (Granite State Electric) Corp.

d/b/a Liberty Utilities

Distribution Service Rate Case

DIRECT TESTIMONY

OF

Jay E. Dudley Utility Analyst IV NHPUC

December 6, 2019

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1 I. INTRODUCTION AND QUALIFICATIONS

- 2 Q. Mr. Dudley, please state your full name and business address.
- 3 A. My name is Jay E. Dudley. My business address is 21 South Fruit Street, Suite 10,
- 4 Concord, NH 03301.

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- 6 Q. Please state your employer and your position.
- 7 A. I am employed by the New Hampshire Public Utilities Commission ("Commission") as a
- 8 Utility Analyst for the Electric Division.

- 10 Q. Please describe your professional background.
- 11 A. I started at the Commission in June of 2015 as a Utility Analyst in the Electric Division.
- Before joining the Commission, I was employed at the Vermont Public Service Board
- 13 (now known as the Vermont Public Utilities Commission, "VT-PUC") for seven years as
- a Utility Analyst and Hearing Officer. In that position I was primarily responsible for the
- analysis of financing and accounting order requests filed by all Vermont utilities,
- including review of auditor's reports, financial projections, and securities analysis. As
- 17 Hearing Officer, I managed and adjudicated cases involving a broad range of utility-
- related issues including rate investigations, construction projects, energy efficiency,
- 19 consumer complaints, utility finance, condemnations, and telecommunications. Prior to
- working for the VT-PUC, I worked in the commercial banking sector in Vermont for
- 21 twenty years where I held various management and administrative positions. My most
- 22 recent role was as Vice President and Chief Credit Officer for Lyndon Bank in
- 23 Lyndonville, Vermont. In that position I was responsible for directing and administering

the analysis and credit risk management of the bank's loan portfolio, including internal loan review, regulatory compliance, and audit. In performing those responsibilities, I also provided oversight for the commercial and retail lending functions with detailed financial analysis of large corporate relationships, critique of loan proposals and loan structuring, consultation on business development efforts, and advised the Board of Directors on loan approvals and loan portfolio quality. Prior to my role as Chief Credit Officer, I held the position of Vice President of Loan Administration. In this position, I was responsible for directing and administering the underwriting, processing, and funding of all commercial, consumer, and residential mortgage loans. My responsibilities also included the management of loan processing and loan origination staff and partnering with the Compliance Officer to monitor and ensure compliance with all banking laws, regulations, and the bank's lending policy. Previous to my position as Loan Administration Vice President, I held the position of Assistant Vice President of Commercial Loan Administration with Passumpsic Savings Bank in St. Johnsbury, Vermont. In that role, I was responsible for supervising loan administration and loan operations within the commercial lending division of the bank.

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Q. Please describe your educational background?

I received my Bachelor of Arts degree in Political Science from St. Michael's College.

Throughout my career in banking, I took advantage of numerous Continuing Professional

Education (CPE) opportunities involving college level coursework in the areas of
accounting, financial analysis, real estate and banking law, economics, and regulatory
compliance. Also, during my tenure with the VT-PUC I took advantage of various CPE

1 opportunities including the Regulatory Studies Program at Michigan State University 2 (sponsored by the National Association of Regulatory Utility Commissioners "NARUC"), 3 Utility Finance & Accounting for Financial Professionals at the Financial Accounting 4 Institute, and Scott Hempling seminars on Electric Utility Law. 5 Q. Have you previously testified before the Commission? 6 A. Yes. I previously submitted Staff testimony to the Commission in Docket No. DE 14-7 238 PSNH Generation Assets, Docket No. DE 15-137 Energy Efficiency Resource 8 Standard, Docket No. DE 16-383 Liberty Utilities Request for Change in Rates, and 9 Docket No. DE 17-136 2018-2020 NH Energy Efficiency Plan. 10 11 II. **SUMMARY OF TESTIMONY** 12 Q. Please describe the purpose of your testimony today. 13 The purpose of my testimony is to provide Staff's recommendation involving Liberty A. 14 Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities' ("Liberty" or the 15 "Company") request filed on April 30, 2019, to implement a permanent distribution rate 16 increase to be effective on and after July 1, 2019, pending the Commission's final 17 determination on the Company's request for a permanent rate increase. Based on the 18 reports of the Company filed with the Commission, and Staff's extensive review of the 19 Company's revenue requirement, rate of return, and capital expenditures, Staff believes 20 that a number of adjustments are warranted to the Liberty permanent rate proposal. Staff 21 recommends that the Commission make the following modifications: 22

1 • Liberty's proposed revenue requirement: \$6,673,493 2 • Staff's reduction to revenue requirement: (\$6,535,503) \$ 137,990 3 Adjusted revenue requirement 4 • Liberty's proposed rate base: \$103,024,219 5 • Staff's reduction to rate base: (\$ 6,033,781) 6 Adjusted rate base: \$96,990,438 7 In addition, Staff recommends denial of Liberty's proposed step increase of approximately 8 \$2.3 million for 2019 and all subsequent proposed step increases, and Liberty's proposal for 9 a multi-year rate plan. 10 If the Commission allows a 2019 step increase, then Staff recommends that the Commission 11 open a separate docket for the purposes of conducting an investigation of Liberty's capital 12 budgeting and planning process (after this case concludes), including a prudence review of 13 individual capital projects that comprise Liberty's 2019 step increase request. Further, Staff 14 recommends that the Commission consider hiring a consultant to perform a business 15 processes audit concerning the 2019 capital investments, and otherwise assist Staff in that 16 investigation. 17 18 III. DISCUSSION OF PERMANENT RATE REQUEST AND STAFF'S REVIEW 19 Q. What is the statutory foundation for a request for permanent rates? 20 A. Permanent rates are specifically allowed pursuant to RSA 378:28 which reads as follows: 21 22 **378:28 Permanent Rates.** – So far as possible, the provisions of RSA 378:27 shall be 23 applied by the commission in fixing and determining permanent rates, as well as 24 temporary rates. The commission shall not include in permanent rates any return on any 25 plant, equipment, or capital improvement which has not first been found by the 26 commission to be prudent, used, and useful. Nothing contained in this section shall 27 preclude the commission from receiving and considering any evidence which may be pertinent and material to the determination of a just and reasonable rate base and a just and reasonable rate of return thereon.

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Following the completion of the full proceeding, a "permanent rate" level is determined, and the difference between the temporary rate level and the permanent rate level is then reconciled through either collection from or refund to customers.

7 Q. Please describe Liberty's request for the permanent increase in rates.

According to Liberty, the Company has been unable to earn its authorized rate of return under existing rates because of a deficiency in distribution revenue of \$5.68 million as of fiscal year-end 2018. As a result, Liberty's return on rate base for 2018, related to the distribution portion of the business, declined to 6.43% as compared with the Company's authorized return of 7.49%. Liberty is seeking recovery of the \$5.68 million revenue deficiency in permanent rates; however, to allow the Company to earn at least a portion of its authorized return until the Commission makes its final determination on permanent rates, the Company proposed a temporary rate increase of approximately 2.00%, or \$2,093,349 in additional distribution revenue.² After hearing and review, the Commission approved a temporary rate increase of \$2,093,349 (the "June Order").³ In terms of the permanent rate request, the permanent rate amount constitutes an annual increase of 5.58% in distribution revenue, resulting in an increase to the total bill for the average residential ratepayer (650 kWh) of 6.27% or \$7.75 per month as of July 1, 2019, including an increase in the Customer Charge of \$0.74.4 In addition, Liberty has proposed a step increase intended to recover an annual revenue deficiency of

¹ On November 22, 2019, Liberty adjusted this amount to \$6.7 million. *See* Technical Statement of Philip E. Greene and David B. Simek November 22, 2019.

² Greene/Simek Testimony on Temporary Rates at 5 (Bates II 007).

³ Order No. 26,267, Docket No. DE 19-064, dated June 28, 2019.

approximately \$2,293,431 based on \$14,967,736⁵ in projected capital additions from

January 1 through December 31, 2019. The Company is requesting that the Commission

make the step increase effective at the time that permanent rates become effective

following the conclusion of this proceeding, but no earlier than January 1, 2020.

5 Q. As part of this rate case, did Commission Audit Staff complete a financial audit of 6 Liberty's books and records?

A. No. The Commission's Audit Staff is in the process of completing its audit and has not yet issued a final audit report. My understanding from discussions with the Commission's Director of Audit is that the final audit report will be issued by year-end 2019 (after the Company has had an opportunity to respond to draft audit findings). Staff plans to reflect the results of the final audit report in an updated revenue requirement calculation to be completed in advance of the technical sessions/ settlement conference scheduled for in mid-January.

Q. Are you aware of any deficiencies encountered by Audit Staff during the course of the audit process and how do those problems relate specifically to issues raised in your testimony?

A. Yes. Based on discussions with the Audit Director, in reviewing Liberty's capital project costs, Audit discovered inaccuracies in the estimated budget amounts and also large budget variances for some projects. Audit also reviewed several projects for compliance with the Company's capitalization policy and noticed several instances of missing documentation in terms of Business Cases, Over Expenditure Forms, and Project

⁴ Heintz Testimony at 13 (Bates II-313) and Attachment DAH-3 at 2 (Bates II-333).

⁵ On June 21, 2019, in response the Staff data request 3-28, Liberty adjusted this amount upward to \$20 million due to the omission of three additional capital projects, increasing the step adjustment to \$2,860,886.

1 Closeout Reports not provided by Liberty. As we discussed below, these issues 2 constitute an ongoing area of concern for Staff.

3 Q. Is Staff proposing a decrease to Liberty's revenue requirements in this proceeding?

A. Yes. As noted above, please refer to the testimony of Ms. Mullinax in which she provides detailed support for Staff's recommended rate increase of \$137,989 which is \$6,535,504 less than Liberty's revenue requirement as contained in its updated request filed on November 22, 2019. My testimony below addresses adjustments to the Company's rate base.

Q. Is Staff convinced that its recommendations for disallowances in this case will provide just and reasonable results?

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Yes. A key element of the just and reasonable standard, coupled with the statutory requirement that a utility's capital investments must be found to have been prudently incurred, is that the Commission must weigh the conflicting interests of both the utility and the ratepayer before finding the proposed rate is just and reasonable. In doing so, the Commission must measure what the public must reasonably pay against what the utility is reasonably entitled to receive. In the present docket, Staff's analysis indicates that Liberty overstated its revenue requirement by \$6.5 million, and to allow such a requirement into rates would be unjust for Liberty's ratepayers. In addition, the Commission's expectation that a utility's investments are prudent, as directed by the statutory requirement referenced above, also rests on the just and reasonable standard such that imprudent expenditures are inconsistent with the standard and should be disallowed. As a result, Staff has found that approximately \$6 million in capital investments and related cost overruns, and approximately \$20 million in current capital investments for 2019, were not adequately explained or justified by the Company and that ratepayers should not be required to pay those costs.

1 IV. LIBERTY'S CAPITAL EXPENDITURES: HISTORICAL PERSPECTIVE

2 Q. What explanation does the Company provide for the claimed downward pressure

on its rates of return?

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Liberty testifies that the primary driver behind the need for an increase in rates is approximately \$36 million in capital investments made by the Company since December 31, 2016.⁶ In the period immediately after Liberty's acquisition of Granite State Electric in 2013, and prior to Liberty's last rate case in 2016, Liberty had invested \$50 million in capital additions and improvements. At the time of Liberty's last rate case, Staff expressed concern about this level of investment given that Liberty's load growth had increased very little during that same time period.

11 Q. Why are Liberty's capital investments under Staff's review in this rate case?

First, regulated electric utilities are some of the most capital-intensive entities that exist given the substantial amount of capital investment that is required to build and maintain reliable infrastructure. As a result, the significant and ongoing nature of those investments are frequently the primary causes for utilities to request periodic increases in rates. However, unlike unregulated competitive firms, regulated utilities, because they are regulated, cannot just pursue any investment strategies available that maximize shareholder value. Regulators must find that such expenditures are prudent, just and reasonable, and used and useful. As cited above, Liberty's primary justification for the current rate increase request is the downward pressure additional capital expenditures have placed on the Company's revenues and rates of return.

Second, during the course of Staff 's review in Liberty's prior rate case, Docket DE 16-

383, Staff found disparities between budgeted amounts and actual expenditures reported

by the Company to be both numerous and significant in size, especially the costs incurred in 2014, raising questions as to whether the Company was sufficiently diligent in controlling those costs. Given the increasing number of variances at that time (approximately 42 out of 100 projects funded in 2014, and 49 out of 90 projects funded in 2015), which in several instances increased originally budgeted costs several times over, and given that Liberty provided little in the way of specific information as to root causes or how the Company decided that those overages were economic, Staff was unable to determine that Liberty took appropriate measures to control costs or that Liberty's decision-making process was reasonable or in the interest of ratepayers. Ultimately, Staff recommended a disallowance of \$5.8 million in cost overruns in DE 16-383. That case was resolved by a Settlement Agreement, which the Commission approved.

Q. Did additional information come to Staff's attention during the prior rate case (DE 16-383) that re-enforced Staff's concerns involving Liberty's capital investments?

Yes. In Docket No. DG 14-180 Liberty Utilities (EnergyNorth Natural Gas), a prior rate case filed in 2014 by Liberty's New Hampshire natural gas utility EnergyNorth Natural Gas ("EnergyNorth"), the Commission authorized a company-wide audit to review the "effectiveness and efficiency" of Liberty's business processes, including among other areas, Liberty's business planning and budgeting. ⁸ As referenced in that Order, Staff's concerns involved the Company's operational performance after the transition from National Grid, especially in the areas of customer service, IT, and capital budgeting and expenditures. The audit assignment was awarded to Liberty Consulting Group ("LCG")

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⁶ Greene/Simek Testimony on Permanent Rates at 5 (Bates II-081).

⁷ See Docket DE 16-383, Exhibit 11, Testimony of Jay E. Dudley at 8-11 (Bates 9-12).

⁸ See Docket No. DE 14-180, Order No. 25,797 of 6/26/15 at 15.

August 12, 2016.9 2 3 Q. At that time, what elements of the LCG report did Staff consider relevant to its 4 review of Liberty's capital expenditures in the rate case? 5 Staff found most of the findings of the LCG report troubling. One important issue, Α. 6 centered on LCG's review of Liberty's planning and budgeting process, and associated 7 capital expenditures, contained at pages III-1 through III-30 of the LCG audit. An 8 excerpt of that section of the report is attached to my testimony as Attachment JED-1. 9 Specifically, the audit report underscored and confirmed many of the same issues 10 encountered by Staff during discovery in DE 16-383, including but not limited to: 11 a) Extremely large variances between budgeted and actual capital expenditures in 12 2014. 13 b) Capital budget variances that continued into 2015 and 2016. 14 c) Lack of detailed explanations supporting and justifying those variances. 15 d) Significant lags in timing between capital budget approval and actual capital 16 expenditure analysis. 17 e) The commencement of capital projects well in advance of project analysis and 18 approval by management. 19 f) Project proposals (business cases) that lacked sufficient detail and content and 20 failed to conform to internal policy and procedures. 21 g) Failure by management to effectively monitor and control capital spending.

in 2015 and LCG released its Management and Operations Audit of Liberty Utilities on

⁹ It should be noted that the audit covered both the operations of Granite State Electric and EnergyNorth.

- h) No evidence that Liberty observed or followed Good Utility Practice in its capital budgeting and planning process.
- Q. Have these characteristics reappeared in other subsequent rate cases filed by Liberty?

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- Yes. In Docket DG 17-048, EnergyNorth filed a petition for an increase in permanent Α. gas rates that included a decoupling mechanism, recovery of capital investments, and a step increase, similar to the request filed by Liberty in the present rate case. During Staff's review at that time, Staff discovered substantial cost increases related to the construction of the new Concord Training Center which more than doubled the original cost estimate of \$1.02 million to \$2.3 million. Upon completion of Staff's examination of that project, Staff concluded that both the construction and the cost overruns for the training center were not supported by sufficient financial/economic analysis, credible cost estimates, adequate consideration of alternatives, or reasonable decision-making by Liberty's management. 10 In fact, many of the same deficiencies in documentation found by Staff in DE 16-383 and this current electric case were also discovered by Staff in the Ultimately, based on the considerable evidence presented, Staff gas rate case. recommended disallowance of the training center costs and the Commission disallowed \$1.25 million of those costs from inclusion in the rate base. 11
- Q. With the filing of the rate case in the current docket, and in light of the previous concerns and evidence involving Liberty's deficient capital planning and budgeting practices, has Staff noticed any improvements in the Company's processes since that time?

¹⁰ See Docket DG 17-048, Testimony of Al-Azad Iqbal, Exhibit No. 18 at Bates 19-27.

¹¹ Docket DG 17-048, Order No. 26,122, dated April 27, 2018, at 19-26, and Appendix 1 at 10.

Noticeable improvements have been few. One positive development observed by Staff was the introduction by Liberty of a new and improved policy and procedures manual for capital expenditures, the "Liberty Way Policy & Procedures" dated October 23, 2018 (attached as Attachment JED-2), which better defines the capital budgeting and planning process and also provides a more comprehensive business case design in terms of project analysis. In addition, the occurrence of cost overruns has decreased since 2016, however, the variances for many individual projects remain significant as outlined below. Nevertheless, as discussed below, most of the recommendations made by LCG for improving the capital planning and budgeting process at Liberty have been largely ignored.

Q. Please briefly summarize the capital budgeting process at Liberty.

The capital budget process for Liberty begins in August of each year with the preparation and submission by Liberty Utilities Regional Management of the Long Term Capital Expenditure Plan that is incorporated into Algonquin Power and Utilities Corporation's (APUC) Corporate Long Term Model. ¹² Inclusion of preliminary Business Case and Capital Project Expenditure forms for each project are recommended in Liberty's policy and procedures for this stage of the process. ¹³ With submission of the Long Term Expenditure Plan, the related capital budget is set and approved by the APUC Board and Regional Liberty management is responsible throughout the successive year for planning and overseeing the projects that fall within the capital budget. ¹⁴ A five-year capital budget forecast is also part of the Expenditure Plan. A flow chart depicting the budget

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¹² Attachment JED-2 at 7.

¹³ Staff learned in the Technical Session held on 10/16/19, that Liberty does not include any business cases in support of its capital budget sent to the APUC Board.

¹⁴ Attachment JED-2 at 7.

1 preparation and approval cycle is included as Appendix G of the Liberty Way Policy & Procedures. 15 In addition, the policy and procedures requires the preparation of a 2 3 "Business Case" and/or a "Capital Project Expenditure" form for each budgeted project, 4 and a "Change Order" form to request changes to project scope and budget amounts. The 5 policy and procedures sets out specific information requirements for each of these forms. 16 6 7 What internal documentation from Liberty did Staff examine as part of its review? Q. 8 As part of Staff Data Request 9-3 (Attachments JED-3, 3a, and 3b to my testimony), Staff Α. 9 sought to obtain and review the following documents involving a specific sampling of 10 projects from 2017 and 2018: a. Business Cases and/or Capital Expenditure Request forms 11 12 Change Order forms 13 **Project Close-out Reports** 14 Work orders 15 Over Expenditure Applications (pre-2018) 16 Monthly Capital Reports/ Monthly Cash Spend Reports f. 17 Monthly Operations Review 18 h. Meeting agendas and minutes of the Financial Planning and Analysis Group 19 As referenced below, not all of the requested documentation was submitted or made 20 available by Liberty. In addition, Staff's review of some projects was hampered by the 21 Company's excessive and unexplained delays in submitting additional follow-up 22 responses from the October Technical Sessions.

¹⁶ *Id* at 11-14.

¹⁵ *Id* at 35.

Q. What issues did Staff discover in its review of Liberty's capital budgeting?

A. As was the case in DE 16-383, Staff found that the cost estimates contained in the capital budgets were consistently inaccurate, especially for blanket projects and large complex projects, and that the capital planning and budgeting process itself appears to be ad hoc with Liberty management providing only cursory oversight and monitoring as projects progress to completion. For example, from the initial budget phase through project startup, local management is given a high level of discretion in terms of capital budget tolerances and accuracy with ranges as wide as +100%/-50% for investment grade projects.¹⁷ The LCG report found this to be unusually broad when compared with similarly situated utilities and that more reasonable tolerances tend to be in the 5 percent to 10 percent range. 18 In addition, project analysis documentation such as Business Cases and Capital Project Expenditure forms are not included with the annual Expenditure Plan submitted to APUC, indicating that budgets are approved with little scrutiny of specific projects by upper level management and the Board of Directors. Staff also found little evidence that Liberty considered or utilized basic capital budgeting techniques such as the identification of alternatives and dependencies among alternatives, least cost planning, or risk identification for any of the over-budget projects reviewed in the sample below. It also appears from a review of Liberty's monthly capital spending reports that APUC imposes little in the way of restrictions or cost controls on the level of capital expenditures undertaken by the Company. Similarly, it appears that Liberty Regional Management provides only cursory oversight and monitoring of the capital budgets during the course of the year since they receive the same monthly reports. In

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¹⁷ *Id* at 12.

¹⁸ Attachment JED-1 at III-29.

1		addition, as noted below, most of the over-budget projects reviewed by Staff were not				
2		specifically tracked by these reports.				
3	Q.	What conclusion does Staff draw from the historical perspective discussed above				
4		involving Liberty's past and present practices and approaches to capital planning,				
5		budgeting, and expenditures?				
6	A.	Given that the same issues and deficiencies have occurred repeatedly since Liberty's				
7		acquisition of Granite State Electric from National Grid, and the fact that few or no				
8		improvements in these processes have been evident, Staff concludes that this ongoing				
9		state of affairs establishes a pattern of conduct and business dealings by Liberty that are				
10		detrimental to ratepayers and not in compliance with the just and reasonable standard.				
11						
12	V.	FINDINGS: REVIEW OF CAPITAL PROJECTS SAMPLE AND COST OVER				
13		RUNS FOR 2018 AND 2017				
14	Q.	What specific projects did Staff include in its examination?				
15	A.	Staff compiled sample lists (attached as Attachments JED-3a and JED-3b) of projects				
16		with cost over runs for 2018 (9 projects) and 2017 (6 projects) from a master list of				
17		capital projects provided by Liberty in response to Staff Data Request 1-2 (attached as				
18		Attachment JED-4). The list of sample projects for 2018 and 2017 are provided in the				
19		table below:				
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Table 1: 2018 Sample Projects

2	Project No.	<u>Description</u>	Budget	Actual	Variance
3					
4	8830-1832	Replace 6L2 No. Main Hanover	\$1,100,000	\$1,295,593	\$195,593
5	8830-C42930	Install Service to Tuscan Village	\$400,000	\$674,260	\$274,260
6	8830-C18620	Charlestown 32 Dline	\$250,000	\$354,751	\$104,750
7	8830-1827	IT Systems Allocations-Corp	\$270,500	\$361,643	91,142
8	8830-1830	Misc. Capital Imprv. Londonderry	\$35,000	\$60,650	\$25,649
9	8830-1864	Rockingham Substation	\$200,000	\$1,568,870	\$1,368,869
10	8830-PE	Preliminary Engineering	\$0	-\$1,497,946	\$1,497,945
11	8830-1865	Rockingham Sub Transmission	\$300,000	\$575,354	\$275,354
12	8830-C36426	SCADA Distribution & Auto.	\$90,000	\$171,930	\$81,930
13	Total		\$2,645,500	\$3,565,105	\$919,602

Table 2: 2017 Sample Projects

16	Project No.	<u>Description</u>	Budget	Actual	Variance
17					
18	8830-CD0291	Sky View URD	\$21,286	\$70,683	\$49,394
19	8830-C18603	Bare Conductor Replacement	\$1,300,000	\$1,784,038	\$484,038
20	8830-C18620	Charlestown 32 Dline	\$316,992	\$500,281	\$183,289
21	8830-C36424	Mt. Support New 16L3 Feeder	\$275,000	\$467,936	\$192,936
22	8830-1867	Rockingham Sub Transmission	\$50,000	\$175,504	\$125,504
23	8830-C42921	Install Splices 6L2 &6L4	\$111,562	\$203,305	\$91,743
24	Total	-	\$2,074,840	\$3,201,747	\$1,127,444

As referenced above, all of the internal documentation obtained from Liberty, was reviewed by Staff in connection with each of these projects. However, for the purposes of my testimony, only three of the projects from 2018 and two from 2017 will be discussed here as representative of the Company's deficiencies in the areas of capital budgeting, planning, documentation, and execution.

Q. Please provide the results of Staff's review of those projects.

A. Below we provide our findings for the sample projects based on Liberty's responses to Staff Data Request 9-3, and data requests TS 1-13, TS 1-15, TS 1-16, TS 1-17, TS 1-18 (the 2018 projects respectively attached as Attachments JED-3c, 3d, 3e, 3f, and 3g), and

1 data requests TS 2-4, TS 2-6, TS 2-7, TS 2-8, TS 2-9, TS 2-10 (2017 projects 2 respectively attached as Attachments JED-3h, 3i, 3j, 3k, 3land 3m). 3 Note: The Business Cases and Capital Project Expenditure Applications (CPE) are 4 separate forms but are typically incorporated into a single document package when both 5 are required under Liberty's policy and procedures. 6 **2018 Capital Projects** 7 Project #8830-1832 Replace 6L2 Direct Buried Cable No. Main St. Hanover 1. 8 **Attachment JED-3d** 9 2018 Budget: \$1,100,000 Actual: \$1,295,593 Variance: \$195,593 10 **Revised:** Variance: \$1,070,593 \$225,000 Actual: \$1,295,593 11 Business Case/CPE: 12 This project involved the removal and replacement of approximately 1600 13 feet of 500 XLPE AL cables along North Main Street in Hanover, NH. 14 Liberty asserts that this type of underground cable is prone to failure but at 15 the Technical Session held on October 16, 2019, Liberty was unable to 16 identify specific instances of failure of the XLPE AL cables elsewhere 17 within Liberty's service territory. Nor could the Company provide in the 18 follow-up data response any specific documentation evidencing failure or 19 failure rates in Liberty's service territory. 20 The Business Case was dated October 8, 2017, but was not signed by 21 authorized signers until November 30, 2017. 22 Both the Business Case and the attached CPE set the approved budget 23 amount at \$225,000 which conflicts with Table 1 above where Liberty

reported the original budget amount to be \$1.1 million.¹⁹ At a Technical Session held on October 16, 2019, the Company attributed this disparity to a correction and update to the original cost estimate which appears to be the amount of the cost increase of \$1.07 million referenced in the Change Order Form described below. However, because the \$225,000 amount is referenced on all of the documentation submitted by Liberty, Staff will consider this amount as the original budget figure for this project.

No detailed analysis or decision criteria are provided in the sections addressing Alternatives/Options, Financial Assessment, and Risk Assessment as required under Liberty's Policy & Procedures. Instead the word "None" is inserted in these sections. The Implementation/Action Plan section merely states that "construction will take place under individual job numbers." Likewise, the Cost Estimate section of the CPE provides no discussion or detail on the nature of the estimate, timing of spending per quarter, or risks associated with the estimate. Also, the section for Analysis of Project Value is blank except for citing the budget amount of \$225,000.

Change Order Form:

 This change order request was dated March 19, 2019 and approved on March 31, 2019, three months after the project completion date of December 31, 2018. This runs contrary to the apparent intent of the form as described in the Policy & Procedures since engagement of management

¹⁹ Liberty's Form E-22 Report, filed with the Commission February 28, 2018 pursuant to Puc 308.07, shows the original budget as \$225,000.

for approval, and alerting management to cost overruns, should have been sought during the course of the project either before or at the time the changes occurred. This after-the-fact notification undermines the purpose of the form.

The Financial Assessment section of the form only provides the original budget amount of \$225,000, the amount of the requested increase of \$1.07 million, and the new cost figure of \$1.295 million. There is no breakout within the cost categories between original costs and updated costs as required on the form. The Basis for Change section provides no detailed analysis or justification for the increase, or why it was authorized, other than the need to "accommodate expected construction costs" and "additional construction oversight was needed." At the Technical Session held on October 16, 2019, Liberty represented that the project was complicated by road work being conducted by the Town of Hanover at or about the same time, and also by the degradation of some manholes, but Liberty provided no analysis as to how much that road work or manhole construction contributed to the cost increase referenced in the Change Order. In their pre-filed testimony, Mr. Rivera, Mr. Strabone, and Ms. Tebbetts state that the underground cables were relocated but this apparent complication is not discussed or explained in the project documentation or in the data responses provided by Liberty.²¹

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²⁰ See Attachment JED-2 at 11-12, and 16-22.

²¹ Testimony of Rivera, Strabone, and Tebbitts at 7-8 (Bates II-185 - II-186).

1 2 Schedule, New Forecast, and Variance. 3 4 5 6 requested. 7 Project Close Out Report: 8 9 10 Business Case. 11 12 13 the necessary information. 14

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- In the Schedule Impacts sections, "N/A" was inserted for Baseline
- This report was not provided by Liberty in the Company's response to Staff 9-3 as requested by Staff. Instead it was provided in a follow-up request, Staff TS 1-15 (approximately two months after it was originally
- The Project Documentation Checklist in Section 3 of the form is essentially blank in terms of key documents except for a reference to the According to Liberty's data response in TS 1-20 (Attachment JED-8), Liberty apparently believes this section of the form to be superfluous and unimportant since the Business Cases provide all of
- Under the Project Lessons Learned section in Section 5, "N/A" was inserted in the parts involving Problem Statement, Problem Description, References and Recommendations, despite the apparent problems encountered by Liberty with this project. As a result, no root cause analysis addressing project difficulties and the reasons for the cost overrun were provided.
- In Section 8, Project Cost Summary, Liberty erroneously refers to the original budget amount as \$1.295 million which was actually the total cost for the project. As a result, Liberty incorrectly represents that the cost

variance for the project was \$0. Similarly, under Reasons for Variance,
the Company reports "No variance between actual and budget."

Work Orders:

- Copies of individual work orders were not provided for this project. Instead Liberty enters all of the work order information into an Excel spreadsheet and Liberty provided that spreadsheet in its data response. Upon review, Staff noticed that underground construction costs of approximately \$900,000, including underground conductors and devices, appeared to be excessive given that only 1600 ft. of cable was replaced. Manhole replacements typically run in the range of \$30,000 to \$35,000 per manhole. Staff estimates that the maximum number of manholes for this length of cable would be approximately five resulting in a total cost (on the high side) of \$175,000.
- The work orders also show that supplemental engineering was apparently required late in the project (September) at a total cost of \$220,000.
- After including burdens, labor, and all other costs, the total cost of the project came to \$1.3 million.

Monthly Capital/Spend Reports, Meeting Agendas:

- The 6L2 Buried Cable Replacement project in Hanover, and associated cost overruns, was not one of the projects mentioned or tracked in these reports.
- The reports provide only a high level review of gross capital budget amounts in a single chart comparing capital dollars spent to budget, and includes no analysis.
 Only a few select, high profile projects for both the electric and gas divisions are tracked with their own budget schedules.

- Due to the high level nature of these reports, they provide no information as to the degree of oversight, attempts at cost containment (if any), or the thought or decision-making process on the part of upper level management concerning overbudget projects. Because the reports focus on overall levels of spending (both electric and gas), APUC appears to be more concerned with budget overruns on the macro level as opposed to individual projects.
- Based on the dates of the reports, in some instances there was a time lag of two
 months between the creation of the monthly capital spending updates and review
 by APUC (e.g. the February 2018 update was provided for the April meeting, and
 the July 2018 update was provided for the September meeting) indicating a lack
 of timely review by management.
- 2. Project #8830-1864 Rockingham Substation Attachment JED-3c

Budget: \$200,000 Actual: \$1,568,870 Variance: \$1,368,870

Project #8830-PE Preliminary Engineering

Budget: \$0 Actual: -\$1,497,946 Variance: \$1,497,946

Business Case/CPE:

• Note: The two projects listed above are apparently interrelated in that the negative amount of -\$1,497,946 for Project 8830-PE works as an adjustment to the amount of \$1,568,870 for Project 8830-1864 presumably to net out other costs for the Rockingham Substation but this was not clearly explained in the Business Case or any of the other documents submitted by Liberty. The Business Case and the CPE both set the preliminary engineering budget at \$100,000 even though the budget amount listed above by Liberty was \$200,000.

- The \$1.5 million portion of the actual cost for the Rockingham Substation involves the purchase of 1.4 acres of land located at the former Rockingham Park site in Salem, New Hampshire. This amount was not included by the Company in its 2018 test year rate base but instead was booked to "Plant held for future use." According to Liberty, the substation project is a key part of Liberty's overall buildout plan to serve the additional load forecasted for the Tuscan Village development (see Step Adjustment discussion below). Liberty plans to begin construction at the site in 2020. The Company did not report the land purchase as part of its 2018 E-22 report with the Commission nor did it disclose the purchase in the jointly filed testimony of Mr. Rivera, Mr. Strabone, and Ms. Tebbetts.
- The Business Case was dated February 16, 2018, indicating that it was apparently submitted for approval well after the annual budget review and approval by APUC.
- The Business Case/CPE makes no reference to the land purchase and thus provides no economic analysis or analysis of alternatives to support the transaction. Given the date of the Business Case, February 2018, and the date of the Purchase and Sale Agreement, December 2017 (see below), it is clear that the land purchase was known to Liberty at the time of project proposal and design. Also, only minimal analysis for construction of the substation is provided with a reference made to the Salem Area Study for more detailed information.²³ Consequently, Staff made inquiries about the project and the land purchase at the Technical Session held on October 16, 2019. At the tech session, Liberty

²² See Attachment JED-3c, Staff data response 5-14.

²³ The Salem Area Study is attached to Mr. Demmer's testimony as Attachment KFD-5.

witnesses reiterated the need for both the substation and the land purchase but, when asked, did not provide specific details about the need for both the substation and the land. Liberty provided the following supporting documentation in their follow-up data response (attached as Attachment JED-3c):

- a) Purchase and Sale Agreement: The agreement is dated December 2017 between Rock Acquisition, LLC and Liberty Utilities Corp. for 1.4 acres of vacant land within the "Tuscan Village Project," including the grant of an easement over Tuscan Village property to access the lot. The agreement is conditioned upon Liberty obtaining a subdivision permit from the Town of Salem, at Liberty's expense, indicating that the lot was not part of a previously existing subdivision prior to the sale. As noted above, the purchase price was \$1.5 million. Importantly, under Section 20 (a) "Construction Obligations," Liberty agrees to construct at its "sole cost and expense, the Substation which will provide adequate electrical service to the Tuscan Village Project..," indicating that Tuscan Village, as the primary beneficiary of the project, will not be contributing to the costs of the substation project.
- b) Appraisal Report: The Appraisal Report is dated July 13, 2017, and lists the market value of the property at \$925,000. Staff inquiries with the Town of Salem's Tax Assessor's Office revealed that the tax assessed value for 2018 was \$813,200. The appraisal describes the lot size as a "hypothetical 1.23± acre lot" due the fact that the lot had not yet been subdivided from the larger 120 acre Tuscan Village development at the

time of the appraisal. The lot currently lacks existing road frontage and will be accessed from a private road that will be built in conjunction with the rest of the Tuscan Village development.

- c) Alternative Sites: In response to subpart of d. of Attachment JED-3c, no documentation or analysis involving Liberty's consideration of alternative sites was provided by Liberty. As mentioned above, no analysis of alternative sites was included in any of the Business Case documentation reviewed. As a result, Staff can only conclude that no analysis of alternative sites was undertaken by Liberty at the time of the land purchase from Tuscan Village.
- d) APUC Involvement and Approval: Based on the Company's response to subpart e. of Attachment JED-3c, Staff concludes that there were no communications or discussions with upper management concerning the land purchase. According to Liberty, approval of the Business Case and Change Order was all that was needed for approval even though the Business Case/CPE provided no description or analysis of the land transaction.
- e) Salem Depot Substation: The Salem Depot substation is an existing substation owned by Liberty located near the corner of Main Street and Central Street in Salem, New Hampshire. The existing lot consists of two adjoining lots totaling 0.58 acres with a total tax assessed value of \$190,000. According to Liberty, Salem Depot is to be replaced by the Rockingham Substation project and will be taken out of service once the

1 Tuscan Village project is complete and Rockingham Substation is energized.²⁴ In response to subpart g. of Attachment JED-3c, Liberty did 2 3 not provide a detailed analysis, as requested by Staff, showing why Salem 4 Depot was not considered a viable alternative site for the Rockingham 5 Instead, Liberty merely states that it needs 1.5 acres to accommodate the new substation and the storage of large equipment.²⁵ 6 7 Staff reviewed the submitted site plans and other maps for Rockingham and Salem Depot, and Staff conducted a site visit of both locations on 8 November 19, 2019.²⁶ Photos from that site visit are attached as 9 Attachment JED-5. As a result of that review, Staff witness Kurt 10 Demmer, concluded that ample room currently exists at the Salem Depot 11 12 site to accommodate expansion to support of the Tuscan Village development. Also, as discussed in Mr. Demmer's testimony, construction 13 14 of Rockingham Substation is based largely upon load growth that was 15 over-estimated by Liberty as indicated by current load experienced at the finished northern portion of the Tuscan Village development (which is 16 presently 1MW).²⁷ For the reasons stated above, it is apparent that Liberty 17 18 did not employ least cost planning in terms of reusing and expanding the 19 existing Salem Depot site as an alternative to purchasing real estate (at a

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²⁴ See Salem Area Study attached to Mr. Kurt Demmer's testimony as Attachment KFD-5; and Rivera/Strabone/Tebbetts Testimony at 11 (Bates II-189).

²⁵ At the Technical Session held on October 16, 2019, Liberty disclosed that initially the development owner, Rock Acquisition LLC, did not want the Rockingham Substation located at the Tuscan Village site. How this impasse was eventually overcome by Liberty during the course of negotiating the sale was not explained.

²⁶ There also exists a vacant lot abutting the Salem Depot location that once served as the location for a restaurant which was recently destroyed by fire. The lot appears to be available for other development. It is not known whether Liberty explored purchasing this lot.

²⁷ Demmer Testimony at 26-27.

premium, *i.e.* above appraised and assessed value) and constructing a new substation. As a result, Staff does not believe Liberty has supported the need to build a new substation or the land purchase costs needed for the project.

Contributions in Aid of Construction (CIAC): Despite the fact that the Tuscan Village project is the primary beneficiary of the Rockingham substation, it appears that the owners did not offer to contribute the land for the new substation nor did they offer to sell the land at a discount.²⁸ Liberty provided no insight as to whether these issues were discussed as part of the negotiation of the land purchase. In addition, it appears that Tuscan Village is contributing little (\$752,982 to date²⁹) towards Liberty's costs of expansion (estimated at \$20 million) to accommodate the overall Tuscan development, indicating that most of those costs will be borne by Liberty's ratepayers (see discussion of Project #8830-1865 below). In response to subpart i. of Attachment JED-3c, Liberty states that CIAC only applies to line extensions.

Change Order Form:

• This change order request was dated March 19, 2019 and approved on March 31, 2019, more than six months after the land purchase had been finalized. Again, this runs contrary to the intent of the form as described in the Policy & Procedures and is another example of management's apparent disengagement in terms of large capital investments and the limited scrutiny of those investments.

²⁸ See footnote 24 above.

²⁹ See Attachment JED-3c, Staff data response 5-14.

- The Financial Assessment section of the form only provides the original budget amount of \$100,000 and the additional amount needed for the land purchase which was inputted as \$1.4 million. The Basis for Change section provides no detailed analysis or justification for the increase, or why it was authorized, other than the cost of the substation parcel of \$1.5 million was "transferred" to this project.
- In the Schedule Impacts sections, "N/A" was inserted for Baseline Schedule, New Forecast, and Variance.
- This report was not provided by Liberty in the Company's response to Staff 9-3 as requested by Staff. Instead it was provided in a follow-up request, Staff TS 1-13 (again approximately two months after Staff initially requested the report).

Project Close Out Report:

- The Project Documentation Checklist in Section 3 of the form is essentially blank in terms of key documents except for a reference to the Business Case. Again, as noted above, Liberty apparently believes this section of the form to be superfluous and irrelevant in terms of complying with the purpose of the form.
- Under the Project Lessons Learned section in Section 5, "N/A" was inserted in
 the parts involving Problem Statement, Problem Description, References and
 Recommendations. It is under this section that Staff would expect to see some
 discussion and analysis as to why the Salem Depot site was determined by
 Liberty not to be a viable alternative site.
- In Section 8, Project Cost Summary, Liberty erroneously refers to the original budget amount as \$1.568 million which was actually the total cost for the

1 project. As a result, Liberty incorrectly represents that the cost variance for the 2 project was \$0. Similarly, under Reasons for Variance, the Company reports 3 "No variance between actual and budget." 4 Work Orders: 5 The work order spreadsheet provided by Liberty shows adjustments in the amount 6 of \$1.5 million for the purposes of reclassifying the land purchase and transferring 7 it from Project No. 8830-1865 (referenced below). 8 The work orders show a total expense for Station Equipment of \$45,428. 9 Monthly Capital/Spend Reports, Meeting Agendas: 10 The Rockingham Substation project, and the \$1.5 million land purchase, are not 11 specifically mentioned or tracked in these reports. 12 13 3. **Project #8830-1865** Rockingham Substation Transmission Lines 14 **Attachment JED-3e** 15 **Budget: \$300,000** Actual: \$575,354 Variance: \$275,354 16 Revised: \$200,000 **Actual: \$602,418** Variance: \$402,418 17 Business Case/CPE: 18 This project involved the design and site planning for the construction of two 115 19 kV transmission lines from Golden Rock substation to the new Rockingham 20 substation at Tuscan Village based on the recommendations of the Salem Area 21 Study which projects an increase in Liberty's load of approximately 14 MW's due to the Tuscan development project. As discussed in Mr. Demmer's testimony, 22 23 this project is both unneeded and unnecessary due to the fact that load growth in

the Salem area can be reliably served by modifying the existing 23 kV system, and because the projected load is speculative in nature.³⁰ As Mr. Demmer points out, the Salem Area Study did not consider improvements to the existing 23 kV system as among the available alternatives. 31

- The Business Case was dated February 16, 2018, but was not signed by authorized signers until March 27-31, 2018.
- Both the Business Case and the attached CPE set the approved budget amount at \$200,000 which conflicts with the figure Staff obtained and used in Table 1 above (Liberty reported the original budget amount to be \$300,000).³² Because the \$200,000 amount is referenced on all of the documentation submitted by Liberty, Staff considers this amount to be the original budget figure for this project.
 - No detailed analysis or decision criteria are provided in the sections addressing Alternatives/Options, Financial Assessment, and Risk Assessment as required under Liberty's Policy & Procedures, except for a brief reference to the Salem Area Study and reiteration that the project involves engineering and design. The Implementation/Action Plan section merely states that "construction will take place under individual job number in future years." Likewise, the Cost Estimate section of the CPE provides no discussion or detail on the nature of the estimate, timing of spending per quarter, or risks associated with the estimate except for a reference to "\$100,000 to perform detail engineering." Page 5 of the CPE was omitted which includes relevant sections on alternatives evaluation, risk analysis,

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³⁰ Demmer Testimony at 26-27.

³² Liberty's Form E-22 Report, filed with the Commission February 28, 2018 pursuant to Puc 308.07, does not list this project.

safety, decision making process, and Financial Summary, thus Staff was unable to review those sections.

Change Order Form:

- This change order request was dated March 19, 2019 and approved on March 31, 2019, three months after the project completion date of December 31, 2018. Like other change orders reviewed for other projects in the sample group, the late submission this form runs contrary to its intent as described in the Policy & Procedures since engagement of management for approval, and alerting management to cost overruns, should take place during the course of the project either before or at the time the changes occurred. This after-the-fact notification essentially obviates the need for and the purpose of the form.
- The Financial Assessment section of the form only provides the original budget amount of \$200,000, the amount of the requested increase of \$402,418, and the new cost figure of \$602,418. There is no breakout within the cost categories between original costs and updated costs as required on the form. The Basis for Change section provides no detailed analysis or justification for the increase, or why it was authorized, other than additional costs "due to completion of additional tasks such as LiDAR, Staking of structures in ROW; Borings in ROW for proposed structures; Preparation of Construction Cost Estimate and Preparation and submittal of necessary forms to obtain ISO-NE Approval;" all of which are costs that should have been anticipated, analyzed, and accounted for at the time of the initial estimate. When asked in the data request (Staff TS 1-16c)

to explain these costs, Liberty merely referred Staff back to this section of the form.

- In the Schedule Impacts sections, "N/A" was inserted for Baseline Schedule, New Forecast, and Variance.
- This report was not provided by Liberty in the Company's response to Staff 9-3 as requested by Staff. Instead it was provided in a follow-up request, Staff TS 1-16 (two months after being requested).

Project Close Out Report:

- The Project Documentation Checklist in Section 3 of the form is essentially blank
 in terms of key documents except for a reference to the Business Case.
 According to Liberty's data response in Attachment JED-8, Liberty apparently
 believes this section of the form to be superfluous and unimportant since the
 Business Cases provide all of the necessary information.
- Under the Project Lessons Learned section in Section 5, "N/A" was inserted in the
 parts involving Problem Statement, Problem Description, References and
 Recommendations, despite issues encountered by Liberty during implementation
 of the project. As a result, no root cause analysis addressing those issues and the
 reasons for the cost overrun were provided.
- As Staff had observed in other Project Close Out Reports, in Section 8, Project
 Cost Summary, Liberty erroneously refers to the original budget amount as
 \$602,418 which was actually the total cost for the project. As a result, Liberty
 incorrectly represents that the cost variance for the project was \$0. Similarly,

1 under Reasons for Variance, the Company reports "No variance between actual 2 and budget." 3 Work Orders: 4 The work order spreadsheet provided by Liberty shows accounting adjustments 5 related to the land purchase, including the \$1.5 million purchase and 6 approximately \$200,000 other related costs, for the purposes of reversing and 7 reclassifying the land purchase to project number 8830-1864. 8 The spreadsheets also show costs associated with overhead conductors, poles, and 9 devices totaling approximately \$440,000. 10 Liberty Utilities Service Corp. burden charged to Liberty was \$10,690. After including burdens, labor, and all other costs, the total cost of the project 11 12 came to \$1.3 million. 13 Monthly Capital/Spend Reports, Meeting Agendas: 14 • Like the other projects discussed above, the Rockingham Substation Transmission 15 Lines project, and associated cost overruns, was not one of the "High Profile" 16 projects mentioned or tracked in these reports. 17 18 Q. Did Staff discover any other capital investment projects for 2018 that appeared to 19 be problematic? 20 A. Yes. In reviewing Liberty's responses to our follow-up data requests from the Technical 21 Sessions held on October 16 and 17, 2019, and in cross-referencing those responses with 22 the Company's monthly capital spending reports, Staff discovered that Liberty had 23 undertaken a significant improvement project at the Salem Depot substation. The project was first identified in the capital spending report for April 30, 2018, under "Additional Capital Spend Discussion Items" at page 18 (Attachment JED-3a, 9-3.8). The project was described as follows:

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Project Number	Project Description	Project Manager	Amount
8830-1866	Replace Salem Depot Feeder Gateways	Anthony Strabone	1,200,000

This project was not reported on Liberty's E-22 Report to the Commission for 2018, nor was it included in the list of 2018 capital projects listed in the Company's response to data request Staff 9-3 (Attachment JED-3a, 9-3.8). As a result, Staff was unable to serve discovery on Liberty to examine the project since the period for the final round of Importantly, Staff finds troubling the fact that the project discovery had ended. represents a \$1.2 million investment in a substation that is slated by the Company to be taken out of service upon completion of the Rockingham Substation project in 2021.³³ According to the capital spending report for July 23, 2019 at page 55, the budget forecast for the project increased by \$200,000 for a total cost of \$1.4 million. Likewise, with the September 27, 2018 capital spending report at page 156, the budget forecast increased again by another \$200,000 for a total project cost of \$1.6 million. In both instances, no explanation for the cost increases was given. Finally, in the January 29, 2019 report at page 149, the final cost of the project appears to be \$1.356 million, coming in at \$244,000 under the revised budget forecast of \$1.6 million, but \$156,000 over the original budget amount of \$1.2 million.

Q. Does Staff have a recommendation for how the Commission should treat this expenditure?

³³ Demmer Testimony at 25, Attachment KFD-5 at 10-11; and Rivera/Strabone/Tebbetts Testimony at 11 (Bates II-189).

1 Α. Yes. The main concern for Staff is that the project was undertaken by Liberty even 2 though the Salem Depot substation is to be taken out of service once the new proposed 3 Rockingham Substation comes on line. A review of the project by Mr. Demmer 4 indicated that there was little possibility that the getaways could be salvaged and 5 redeployed at a different location at some future time if Salem Depot were taken out of 6 service. In addition, Liberty chose to underground the feeders as opposed to installing 7 them overhead thus adding substantial cost to a project that appears to be only temporary 8 in nature. This occurrence serves as another example of Liberty's failure to employ least 9 cost planning and observe good utility practice. Given that the project was complete as 10 of December 31, 2018, and is thus included in Liberty's rate base for the 2018 rate year, 11 Staff recommends that the Commission disallow the entire investment.

Q. What issues did Staff discover concerning the other projects in Staff's sample group?

Some of the remaining projects reviewed from the sample list are as follows: Α.

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15	<u>Project No.</u>	<u>Description</u>	<u>Budget</u>	<u>Actual</u>	<u>Variance</u>
16	8830-C42930	Install Service to Tuscan Village	\$400,000	\$674,260	-\$274,260
17	8830-C18620	Charlestown 32 Dline	\$250,000	\$354,751	-\$104,750
18	8830-1830	Misc. Capital Imprv. Londonderry	\$35,000	\$60,650	-\$25,649
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20 All of these projects shared the same documentation deficiencies as the projects analyzed in detail above:

> Business Cases/CPE forms that exhibited differing initial budget estimates and missing or incomplete analysis involving alternatives, financial assessment, implementation plan, risks, and decision making process.

- Change Orders that were filed after project completion and nondescript in terms of analysis to support the cost increase.
 - Project Closeout Reports that left key sections blank, provided no analysis of project difficulties (i.e. lessons learned) and misreported variances.
 - Monthly Capital Spend reports that did not include discussion or reference to significant cost overruns of certain projects.
- Q. In your discussion above related to Project #8830-1864 Rockingham Substation

 Transmission Lines, you make reference to Liberty's construction of a 115 kV system in Salem to replace the existing 23 kV system. Does this conversion raise any additional concerns for Staff?
 - Yes. Liberty's main justification for this upgrade to a 115 kV system in Salem is based on the findings of the Salem Area Study attached to Mr. Demmer's testimony. According to the study, in order to adequately and reliably serve the substantial projected load growth associated with the Tuscan Village project (between 14 and 17 MW), and to meet Liberty's new planning criteria, conversion to the 115 kV system is necessary. However, as Mr. Demmer points out in his testimony, the proposed upgrade is unneeded because the new load can be sufficiently met through modifications to the existing 23 kV system at a much lower cost. Mr. Demmer also states that a 115 kV system constitutes excess capacity based on speculative load growth, and does not substantially increase the resiliency or reliability of the overall system with respect to the future needs of the Salem area. Consequently, Staff concludes that all of the 115 kV improvements made by

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³⁴ Demmer Testimony at 26.

1 Liberty in Salem are unnecessary in that they deliver no additional benefits or cost 2 savings to ratepayers over the life of those assets. 3 4 **2017 Capital Projects** 5 1. Project #8830-1867 Rockingham Substation Transmission Supply PE 6 **Attachment JED-3h** 7 **Budget: \$50,000 Actual: \$175,504** Variance: \$125,504 8 Business Case/CPE: 9 This project involved the design and preliminary engineering for the construction 10 of two 115 kV transmission lines from Golden Rock substation to the new 11 Rockingham substation at Tuscan Village based on the recommendations of the 12 Salem Area Study. Note that this project appears to overlap with Project 8830-13 1865 Rockingham Substation Transmission Lines reviewed above. 14 The Business Case was dated July 20, 2017, at least eight months after approval 15 of 2017 capital budget. 16 Both the Business Case and the attached CPE set the approved budget amount at 17 \$50,000 for 2017. The total cost of the project is estimated to be \$5.5 million 18 upon completion in 2021. 19 No detailed analysis or decision criteria are provided in the sections addressing 20 Alternatives/Options, Financial Assessment, and Risk Assessment as required 21 under Liberty's Policy & Procedures, except for a brief reference to the Salem 22 Area Study and reiteration that the project involves engineering and design. The 23 Implementation/Action Plan section merely states that "construction will take

place under individual job number between 2017 and 2021." Likewise, the Cost Estimate section of the CPE provides no discussion or detail on the nature of the estimate, timing of spending per quarter, or risks associated with the overall cost estimate of \$5.5 million.

Change Order Form:

- The requested Change Order form was not provided by Liberty despite the fact that spending on this project increased by \$125,504. In the Company's attached data response, they only mention the missing Project Close Out Report, not the requested Change Order. As a result, Staff is without a documented explanation from Liberty for the cost increase.
- In addition, this form was not provided by Liberty in the Company's response to Staff 9-3, which was the reason for Staff's follow-up request.

Project Close Out Report:

As noted above, and in Liberty's response to the attached data request, apparently a Project Close Out does not exist for this project. Staff assumes that the proposed preliminary engineering and design for the project were completed in 2017, but Staff has no documented confirmation from Liberty to verify that assumption or the final expenditure amount. According to Liberty's data response in Attachment JED-3h, Liberty states that nothing was charged to the project and the capital spend was \$0 for the year, therefore the report was not required. However, the budget amount and variance are shown in Table 2 above, and expenditures were recorded in the attached work order spread sheet for 2017 (see below). Also, if the project is of an ongoing nature as Liberty seems to indicate,

1 then it should appear on the project list for 2018 submitted by Liberty which it 2 does not. 3 Work Orders: 4 The work order spreadsheet provided by Liberty shows numerous accounting 5 adjustments and reversals performed in 2018 and 2019 presumably related to the 6 land purchase, including the \$1.5 million purchase and approximately \$400,000 in other related costs, for the purposes of reversing and reclassifying the land 7 8 purchase to project number 8830-1864. 9 The work orders show some charges to this project in 2017, approximately 10 \$185,000 that had not been reversed (identified as "Preliminary Survey and 11 investigation"), but because of the numerous accounting adjustments and 12 transaction reversals between this project and project number 8830-1864, Staff 13 was unable to precisely trace and verify the actual costs assigned to the project 14 leading up to the variance of -\$125,504. 15 Monthly Capital/Spend Reports, Meeting Agendas: Like the other projects discussed above, this project and associated cost overruns 16 17 were not tracked in these reports. 18 2. **Project #8830-C18620 GSE – Charlestown 32 Dline** 19 20 **Attachment JED-3i** 21 **Budget: \$316,992 Actual: \$500,281** Variance: -\$183,289

Note: This project carried over into 2018 for an additional \$354,751.

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Business Case/CPE:

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- This project involved distribution line work needed to retire the 8L1 feeder at the
 Charlestown substation located in Charlestown to be replaced by a new feeder
 from the Michael Avenue Substation consisting of 1,300 ft. of new 1000 MCM,
 3,500 ft. of 477 Spca, a new 40L2 breaker, and three 167 kVA regulators.
- Both the Business Case and the attached CPE set the approved budget amount at \$316,992 for 2017.
- No detailed analysis or decision criteria are provided in the sections addressing Alternatives/Options, Financial Assessment, and Risk Assessment as required under Liberty's Policy & Procedures. The Implementation/Action Plan section merely states that "construction will take place under individual job number throughout the year." Likewise, the Cost Estimate section of the CPE provides no discussion or detail on the nature of the estimate, timing of spending per quarter, or risks associated with the cost estimate.

Over Expenditure Form:

- The form reflects that spending for the project increased to \$499,069 in August but the "cause" section merely states that bids from contractors were greater than expected at the time of estimate. No information regarding the number or bids, the amounts, or timing of the bidding process were provided.
- In addition, this form was not provided by Liberty in the Company's response to Staff 9-3, which was the reason for Staff's follow-up request.

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Project Close Out Report:

- The report closed out this project despite the fact that is of an ongoing nature as
 Liberty seems to indicate.
 - As noted above, this project apparently continued into 2018 at an additional cost of \$354,751 despite the fact that it was closed out in 2017. Liberty explains in its response to Staff TS 2-6 e. that charges for materials occurred in 2018.

Work Orders:

The work order spreadsheet for 2017 was not provided by Liberty. Instead, the spreadsheet for 2018 was provided confirming the additional amount of \$354,751.
 Because the 2017 spreadsheet was not provided Staff was unable to precisely trace and verify the actual costs assigned to the project leading up to the variance of -\$183,289.

Monthly Capital/Spend Reports, Meeting Agendas:

 Like the other projects discussed above, this project and associated cost overruns were not tracked or addressed in these reports.

Q. What issues did Staff discover concerning the other projects in Staff's 2017 sample group?

A. Some of the remaining projects reviewed from the sample list are as follows:

20	Project No.	<u>Description</u>	Budget	<u>Actual</u>	Variance
21	8830-CD0291	Sky View URD	\$21,286	\$70,683	-\$49,394
22	8830-C36424	Mt. Support New 16L3 Feeder	\$275,000	\$467,936	-\$192,936
23	8830-C42921	Install Splices 6L2 &6L4	\$111,562	\$203,305	-\$91,743
24		-			

As seen in the 2018 sample above, all of the 2017 projects shared the same or similar documentation deficiencies such as in Business Cases/CPE's containing incomplete or nonspecific analysis, Change Orders that were nondescript and filed long after project completion, Project Close Out Reports containing little or no analysis, and Monthly Capital Spend reports that did not include discussion or reference to significant cost overruns for certain projects.

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Q. In the above discussion of projects reviewed for both 2018 and 2017, you refer to some instances of missing documentation not provided by Liberty. Please explain.

At the Technical Sessions held on October 17 and 21, 2019, Liberty represented that it would provide missing project documentation by way of follow-up that was not originally filed with the Company's responses to Staff data request 9-3. Data request 9-3 (Attachment JED-3) was quite specific in terms of the types of documentation Staff was interested in reviewing. Although some missing documents were eventually provided (e.g. Change Orders, Business Cases), as the period for discovery expired key documentation for the projects listed below were not provided by Liberty despite Staff's subsequent requests. As a result, Staff will recommend disallowance for the over-expenditures associated with those projects since they were not supported by Liberty.

18	Project No. Description	Documentation
19 20	8830-C36424 Mt. Support – 16L3	Verification of 1.8% load growth and work orders spreadsheet
21 22	8830-1830 Misc. Capital Improvements- Londonderry	Change order forms
23 24	8830-CD0291 Sky View URD	CIAC received and work orders spreadsheet
25	A complete list of Staff's recommended dis	allowances for the projects reviewed here and

in Mr. Demmer's testimony can found in Section VII below.

- Q. Please summarize Staff's findings based on the review of sample projects for 2018 and 2017 and the documentation and reports obtained from Liberty.
 - My response is divided in two parts. First, Staff's review was largely dependent upon the quality of documentation provided by Liberty in their data responses. Although Liberty appears to have been consistent in filing and processing all of the standard documentation and reports required under Liberty Utilities' internal processes and procedures, most of the documentation examined by Staff lacked the level of detail and analysis required by those same policies and procedures, in most instances providing only a cursory assessment of the capital projects mentioned, containing information that was repetitive and rudimentary in nature. In terms of data responses both written and obtained at the Technical Sessions, Liberty was given ample opportunity to provide root causes and detailed analysis for the cost overruns reviewed, but the answers received were vague and lacking in specifics. Staff's overall findings for each of the documents reviewed are as follows:
 - a) <u>Business Cases</u>: In Staff's view, this is a key piece of documentation since, under Liberty Utilities' policy and procedures for capital expenditures, the business case provides the essential details, and primary justifications for, a given capital project.³⁵ Specifically, for all of the business cases reviewed, most of the sections requiring detailed information and descriptions, such as "Recommendation," "Background," "Alternatives," "Financial Assessment," "Risk Assessment," and "Implementation," provided only a perfunctory discussion, or in many cases, the word "None" or "N/A" were inserted, leading Staff to conclude that the

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³⁵ Attachment JED-2 at 11-12.

³⁶ *Id.* Appendix B at 20-21.

requirements under Liberty's policy and procedures are largely ignored. None of the business cases provided any basis for the proposed budget estimates nor economic justification for the projects. Moreover, for all of the business cases reviewed, the initial budget amounts were consistently under-estimated, in some cases by several times the amount of the actual expenditures as reflected in Attachment JED-3 and Tables 1 and 2 above.

Timing was another concern with the business cases. Most of the business cases

reviewed for 2018 and 2017 were dated the following year, usually two to three months after the capital budgets had been approved by APUC. Moreover, as noted above, Liberty disclosed in discovery that the business cases are never filed as part of the annual budget process, thus leading Staff to conclude that upper management could not have properly assessed the necessity, scope, and costs of a given project at the time of budget preparation and approval.

b) Change Orders: These reports are another example poor timing in that they are submitted at least three months after the typical project completion dates of December 31 of the prior year. This practice runs contrary to the apparent intent of the form as described in the Policy & Procedures since engagement of management for approval, and alerting management to cost overruns, presumably should be sought during the course of the project at the time the changes occurred. This after-the-fact notification essentially negates the need for and purpose of the form. Further, there is typically no breakout within the cost categories between original costs and updated costs as required. The Basis for Change section

provides no detailed analysis or justification for an increase or why it was authorized.

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- c) Project Close Out Reports: Under Liberty's policy and procedures this report is considered to be "a vital aspect of any project;" 37 however, as noted above, the Project Documentation Checklist in Section 3 of the form is typically left blank in terms of key documents except for a reference to the Business Case. According to Liberty's data response in Attachment JED-8, Liberty apparently believes this section of the form to be superfluous and unimportant since Liberty considers that the Business Cases provide all of the necessary information. Also, under the Project Lessons Learned section in Section 5, "N/A" was usually inserted in the parts involving Problem Statement, Problem Description, References and Recommendations, regardless of whether or not Liberty encountered any problems with a project. As a result, no root cause analysis addressing project difficulties and the reasons for a cost overrun were provided. In addition, under Section 8, Project Cost Summary, Liberty will typically refer to the final cost of the project as the original budget amount and, as a result, incorrectly representing that "No variance between actual and budget."
- d) Monthly Capital/Spend Reports, Meeting Agendas: As noted above, these monthly reports attempt to track capital expenditures and variances on a monthly basis, however, the reports provide only a high level review of gross capital budget amounts in a single chart comparing capital dollars spent to budget, and includes no analysis. Only a few select, high profile projects for both the electric and gas divisions are tracked with their own budget schedules and progress

reports. None of the projects reviewed by Staff, except for the Salem Depot Getaway project, were included in any of these reports. Due to the high level nature of these reports, they provide no information as to the degree of oversight, attempts at cost containment (if any), or the thought or decision-making process on the part of upper level management concerning over-budget projects. Because the reports focus on overall levels of spending (both electric and gas), APUC appears to be more concerned with budget overruns on the macro level as opposed to individual projects. Also, based on the dates of some of the reports, there was a time lag of two months between the creation of the monthly capital spending updates and review by APUC, indicating a lack of timely review by management.

e) Work Orders: Copies of individual work orders were not provided for the projects reviewed. Instead, Liberty enters all of the work order information into an Excel spreadsheet. Typically, in addition the work orders and amounts, the spreadsheets also contained numerous accounting adjustments and transaction reversals, making it difficult for Staff to precisely trace and verify the actual costs assigned to a project leading up to the variance. Note: In Staff data request 9-3, copies of work orders were among the documents requested but not submitted by Liberty. If Liberty had provided this information, it would have given Staff the opportunity to work through the line items with the Company's witnesses during the Technical Sessions held in October.

Second, as detailed above, Staff is troubled by two projects that occurred in 2018 but were not fully disclosed by Liberty in terms of its reporting to the Commission (E-22

³⁷ *Id.* at 13.

Report) or in providing complete responses to Staff's inquiries. Those projects are the land purchase from Tuscan Village for \$1.5 million, embedded in project #8830-1864 Rockingham Substation, and the installation of getaways at the Salem Depot substation in project #8830-1866 in the amount of \$1.356 million. Both of these projects represent substantial investments for which Liberty provided no financial analysis, alternatives analysis, or efficiency gains for the benefit of the ratepayers. In short, Liberty did not provide sufficient justification that makes these projects appropriate additions to rate base. Staff believes that when a public utility undertakes investments of this magnitude the decision making process should involve consideration of different future scenarios and options. A prudent manager would have used reasonable assumptions to assess those scenarios and options. Since Liberty did not do this, Staff recommends disallowance of the entire costs for both projects. Q. Did Staff have reasonable expectations in terms of informational content involving the documents requested from Liberty? Staff expected that it would obtain information from Liberty that would provide details Α. and support for the presumption that some or all of the cost overruns were reasonably incurred. In particular, Staff was looking for the following: a) Specific causes of the cost increases for certain projects from inception to completion. b) Extent of project management involvement and methodologies utilized to

assure cost control.

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	c) Documentation evidencing the existence of cost-effectiveness and
	efficiency in project management, engineering, procurement, and
	construction.
	d) Amount or level of interaction with contractors in containing costs.
	e) Techniques used to review and measure the performance of project
	management and cost control.
	Staff believes that these measures represent reasonable and typical management
	practices. Moreover, for a public utility, management's judgment should be substantiated
	in a way that permits thorough review. Unfortunately, Staff was unable to find
	sufficient evidence that Liberty's budgeting and planning process incorporated any of
	these types, or similar types, of project management and cost control. Therefore, based
	on the substantial record Staff reviewed, Staff cannot conclude that such metrics were
	considered by Liberty and we are unable to conclude that the costs were reasonably
	incurred.
VI.	STEP ADJUSTMENTS AND PROPOSED MULTI-YEAR RATE PLAN
Q.	Did Liberty propose any step adjustment increases as part of its overall rate
	request?
A.	Yes. Similar to Liberty's previous request in Docket DE 16-383, the Company proposed
	an initial step adjustment increase for 2019 in the amount of \$2.3 million. This increase
	incorporates costs associated with Liberty's entire 2019 capital spending budget totaling
	\$14.98 million and is to take effect concurrently with the Commission's approval of the
	Q.

permanent rate increase.³⁸ Liberty later modified this request on July 1, 2019, in response to Staff Data Request 3-28b (Attachment JED-6), in which Liberty disclosed that three capital projects had been omitted from the original filing: Project Nos. 8830-1958 Install Service to Tuscan Village South Line \$900,000; 8830-1937 GSE-Dist-New Bus-Resid Blanket \$1.0 million; and 8830-1938 GSE-Dist-New Bus-Comm Blanket \$1.4 million. These project additions resulted in an increase to the 2019 capital spending budget of \$5 million for a new total budget amount of \$20 million, with a revised revenue requirement for the first step adjustment of \$2.9 million. Liberty filed a corrected version of Attachment PEG/DBS-2 with its response to data request Staff 3-28; however, this correction was not included as part of the Company's Technical Statement filed with the Commission on November 27, 2019.

- Q. In Docket DE 16-383 the parties agreed through Settlement that the first step increase in that proceeding should be approved by the Commission. Does Staff support approval of Liberty's first step increase (as revised) in the present docket?
- A. No. As the question indicates, the first step adjustment in Liberty's last rate case was ultimately subsumed, along with several other negotiated issues, into a broad-based Settlement Agreement resolving the issues between the parties. Unfortunately, due to the schedule in that case, and the timing of the Settlement discussions, there was no opportunity for Staff to conduct a thorough review of Liberty's 2016 capital budget, nor did the Audit Division have time to perform an audit. Moreover, by the time the final 2016 capital spending numbers were available from Liberty (with the year-end closure of Liberty's books), i.e. actual expenditures as compared with the budgeted amounts, the

 38 Greene/Simek Testimony on Permanent Rates at 17 (Bates II-093) and Attachment PEG/DBS-2 at 1 and 2 (Bates II-134 and II-135.

time for discovery and testimony involving individual projects had passed. In terms of the present rate case, a near identical situation is emerging whereby Liberty's capital spending budget for 2019 has been proposed by Liberty as the first step increase, and like the prior rate case, the final expenditure amounts for those projects are not yet available for Staff or Audit to review (not to mention projects that may have been postponed or cancelled in the interim³⁹). This is particularly important since some of the more significant capital investments are related to the Tuscan Village project in Salem which we discuss below. Also, the time for serving discovery and submitting testimony related to the 2019 capital projects has now passed. Consequently, Staff is recommending that the Commission not approve the 2019 step increase concurrently with the permanent rates as requested by Liberty. Instead, Staff recommends that the Commission order the scheduling of a separate proceeding to take up this matter at some point in 2020 so as to allow sufficient time for a complete review of the 2019 capital expenditures by both Staff and Audit.

Q. Is Staff deviating from precedent by not recommending approval of the first step increase as requested by Liberty?

A. Staff is not aware of any precedent that requires the automatic acceptance and approval of any step increase without an adequate and reasonable process for review by Staff, Audit, and the Commission. As we have thoroughly documented above, Liberty's history of capital planning and budgeting is not stellar, thus justifying the need for a comprehensive review.

³⁹ Liberty has included Project #8830-1933 GSE Backup Battery Program as part of the 2019 step increase in the amount of \$1 million. However, as part of Staff discovery in this case, Liberty disclosed that it has not yet purchased any of the batteries due to a delay in rolling out the program which was approved by the Commission in Docket No. DE 17-189.

Q. Has Liberty proposed other step adjustments in addition to the 2019 increase?

2 A. Yes, but the Company's proposal is very different from the request approved by the 3 Commission in DE 16-383. According to the submitted joint testimony of Mr. Rivera, 4 Mr. Strabone, and Ms. Tebbetts, additional "system capacity and reinforcement projects" will be undertaken by Liberty from 2019 through 2023. 40 For capital projects placed in 5 service after 2019, Liberty proposes a series of annual step increases based on the change 6 7 in its net plant between January 1 and July1 of each year, subject to a prudency review. 8 The actual change will be based on an annual reconciliation of forecasted capital 9 increases with actual increases whereby 80 percent of the net change in plant (non-RFP) will be allowed in rates.⁴¹ 10

Q. How is this step increase proposal different from the one requested by Liberty in Docket DE 16-383?

In Docket DE 16-383, two additional step increases beyond the initial increase in 2016 were agreed to by all parties as part of the Settlement Agreement in that case. However, unlike the current proposal, the additional step increases in the prior rate case involved five specific capital projects comprising only a portion of Liberty's annual capital spending: Pelham Substation Transformer, Pelham 14L4 Feeder, Pelham 14L5 Feeder, Charlestown DSub, and Charlestown 32 Dline. Liberty subsequently removed the last three projects from consideration as part of the step increase leaving only the Pelham Transformer and the 14L4 Feeder for inclusion. At that time, a separate process for review and audit of those projects was agreed to and ultimately performed in 2019. Under the current proposal as filed, Liberty provided no specifics on future investments

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⁴⁰ Rivera, Strabone, and Tebbitts Testimony at 9 – 11 (Bates II-187 – II-189), and Attachment JED-9.

⁴¹ *Id.* at 12 - 13 (Bates II-190 – II-191).

that were to be included in subsequent annual step increases. All that is known about these projects is that they are varied and necessary for future growth. Consequently, Staff requested more specific information through Staff Data Request 9-1 (Attachment JED-7) and in response Liberty provided a list of planned capital projects and forecasted expenditures based on its 5-year capital plan for years 2020 through 2023. According to that response, Liberty projects total investments of \$23.7 million in 2020, \$47.7 million in 2021, \$25.2 in 2022, \$24 million in 2023, and \$21 million in 2024. Whereas the number of capital projects and associated costs comprising the step increase in DE 16-383 were limited, specific, and reasonably certain, the projects and amounts in the aforementioned list are merely budget estimates for numerous future investments that provide no known or knowable benefits to ratepayers and are subject to modification in future years. Moreover, Liberty's proposal essentially requests recovery on an annual basis, of the revenue requirement of eighty percent of Liberty's entire capital spending plan as opposed to reviewing those expenditures in a subsequent rate case. Further, Liberty seeks recovery of future property tax increases as part of its multi-year plan. 42

Q. What is Staff's recommendation for future step increases involving Liberty's annual net plant reconciliation proposal and Mr. Mullen's proposed multi-year plan?

Staff does not support the proposals and instead recommends that the Commission retain a more traditional rate-making scheme where plant and property taxes are reviewed comprehensively in periodic rate cases, resulting in just and reasonable rates. Staff in particular recommends base rate case review of Liberty's plant investments, based on its position that Liberty's capital investments have been overly aggressive, and in some instances unnecessary, especially given the Company's relatively flat load growth,

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 $^{^{\}rm 42}$ Mullen Testimony at 3-7 (Bates II-203 - II-207).

satisfactory reliability, and the adoption of more stringent performance standards as described in Mr. Demmer's testimony.⁴³ For those reasons, Staff recommends that the Commission deny the Company's proposals involving future step increases and a multi-year plan.

Q. Does Staff have any additional concerns related to Liberty's future step increases and capital investments?

Yes. A significant component of Liberty's current and future capital additions involves supplying projected load growth in the Salem service area driven mostly by the Tuscan Village project. The Tuscan Village development is a 170 acre project located at the former Rockingham Park Race Track that involves a combination of both commercial and residential uses divided between two sections: Tuscan North and Tuscan South. Tuscan North is near completion and approximately 25 percent of the total electric service work required for that part of the development has been installed by Liberty. As stated in the Salem Area Study, load growth from the development is projected to be the 14MW to 17MW range. A critical assessment of The Salem Area Study and associated load growth forecasts can be found in Mr. Demmer's testimony. To date, Liberty has invested a total of \$6.8 million in Tuscan Village related projects and expects to add \$29.95 million in investments to rate base upon completion in 2023. Liberty has also forecasted \$2.9 million in annual revenue growth resulting from the project.

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⁴³ Demmer Testimony at 13-19 and 22-27.

⁴⁴ See Attachment JED-11.

⁴⁵ Demmer Testimony at 19-27.

⁴⁶ See Attachment JED-10.

The development as a whole constitutes a significant and complex undertaking. Based on the detailed analysis we provide above, and as referenced in Mr. Demmer's testimony, 47 Staff is not confident in Liberty's ability to plan, budget, and efficiently manage such large capital projects. As the record in this case shows, the Company has already carried out uneconomic projects such the Rockingham land purchase, the expansion of Golden Rock substation, and the costly installation of getaways at Salem Depot, all pursuant to over-optimistic load growth and excessive performance standards. As Mr. Demmer reports in his testimony, with Tuscan North now mostly complete current load growth for the development has only increased by 1MW.⁴⁸ Further, Liberty's assertion at the Technical Sessions of October that Liberty would have made the Salem area investments regardless of whether or not the Tuscan Village development was built, due primarily to asset deterioration and maintenance issues associated with the Salem Depot and Barron Avenue substations. As mentioned above, Staff visited the Salem Depot site and did not observe any serious deterioration or degradation issues with the equipment located within the substation.

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VII. CONCLUSIONS AND RECOMMENDATIONS

Q. Please summarize Staff's findings.

A. In summary, based on the extensive review outlined above, Staff is unable to find that Liberty provided sufficient economic justification and analysis to support the capital projects reviewed or the sizeable cost overruns associated with some of those projects, for the following reasons:

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⁴⁷ Demmer Testimony at 21.

⁴⁸ Demmer Testimony at 25-26.

Staff found no evidence that Liberty analyzed alternatives, considered least cost
planning, performed sufficient financial analysis, or complied with its own policy
and procedures involving the Business Case/CPE's, Change Orders, and Project
Closeout Reports reviewed.

- Staff found initial budgeted amounts, both in spreadsheets and the Business
 Case/CPE's, to be consistently underestimated, unreliable, and lacking
 documentary support thus calling into question the quality of the figures
 contained in Liberty's reports and other related documentation.
- Liberty bases the need for many of its capital investments on more stringent performance standards than other New Hampshire utilities, thus encouraging the building of projects beyond what is needed or necessary to maintain reliability.
- Staff found little evidence that Liberty's project planning and management constitutes an efficient or organized process or that proper processes and controls are in place for reasonable and prudent decision making.
- Liberty provided little evidence that its project management employed any form
 of cost control methodology or techniques, or that it reasonably responded to
 changing circumstances or new challenges as projects progressed.
- Staff found that Liberty does not always observe Good Utility Practice and did
 not conduct its capital budgeting and planning in a manner that was economic,
 efficient, or comparable to other similarly situated utilities.
- Liberty's approach to capital budgeting and planning directly impacts rates given that this rate case was filed primarily because of \$36 million in capital expenditures invested by the Company since the last rate case.

 The delays by Liberty in providing key documents, or not providing them at all, hampered Staff's review in this case.

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Q. What recommendations does Staff propose as a result of its analysis of Liberty's revenue requirement?

First, Staff incorporates the recommendations of witnesses Mullinax and Demmer. Ms. Mullinax recommends a total reduction of \$6.5 million from the proposed revenue requirement based on her extensive review of Liberty's proposed revenue requirement and Staff's recommended adjustments. Mr. Demmer recommends a reduction in the requested \$2.3 million for the Veg Management program proposed by Liberty of approximately \$666,301 for a revised program amount of \$1.7 million. Mr. Demmer also supports with the plant disallowances referenced below involving Rockingham Substation and Tuscan Village based on the Company's failure to demonstrate that the benefits of its more stringent system planning criteria outweigh the increased costs to ratepayers. Staff also recommends that the Commission reject the proposed step increase for 2019, and Liberty's proposal for a net plant calculation and multi-year plan for all future step increases, given Staff's overall determination that Liberty has exhibited defective capital planning and budgeting based on the evidence provided above. Instead, Staff recommends that the Commission open a separate docket for the purposes of conducting an investigation of Liberty's capital budgeting and planning processes, including (if the Commission approves a step increase for 2019 investments) a prudence review of individual capital projects that comprise Liberty's step increase request for 2019, and consider hiring a consultant to perform a business processes audit in support of that investigation.

Second, Staff incorporates the recommendations of witness Woolridge that Liberty's appropriate cost of capital should be 7.11% and that its ROE should be 8.25%.

Lastly, based on our review of capital projects for 2017 and 2018, Staff recommends the following disallowances from Liberty's proposed rate base:

5	Project No.	<u>Description</u>	Year	Amount
6	8830-1832	Replace 6L2 No. Main Hanover	2018	\$1,070,593
7	8830-C42930	Install Service to Tuscan Village	2018	\$ 674,260
8	8830-C18620	Charlestown 32 Dline	2018	\$ 104,750
9	8830-1830	Misc. Capital Imprv. Londonderry	2018	\$ 25,649
10	8830-1865	Rockingham Sub Transmission	2018	\$ 575,354**
11	8830-1866	Salem Depot Feeder Getaways	2018	\$1,356,000
12	8830-1845	Golden Rock Dist. Feeders	2018	\$ 16,978
13	8830-1744	Golden Rock Substation	2018	\$ 309,324
14	8830-CD0291	Sky View URD	2017	\$ 49,394
15	8830-C18620	Charlestown 32 Dline	2017	\$ 183,289
16	8830-C36424	Mt. Support New 16L3 Feeder	2017	\$ 467,937
17	8830-C36425	Mt. Support New 16L5 Feeder	2017	\$ 555,143
18	8830-1867	Rockingham Sub Transmission	2017	\$ 175,504
19	8830-C42921	Install Splices 6L2 &6L4	2017	\$ 203,305
20	Total Project I	Disallowance		\$5,767,480
21	Veg Managem	nent Disallowance (Demmer)	2018	<u>\$666,301</u>
22	Total Disallov	vances		\$7,100,082

**Note: The total cost for the land purchase associated with Project #8830-1864 Rockingham Substation in the amount \$1,568,870 is not included above. This amount is not currently in rate base but instead is posted on Liberty's books as "Plant held for future use." As discussed in Section V. above, Staff recommends that the Commission disallow the expenditure.

1		Total Rate Base	\$103,024,219 ⁴⁹
2		Less:	
3		Adjustment for Capital Expenditures	(\$5,767,480)
4		Adjustment for Veg Management Program	(\$ 266,301) ⁵⁰
5		Total Rate Base Disallowance	\$ 6,033,781
6		Impact on Rate Base:	
7		Rate Base	\$103,024,219
8		Less Disallowance	(\$ 6,033,781)
9		Adjusted Rate Base	\$96,990,438
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11	Q.	Does Staff have any additional recommendations for th	e Commission to consider?
12	A.	Yes. Related to the tariffs filed by Liberty, Staff propose	s to meet with Liberty at some
13		point during this case to discuss non-substantive changes	s to the tariffs, which could be
14		incorporated into a compliance filing following the Comm	ission's final order.
15	Q.	Does that conclude your testimony?	
16	A.	Yes, it does.	
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⁴⁹ Mullinax Testimony at 11.⁵⁰ Demmer Testimony at 27-29.