

**STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION**

DOCKET NO. DE 23-039

**LIBERTY UTILITIES (GRANITE STATE ELECTRIC) CORP d/b/a LIBERTY
REQUEST FOR CHANGE IN DISTRIBUTION RATES**

DIRECT JOINT TESTIMONY OF

**Jay E. Dudley
Utilities Analyst IV
New Hampshire Department of Energy**

**Ronald D. Willoughby
River Consulting Group, Inc.**

**Joseph J. DeVirgilio
River Consulting Group, Inc.**

December 13, 2023

Table of Contents

I. Introduction and Qualifications	4
II. Summary of Testimony	14
III. Discussion of Permanent Rate Request	16
IV. Liberty's Capital Expenditures Historical Perspective	20
V. Findings: Review of Capital Projects	27
VI. Vegetation Management Program	60
VII. Multi-year Rate Plan	64
VIII. Conclusion	67

List of Attachments:

Attachment RDW-1

Attachment RDW-2

Attachment JJD-1

Attachment JED/RDW/JJD-1 DOE Audit Report

Attachment JED/RDW/JJD-2 Liberty Consulting Audit

Attachment JED/RDW/JJD-3 Liberty Policy & Procedures

Attachment JED/RDW/JJD-4 Data Request DOE 3-01

Attachment JED/RDW/JJD-5 Data Requests DOE 6-13, AR 85, TS 2-41

Attachment JED/RDW/JJD-6 Rockingham Substation

Attachment JED/RDW/JJD-7 Rockingham Transmission

Attachment JED/RDW/JJD-8 Tuscan EV Chargers

Attachment JED/RDW/JJD-9 IEEE Subscription

Attachment JED/RDW/JJD-10 AMI

Attachment JED/RDW/JJD-11 VMP

Attachment JED/RDW/JJD-12 Attachment DOE 9-14

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.

5 **Q. Please state your employer and your position.**

6 A. I am employed by the New Hampshire Department of Energy (“DOE” or the
7 “Department”) as a Utility Analyst for the Regulatory Support Division.

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

9 A. I started at the New Hampshire Public Utilities Commission (“Commission” or “PUC”)
10 in June of 2015 as a Utility Analyst in the Electric Division. Effective July 1, 2021, the
11 Electric Division was transferred to, and became part of, the newly created New
12 Hampshire Department of Energy and I am presently employed by that agency. Before
13 joining the Commission, I was employed at the Vermont Public Service Board (now
14 known as the Vermont Public Utilities Commission, “VT-PUC”) for seven years as a
15 Utility Analyst and Hearing Officer. In that position I was primarily responsible for the
16 analysis of financing and accounting order requests filed by all Vermont utilities,
17 including review of auditor’s reports, financial projections, and securities analysis. As
18 Hearing Officer, I managed and adjudicated cases involving a broad range of utility-
19 related issues including rate investigations, construction projects, energy efficiency,
20 consumer complaints, utility finance, condemnations, and telecommunications. Prior to
21 working for the VT-PUC, I worked in the commercial banking sector in Vermont for

1 twenty years where I held various management and administrative positions. My most
2 recent role was as Vice President and Chief Credit Officer for Lyndon Bank in
3 Lyndonville, Vermont, where I was responsible for directing and administering the
4 analysis and credit risk management of the bank's loan portfolio, including internal loan
5 review, regulatory compliance, audit, and coordinating periodic bank examinations by
6 state and federal regulators.

7 **Q. Please describe your educational background?**

8 A. I received my Bachelor of Arts degree in Political Science from St. Michael's College.
9 Throughout my career in banking, I took advantage of numerous Continuing Professional
10 Education (CPE) opportunities involving college level coursework in the areas of
11 accounting, financial analysis, real estate and banking law, economics, and regulatory
12 compliance. Also, during my tenure with the VT-PUC I took advantage of various CPE
13 opportunities including the Regulatory Studies Program at Michigan State University
14 (sponsored by the National Association of Regulatory Utility Commissioners "NARUC"),
15 Utility Finance & Accounting for Financial Professionals at the Financial Accounting
16 Institute, Standard & Poor's seminars on credit ratings for public utilities, and Scott
17 Hempling seminars on Electric Utility Law and Public Utility Regulation.

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

19 A. Yes. I previously submitted Staff testimony to the Commission in Docket No. DE 14-
20 238, Public Service Company of New Hampshire Generation Assets; Docket No. DE 15-
21 137, Energy Efficiency Resource Standard; Docket No. DE 16-383, Liberty Utilities
22 Request for Change in Rates; Docket No. DE 17-136, 2018-2020 NH Energy Efficiency
23 Plan; Docket No. DE 19-064, Liberty Utilities Request for Change in Rates; Docket No.

1 DE 19-057 Public Service Company of New Hampshire for Change in Rates; Docket No.
2 DE 20-092, 2021-2023 Triennial Energy Efficiency Plan; Docket No. DE 21-030 Unitil
3 Energy Systems, Inc. Request for Change in Rates; Docket No. DE 22-026 Unitil Energy
4 Systems, Inc. Petition for Approval of Step Adjustment Filing; Docket No. DE 20-161
5 Eversource 2020 Least Cost Integrated Resource Plan; Docket No. DE 21-004 Liberty
6 2021 Least Cost Integrated Resource Plan; Docket No. DE 23-068, 2024-2026 Triennial
7 Energy Efficiency Plan; and Docket No. DE 23-065 Unitil Petition for Waiver of Puc
8 307.05 and Authority to Change Short-term Debt Limit Formula.

9 **Q. Mr. Willoughby, please state your full name and business address.**

10 **A.** My name is Ronald D. Willoughby. My business address is 1007 Wolfs Bane Drive,
11 Apex, NC 27539.

12 **Q. Please state your employer and your position.**

13 **A.** I am employed by Willoughby Consultant as its Owner. I am performing this engagement
14 as a subcontractor to River Consulting Group, Inc.

15 **Q. Are you registered as a Professional Engineer?**

16 **A.** Yes, I hold a license as a Professional Engineer in Pennsylvania.

17 **Q. Do you hold any patents in power engineering?**

18 **A.** Yes, I hold a U.S. Software Patent for improving the reliability of electrical distribution
19 networks.

20 **Q. Please summarize your educational and professional background.**

21 **A.** I received a Bachelor of Science in Electrical Engineering from the University of
22 Missouri-Rolla and a Master of Science in Electrical Engineering (Power Engineering)
23 from Carnegie-Mellon University.

1 I am a senior life member of the IEEE (Institute of Electrical and Electronics Engineers);
2 a senior member of the IEEE Power Engineering Society; a senior member of the IEEE
3 Industrial Applications Society; and a member of the honorary societies Phi Kappa Phi,
4 Eta Kappa Nu, Tau Beta Phi and Kappa Kappa Psi.

5 I have published over 60 articles relating to electric power systems analysis and
6 operation.

7 **Q. Please summarize your consulting and employment experience.**

8 A. I have been actively engaged in the utility industry for over 45 years, during which I have
9 had extensive experience in the following areas:

- 10 ▪ Transmission and Distribution Planning – I have led engineering, procurement and
11 construction (EPC), and turnkey solutions for electric distribution automation,
12 medium voltage modular substations (distribution centers), and wind farm
13 distribution systems (from base of turbine towers through interconnection to utility
14 grid). I have also led distribution grid modernization planning efforts, focused on
15 systematic and incremental addition of smart grid devices, with technology,
16 performance, and cost central to the planning process.
- 17 ▪ Distribution Substation Design and Specification Review – I managed an engineering
18 group that designed modular distribution substations and specified all corresponding
19 equipment.
- 20 ▪ Advanced Protection, Automation & Control – I co-chaired (with the Director of
21 R&D at We-Energies) Distribution Vision 2010 LLC (DV2010), a consortium of
22 Investor-Owned Utility (IOU) companies to advance distribution automation and
23 equipment design.

- 1 ▪ Distribution Grid Modernization Planning – I was principal engineer on distribution
2 automation and volt-var optimization projects, with an emphasis on conservation
3 voltage reduction (CVR).
- 4 ▪ Renewable Energy Integration and the Impact on the Utility Grid - I was involved in
5 electric power system impact studies related to distributed energy resource
6 integration, including energy storage specification and integration, and related impact
7 studies.
- 8 ▪ Conservation Voltage Reduction – I was the Project Manager and Technical Lead for
9 a major midwestern electric utility’s feasibility study to quantify energy and demand
10 savings using distribution Voltage Optimization techniques. Objectives: 1)
11 Minimize cost by initiating feeder upgrades to achieve minimum performance
12 thresholds. 2) Maximize energy savings by optimizing performance while staying
13 within Total Resource Cost (TRC) constraints. I also was the Co-founder of a CVR
14 Industry Consortium to guide CVR research, work with industry groups, develop
15 policy recommendations, promote implementation strategies, and document the
16 results.

17 I have participated in various international programs including:

- 18 ▪ Invited by CEOs of Wind-2-Power-Systems (W2PS) and Hudson Energy to represent
19 the United States for a conference in Madrid to cover PV integration, grid integration,
20 energy storage, and DC infrastructure issues.
- 21 ▪ Invited by CARILEC to chair two sessions on Transforming the Electricity Grid at
22 the Renewable Energy Forum, St Thomas, U.S. Virgin Islands.

- 1 ▪ Invited by Prime Minister of Curacao to represent United States in 1st Annual
- 2 Durable Energy Conference to address renewables integration issues for the
- 3 transmission and distribution system.
- 4 ▪ Conducted comprehensive seminar on electric power systems for the Ministry of
- 5 Water and Power in Peking, China.
- 6 ▪ Led projects sponsored by the Pacific Power Association (PPA) for power system
- 7 energy analysis and loss reduction on 20 islands in the South Pacific, 10 with U.S.-
- 8 style power systems, and 10 with European-style power systems.
- 9 ▪ Performed international power systems studies on power flow, transient stability,
- 10 shunt compensation, load shedding, motor starting, loss formula development, short
- 11 circuit, and protective device coordination.
- 12 ▪ Taught Westinghouse's Advanced School on Power System Stability.
- 13 ▪ Managed commissioning and public relations for comprehensive distribution line
- 14 installation in the city of Smolensk, Russia.

15 **Q. Have you included a more detailed description of your qualifications?**

16 A. Yes. More detailed descriptions of my experience and qualifications are included as
17 Attachments RDW-1 and RDW-2.

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

19 A. Yes. I have previously submitted testimony on behalf of the Department in Docket No.
20 DE 20-161 Eversource 2020 Least Cost Integrated Resource Plan and Docket No. DE 21-
21 004 Liberty 2021 Least Cost Integrated Resource Plan.

22 **Q. Mr. DeVirgilio, please state your full name and business address.**

1 A. My name is Joseph J. DeVirgilio, Jr. My business address is 201 Vicenza Way, North
2 Venice, FL 34275.

3 **Q. Please state your employer and your position.**

4 A. I am employed by Suncoast Management Consultants, LLC as its Owner. I am
5 performing this engagement as a subcontractor to River Consulting Group, Inc.

6 **Q. Are you registered as a Professional Engineer?**

7 A. Yes, I hold an inactive license as a Professional Engineer in New York.

8 **Q. Please summarize your educational and professional background.**

9 A. I received a Bachelor of Engineering from Stevens Institute of Technology and a Master
10 of Engineering in Electrical Power Engineering from Rensselaer Polytechnic Institute
11 (RPI).

12 **Q. Please summarize your consulting experience.**

13 A. I have 12 years of experience as a utility consultant. I have been part of consulting teams
14 performing capital spending reviews, operations improvement initiatives, management
15 audits, and reviews of emergency plans. I have participated in broad management audits
16 for regulatory commissions and led the study teams in the subject areas of HR, IT, Call
17 Center Operations, Collections, Billing, Meter Reading, Field Operations, and others for
18 clients including Southern Connecticut Gas, Management Audit, 2016; Connecticut
19 Natural Gas, Management Audit, 2016; and Yankee Gas, Connecticut, Management
20 Audit, 2014-2015.

21 **Q. Please summarize your employment experience.**

22 A. I have been actively engaged in the utility industry for over 49 years. I am a retired
23 senior utility executive (Central Hudson Gas & Electric Corporation). My experience

1 spans a wide variety of consulting and executive responsibilities in both the regulated
2 electric T&D business and natural gas and the unregulated energy business, including
3 natural gas and electric T&D operations, construction and maintenance, work
4 management planning, and reporting, process re-engineering, H/R, and I/T. I have been
5 responsible for distribution, substation and meter engineering, I/T, meter testing, T&D
6 operations and construction, O&M and capital budgeting, process re-engineering, work
7 management, emergency response, security, strategic planning, purchasing, stores and
8 transportation and human resources and labor relations, staffing and human capital
9 effectiveness assessments, executive and management compensation programs. I have
10 15+ years of experience as a T&D engineer, supervisor, and senior manager for the
11 company-wide T & D operations. For 20+ years I also held the CIO role and lead the
12 Utility I/T Steering Committee including the review and approval of all outsourcing
13 contracts, hardware, software, outage management and SCADA software and the
14 associated capital and expense annual budgets. Additionally, I have been a member of
15 the Corporate Executive Capital Allocation and Review Committee responsible for the
16 review of all proposed capital projects and the post completion review of actuals to
17 estimates. I have 25 plus years of experience as a H/R executive with responsibility for
18 all aspects of the function, including employment, employee and labor relations,
19 employee safety, and employee benefits, and executive and employee compensation.
20 Additionally, as the chief staffing officer I was responsible for the annual corporate
21 staffing budgets, identification and implementation of technology driven staffing
22 reduction initiatives, productivity improvement initiatives, enterprise-wide staffing and
23 use of non-traditional employees, employee/contractor mix analysis, staffing and turn-

1 over analysis and resulting changes to employment and employee development
2 processes. I have training in mentoring and mediation.

3 **Q. Please describe your T&D utility related experiences.**

4 **A.** I have 15 plus years of experience as a T&D engineer, supervisor, and senior manager for
5 the company-wide T&D operations and reliability, construction, maintenance, and
6 support, process re-engineering, Q/P implementations and benchmarking. My process re-
7 engineering experience has included all parts of the T&D operations and customer
8 services organizations, including meter reading, capital construction, T&D maintenance
9 and reliability planning, use of contractors, tree trimming process and call center
10 improvements.

11 **Q. Please summarize your relevant utility experience.**

12 **A.** I have had extensive experience in the following areas:

- 13 ▪ Electric T&D Operations, Engineering, and Management – I have 13 plus years of
14 experience performing hands-on design and installation management of electric T&D
15 systems and O&M management, including reliability improvement plans and
16 assessments of tree trimming impact on reliability.
- 17 ▪ Capital Projects & Programs Evaluations – I have participated in an in-depth
18 evaluation of a major midwestern, urban electric utility’s CapEx processes and
19 planning efforts. The utility, at the time, had planned a multi-year, multi-billion
20 dollar capital program to build new transmission and upgrade its distribution system
21 to improve overall reliability and position it to accept distributed energy resources.
- 22 ▪ Capital & O&M Budgeting – I have had more than 25 years of operations support
23 services responsibility, including supply chain, stores, transportation, security, and

1 building services and maintenance. Additionally, I have had more than five years of
2 P&L business responsibility and 30+ years of capital and O&M budget development
3 and execution responsibility for the various management and executive areas of a
4 utility business. I have extensive labor management experience and the impact of
5 labor/contractor decision management on budget outcomes.

6 ■ Performance & Result Management – I have 10+ years of experience as the lead
7 executive responsible for utility performance improvement and the work management
8 system.

9 ■ Management Audits –I have 20+ years of experience in participation, planning,
10 preparation, and execution of the utility side of management audits in both general
11 and subject-specific audits. I was the executive responsible for the utility’s audit
12 response for over 15 years.

13 ■ Human Resources – I have 25 plus years of experience as a H/R executive
14 responsible for staffing, labor and employee relations, executive and salaried
15 employee compensation and benefits, and safety. I was the plan administrator for the
16 pension and 401k plans. I have selected and implemented third-party providers for
17 both plans. I have implemented a new executive incentive plan and had administered
18 it since its inception. I have put in place and implemented EEO/AAP plans. I have
19 identified and implemented a “high potential employee” (HPE) selection and
20 development program including executive mentoring.

21 ■ Corporate Mission, Objectives, Goals, and Planning – I have been a member of a
22 corporate Strategic Planning Committee and have several years of experience

1 developing a strategic plan and ensuring goal alignment throughout the utility and
2 other business unit organizations.

3 ■ I/T – I have had over 20+ years of experience as a utility CIO and the Chair of the
4 utility I/T Steering Committee responsible to review and approve the 5-year I/T
5 strategic plan, all I/T projects, the annual capital and expense budgets, and
6 expenditure reviews.

7 **Q. Have you included a more detailed description of your qualifications?**

8 **A.** Yes. More detailed descriptions of my experience and qualifications are included as
9 Attachment JJD-1.

10 **Q. Have you previously testified before this Commission or any other Commission?**

11 **A.** Yes. I have previously submitted testimony in Docket No. DE 20-161 Eversource 2020
12 Least Cost Integrated Resource Plan and DE 21-004 Liberty 2021 Least Cost Integrated
13 Resource Plan. I have also testified before the New York State Public Service
14 Commission as an executive for Central Hudson Gas & Electric Corporation in a rate
15 case proceeding involving gas employee staffing and productivity.

16 **II. SUMMARY OF TESTIMONY**

17 **Q. Please describe the purpose of your testimony today.**

18 **A.** The purpose of our testimony is to provide the Department’s recommendation involving
19 Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities’ (“Liberty” or the
20 “Company”) request filed on May 5, 2023, to implement a permanent distribution rate
21 increase to be effective on and after July 1, 2023, pending the Commission’s final
22 determination on the Company’s request. Based on the reports of the Company filed
23 with the Commission, and DOE’s extensive review of Liberty’s revenue requirement,

1 rate of return, capital expenditures, vegetation management program, and overall quality
 2 of management, the Department believes that a number of adjustments are warranted to
 3 the Liberty permanent rate proposal. The Department recommends that the Commission
 4 make the following modifications:

- 5 • Liberty’s proposed revenue requirement: \$10,378,758
- 6 • DOE’s reduction to revenue requirement: (\$8,336,858)
- 7 Adjusted revenue requirement \$2,041,900
- 8 With step adjustment of \$2,447,915 \$4,489,815
- 9 • Liberty’s proposed rate base: \$187,977,587
- 10 • DOE’s reduction to rate base: (\$16,722,668)
- 11 Adjusted rate base: \$171,254,919
- 12 • Liberty’s Proposed ROE: 10.35%
- 13 • DOE’s reduction to ROE: (1.1%)
- 14 Adjusted ROE: 9.25%

15

16 The Department also recommends denial of Liberty’s proposed multi-year rate
 17 plan and related performance incentive mechanisms which are discussed in detail in the
 18 direct testimony of DOE witnesses Nicholas Crowley, Michael Clark, and the joint
 19 testimony of Elizabeth Nixon and Jacqueline Trottier. In addition, as discussed below,
 20 the Department has become increasingly concerned with Liberty’s apparent lack of
 21 diligence and due care in conducting and managing its operations efficiently and
 22 prudently. As noted below, this has become a legacy issue for the Company. As a result,
 23 the Department recommends that the Commission open a separate docket for the

1 purposes of conducting an investigation of Liberty’s overall management structure and
2 operations, including capital budgeting and planning, customer service, accounting, and
3 information technology (IT). Further, the Department recommends that the Commission
4 consider retaining a consultant to assist with the investigation and oversee
5 implementation of any recommendations on improving Liberty’s management processes
6 and procedures.

7
8 **III. DISCUSSION OF PERMANENT RATE REQUEST AND THE DEPARTMENT’S**
9 **REVIEW**

10 **Q. What is the statutory foundation for a request for permanent rates?**

11 **A.** Permanent rates are specifically allowed pursuant to RSA 378:28 which reads as follows:

12
13 **378:28 Permanent Rates.** – So far as possible, the provisions of RSA 378:27 shall be
14 applied by the commission in fixing and determining permanent rates, as well as
15 temporary rates. The commission shall not include in permanent rates any return on any
16 plant, equipment, or capital improvement which has not first been found by the
17 commission to be prudent, used, and useful. Nothing contained in this section shall
18 preclude the commission from receiving and considering any evidence which may be
19 pertinent and material to the determination of a just and reasonable rate base and a just
20 and reasonable rate of return thereon.

21
22 Following the completion of the full proceeding, a “permanent rate” level is determined,
23 and the difference between the temporary rate level and the permanent rate level is then
24 reconciled through either collection from or refund to customers.

25 **Q. Please describe Liberty’s request for the permanent increase in rates.**

26 **A.** According to Liberty, the Company has been unable to earn its authorized rate of return
27 under existing rates because of a deficiency in distribution revenue of \$15.5 million as of

1 fiscal year-end 2022 (later adjusted to \$10.4 million¹). As a result, Liberty’s return on
2 rate base for 2022, related to the distribution portion of the business, declined to 4.80% as
3 compared with the Company’s authorized return of 7.60%. Liberty originally sought
4 recovery of the \$15.5 million revenue deficiency in permanent rates; however, to allow
5 the Company to earn at least a portion of its authorized return until the Commission
6 makes its final determination on permanent rates, the Company proposed a temporary
7 rate increase of approximately 2.60%, or \$6,732,801 in additional distribution revenue.²
8 After hearing and review, the Commission approved an agreement between Liberty, the
9 Department, and the Office of Consumer Advocate (“OCA”) for a temporary rate
10 increase of \$5,462,876 (the “June Order”) resulting in a temporary rate increase of
11 1.50%.³ In terms of the permanent rate request, the permanent rate amount constitutes an
12 annual increase to the total bill for the average residential ratepayer (650 kWh) of 6.18%
13 or \$13.76 per month as of July 1, 2023, including an increase in the Customer Charge of
14 \$3.13.⁴ In addition, Liberty has proposed a Multi-year Rate Plan (“MYRP”) allowing for
15 annual rate increases over three years beginning in 2023, intended to recover annual
16 revenue deficiencies of approximately \$15.5 million in 2023, \$2.6 million in 2024, and
17 \$3.0 million in 2025.⁵ The Company is requesting that the Commission make the rate
18 increases under the MYRP effective July 1, 2023, July 1, 2024, and July 1, 2025.⁶

¹ On November 27, 2023, Liberty adjusted this amount to \$10.4 million. *See* Liberty’s November 27, 2023, Updated Revenue Requirements, Schedule RR-1.2.

² Testimony of Jardin/Dane/Therrien on Temporary Rates at Bates II-029 and II-035. Note: the temporary rate request did not take into account RDAF.

³ Order No. 26,855, Docket No. DE 23-039, dated June 30, 2023.

⁴ Testimony of Therrien at Bates II-837 and Attachment GHT-5 at Bates II-853.

⁵ Testimony of Jardin/Dane at Bates II-274. Note: these amounts were later updated in Liberty’s November 27, 2023, Updated Revenue Requirements, Schedule RR-1.2.

⁶ Testimony of DeCoursey/Therrien at Bates II-112.

1 **Q. As part of this rate case, did the Audit Division complete a financial audit of**
2 **Liberty's books and records?**

3 **A.** Yes. A copy of the audit report prepared by Audit Staff was provided to the Department
4 on October 25, 2023, and is attached to our testimony as Attachment JED/RDW/JJD-1
5 Audit Report.

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

9 **A.** Yes. Based on the findings contained in the audit report, Audit discovered inaccuracies
10 in the estimated budget amounts and large actual cost variances for some projects in the
11 review of Liberty's capital projects. Audit also reviewed several projects for compliance
12 with the Company's capitalization policy and noticed several instances of missing
13 documentation in terms of Project Capital Expenditure Forms and Project Closeout
14 Reports not provided by Liberty. In addition, Audit discovered numerous variances and
15 mismatching of accounting entries between the Company's 2022 FERC Form 1 and the
16 general ledger largely due to defective system mapping and other difficulties experienced
17 by Liberty related to their conversion to the new SAP operating system. Audit also
18 reported that the timeliness in completing Audit Staff's work and completion of the audit
19 report were seriously hampered by Liberty's delays in responding to many of Audit's
20 data requests. In all, Audit identified a total of twenty-eight audit issues detailing various
21 deficiencies in the Company's books and records. As we discuss below, many of these
22 issues constitute an ongoing area of concern for the Department and have prompted the

1 Department to have serious doubts involving the accuracy of information provided by
2 Liberty in its filing.

3 **Q. Is the Department proposing a decrease to Liberty's revenue requirements in this**
4 **proceeding?**

5 **A.** Yes. As noted above, please refer to the testimony of Ms. Mullinax in which she
6 provides detailed support for DOE's recommended revenue requirement of \$2.0 million
7 which is \$8.3 million less than Liberty's revenue requirement as contained in its updated
8 request filed on November 27, 2023. Our testimony below addresses adjustments to the
9 Company's rate base.

10 **Q. In terms of Liberty' capital investments, does the Department believe that its**
11 **recommendations for disallowances in this case will provide just and reasonable**
12 **results?**

13 **A.** Yes, in part. A key element of the just and reasonable standard, coupled with the
14 statutory requirement that a utility's capital investments must be found to have been
15 prudently incurred, and used and useful, is that the Commission must weigh the
16 conflicting interests of both the utility and the ratepayer before finding the proposed rate
17 is just and reasonable. In doing so, the Commission must measure what the public must
18 reasonably pay against what the utility is reasonably entitled to receive. In the present
19 docket, DOE's analysis indicates that Liberty overstated its revenue requirement by \$8.3
20 million, and that the cost of service numbers submitted by Liberty are inaccurate and can
21 not be relied on. To allow such a revenue requirement into rates would be unjust for
22 Liberty's ratepayers since it would not result in just and reasonable rates. In addition, the
23 Commission's expectation that a utility's investments are prudent, as directed by the

1 statutory requirement referenced above, also rests on the just and reasonable standard
2 such that imprudent expenditures are inconsistent with the standard and should be
3 disallowed. As a result, the Department has found that approximately \$16.7 million in
4 capital investments and related cost overruns were not adequately explained or justified
5 by the Company and that ratepayers should not be required to pay those costs.

6
7 **IV. LIBERTY'S CAPITAL EXPENDITURES: HISTORICAL PERSPECTIVE**

8 **Q. What explanation does the Company provide for the claimed downward pressure**
9 **on its rates of return?**

10 A. Liberty testifies that the primary driver behind the need for an increase in rates is
11 approximately \$117 million in capital investments made by the Company since
12 December 31, 2018.⁷ Liberty forecasts that its post-test year capital spending over the
13 next four years will continue to be at a high level totaling approximately \$118 million.⁸
14 As in past rate cases, the Department remains concerned about this substantial growth in
15 capital investments given that Liberty continues to be a small utility with a small service
16 territory.

17 **Q. Why are Liberty's capital investments under the Department's review in this rate**
18 **case?**

19 A. First, regulated electric utilities are some of the most capital-intensive entities that exist
20 given the substantial amount of capital investment that is required to build and maintain
21 reliable infrastructure. As a result, the significant and ongoing nature of those
22 investments are frequently the primary causes for utilities to request periodic increases in

⁷ Testimony of Jardin/Dane at Bates II-275-276; and Testimony of Strabone at Bates II-464.

⁸ Testimony of Strabone at Bates II-485.

1 rates. However, unlike unregulated competitive firms, regulated utilities, because they
2 are regulated, cannot just pursue any investment strategies available that maximize
3 shareholder value. Regulators must find that such expenditures are prudent, just and
4 reasonable, and used and useful. As cited above, Liberty's primary justification for the
5 current rate increase request is the downward pressure additional capital expenditures
6 have placed on the Company's revenues and rates of return.

7 Second, during the course of PUC Staff 's review in Liberty's prior rate cases, Dockets
8 DE 16-383 and DE 19-064, Staff found disparities between budgeted amounts and actual
9 expenditures reported by the Company to be both numerous and significant in size,
10 raising questions as to whether the Company was sufficiently diligent in its budgeting,
11 project management, and cost control. Given the increasing number of variances
12 observed in both rate cases, which in some instances increased originally budgeted costs
13 several times over, and given that Liberty provided little in the way of specific
14 information as to root causes or how the Company decided that those overages were
15 economic, PUC Staff was unable to determine that Liberty took appropriate measures to
16 control costs or that Liberty's decision-making process was prudent and reasonable or in
17 the interest of ratepayers.⁹ Ultimately, PUC Staff recommended a disallowance of \$5.8
18 million in cost overruns in DE 16-383, and \$6.5 million in DE 19-064. Those cases were
19 ultimately resolved through Settlement Agreements that the Commission approved.

20 **Q. Did additional information come to PUC Staff's attention during the rate case in DE**
21 **16-383 that re-enforced PUC Staff's ongoing concerns involving Liberty's capital**
22 **investments?**

⁹ See Docket No. DE 16-383, Exhibit 11, Testimony of Jay E. Dudley at 8-11 (Bates 9-12); and Docket No. DE 19-064, Exhibit 21, Testimony of Jay E. Dudley at Bates 17-18.

1 **A.** Yes. In Docket No. DG 14-180 Liberty Utilities (EnergyNorth Natural Gas), a prior rate
2 case filed in 2014 by Liberty’s New Hampshire natural gas utility EnergyNorth Natural
3 Gas (“EnergyNorth”), the Commission authorized a company-wide audit to review the
4 “effectiveness and efficiency” of Liberty’s business processes, including among other
5 areas, Liberty’s business planning and budgeting.¹⁰ As referenced in that Order, PUC
6 Staff’s concerns involved the Company’s operational performance after the transition
7 from National Grid, especially in the areas of customer service, IT, and capital budgeting
8 and expenditures. The audit assignment was awarded to Liberty Consulting Group
9 (“LCG”) in 2015 and LCG released its Management and Operations Audit of Liberty
10 Utilities on August 12, 2016.¹¹

11 **Q.** **At that time, what findings of the LCG report did PUC Staff consider relevant to its**
12 **review of Liberty’s capital expenditures in the rate case?**

13 **A.** PUC Staff found most of the findings of the LCG report troubling. One important issue,
14 centered on LCG’s review of Liberty’s planning and budgeting process, and associated
15 capital expenditures, contained at pages III-11 through III-15, and III-25 through III-30
16 the LCG audit report. Excerpts of those sections of the report are attached to our
17 testimony as Attachment JED/RDW/JJD-2 LCG Audit. Specifically, the audit report
18 underscored and confirmed many of the same issues and concerns encountered by PUC
19 Staff during discovery in DE 16-383, and later re-emerged in DE 19-064, including but
20 not limited to:

21 a) Extremely large variances between budgeted and actual capital expenditures in
22 2014.

¹⁰ See Docket No. DE 14-180, Order No. 25,797 of 6/26/15 at 15.

¹¹ It should be noted that the audit examined the operations of both Granite State Electric and EnergyNorth.

- 1 b) Capital budget variances that continued into 2015 and 2016.
- 2 c) Lack of detailed explanations supporting and justifying those variances.
- 3 d) Aggressive growth in capital investments is apparently driven by obtaining
- 4 increased returns instead of utility operating metrics.
- 5 e) Significant lags in timing between capital budget approval and actual capital
- 6 expenditure analysis.
- 7 f) Lack of effective control or monitoring of project budgets.
- 8 g) Project documentation (business cases, change orders, and close-out reports) that
- 9 lacked sufficient detail and analysis and failed to conform to internal policy and
- 10 procedures.
- 11 h) Consistent lack of following and adhering to the Company's CAPEX policies and
- 12 procedures.
- 13 i) No evidence that Liberty observed or followed Good Utility Practice in its capital
- 14 budgeting and planning process.

15 **Q. Have these characteristics reappeared in other subsequent rate cases filed by**
16 **Liberty?**

17 **A.** Yes. In Docket DG 17-048, EnergyNorth filed a petition for an increase in permanent
18 gas rates that included a decoupling mechanism, recovery of capital investments, and a
19 step increase. During PUC Staff's review at that time, Staff discovered substantial cost
20 increases related to the construction of the new Concord Training Center which more
21 than doubled the original cost estimate of \$1.02 million to \$2.3 million. Upon
22 completion of Staff's examination of that project, Staff concluded that both the
23 construction and the cost overruns for the training center were not supported by sufficient

1 financial/economic analysis, credible cost estimates, adequate consideration of
2 alternatives, or reasonable decision-making by Liberty’s management.¹² In fact, many of
3 the same deficiencies in documentation found by Staff in DE 16-383 and this current
4 electric case were also discovered by Staff in the gas rate case. Ultimately, based on the
5 considerable evidence presented, Staff recommended disallowance of the training center
6 costs and the Commission disallowed \$1.25 million of those costs from inclusion in the
7 rate base.¹³

8 **Q. With the filing of the rate case in the current docket, and in light of the previous**
9 **concerns and evidence involving Liberty’s deficient capital planning and budgeting**
10 **practices, has the Department noticed any improvements in the Company’s**
11 **processes since that time?**

12 **A.** Unfortunately, very few noticeable improvements have been observed. One positive
13 development was the introduction by Liberty of a new and improved policy and
14 procedures manual for capital expenditures, the “Liberty Way Policy & Procedures”
15 dated October 23, 2018, and then an updated version released July 18, 2022, entitled
16 “Capital Expenditure Planning and Management” (attached as Attachment
17 JED/RDW/JJD-3), which better defines the capital budgeting and planning process and
18 also provides a more comprehensive business case design in terms of project analysis. In
19 addition, the occurrence of cost overruns has decreased slightly from levels experienced
20 since 2016, however, the variances for many individual projects remain significant as
21 outlined below. Nevertheless, as discussed below, most of the recommendations made
22 by LCG for improving the capital planning and budgeting process at Liberty have been

¹² See Docket DG 17-048, Exhibit 18, Testimony of Al-Azad Iqbal, at Bates 19-27.

¹³ Docket DG 17-048, Order No. 26,122, dated April 27, 2018, at 19-26, and Appendix 1 at 10.

1 largely ignored, and the requirements of the Company's CAPEX policy continue to be
2 widely disregarded.

3 **Q. What internal documentation from Liberty did the Department examine as part of**
4 **its review?**

5 **A.** As part of DOE Data Request 3-01 (Attachment JED/RDW/JJD-4 to our testimony), the
6 Department sought to obtain and review the following documents involving a specific
7 sampling of projects from 2019 through 2022:

- 8 a. Business Cases and/or Capital Expenditure Request forms
- 9 b. Change Order forms
- 10 c. Project Close-out Reports

11 As referenced below, and as acknowledged by Liberty in response to DOE 3-01, not all
12 of the requested documentation was submitted or made available by Liberty to the
13 Department. In fact, as stated by Liberty, some of the missing documentation had to be
14 re-created and re-produced and post-dated by the Company two to three years after
15 certain projects had been originated and completed. In addition, the Department's timely
16 review of some projects was hampered in some instances by the Company's delays in
17 submitting data responses and follow-up responses.¹⁴

18 **Q. What issues did the Department discover in its review of Liberty's capital**
19 **budgeting?**

20 **A.** As was the case in DE 16-383 and DE 19-064, DOE found that the cost estimates
21 contained in the capital budgets were consistently inaccurate, especially for blanket
22 projects and large complex projects, and that the capital planning and budgeting process

¹⁴ See Docket No. DE 23-039, Commission Procedural Order Re: DOE's Motion to Compel, dated September 7, 2023.

1 itself continues to be rudimentary with Liberty management providing only cursory
2 oversight and monitoring as projects progress to completion. For example, from the
3 initial budget phase through project start-up, local management is given a high level of
4 discretion in terms of capital budget tolerances and accuracy with ranges as wide as 30%
5 to 100% for investment grade projects.¹⁵ The LCG report found this to be unusually
6 broad when compared with similarly situated utilities and that more reasonable tolerances
7 tend to be in the 5% to 10% range.¹⁶ In addition, project analysis documentation such as
8 Business Cases and Capital Project Expenditure forms are not included with the annual
9 Expenditure Plan submitted to APUC, indicating that budgets are approved with little
10 scrutiny of specific projects by upper level management and the Board of Directors. The
11 Department also found little evidence that Liberty considered or utilized basic capital
12 budgeting techniques or analysis such as the identification of alternatives and
13 dependencies among alternatives, least cost planning, or risk identification for most of the
14 over-budget projects reviewed in the sample below. In many cases, sections within the
15 Company's project documentation requiring this analysis were left blank or contained the
16 designation "N/A" for non-applicable.

17 **Q. What conclusion does the Department draw from the historical perspective**
18 **discussed above involving Liberty's past and present practices and approaches to**
19 **capital planning, budgeting, and expenditures?**

20 **A.** Given that the same issues and deficiencies have re-occurred repeatedly since Liberty's
21 acquisition of Granite State Electric from National Grid, and the fact that few or no
22 improvements in these processes have been evident, the Department concludes that this

¹⁵ Attachment JED/RDW/JJD-3 at 13.

¹⁶ Attachment JED/RDW/JJD-2 at III-29.

1 ongoing state of conducting business establishes a pattern of conduct and behavior by
2 Liberty that is detrimental to ratepayers and not in compliance with the just and
3 reasonable standard or good utility practice.

4 Moreover, many of Liberty's operational deficiencies have not been limited to just capital
5 investments. Legacy problems involving accounting, IT, and customer service have re-
6 emerged as part of the Company's recent transition to the SAP operating system.¹⁷ These
7 issues have manifested themselves in the form of late or unresponsive data responses,
8 incorrect rate calculations and tariff filings, increased consumer complaints received by
9 the Division of Consumer Affairs, and negative findings contained in the Audit Report
10 produced by the Audit Division. Taken together, these numerous operational deficiencies
11 call into question the management of Liberty as a public utility and lead the Department
12 to conclude that an outside expert needs to conduct an extensive review of the
13 Company's operations similar to, but more expansive than, the LCG audit discussed
14 above. As a result, as a condition to any rate approval in this docket, the Department will
15 recommend a wide-ranging management audit of Liberty which will include auditor
16 oversight of Liberty's implementation of any recommendations and modifications to the
17 Company's operations that address the problems outlined in DOE's testimony.

18
19 **V. FINDINGS: REVIEW OF CAPITAL PROJECTS SAMPLE AND COST OVER**
20 **RUNS FOR 2019 THROUGH 2022**

21 **Q. What specific capital projects did the Department include in its examination?**

22 **A.** The Department compiled its original sample lists, attached as Attachment
23 JED/RDW/JJD-4, comprised of projects with cost over runs and other projects of interest

1 for 2019, 2020, 2021, and 2022, from a master list of capital projects provided by Liberty
 2 in response to DOE Data Request 2-11. Based on information received from the
 3 Company during the course of additional discovery and Technical Sessions in this
 4 proceeding, the Department was able to condense the list from Attachment
 5 JED/RDW/JJD-4 to the projects provided in the tables below:

Table 1: 2019 Sample Projects

<u>Project No.</u>	<u>Description</u>	<u>Budget</u>	<u>Actual</u>	<u>Variance</u>
8830-1965	Rockingham Substation Trans.	\$200,000	\$301,229	-\$101,229
8830-UNALL	Finance Unalloc Burden	\$0	\$309,595	-\$309,595
Total		\$200,000	\$610,824	-\$410,824

Table 2: 2020 Sample Projects

<u>Project No.</u>	<u>Description</u>	<u>Budget</u>	<u>Actual</u>	<u>Variance</u>
8830-1965	Rockingham Substation Trans.	\$1,750,000	\$1,804,061	-\$ 54,061
8830-2093	GSE Facilities Capital Improv.	\$ 750,000	\$ 559,460	\$ 190,540
8830-2095	Tuscan Village EV Chargers	\$ 210,000	\$ 21,838	\$ 188,162
8830-UNALLOC OH	Finance Unalloc Burden	\$ 384,069	\$ 843,160	-\$ 459,091
Total		\$3,094,069	\$3,228,519	-\$ 134,450

Table 3: 2021 Sample Projects

<u>Project No.</u>	<u>Description</u>	<u>Budget</u>	<u>Actual</u>	<u>Variance</u>
8830-1958	Install Service Tuscan Village	\$1,000,000	\$812,956	\$ 187,044
8830-1965	Rockingham Substation Trans.	\$6,000,000	\$6,372,658	-\$ 372,658
8830-1964	Rockingham Substation	\$7,000,000	\$10,238,907	-\$3,238,907
8830-2095	Tuscan Village EV Chargers	\$ 150,000	\$ 354,768	-\$ 204,768
8830-UNALLOC OH	Finance Unalloc Burden	\$ 193,063	\$ 631,619	-\$ 438,556
Total		\$14,343,063	\$18,410,908	-\$4,067,845

¹⁷ See Testimony of Amanda Noonan, and the Joint Testimony of Elizabeth Nixon and Jacquelin Trottier.

Table 4: 2022 Sample Projects

<u>Project No.</u>	<u>Description</u>	<u>Budget</u>	<u>Actual</u>	<u>Variance</u>
8830-2212	Dist. Damage & Failure Blanket	\$1,415,500	\$1,932,718	-\$ 517,218
8830-2291	01659 Granite St Meter Purchases	\$ 500,000	\$ 907,558	-\$ 407,558
8830-1965	Rockingham Substation Trans.	\$9,000,000	\$7,071,538	\$1,928,462
8830-1964	Rockingham Substation	\$ 500,000	\$ 460,015	\$ 39,985
8830-2095	Tuscan Village EV Chargers	\$ 100,000	\$ 40,566	\$ 59,434
8830-2285	AMI	\$ 700,000	\$ 2,501	\$ 697,499
8830-22XX	IEEE Membership	\$ 155,000	\$ 207,186	-\$ 52,186
8830-UNALLOC OH	Finance Unalloc Burden	\$ 191,500	\$2,730,627	-\$2,539,127
8830-2299	SAP Placeholder-GSE	<u>\$19,116,666</u>	<u>\$13,550,995</u>	<u>\$5,565,671</u>
Total		\$31,678,666	\$26,903,704	-\$11,807,140

As referenced above, all of the internal documentation obtained from Liberty, was reviewed by the Department in connection with each of these projects.

Q. Please provide the results of the Department’s review of those projects.

A. Below we provide our findings for the sample projects based on Liberty’s responses to the Department’s Data Requests which have been incorporated in the attachments to our testimony for each of the projects analyzed below. Note: The Business Cases and Capital Project Expenditure Forms (CPE) are separate documents but are typically incorporated into a single document package when both are required under Liberty’s policy and procedures.

2019-2022 Capital Projects

1. Project #8830-UNALLOC OH Finance Unalloc Burden

Attachment JED/RDW/JJS-5

2019 Budget: \$0	Actual: \$309,595	Variance: -\$309,595
2020 Budget: \$384,069	Actual: \$843,160	Variance: -\$459,091
2021 Budget: \$193,063	Actual: \$631,619	Variance: -\$438,556
2022 Budget: <u>\$191,500</u>	Actual: <u>\$2,730,627</u>	Variance: <u>-\$2,539,127</u>
Total: \$768,632	\$4,515,002	-\$3,746,339

1 **Note:** This project category is recurring on an annual basis therefore DOE's
2 analysis below is for all four years 2019-2022.

3
4 Business Case/CPE: Unlike all of Liberty's other capital projects, the Company
5 does not generate a Business Case or CPE for this project category. Based on
6 information obtained in discovery and at Tech Sessions, Liberty asserts that it
7 uses this project as a vehicle to hold accumulated annual work-in-progress costs
8 (mostly burden and overhead allocations) for all project categories until such time
9 as those costs can be allocated to the appropriate project and unitized to plant.¹⁸
10 As a result, the Company does not consider this project to be an individual capital
11 asset in and of itself but instead consists of many expenditures related to many
12 different projects. Accordingly, this project is not approved as an individual
13 project and the usual documentation requirements under Liberty's capital
14 expenditure policy do not apply. Capital expenditures under this category are
15 only approved once they are assigned to a related project, although a place holder
16 and budget amount is assigned at the time of formulating the capital budget.¹⁹
17 Because this type of project does not require a Business Case or CPE, there was
18 no project description, supporting financial analysis, or project justification
19 available for the Department to review.

20 Change Order Form: Similar to Business Cases and CPE's as explained above,
21 Change Order Forms describing the cause and the justification for any cost

¹⁸ Attachment JED/RDW/JJD-5.

¹⁹ *Id.*

1 increases or cost overruns under this project category were not produced and were
2 not available for the Department's review.

3 Project Close-out Report: No project close-out report for this project was
4 produced by Liberty.

5 **DOE Analysis:** As noted above, no project documents were available to review
6 under this project category. As a result, there was no way for the Department to
7 perform a thorough assessment or analysis of the expenditures or the cost
8 overruns incurred under this project. The only piece of information that Liberty
9 provided for DOE's review of these projects was Attachment 23-039 DOE 6-
10 13.zip which was a sample of Liberty's August 2022 journal entries (in both
11 Excel and PDF format) for July 2022.²⁰ The spreadsheets in the attachment
12 contain over a thousand lines of entries and unrecognizable codes, and were
13 extremely cumbersome to review, preventing the Department from tying out most
14 entries under some tabs of the Excel spreadsheets to the projects under review in
15 DOE's sample. In addition, the project descriptions for many line items were not
16 recognizable (e.g. designated under street names) and frequently did not match
17 descriptions that were provided in response to DOE Data Request 3-01. This
18 prevented the Department from establishing which expenditures contributed to the
19 cost overruns for some of the projects contained in DOE's sample. The PDF
20 journal entries simply refer to "Construction Work In Progress" ("CWIP") in the
21 line item descriptions and were not tied to any specific project number. As a
22 result, in terms of the 2022 cost overrun in the amount of \$2.5 million, the
23 Department had no way of ascertaining or parsing out which CWIP charges were

1 appropriately charged to projects that were completed, used and useful, and
2 providing service to customers in the test year in compliance with RSA 378:30-a.
3 Audit Staff experienced similar difficulty during their review of this project as
4 part of their audit.²¹ Although the spreadsheets and journal entries provided the
5 Department with some sense of the breadth of these expenditures, there was no
6 way for the Department to assess or determine the justification or prudence of
7 those costs in the absence of project documentation backup. In addition, given
8 that Liberty capitalizes labor costs both from the time cards of workers and
9 through burden allocations, there was no way for the Department or Audit to
10 verify whether such costs were not double counted under this project category.²²
11 This situation is especially troubling given that the amounts of the cost overruns
12 for this project category for the period of 2019 – 2022 were significant totaling
13 \$3.75 million. In addition, there were amounts left at year-end, totaling \$4.5
14 million for all four years, that were carried over to the following year. The actual
15 causes for these carryover expenditures are unknown and DOE was unable to link
16 them to any specific projects based on the information provided by Liberty.
17 Moreover, as discussed further below, DOE is very concerned about the
18 escalation in burden rates by the Company and that concern is intensified in terms
19 of this project given that the bulk of the costs included in this category are
20 burdens and overheads.²³ It is the Department’s view that all charges should be
21 allocated directly to the appropriate projects when incurred thus eliminating the

²⁰ *Id.*

²¹ *Id.*, Request No. AR 85 at 1.

²² *Id.*, Request No. AR 85, Attachment 23-039 AR 85.2.

1 need for this suspension account. Based on Liberty’s responses to discovery, this
 2 project category has been eliminated as part of the SAP conversion but the
 3 problems involving accurate, just and reasonable rates for the 2022 test year
 4 remains as a major concern for the Department.

5 **Conclusion & Recommendation:** The Department firmly believes that such
 6 expenditures in total have a significant financial impact on ratepayers and must be
 7 substantiated with more than just non-descript journal entries. Management’s
 8 decisions associated with the creation of these expenditures must be substantiated
 9 in a way that permits intelligent review of those decisions by both the Department
 10 and the Commission. Because the needed documentary support was not provided
 11 by Liberty, the Department recommends the full amount of the expenditures for
 12 this project category for all four project years 2019-2022, totaling \$4.5 million
 13 should be disallowed from inclusion in rate base.

14
 15 **2. Project #8830-1864 Rockingham Substation**

16 **Attachment JED/RDW/JJD-6**

17	2021 Budget: \$7,000,000	Actual: \$10,238,907	Variance: -\$3,238,907
18	2022 Budget: <u>\$500,000</u>	Actual: <u>\$460,015</u>	Variance: <u>\$ 39,985</u>
19	Total: \$7,500,000	\$10,698,922	-\$3,198,922
20			

21 Business Case/CPE: The Department has three concerns related to this project as
 22 discussed below: i) land purchase by Liberty for the Rockingham Substation site, ii)
 23 elevation change for the Rockingham site, and iii) construction of a screening wall.

²³ See Attachment JED/RDW/JJD-1. The Audit Division also raised concerns about Liberty’s escalation of burden rates, Audit Issue No. 5 at 159.

1 • Land purchase for Rockingham Substation: None of the Business Cases/CPE's
2 for this project submitted for years 2019-2024 describe this transaction or provide
3 financial or alternatives analysis to support the land purchased from Tuscan
4 Village that now serves as the location for the new Rockingham Substation. As a
5 result, the Department had to rely on information provided in Liberty's last rate
6 case, DE 19-064, and discovery responses obtained in the present case. Out of the
7 total actual cost for the Rockingham Substation in the amount of \$11.8 million,
8 the land purchase portion constitutes \$1.5 million and involved the acquisition of
9 1.4 acres of land located near the northern end of the Tuscan Village
10 development. Prior to the purchase, Liberty obtained a commercial appraisal of
11 the parcel in 2017 which provided a market value of \$925,000.²⁴ The Department,
12 then PUC Staff, first learned of the land purchase through discovery in Docket DE
13 19-064. In that case, the \$1.5 million purchase was not disclosed by the Company
14 in its initial rate filing or in its 2018 test year rate base but was later found to have
15 been booked to "Plant held for future use."²⁵ In addition, the Company did not
16 report the land purchase as part of its 2018 E-22 report with the Commission nor
17 did it disclose the purchase in the jointly filed testimony of Mr. Rivera, Mr.
18 Strabone, and Ms. Tebbetts in that rate case. According to Liberty at that time,
19 the substation project was a key part of Liberty's overall buildout plan to serve the
20 additional load forecasted for the Tuscan Village of approximately 15-16 MW.
21 Liberty began construction at the site in 2021, and the substation was completed
22 and placed in service in 2022.

²⁴ Attachment JED/RDW/JJD-6, Rockingham Appraisal Report.

²⁵ See Docket No. DE 19-064, Exhibit 21, Attachment JED-3c, Staff data response 5-14.

1 **DOE Analysis:** Liberty provided the following supporting documentation in
2 their last rate case in Docket DE 19-064:

3 a) Purchase and Sale Agreement:²⁶ The agreement is dated December 2017
4 between Rock Acquisition, LLC and Liberty Utilities Corp. for 1.4 acres
5 of vacant land within the “Tuscan Village Project,” including the grant of
6 an easement over Tuscan Village property to access the lot. The
7 agreement is conditioned upon Liberty obtaining a subdivision permit
8 from the Town of Salem, at Liberty’s expense, indicating that the lot was
9 not part of a previously existing subdivision prior to the sale. As noted
10 above, the purchase price was \$1.5 million. Importantly, under Section 20
11 (a) “Construction Obligations,” Liberty agrees to construct at its “sole cost
12 and expense, the Substation which will provide adequate electrical service
13 to the Tuscan Village Project..,” indicating that Tuscan Village, as the
14 primary beneficiary of the project, will not be contributing to the costs of
15 the new substation. In addition, Section 20 (c) states that Liberty “shall be
16 responsible, at its sole cost and expense, to construct a screening fence
17 around the substation and for all other improvements on the Property.” At
18 the Technical Session held on October 30, 2023, Liberty represented that
19 initially the owner of Tuscan Village was opposed to Liberty locating a
20 substation within the development due to aesthetic concerns. How this
21 impasse was eventually overcome by Liberty during the course of
22 negotiating the sale was not explained.

²⁶ Attachment JED/RDW/JJD-6, Rockingham Purchase & Sale Agreement.

1 b) Appraisal Report: The Appraisal Report is dated July 13, 2017, and lists
2 the market value of the property at \$925,000. PUC Staff's inquiries with
3 the Town of Salem's Tax Assessor's Office revealed that the tax assessed
4 value for 2018 was \$813,200. The appraisal describes the lot size as a
5 "hypothetical 1.23± acre lot" due to the fact that the lot had not yet been
6 subdivided from the larger 120 acre Tuscan Village development at the
7 time of the appraisal. The lot lacks existing road frontage and can only be
8 accessed from a private road that was built by Tuscan Village
9 development.

10 c) Contributions in Aid of Construction (CIAC): Despite the fact that the
11 Tuscan Village project is the primary beneficiary of the Rockingham
12 substation, it appears that the owners did not offer to contribute the land
13 for the new substation nor did they offer to sell the land at a discount.
14 Liberty provided no insight as to whether these issues were discussed as
15 part of the negotiation of the land purchase, other than discussions with
16 Tuscan Village began in 2016 and that the owner was reluctant to sell.

17 In discovery, the Department inquired of Liberty as to why the Company decided
18 to pay a premium of \$575,000 over and above the appraised market value of
19 \$925,000 for the Rockingham site. Liberty responded that it did not pay a
20 premium over market value because the sale constituted an "arms-length"
21 transaction between the Company and Tuscan Village and that the agreed to sale
22 price of \$1.5 million became the actual market value for the property.²⁷ The
23 Department understands that for a true arms-length transaction between the buyer

1 and seller to take place the following conditions must be present: i) neither buyer
2 nor seller is acting under duress, ii) the property must be offered on the open
3 market for a reasonable length of time to provide market exposure, iii) both buyer
4 and seller are aware of the property's potential, including its assets and defects,
5 and iv) no unusual circumstances are present that may be favorable to either party
6 such as a seller desperate to sell or a buyer desperate to buy.²⁸ Based on these
7 rules of thumb for property appraisal, it is apparent to the Department that at least
8 three of the conditions appear to disqualify the sale from being a true arms-length
9 transaction: i) the property was not listed for sale on the market which would have
10 tested the asking price of \$1.5 million by exposing the property to other potential
11 buyers, ii) the property did have some unattractive characteristics in that it was an
12 odd-shaped, land-locked, isolated parcel with no road frontage, and iii) it appears
13 that unusual circumstances did exist since this was a transaction between a
14 reluctant seller and a highly motivated buyer. The Department is also highly
15 skeptical of the notion that paying a premium over and above the appraised
16 market value of the property, a premium that equates to approximately 62% more
17 than the appraised value, constitutes the actual market value for that property.
18 The Department acknowledges that sometimes the list price for real estate is
19 exceeded in a transaction involving competing buyers and a motivated seller,
20 however, such a price escalation must be within the bounds of reasonableness
21 otherwise why wouldn't Liberty have paid \$2 million or \$3 million for this
22 property. It is also noteworthy that the transaction was an exclusive sale with the

²⁷ Attachment JED/RDW/JJD-6, DOE TS 2-40.

²⁸ See William L. Ventolo & Martha R. Williams, *Fundamentals of Real Estate Appraisal*, 6th Edition (1994), at 50.

1 property never listed by Tuscan Village to test the pricing limits of the
2 marketplace in Salem.

3 **Conclusion & Recommendation:** The Department was unable to fully analyze
4 and verify the Company's decision making for the Rockingham land purchase
5 since Liberty did not provide a Business Case or any other project documentation
6 supporting the decision and offered little clarity in discovery as to why it chose to
7 pay a \$575,000 premium over and above the appraised market value. The
8 Department acknowledges that a viable location for the new substation was
9 needed but not at a highly inflated above market price. As a result, the
10 Department recommends that the full amount of the \$575,000 paid in excess of
11 the appraised market value of the Rockingham property should be disallowed
12 from inclusion in rate base.

- 13 • Elevation grade change for the Rockingham site: In March of 2021, Tuscan
14 Development made Liberty aware of an error involving the elevations of the
15 parcel around the Rockingham Substation site. The contractor responsible for the
16 construction of the access road to the substation provided Liberty with the wrong
17 elevation in 2018 resulting in Liberty basing its site designs on the incorrect
18 elevation measurement. Upon being notified of the error, the Company evaluated
19 its options and decided to raise the site two feet to match the revised elevation.
20 The associated design modifications and construction delays resulted in part to a
21 \$3 million cost overrun for the project. A Business Case/CPE supporting this
22 stage of the project in 2021 was not provided by Liberty. The only
23 documentation that alerted the Department to the elevation grade change problem

1 was a Change Order Form dated April 5, 2021, submitted in response to data
2 request DOE 3-1.²⁹ This change, in part, contributed to the \$3.2 million cost
3 overrun referenced in the table above. Other costs included an underestimation
4 by Liberty of burden rates and additional reinforcement of the foundations for the
5 new transformers given the increased weight of the transformers.

6 **DOE Analysis:** The elevation grade change for the access road was not the result
7 of poor planning or design by Liberty. The fault clearly lies with the contractor
8 for Tuscan Village. In terms of liability on the part of the road contractor, the
9 Company did not consider holding the contractor liable even though the error
10 caused additional significant expense for Liberty.³⁰ When the Department asked
11 Liberty to provide the actual cost of the error Liberty was unable to account for it
12 other than it was imbedded in the total cost overrun of \$3.2 million.³¹

13 **Conclusion & Recommendation:** Although the contractor was clearly at fault
14 for the elevation error and given that for a project the size of Tuscan Village the
15 contractor likely had general liability insurance, it is not entirely clear why
16 Liberty chose not to hold them liable or even explore the issue. It is also
17 unknown when the contractor first became aware of the error or why it took three
18 years for them to inform Liberty. In docket No. DE 19-057, Order No. 26,504
19 dated July 30, 2021, the Commission disallowed \$911,000 in project costs
20 incurred by Eversource as a result a contractor's error in installing a new
21 transformer at the Pemgewasset Substation. The Commission found that the costs
22 were imprudently incurred because Eversource never sought recovery from the

²⁹ Attachment JED/RDW/JJD-6.

³⁰ *Id.* DOE TS 2-40 e.

1 contractor under the contractor's general liability insurance coverage.³²
2 Accordingly, the Department recommends that the cost overrun of \$3.2 million be
3 disallowed from Liberty's test year rate base.

- 4 • Screening Wall: According to the 2022 Business Case for this project, the final
5 phase for completion of the Rockingham Substation involved landscaping,
6 installing permanent gates, animal protection, and finalizing construction of a
7 perimeter screening wall. Liberty received a building permit from the Salem
8 Planning Board in 2018 to construct the new Rockingham Substation which, in
9 addition to installation of two 55 MVA transformers and related electrical
10 infrastructure, also included permitting for proposed landscaping, security fencing
11 and gates, and a perimeter screening wall. Significant vegetation planting around
12 the substation was also included in Liberty's proposal to provide additional
13 screening. In terms of the screening wall, Liberty originally proposed a fifteen-
14 foot high louvered metal "shadow" fence to provide the screening, but in 2021
15 submitted a design change to instead install a fifteen foot high solid pre-cast
16 concrete wall with a stone finish.³³ The design change request and permit
17 modification was approved by Salem. The Department requested a copy of the
18 permit documents from Liberty in discovery, but Liberty did not provide them.
19 The total cost of the wall was \$653,608. As noted above, the screening wall was

³¹ *Id.* DOE 6-19 a.

³² Docket No. DE 19-057, Public Service Company of New Hampshire d/b/a Eversource Energy, Petition for Permanent Rates, Order No. 26,504 dated July 30, 2021, at 6. Reaffirmed in Order No. 26,528, dated September 27, 2021. The disallowance amount of \$911,000 was later reduced to \$614,652 as a result of a settlement between the Department and Eversource. See Order No. 26,882 dated September 11, 2023.

³³ Attachment JED/RDW/JJD-6, DOE TS 2-40 g, i and v.

1 required by Tuscan Village as one of the conditions contained in the Purchase and
2 Sale Agreement.

3 **DOE Analysis:** The screening wall as designed by Liberty and permitted by the
4 Town of Salem was above and beyond what is typically required for fencing and
5 protection of a substation. Fencing for substations consists of a chain link fence
6 usually topped with barbed wire. In Liberty's case, the intent of the fence was not
7 only for security but also for shielding the substation from public view. The
8 Department assumes that this was required by Tuscan Village due to concerns
9 over aesthetics. Nevertheless, the Department finds that the concrete screening
10 wall is excessive and beyond the standard requirements for a substation. As a
11 result, the wall provides no additional safety or security benefits to ratepayers and
12 appears to have been designed and built exclusively to address the private
13 concerns of Tuscan Village.

14 **Conclusion & Recommendation:** The screening wall was clearly built by
15 Liberty to shield the substation from public view in response to a requirement
16 imposed by the owner of Tuscan Village based on the owner's concerns over
17 aesthetics at the time of sale. The Department does not dispute that substations
18 can be aesthetically unpleasing to the eye and not a good complement to a
19 commercial development that is intended to be visually attractive to customers.
20 However, ratepayers should not be forced to pay for a screening wall that is above
21 and beyond what is typically required for other substations in Liberty's service
22 territory. The wall provides no additional safety and security benefits to
23 ratepayers, greatly exceeds standard fencing requirements, and appears to

1 primarily benefit the owner who did not share or contribute to any of costs of
 2 construction. Therefore, the Department recommends that the entire cost of the
 3 screening wall in the amount of \$653,608 be disallowed from inclusion in the test
 4 year rate base.

6 **3. Project #8830-1965 Rockingham Substation Transmission Lines**

7 **Attachment JED/RDW/JJD-7**

8	2019 Budget: \$200,000	Actual: \$301,229	Variance: -\$101,229
9	2020 Budget: \$1,750,000	Actual: \$1,804,061	Variance: -\$ 54,061
10	2021 Budget: \$6,000,000	Actual: \$6,372,658	Variance: -\$372,658
11	2022 Budget: <u>\$9,000,000</u>	Actual: <u>\$7,071,538</u>	Variance: <u>\$1,928,462</u>
12	Total: \$16,950,000	\$15,549,486	\$1,400,514

13
 14 **Note:** This project category is recurring on an annual basis therefore DOE's
 15 analysis below is for all four years 2019-2022.

16 Business Case/CPE: Liberty provided Business Cases/CPE's for all four years of 2019 to
 17 2022. The project involved the design, site planning, and construction of two 115 kV
 18 transmission lines from Golden Rock substation to the new Rockingham substation at
 19 Tuscan Village based on the recommendations of the Salem Area Study which projected
 20 an increase in Liberty's load of approximately 16-15 MW's due to the Tuscan
 21 development project. This load forecast was later updated in the 2020 Salem Area Study
 22 to 18MW and updated again by Liberty to approximately 23MW. The project years 2019
 23 and 2020 largely involved the design and procurement phase of the project, and
 24 construction began in 2021 and was completed in 2023. Construction was divided into
 25 two phases. The first phase was initiated in 2021 and involved constructing one 2.2 mile
 26 section of 115kV line along the Salem Rail Track to the Rockingham Substation site.

1 The second phase was initiated in 2022 and involved constructing a second 115kV line
2 approximately 2.5 miles in length to Rockingham Substation. The second line consisted
3 of covered wire spacer cable configuration due to the need for a more compact design
4 because of shorter steel structures which were put into place in response to concerns
5 expressed by the Town of Salem related to heights of those structures. Due to delays in
6 the delivery of steel structures in 2022, the second 115kV line was not completed and
7 placed in service until 2023.³⁴

8 Change Order Form: Change order requests were submitted for the first three years of
9 the project, but none for 2022 because there were no cost overruns in that year.

- 10 • 2019: This request involved the reallocation for additional funds in the amount
11 \$200,000 doubling the initial budget for the project. The Change Order Form was
12 non-descript in terms of explaining the need for the reallocation of funds,
13 however, the Project Closeout Report explains that the reallocation was due to
14 charges being applied to the wrong project. Like many other change orders
15 reviewed for other Liberty projects, this one was submitted late (in this instance
16 nearly four years after the occurrence) in 2023. The late submission this form
17 runs contrary to its intent as described in the Policy & Procedures since
18 engagement of management for approval, and alerting management to cost
19 overruns, should take place during the course of the project either before or at the
20 time the changes occurred. This after-the-fact notification essentially obviates the
21 requirement for and the purpose of the form.

³⁴ Attachment JED/RDW/JJD-7, DOE 5-3 b.

- 1 • 2020: Three Change Order Forms were submitted for 2020. The first dated
2 7/27/20 involves an additional \$150,000 for additional costs related to design
3 changes prompted by the revised Salem Area Study and to secure easements for
4 the 115kV line. The second change order dated 11/04/20 in the amount of \$1.1
5 million was related to reallocation of funds from another project that had been
6 cancelled with remaining capital funds. The third change order prepared on
7 2/01/21 in the amount of \$54,061 was due to higher direct and indirect costs
8 assessed against the project in 2020.
- 9 • 2021: This Change Order Request in the amount of \$373,000 involved an
10 additional increase in direct and indirect costs plus environment compliance.
11 Similar to the change orders, this one is also non-descript and the Financial
12 Assessment section provides no breakout of the new funds. Also, the form was
13 submitted on 8/03/23, two years after this part of the project was completed.

14 Project Close Out Report: The only Project Close Out Report provided by Liberty for
15 this project was for 2019. The report merely repeats the cause for the additional
16 funding of \$150,000 as a reallocation of charges that were charged to the wrong
17 project.

18 **DOE Analysis:** The Department remains concerned about the substantial increases
19 in burden rates that appear to continually arise at the mid-way point for many projects
20 and drive many of the significant cost overruns for these projects. Also, lack of detail
21 and analysis in the way Liberty processes its Change Order Forms, which was
22 observed again as part of the review of this project, has now apparently become
23 standard practice for the Company. Although the Department also remains concerned

1 about the potential for over-build and over-capacity at the Rockingham Substation,
2 capacity that may never be fully utilized, DOE understands that construction of both
3 of the 115kV supply lines was a key part of the overall project. Nevertheless,
4 according to discovery response DOE 5-3b., Liberty has acknowledged that
5 construction of the second 115kV line was delayed in 2022 due to supply issues
6 involving key components of the project and Liberty was not able to complete the
7 second phase of the project until 2023. Under RSA 378:30a.: “Public Utility rates or
8 charges shall not in any manner be based on the cost of construction work in progress.
9 At no time shall any rates or charges be based upon any costs associated with
10 construction work if said construction work is not completed. All costs of
11 construction work in progress, including, but not limited to, any costs associated with
12 constructing, owning, maintaining or financing construction work in progress, shall
13 not be included in a utility’s rate base nor be allowed as an expense for rate making
14 purposes until, and not before, said construction project is actually providing service
15 consumers.”

16 **Conclusion and Recommendation:** As noted above, Liberty represented that the
17 second 115kV line of the Rockingham Substation project was not completed and
18 placed in service until 2023. Given the requirements of RSA 378:a., and given that
19 that part of the project was not completed and providing service during the 2022 test
20 year, the Department recommends that the entire cost of the second 115kV line in the
21 amount of \$7,071,538 be disallowed by the Commission for inclusion in Liberty’s
22 2022 rate base. However, since this part of the project was completed and providing
23 service in 2023, the Department believes that the costs associated with the second

1 115kV line are eligible for recovery in Liberty’s next rate case; therefore the
 2 Department’s recommendation is for a temporary disallowance of the investment
 3 pending its review in the next rate case.

4

5 **4. Project #8830-2095 Tuscan Village EV Chargers**

6 **Attachment JED/RDW/JJD-8**

7	2020 Budget: \$210,000	Actual: \$ 21,838	Variance: \$188,162
8	2021 Budget: \$150,000	Actual: \$354,768	Variance: -\$204,768
9	2022 Budget: <u>\$100,000</u>	Actual: <u>\$ 40,566</u>	Variance: <u>\$ 59,434</u>
10	Total: \$460,000	 \$417,172	 \$ 42,828

11

12 **Note:** This project category is recurring on an annual basis therefore DOE’s
 13 analysis below is for all three project years 2020-2022.

14 Business Case/CPE: Liberty submitted Business Cases/CPE’s for project years 2020,
 15 2021, and 2022, in response to data requests DOE TS 2-21 a. and DOE TS 2-36 c.³⁵ At
 16 the request of the Tuscan Village development, Liberty installed three EV charging
 17 stations to serve customers utilizing the retail area of the development. The Company
 18 worked with ChargePoint to install one level 3 charger and two level 2 chargers. Tuscan
 19 Village did not purchase the chargers but is instead the customer of the chargers and is
 20 billed monthly by Liberty for their use under Rate G-3 (level 2) and Rate G-2 (level 3).
 21 Tuscan Village is responsible for installing the conduit that is necessary for connecting
 22 the chargers.

23 Change Order Form: Change order requests were submitted for 2021, but none for 2019
 24 and 2022 because there were no cost overruns in those years.

³⁵ Attachment JED/RDW/JJD-8, DOE TS 2-21.

- 1 • 2021: Two change orders were submitted for 2021. The first change order
2 involved Tuscan Village’s request to install two additional level 3 chargers
3 increasing the project cost by an additional \$150,000 for a total of four level 3
4 chargers. The second change order request involved a design change
5 recommended by ChargePoint to change the configuration of the level 3 chargers
6 to a cluster configuration to better serve customers. The cost increase for this
7 request was \$54,768.

8 Project Close Out Report: A project close out report was submitted in 2022 covering the
9 completion of this project. The report notes that project delays were experienced due to
10 permitting issues with the Town of Salem involving the charger installations.

11 **DOE Analysis:** According to discovery response DOE TS 2-21, Liberty paid all costs
12 associated with this project. Tuscan Village only contributed to the costs for the
13 installation of conduit. In addition, Liberty pre-paid ChargePoint for the following
14 support services:³⁶

- 15 • 24/7 monitoring, remote troubleshooting, and service restoration for the level 2
16 charger in the amount of \$2,246.
- 17 • Cloud data access for each charger port in the amount of \$2,638.
- 18 • 5-year prepaid enterprise cloud plan in the amount of \$19,196 (\$4,799 per
19 charger).
- 20 • 5-year prepaid ChargePoint Assure in the amount of \$57,660 (\$14,415 per
21 station).
- 22 • Total cost for support services: \$81,740.

³⁶ *Id.* DOE TS 2-21 d.

1 The above costs are included for recovery in the 2022 revenue requirement, however
2 these costs were not included as part of the Business Case analysis. The Department only
3 became aware of these additional costs in a late tech session data response (DOE TS 2-
4 21) from Liberty after the deadline for additional discovery had passed.

5 **Conclusion and Recommendation:** According to Liberty’s project documentation,
6 Tuscan Village requested the installation of the EV chargers for the convenience of its
7 customers shopping within the retail portion of the development. Although Tuscan is
8 billed by Liberty and Tuscan pays for the electrical usage of the chargers, the developer
9 did not pay for the chargers or their installation. There is no mention of whether Liberty
10 asked Tuscan to purchase the chargers or whether a CIAC analysis was performed.
11 Moreover, these charging stations are not part of Liberty’s overall distribution
12 infrastructure and appears to be exclusive to Tuscan with Tuscan being the only end user,
13 therefore the chargers are not providing service or any benefits to the bulk of Liberty’s
14 customers. As a result, the Department concludes that this investment represents an
15 unreasonable cross-subsidization of an expansionary business as discussed by the
16 Commission in Order No. 26,623, in Docket No. DE 21-030. In that order, the
17 Commission rejected Section 7 of the Settlement Agreement reached by the parties in
18 that docket supporting Unitil’s EV make-ready initiatives at ratepayer expense because
19 “businesses, municipalities, and institutions throughout New Hampshire are now offering
20 fast-charging stations at their own cost, as a convenience to their customers, employees,
21 patrons and visitors.”³⁷ In this instance, it is apparent that Liberty ratepayers are
22 subsidizing the use of chargers installed at Tuscan Village for the benefit of Tuscan
23 Village and Tuscan’s customers. Therefore, the Department recommends that the

1 Commission disallow the cost of the chargers and their installation in the amount of
2 \$417,172, plus the costs of the ChargePoint support services in the amount of \$81,740,
3 for a total disallowance of \$498,912.

4
5 **5. Project #8830-22XX IEEE Membership**

6 **Attachment JED/RDW/JJD-9**

7 **2022 Budget: \$155,000 Actual: \$207,186 Variance: -\$52,186**

8
9 Business Case/CPE: Liberty did not submit a Business Case/CPE for this project but
10 instead submitted a Capital Approval Form in response to data request DOE 3-1. This
11 project involves the purchase of a five-year subscription for access to the IEEE database
12 and resources for training and updating industry standards.

13 Change Order Form: A change order request was submitted in 2022 in the amount of
14 \$53,000 to include indirect overhead costs for the project.

15 Project Close Out Report: A project close out report was submitted in 2022. The report
16 is non-descript and largely left blank with the exception of referring to the Change Order
17 Form to explain the cost overrun.

18 **DOE Analysis**: In Liberty's response to discovery request DOE 9-12, Liberty argues
19 that the membership should be regarded as a capital asset because the five-year
20 subscription is over the one-year threshold for useful life for a capital expenditure.³⁷
21 Liberty also asserts that the use of the subscription will be largely associated with using
22 industry standards in developing or revising design, operating, and maintenance
23 standards. The Department agrees that such a resource would be helpful to Liberty in

³⁷ Docket No. DE 21-030, Order No. 26,623 at 27-29.

³⁸ Attachment JED/RDW/JJD-9, DOE 9-12 a.

1 terms of providing industry information and education, however, the subscription itself
2 provides no direct benefit to ratepayers in terms of delivering service. In addition, the
3 subscription does not involve the purchase of software to be downloaded on Liberty's
4 systems, therefore the Department is not persuaded that the service can be considered a
5 capital asset.

6 **Conclusion and Recommendation:** The Department does not agree that the
7 subscription should be treated as a capital asset to be added to the 2022 test year rate
8 base. The subscription appears to be similar in nature and value to other subscriptions
9 that utilities subscribe in order to remain informed and up to date on developments
10 occurring in the industry. Therefore, the Department recommends disallowance of this
11 expenditure in the full amount of \$207,186.

12 **Q. Did the Department discover any other capital projects for 2022 that appeared to be**
13 **problematic?**

14 **A.** Yes. According the Company's testimony, Liberty intends to hire two Electric Relay
15 Technicians to perform maintenance testing on relay and protection schemes associated
16 with substation equipment, such as circuit breakers and line reclosers, and will play a part
17 in testing and commissioning new relayed controlled equipment installed on Liberty's
18 electric system."³⁹ These new positions are neither supported nor accounted for in
19 Liberty's filing and therefore should be excluded from the cost of service calculation.
20 In addition, Liberty has proposed the deployment of AMI meters over the next few years
21 at a substantial cost to assist with the implementation of time-of-use rates and numerous
22 other grid modernization efforts. The Department's analysis is provided below.

23

1 **6. Project #8830-2285 AMI**

2 **Attachment JED/RDW/JJD-10**

3 **2022 Budget: \$700,000 Actual: \$2,501 Variance: \$697,499**

4 **Q. Has Liberty submitted a business case, including detailed cost/benefit calculations, to**
5 **justify the requested expenditures?**

6 **A.** Yes. A Business Case and CPE were submitted for 2022 for a total projected capital
7 investment of \$19,755,517 spanning 2022 through 2024. The proposal involves replacing
8 Liberty’s current Automated Meter Reading (AMR) one way communication technology
9 with the two-way communication capability provided by AMI (Advanced Metering
10 Infrastructure). As explained below, this will provide Liberty with a two-way
11 communication network which will allow customer meter information to automatically
12 collect and transmit consumption data to Liberty on a continual basis. Liberty signed a
13 contract with AMI provider Itron in 2019 for approximately \$9 million but that cost was
14 later revised by Liberty to \$18.3 million.⁴⁰ In 2023, Liberty was informed by Itron that the
15 original AMI platform, Open Way Riva, was to be replaced by the new Gen X
16 communication platform at an additional cost of \$20 million bringing the total project cost
17 to approximately \$40 million. This prompted additional discussions between Itron and
18 Liberty focused on revising the original contract with Itron. Despite frequent conversations
19 between the two companies, a revised contract has not been agreed to. As a result, Liberty’s
20 planned milestones for deployment in 2022-2023 were not achieved, and the project has
21 been delayed until 2025-2026. In addition, in the Balashov and Strabone testimony of May
22 5, 2023, the following recommendation was made: “. . . a cost/benefit analysis (should) be

³⁹ Testimony of K. Jardin and D. Dane at 21:12–19 (Bates II-289).

⁴⁰ Attachment JED/RDW/JJD-10, data request DOE 3-1.

1 conducted to determine the appropriate level of AMI functionality before deployment of a
2 certain type of meter at full scale.”⁴¹ In July 2023, Liberty provided a confidential (and
3 preliminary) AMI cost/benefit analysis based on Itron’s GenX technology in response to
4 data request DOE OCA 1-79.⁴² Liberty indicated in their response to data request DOE TS
5 2-39, an updated business case would not be developed until “there is clarity about the
6 (AMI) project’s funding status.”⁴³ In summary, the Department proposes that a strategically
7 important next step would be to develop a detailed cost/benefit analysis and detailed project
8 plan/roadmap (inception, deployment, through closeout) as a result of the cost and
9 technology changes from Itron.

10 **Q. What is the difference between AMR and AMI technologies?**

11 **A.** AMR uses digital technology to transmit meter data when prompted by a collection device
12 in the vicinity of the meter. This typically requires a vehicle to drive by the meter with a
13 collection device. Communication is one way; i.e., from the meter to the collection device.
14 AMI is capable of two-way communication that can be managed over a communications
15 network, eliminating the drive-by collection requirement. Using communication and
16 software platforms, AMI can perform other functions.⁴⁴ AMI is an integration of
17 technologies that provides an intelligent connection between consumers and utility system
18 operators.⁴⁵

19 **Q. Did Liberty conduct comprehensive vetting of potential technology suppliers?**

20 **A.** Itron was selected by Liberty’s parent company Liberty Utilities Co (LUCo) in 2019 who
21 determined Itron to be best in class with costs on par with industry norms. In 2022, Util-

⁴¹ Testimony of Balashov and Strabone, at Bates II-651.

⁴² Data response OCA 1-79, Confidential Attachment 23-039 OCA 1-79, Tab 1.CBA.

⁴³ *Id.* data request DOE TS 2-39 d.

⁴⁴ *Id.* at Bates II-645.

1 Assist, Inc., was engaged to reconfirm Itron’s industry leadership position, which was
2 reconfirmed.⁴⁶ Details of the selection process, including candidate company comparisons
3 and technology assessments, are provided in a confidential November 22, 2022 report titled
4 “AMI Vendor Comparison.”⁴⁷ Five companies were evaluated, including Itron.

5 **Q. Has Liberty identified AMI’s most significant benefits?**

6 **A.** Yes.⁴⁸ Liberty states that the benefits are as follows: 1) Modernize rate designs: AMI
7 improves billing accuracy/efficiency and generates cost savings by streamlining usage data
8 collection (communications-driven) and processing. 2) Enable more granular outage data
9 analysis: AMI can proactively provide outage information, reducing repair times and
10 improving reliability. 3) Establish foundational capabilities for management of distributed
11 energy resources: AMI can facilitate the interconnection and control of distributed energy
12 resources. 4) Help identify opportunities for grid performance enhancements and risk
13 mitigation: AMI can serve as the basis for grid modernization.

14 **Q. Are these benefits consistent with industry findings?**

15 **A.** Yes.⁴⁹ According to AMI experts, related benefits include: 1) Reducing peak demand and
16 improving energy efficiency through TOU incentives and dynamic pricing, and 2)
17 providing real-time data on energy consumption that can be used to identify patterns,
18 trends, and energy efficiency opportunities.

19 **Q. What are AMI’s most significant risks?**

⁴⁵ NETL. “Advanced Metering Infrastructure,” February 2008, page 2.

⁴⁶ Testimony of Balashov and Strabone, at Bates II-658.

⁴⁷ Attachment JED/RDW/JJD-10, data request DOE TS 2-39, Attachment 23-039 DOE TS 2-39.2.

⁴⁸ Testimony of Balashov and Strabone, at Bates II-652.

⁴⁹ Amith Vijayan. “Advanced Metering Infrastructure – A Detailed Walkthrough,” Energy Central Intelligent Utility Network, April 6, 2023. NETL. “Advanced Metering Infrastructure,” February 2008.

1 A. 1) Total AMI deployment requires a large initial capital investment for “the hardware and
2 software (meters, network infrastructure, and network management software for the AMI
3 system); as well as installation costs, meter data management, project management, and
4 information technology integration costs.”⁵⁰ Initial AMI technology costs alone (i.e., not
5 including installation) typically account for 35-40% of total deployment costs.⁵¹ Societal
6 benefits (for consumers) are difficult to quantify. As a result, utilities have difficulty
7 justifying the total AMI investment.⁵² 2) Since meters directly impact a utility’s revenue
8 stream, there is a risk revenue will be adversely impacted (temporarily) during AMI
9 implementation.⁵³ 3) Technical risks from AMI technologies (e.g., control software,
10 communications infrastructure, cyber security requirements) changing over time, creating
11 on-going and long-term support challenges.⁵⁴ AMI interoperability between different
12 vendors equipment (IT systems such as CIS and OMS) can lead to significant integration
13 problems.⁵⁵ 4) Meter Data Management (MDM) systems not able to handle future growth
14 needs can lead to significant operational risks.⁵⁶ [MDM systems are designed to collect,
15 store, process, and analyze meter data and data from other sources such as energy
16 management systems and billing systems.] 5) Project management and comprehensive
17 (phased) master plans are critical to success and must be treated as such. “If the

⁵⁰ Aclara website. “4 Key Factors to a Successful AMI Project Rollout,” September 29, 2020.

⁵¹ Bill Zorn. “Strategies to Consider When Implementing AMI,” EE Online, Electric Energy T&D Magazine, March/April 2006, page 3 of 4.

⁵² Amith Vijayan. “Advanced Metering Infrastructure – A Detailed Walkthrough,” Energy Central Intelligent Utility Network, April 6, 2023.

⁵³ Bill Zorn. “Strategies to Consider When Implementing AMI,” EE Online, Electric Energy T&D Magazine, March/April 2006, page 2 of 4.

⁵⁴ Amith Vijayan. “Advanced Metering Infrastructure – A Detailed Walkthrough,” Energy Central Intelligent Utility Network, April 6, 2023.

⁵⁵ Ibid.

⁵⁶ Bill Zorn. “Strategies to Consider When Implementing AMI,” EE Online, Electric Energy T&D Magazine, March/April 2006, page 3 of 4.

1 implementation costs related to project management and installation are out of control,
2 the success of an AMI project is in jeopardy.”⁵⁷

3 **Q. How can these risks be mitigated?**

4 **A.** According to experts, risks can be mitigated as follows: 1) Clearly define performance needs
5 in as much detail as possible and make sure they are comprehensively addressed in the
6 overall project plan.⁵⁸ 2) Select vendors who offer technologies designed for long-term use
7 and support.⁵⁹ 3) Initiate pilot projects focused on demonstrating technical feasibilities and
8 verifying cost/benefit projections. A pilot should test the most significant and uncertain
9 components of the business case.⁶⁰ 4) Build a compelling business case focused on
10 technology maturity consistent with regulatory requirements, demonstrating how financial
11 and non-financial benefits can be realized across the value chain.⁶¹ 5) Develop a clear plan
12 for making cyber security a top priority to give the utility and customers the best possible
13 protection against cyber-attacks.⁶² 6) Implement strong project management capable of
14 managing stakeholders across multiple business lines and functions (e.g., systems
15 engineering, test engineering, mobile workforce management, change management). The
16 importance of strong project management/communication skills cannot be overemphasized
17 since up to 80% of AMI projects fail to meet technical, cost, or scheduling objectives; 30%

⁵⁷ Aclara website. “4 Key Factors to a Successful AMI Project Rollout,” September 29, 2020.

⁵⁸ James Ketchledge. “Challenges of Implementing AMI,” *Perspectives*, September/October 2008 Issue 5 Vol 12.

⁵⁹ Anjan Asthana et al. “Best Practices in the Deployment of Smart Grid Technologies,” McKinsey on Smart Grid, Summer 2010.

⁶⁰ Steve Deskins. “AMI Case Study at AEP Ohio: Deployment Lessons Learned in the gridSMART Pilot Project,” PowerPoint slide deck, gridSMART Conference, September 22, 2011, Slide 5 of 15.

⁶¹ Anjan Asthana et al. “Best Practices in the Deployment of Smart Grid Technologies,” McKinsey on Smart Grid, Summer 2010.

⁶² Balu Ambady. “Six Steps for Implementing a Secure AMI Infrastructure,” *Electric Energy T&D Supplement*, September/October 2015.

1 are cancelled; and 50% exceed original cost estimates.⁶³ 7) Establish a comprehensive
2 customer outreach program.⁶⁴

3 **Q. Given that Liberty has delayed the deployment of its AMI program until the 2025-**
4 **2026 time frame, why is the Department bringing this issue to the attention of the**
5 **Commission in this rate case?**

6 As discussed above, Liberty's original plan was to begin the initiation phase of the AMI
7 project in the 2022-2023 time frame. However, due to technology upgrades and related cost
8 changes put into place by the provider Itron, renegotiation of the original contract between
9 Liberty and Itron took place in 2023 and is ongoing. The primary purpose of the
10 Department addressing this issue now is to inform the Commission about the delay in the
11 deployment of AMI meters and to also alert the Commission to the significant cost increase
12 for this project, from \$19 million to \$40 million, that the Commission will have to consider
13 in a future proceeding. Despite the delay in initiating this project as planned, Liberty has
14 incurred \$2,501 in expenditures which it has included for recovery in the test year rate base.
15 Given that this project is not yet used and useful, the Department recommends temporary
16 disallowance of this expenditure until it can be reviewed in Liberty's next rate case in
17 conjunction with Liberty's planned future rollout of the total project in the approximate
18 amount of \$40 million.

19 **Q. Please provide a brief summation of the disallowances to Liberty's rate base that the**
20 **Department is proposing in this proceeding.**

21 **A.** The Department's recommended disallowances are as follows:
22

⁶³ James Ketchledge. "Challenges of Implementing AMI," *Perspectives*, September/October 2008 Issue 5 Vol 12.

1	<u>Project Number & Description</u>	<u>Disallowance</u>	<u>Justification</u>
2	8830-UNALL Finance Unalloc Burden	\$4,515,001	No document support.
3	8830-1964 Rockingham Substation	\$4,427,530	Price not supported.
4			Elevation/grade error
5			liability.
6			Excessive screening.
7			
8	8830-1965 Rockingham Sub Trans.	\$7,071,538	Not used and useful.
9	8830-2095 Tuscan Village EV Chargers	\$ 498,912	Non-distribution.
10	8830-22XX IEEE Membership	\$ 207,186	Non-capital expense.
11	8830-2285 AMI	<u>\$ 2,501</u>	Not used and useful.
12	Total	\$16,722,668	

13

14 **Q. Please summarize the Department’s findings involving the quality of project**
 15 **documentation and data responses obtained from Liberty.**

16 **A.** The Department’s review was largely dependent upon the quality and completeness of
 17 documentation provided by Liberty in their data responses. Although Liberty appears to
 18 have been consistent in filing and processing all of the standard documentation and
 19 reports required under Liberty Utilities’ internal processes and procedures, most of the
 20 documentation examined by the Department lacked the level of detail and analysis
 21 required by those same policies and procedures, in most instances providing only a
 22 cursory assessment of the capital projects mentioned, containing information that was
 23 repetitive and rudimentary in nature. In terms of data responses both written and
 24 obtained at the Technical Sessions, Liberty was given ample opportunity to provide root
 25 causes and detailed analysis for the cost overruns and project management issues

⁶⁴ Steve Deskins. “AMI Case Study at AEP Ohio: Deployment Lessons Learned in the gridSMART Pilot Project,”

1 reviewed, but the answers received were vague and lacking in specifics. The
2 Department's overall findings for each of the documents reviewed are as follows:

3 a) Business Cases and Capital Project Expenditure Forms: In the Department's
4 view, these are key pieces of documentation since, under Liberty Utilities' policy
5 and procedures for capital expenditures, the business case and CPE provide the
6 essential details, and primary justifications for, a given capital project.⁶⁵
7 Specifically, for all of the business cases reviewed, most of the sections requiring
8 detailed information and descriptions, such as "Recommendation,"
9 "Background," "Alternatives," "Financial Assessment," "Risk Assessment," and
10 "Implementation,"⁶⁶ provided only a perfunctory discussion, or in many cases, the
11 word "None" or "N/A" were inserted, leading DOE to conclude that the
12 requirements under Liberty's policy and procedures are largely ignored. Most of
13 the business cases reviewed provided little or no basis for the proposed budget
14 estimates nor economic justification for the projects. Moreover, for all of the
15 business cases reviewed, the initial budget amounts were consistently under-
16 estimated, in some cases by several times the amount of the actual expenditures.
17 Timing was another concern with the business cases. Most of the business cases
18 reviewed for 2019 through 2022 were dated two to four months after the capital
19 budgets had been approved by APUC. In some cases, as noted above, business
20 cases and change orders were dated as of 2023 due to the fact that Liberty was
21 unable to locate the original documents and had to recreate them. In addition,
22 Liberty disclosed in discovery that the business cases are never filed as part of the

PowerPoint slide deck, gridSMART Conference, September 22, 2011, Slide 7 of 15.

⁶⁵ Attachment JED/RDW/JJD-3 at 11-12.

1 annual budget process, thus leading DOE to conclude that upper management
2 could not have properly assessed the necessity, scope, and costs of a given project
3 at the time of budget preparation and approval.

4 b) Change Orders: These reports are another example of poor timing in that they are
5 submitted up to four months after the fiscal year end as of December 31 of the
6 prior year. This practice runs contrary to the intent of the form as described in the
7 Policy & Procedures since engagement of management for approval, and alerting
8 management to cost overruns, presumably should be sought during the course of
9 the project at the time the changes occurred. This after-the-fact notification
10 essentially negates the requirement for and purpose of the form in violation of
11 Liberty's own policy and procedures. Further, there is typically no breakout
12 within the cost categories between original costs and updated costs as required.
13 The Financial Assessment and Basis for Change sections are typically incomplete
14 and provide no detailed analysis or justification for an increase or why it was
15 authorized.

16 c) Project Close Out Reports: Under Liberty's policy and procedures the project
17 close out report is considered to be "a vital aspect of any project;" however, as
18 noted above, the Project Documentation Checklist in Section 3 of the form is
19 typically left blank in terms of key documents except for a reference to the
20 Business Case. Also, under the Project Lessons Learned section in Section 5,
21 "N/A" was usually inserted in the parts involving Problem Statement, Problem
22 Description, References and Recommendations, regardless of whether or not
23 Liberty encountered any problems with a project. As a result, no root cause

⁶⁶ *Id.* Appendix B at 20-21.

1 analysis addressing project difficulties and the reasons for a cost overrun were
2 provided.

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6 **VI. VEGETATION MANAGEMENT PROGRAM**

7 **Q. What is the Department’s general conclusion regarding Liberty’s Vegetation**
8 **Management Program (VMP)?**

9 **A.** Liberty’s VMP as presented is a substantial broadening of their previous efforts at an
10 approximate doubling of cost from \$2.2 million, with a cap of \$2.4 million, to \$4.1
11 million in Year 1 of Liberty’s multi-year rate plan, increasing to \$4.3 in Year 2 and \$4.6
12 in Year 3.⁶⁷ Liberty provided no details in terms of future benefits to customers that
13 these increases in spending would provide. Consequently, as discussed below, we
14 recommend Liberty’s VMP budget be set at \$2.5 million with a cap of \$3 million.

15 **Q. What is Liberty’s proposal for the VMP?**

16 **A.** Liberty’s VMP includes all the components of the previous VMP plus hazard tree
17 removal catch-up, brush and limb removal, one additional work planner, and a move
18 from a 4-year to a 5-year trimming cycle and a program assessment in the 3rd year of the
19 rate case. These changes result in an approximately \$1.5 million increase in cost over
20 Liberty’s 2023 budget. Additionally, there are substantial cost increases in subsequent
21 rate years due to inflation factors of 5% in all categories except cycle trimming, which is
22 projected to increase at 10% and ROW herbicide treatment which was not inflated.⁶⁸

⁶⁷ Testimony of Heather Green and J.M. Sparkman at Bates II-537.

⁶⁸ Attachment JED/RDW/JJD-11, Attachment 23-039 DOE 6-23.1

1 **Q. Does the Department believe Liberty has demonstrated their proposed VMP will**
2 **provide future benefits to customers to warrant this substantial budget increase?**

3 **A.** No.

4 **Q. Recognizing that a utility’s VMP is in place to improve customer reliability and**
5 **reduce storm related outage duration, what has Liberty’s system historic**
6 **performance been in these regards?**

7 **A.** Liberty’s system-wide reliability performance (SAIDI & SAIFI) has been steadily
8 improving since 2014, approaching first quartile industry performance.⁶⁹ For both SAIDI
9 and SAIFI, Liberty ranks in the 1st quartile among its peers when major storms are
10 excluded. When major storms are included, Liberty ranks in the 2nd quartile.⁷⁰ However,
11 as with most utility power systems, there are pockets of poor performance (multiple
12 feeders) and worst performing feeders (individual feeders) that are tracked and reported
13 on annually. Once either situation is identified, Liberty defines one or more projects to
14 address the issues causing the poor performance.⁷¹ One such problem area is Bellows
15 Falls which is addressed below.

16 **Q. Are all customers throughout Liberty’s service territory experiencing 1st quartile**
17 **reliability performance?**

18 **A.** No. Liberty identified the Bellows Falls area of their service territory as an area with
19 poor reliability performance in their “Bellow Falls Reliability Report” dated May 2,
20 2022, submitted in Docket No. DE 21-004.⁷²

21 **Q. Can you provide a summary of Liberty’s “Bellows Falls Reliability Report 2022”?**

⁶⁹ Testimony of Strabone, at Bates II-471.

⁷⁰ Attachment JED/RDW/JJD-11, data request DOE-6-24, response “b”.

⁷¹ *Id.* Data request DOE 3-2, response “b”.

1 **A.** Liberty’s Bellows Falls Reliability Report 2022, dated May 2, 2022 (“Report”) concluded
2 *“the Company has identified that the 12L1 and 12L2 circuits that serve the Bellows Falls*
3 *area have low reliability, significant tree issues, and the inability to switch load during*
4 *an outage due to the lack of circuit ties. As such, the Company is continuing to look at*
5 *wires and non-wires solutions to address the reliability problems over the next 0–5*
6 *years.”*⁷³ Additionally, the Department found the Report’s data and findings consistent
7 with the “Reliability Review 2020”, Appendix H of Liberty’s last LCIRP.⁷⁴

8 **Q.** **Can you expand further on the Report’s “significant tree issues” in the Bellows Falls**
9 **area as mentioned above?**

10 **A.** The Report provided reliability data that identified the primary causes of the poor
11 reliability on the distribution circuits 43-12L1 and 43-12L2 in the Bellows Falls area.
12 “Fallen Trees” and “Tree-Broken Limbs” categories represent the major causes of service
13 interruption on 12L1 and 12L2, representing “62% of total incidents and 74% of total
14 customer minutes interrupted”. Based on the data provided, the Department believes
15 “mechanical damages” from “Fallen Trees” and “Tree-Broken Limbs” were the major
16 contributing factors to the service interruptions. Outages from tree limbs “touching” the
17 circuits were insignificant in comparison as evidenced by the “Tree Growth” category.
18 Generally, mechanical damage to distribution circuit facilities includes conditions such as
19 downed wires, broken poles, broken crossarms, and/or broken pole hardware. The
20 Department believes the eventual solutions need to directly address these mechanical
21 damage causes and/or effects.

⁷² See Docket No. DE 21-004, Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities Least Cost Integrated Resource Plan, Tab 27.

⁷³ *Id.* at 12.

⁷⁴ *Id.* Tab1 at Bates 494-495.

1 **Q. Does Liberty’s proposed VMP specifically include programs and/or initiatives to**
2 **address the Bellows Falls or other tree related reliability issues?**

3 **A.** No.

4 **Q. Does the Department propose a different approach to that proposed in Liberty’s**
5 **VMP that would focus its trimming efforts on trees that cause mechanical damage**
6 **and on areas that have not been cycle trimmed and contribute to the poor reliability**
7 **in the Bellows Falls and other impacted areas?**

8 **A.** Yes. The Department proposes that Liberty set a priority in their 1st Rate Year to
9 complete backlogged hazard tree removals and their proposed targeted 1st year hazard
10 trees. The next priority would be additional tree work needed in the Bellows Falls area,
11 such as backlogged cycle trimming and increasing the trimming box size to current
12 requirements. Lastly, within budgetary constraints, all previous normal programs, such
13 as spot tree trimming, trouble and restoration maintenance, interim trimming, traffics
14 control, tree planting, ROW IVM work, permissions, permit fees, make safe work,
15 existing software maintenance would continue as proposed except cycle trimming. Cycle
16 trimming should be initiated thereafter under the proposed change to a 5-year cycle
17 within the 1st year and within the remaining budgetary constraints. All new initiatives
18 and staffing could be initiated in year 2 and 3, as budgetary constraints permit.

19 **Q. Does the Department believe that the VMP is the only method to address tree-**
20 **related reliability issues?**

21 **A.** No. Liberty has historically had a Bare Wire Replacement Program that also targeted
22 tree-related reliability issues. Such a Program, justified on a project-by-project basis and

1 appropriately coordinated with a targeted VPM have been demonstrated to be most
2 effective in this regard.

3 **Q. What is the Department's recommendation in terms of Liberty's VMP budget?**

4 A. Under Liberty's multi-year rate plan, the Company has proposed budgets of \$4.1 million
5 in Year 1, \$4.3 million in Year 2, and \$4.6 million in Year 3. Based on the analysis
6 above, the Department finds Liberty's proposed spending to be excessive without
7 providing the necessary reduction in hazard tree backlog that Liberty should be focused
8 on. Therefore, Liberty's priority in Year 1 should be to eliminate the backlog of hazard
9 tree removal, especially in the Bellows Falls service area, and then return to the proposed
10 five-year plan of cycle trimming and sub-transmission right of way (ROW) clearing in
11 Year 2. To accomplish this, the Department recommends a base budget of \$2.5 million
12 with a cap set at \$3.0 million. However, the Department agrees with Liberty that any
13 reconciliation of variances in these amounts will be included for approval as part of the
14 Electric Reconciliation Adjustment Mechanism (ERAM).⁷⁵

15 **VII. MULTI-YEAR RATE PLAN**

16 **Q. Does the Department support Liberty's multi-year rate plan proposal as it pertains
17 to future capital investments and additions to rate base?**

18 A. The Department does not support Liberty's multi-year rate plan (MYRP) as proposed and
19 instead recommends that the Commission retain a more traditional rate-making scheme
20 where additions to rate base are reviewed comprehensively in periodic rate cases,
21 resulting in just and reasonable rates. In the Department's view this is particularly
22 important given DOE's historical observations that Liberty's capital investments have
23 been overly aggressive, poorly managed, and in some instances unnecessary. Such

1 characteristics have been discussed extensively in Liberty’s prior rate cases (by then PUC
2 Staff) and in the project reviews outlined by the Department above. One of the elements
3 under Liberty’s MYRP proposal is that step adjustments are discontinued and prudence
4 reviews of those capital investments only take place in Year 3 and only involve
5 replacement projects and cost overruns.⁷⁶ In addition, as covered in greater detail by the
6 Department’s witness Nicholas Crowley, the rate base reconciliation mechanism within
7 the proposed MYRP has a built-in incentive for Liberty to spend up to 10% more than the
8 forecasted cost for specific projects. This enables the Company to adjust its rate base up
9 to 10% of the forecasted cost of plant placed into service in a given year without the need
10 to justify this increase in capital spending. As a result, Liberty has no incentive to
11 consider cost savings that allow the Company to spend less than the forecast since all
12 underspending would reduce rate base.⁷⁷ Other elements of the plan that are of concern
13 to the Department are outlined in Mr. Crowley’s testimony and Michael Clark’s
14 testimony. In terms of an alternative, the Department would support one step adjustment
15 increase for limited capital investments made in 2023 involving only non-growth, non-
16 blanket projects with a 90-day review period for prudence reviews as was the process in
17 previous step adjustment proceedings. For these reasons, the Department recommends
18 that the Commission deny the Company’s proposal for an MYRP. However, in the event
19 that the Commission decides to adopt an MYRP, it is the Department’s position that the
20 Commission should design such a plan according to the recommendations of Mr.
21 Crowley and Mr. Clark and not accept the plan proposed by Liberty.

⁷⁵ See Testimony of Heather Green and J.M. Sparkman at Bates II-537.

⁷⁶ See Testimony of Phillip Q. Hanser at Bates II-224.

⁷⁷ See Testimony of Nicholas A. Crowley at 8.

1 **Q. If the Commission were to approve Liberty’s proposed MYRP, or a different**
2 **version of MYRP, does the Department have confidence that Liberty can implement**
3 **such a plan competently, efficiently, and for the benefit of ratepayers?**

4 **A.** No. As outlined in the testimony of Ms. Noonan, the DOE’s Audit Report, and the
5 testimony of Ms. Nixon and Ms. Trottier, a number of deficiencies in Liberty’s
6 operational performance and management were observed in this rate case, including but
7 not limited to:

- 8 • Deficiencies in customer service and increased ratepayer complaints, in particular
9 related to inaccurate billing statements and unbilled services.
- 10 • Numerous errors in tariff filings involving incorrect rate calculations and non-
11 compliant content.
- 12 • Numerous errors in general ledger accounting entries and incorrect coding
13 resulting in a deficient and unreliable cost of service filing and defective FERC
14 Form-1 filing.
- 15 • Significant delays in filing data responses and supplemental information.

16 Many of the deficiencies noted above were directly related to Liberty’s recent conversion
17 to the SAP operating system. This conversion impacted all aspects of the Company’s
18 business including customer service, plant accounting, and accounting entries into the
19 general ledger. Due to the number of related errors and defects found in Liberty’s rate
20 case filings, and the continuation of unresolved legacy defects that continue to impact the
21 Company’s operations today, the Department concludes that the SAP conversion was not
22 competently planned or implemented by Liberty. As a result, the Department further
23 concludes that Liberty does not possess the technological bandwidth, or the required

1 expertise in staffing, to competently transition to a new and sophisticated approach to
2 ratemaking such as MYRP.

3
4 **VIII. CONCLUSIONS AND RECOMMENDATIONS**

5 **Q. Please summarize the Department's findings.**

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

- 10 • The Department found no evidence that Liberty considered least cost alternatives,
11 performed sufficient financial analysis, or complied with its own policy and
12 procedures involving the Business Case/CPE's, Change Orders, and Project
13 Closeout Reports reviewed.
- 14 • The Department found initial budgeted amounts, both in spreadsheets and the
15 Business Case/CPE's, to be consistently underestimated, unreliable, and lacking
16 documentary support thus calling into question the quality of the figures
17 contained in Liberty's reports and other related documentation.
- 18 • The Department found little evidence that Liberty's project planning and
19 management constitutes an efficient or organized process or that proper processes
20 and controls are in place for reasonable and prudent decision making.
- 21 • Liberty provided no evidence that its project management employed any form of
22 cost control methodology or techniques, or that it reasonably responded to
23 changing circumstances or new challenges as projects progressed. Change Order

1 Forms were typically completed and signed several months after a project has
2 gone over budget.

- 3 • The delays by Liberty in providing key documents, or not providing them at all,
4 hampered the Department's review in this case.
- 5 • Liberty's planning and buildout of infrastructure for the Tuscan Village
6 development, in particular projects related to the Rockingham Substation,
7 represent a significant over-build of that system given that the Tuscan
8 development is nearly complete and only 7.5 MW of the projected 23 MW of load
9 has been realized.⁷⁸
- 10 • Implementation of the Company's VMP has been seriously flawed due to a
11 consistent backlog of hazard tree removal and lack of prioritization of cuts.
- 12 • Liberty's MYRP proposal does not give adequate consideration to efficient capital
13 planning or properly balance ratepayer interests with shareholder interests.
- 14 • The SAP conversion was poorly planned and poorly executed leading the
15 Department to conclude that Liberty lacks the capability to implement any type of
16 an MYRP.

17 **Q. What recommendations does the Department propose as a result of its analysis of**
18 **Liberty's revenue requirement?**

19 A. First, the Department incorporates the recommendations of witnesses Mullinax and
20 DeVirgilio. Ms. Mullinax recommends a total reduction of \$8.3 million from the
21 proposed revenue requirement based on her extensive review of Liberty's proposed
22 revenue requirement and DOE's recommended adjustments. The Department

⁷⁸ Attachment JED/RDW/JJD-12 Attachment DOE 9-14.

1 recommends a reduction of approximately \$1.7 million out of the requested \$4.2 million
2 for the Veg Management program proposed by Liberty for a revised program amount of
3 \$2.5 million with a cap of \$3 million. The Department also recommends that the
4 Commission reject Liberty's proposed MYRP for rate years 2023, 2024, and 2025, given
5 the deficiencies found in the plan and DOE's overall determination that Liberty lacks the
6 requisite technical capability to effectively implement such a plan. In addition, due to the
7 copious number defects found in Liberty's rate case filing, the poor execution of the SAP
8 conversion, and numerous difficulties experienced by the Department and the Audit
9 Division in obtaining timely and accurate information, the Department recommends that
10 the Commission open a separate docket for the purposes of conducting an investigation
11 of Liberty's operations and management, and consider hiring a consultant to perform a
12 business management audit in support of that investigation and to also oversee the
13 implementation by Liberty of any recommendations that may arise from the management
14 audit as approved by the Commission.

15 Second, the Department incorporates the recommendations of witness Zhen Zhu that
16 Liberty's appropriate cost of capital should be 7.61% and that its ROE should be 9.25%.

17 **Q. Does the Department have any additional recommendations for the Commission to**
18 **consider?**

19 **A.** Yes. The Audit Report cites many instances in which Liberty's overhead/burden
20 calculations for capital projects appeared to be excessive.⁷⁹ The Department also
21 encountered large increases in overheads during its project review where in some
22 instances the burden calculations contributed to most of the cost overruns for several
23 projects. When asked in discovery to provide an explanation of the causes behind the

1 high burden rates, Liberty did not provide clear responses.⁸⁰ As a result, the Department
2 recommends that the Commission require an in-depth audit of Liberty's process for
3 calculating and applying burden rates to determine whether or not the process is accurate
4 and comparable to processes utilized by other similarly situated utilities.

5 **Q. Does that conclude your testimony?**

6 A. Yes, it does.

⁷⁹ Attachment JED/RDW/JJD-1, Audit Issue 5 at 157.

⁸⁰ DOE data responses 6-8, 9-1, 10-19, and 10-20.