

STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

DOCKET NO. DE 19-057

IN THE MATTER OF: **PUBLIC SERVICE COMPANY OF NEW
HAMPSHIRE D/B/A EVERSOURCE ENERGY**

Notice of Intent to File Rate Schedules

DIRECT TESTIMONY

OF

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NHPUC

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I. INTRODUCTION

Q. Please state your full name?

A. My name is Richard Chagnon.

Q. By whom are you employed and what is your business address?

A. I am employed as an Assistant Director in the Electric Division of the New Hampshire Public Utilities Commission (Commission or PUC). My business address is 21 South Fruit Street, Suite 10, Concord, NH 03301.

Q. Please summarize your education and professional work experience.

A. I started at the Commission in May of 2015 as a Utility Analyst in the Electric Division, and was promoted to Assistant Director in June of 2019. Before joining the Commission, I was employed at Public Service of New Hampshire (PSNH) for 36 years. My most recent position at PSNH was Division Manager of the Seacoast Northern Division for 4 years. In this position I was responsible for account executives assigned to the largest commercial and industrial customers, community relations manager assigned to towns and community outreach programs, operations manager assigned to six area work centers throughout the division, and associated staff and crews. My responsibilities also included budgets, goals, employee safety, environmental, employee relations, customers, and company policies and procedures.

Prior to my position as Division Manager, I held the position of Manager of Human Resources for 4 years. In this position, I was responsible for implementing company policies, employee training, employee discipline/promotion, employee compensation, staffing, and internal investigations for over 1,400 employees in New Hampshire. I also oversaw labor relations and labor contracts.

1 Prior to my position as Manager of Human Relations, I held the position of Manager of
2 Customer Systems & Training in the Customer Services Division for 3 years. In this
3 position, I was responsible for directing the requirements of the customer information system
4 (CIS) for billing customer accounts, CIS analysts, large power billing system, and the
5 customer call center and credit department training team. The other positions I held prior to
6 this were Account Executive, Conservation & Load Program Administrator, Credit &
7 Collections Analyst, Credit & Collections Supervisor, Meter Reading Supervisor, Meter
8 Reading Foreman, Line Worker and Meter Reader.

9 I received a Bachelor of Science Degree from Franklin Pierce College in Marketing.

10 **Q. What is the purpose of your testimony in this proceeding?**

11 A. My testimony addresses Eversource's request for Step Adjustments, its request for approval
12 of a reconciling mechanism, the Distribution Revenue Adjustment Mechanism (referred to
13 herein as DRAM), and issues related to environmental remediation, meter replacement and
14 electric vehicle infrastructure.

15
16 **II. STEP ADJUSTMENTS**

17 **Q. What is your understanding of the Step Adjustments that Eversource is requesting in**
18 **the context of this distribution rate case?**

19 A. On Bates Page 1823 of the Testimony of Mr. Edward Davis, the Company states that it is
20 asking for distribution revenue additions of \$14.9 million for 2019, \$20.8 million for 2020,
21 \$13.5 million for 2021 and \$15.6 million for 2022. Together, the requested steps total \$64.8
22 million in incremental distribution revenue requirements. In this filing, the Company is
23 requesting a \$69.9 increase in permanent distribution rates. The amount requested in

1 connection with the four Step Increases almost doubles the revenue increase Eversource
2 requests in this docket.

3 **Q. What are the reasons provided by Messrs. Chung and Dixon for the request for Step**
4 **Adjustments for each of the four years following conclusion of this rate case?**

5 A. According to the Chung/Dixon testimony at Bates Page 153, Eversource says that the Step
6 Adjustments are needed to allow the Company to earn its approved rate of return and to
7 prevent the “erosion of earnings” after permanent rates go into effect.

8 **Q. Please explain the concept of regulatory lag and how it relates to earnings erosion.**

9 A. Regulatory lag refers to the time between the period when costs change for a utility and the
10 point when the regulatory Commission recognizes these changes by raising or lowering the
11 utility’s rates to consumers in a rate case. During this period of regulatory lag between rate
12 cases, a regulated utility may face certain upward pressures on revenue requirements that
13 may not be offset by revenue growth. This is especially likely during times when sales
14 growth is low or flat or during periods of high inflation. These pressures provide the utility
15 with an incentive to control costs between rate cases, in order to avoid earnings erosion.
16 Ratepayers benefit from the efficiencies regulated utilities seek between rate cases as a result
17 of this incentive to control costs.

18 **Q. How might the proposed step adjustments be to the detriment of ratepayers?**

19 A. Step adjustments may mitigate shareholder earnings erosion, but also limit the incentive to
20 control costs between rate cases that results from regulatory lag and earnings erosion.

21 **Q. How might ratepayers benefit from the proposed step adjustments?**

22 A. Rate cases can be an expensive undertaking for the customers of a regulated utility. To the
23 extent that step adjustments help a regulated utility avoid the administrative costs associated

with a rate case filing, those savings are passed on to ratepayers. However, it is important to recognize that rate case expenses are a one-time cost and generally small compared to requested revenue requirement increases. Furthermore, Eversource has stated that “approval of the Company’s step adjustment proposal would not, in isolation, preclude the Company from filing another rate case until the conclusion of the step adjustment period.” Please see the Company’s data response OCA 3-002 (Attachment RTC-1). Based on this statement, the Commission should not conclude that approval of the Company’s requested step adjustments would result in lower rate case expenses being passed through to ratepayers.

Q. How does the Company’s requested Step Adjustment in this rate case compare to its previous rate case?

A. The table below compares the details of the steps requested by the Company in the instant rate case against those that were settled upon in the last rate case. Please see the Company’s data response OCA 6-049 (Attachment RTC-2).

STEP ADJUSTMENT DETAIL	2009 RATE CASE DE 09-035	2019 RATE CASE DE 19-057
Number of Step Adjustments Approved/Proposed	3	4
Percent of Annual Capital Investments Allowed/Proposed	80% of Non-REP	100%
Percent of Annual O&M Expenses Allowed/Proposed	0%	.64%, starting in Step #2 *

* percent would increase to 1.92% if Enterprise IT Projects Depreciation is included

Notably, approval of the Company’s requested steps in the last rate case was accompanied by a non-symmetrical ROE earnings sharing mechanism. The Company was also granted fewer steps, and those steps were designed to recover only a percentage of the planned capital investments.

Q. Has the Company included adjustments for operating expenses within the Step Adjustment?

A. Yes. Eversource testifies, however, that the revenue requirement for the proposed Step Adjustments consists of costs incurred in connection with depreciation expense, property taxes, return on rate base, the estimated allocated share of Enterprise IT projects, and anticipated union wage increases. Please see Bates Page 154. With the exception of the Enterprise IT project expense, the expenses enumerated by Chung and Dixon are the type of expenses that are updated and pro-formed using test year data in formulation of the revenue requirements in a full distribution rate case. These are expenses incurred in the day-to-day operation of operating a utility and are not extraordinary expenses that warrant a Step Adjustment.

One of the key principles in public utility rate regulation is the balancing of interests between the ratepayers and the utility. The goal is to set rates that are just and reasonable, and that will also allow a utility the opportunity to earn a reasonable return on investment in property of the utility used and useful in the public service, provided that those investments are deemed prudent. *See*, RSA 378:27 and RSA 378:28. Staff believes that allowing Eversource a step increase for the ordinary day-to-day operating expenses is inconsistent with basic rate setting principles.

Q. What is your recommendation regarding the proposed annual recovery of operating expenses?

A. There should be no incremental increase in rates through a Step Adjustment for any increases to Eversource's operating costs for depreciation expense, property taxes, return on rate base, the estimated allocated share of Enterprise IT projects, and anticipated union wage increases.

1 If these operating costs cause an erosion in earnings, Eversource should file a rate case
2 asking for increased distribution revenue. To be clear, these are increases that are not
3 necessarily associated with a particular project or any project at all as I elaborate on below.

4 **Q. What else concerns you about the requested step increases?**

5 A. The cases cited by Eversource in support of its request for Step Increases demonstrate that
6 Eversource's request is unusual. See FN 38 and 39 on Bates Page 154. The step increases in
7 the cited cases generally allow the utility to recover return associated with capital investment,
8 used and useful in providing public service, and prudently incurred, in the particular year for
9 which the step is requested. The allowance of such costs is consistent with traditional cost-
10 of-service ratemaking. In most of the cases cited by Eversource in its testimony, such as in
11 Docket No. DE 16-384 (Unitil Energy Systems, Inc.), the specific investment proposed for
12 recovery through a step increase was disclosed by the utility during the course of the rate
13 case to allow the parties and Staff to evaluate the costs associated with the investment, and
14 the need for, and prudence of, such investment.

15 There is immense value in this prospective review process, which allows regulators to weigh
16 in on the appropriateness of a planned investment prior to that investment being made. This
17 type of proactive review lowers utility shareholder risks associated with a future
18 disallowance and helps ensure that planned investments are the optimal use of funds that will
19 later need to be collected from ratepayers. In requesting step increases that extend over a
20 four-year period and include operating expenses, Eversource has essentially asked for a
21 multi-year rate plan (MRP), but without the stay-out provision or prospective review of
22 planned investments typically associated with such a plan — aspects from which ratepayers
23 would generally benefit.

1 As suggested recently by the Maryland Public Service Commission, “a key element of an
2 MRP is that it provides more transparency into a utility’s planning process. An MRP will
3 require significant detail into utility planning that is not available to interested parties
4 today.”¹ In the instant distribution rate case, Eversource has provided very little information
5 relating to particular investments proposed for 2019, 2020, 2021 and 2022 that would be
6 eligible for return as a capital investment. In several instances, Staff requested this
7 information and Eversource’s response has generally been that “[t]he illustrative step
8 adjustments provided in this rate case are estimated based on the high-level, long range
9 capital addition forecast, which is produced by category of investment and not at a specific
10 project level;” and that “[t]he Company is not at this time requesting that the PUC authorize
11 the precise step adjustment in future years that has been calculated in this case.” Please see
12 the Company’s data response Staff 13-009 (Attachment RTC-3). Consequently, Staff lacks
13 the information necessary to determine whether a Step Adjustment based on annual capital
14 investment is warranted.

15 **Q. What is the recommendation of Staff with respect to the proposed Step Adjustments?**

16 A. For the reasons I have stated above, Staff does not support the Company’s proposal
17 regarding Step Adjustments as filed.
18

19 **III. DISTRIBUTION REVENUE ADJUSTMENT MECHANISM (DRAM)**

20 **Q. Has Eversource asked for approval of other annual rate adjustments in connection**
21 **with its request for an increase to distribution revenue?**

¹ Maryland Public Service Commission. Order on Alternative Forms of Rate Regulation and Establishing Working Group Processes. Order No. 89226. (August 9, 2019) Available at: <https://www.psc.state.md.us/wp-content/uploads/Order-No.-89226-PC51-and-Case-No.-9618-Order-on-Alternative-Forms-of-Rate-Regulation-and-Establishing-Working-Group-Processes.pdf>

1 A. Yes. Beginning on Bates Page 163, Messrs. Chung and Dixon are proposing a new, non-by-
2 passable reconciling rate called the Distribution Revenue Adjustment Mechanism (DRAM).

3 The proposal would provide an annual rate that would fully reconcile expenses and rates for
4 five activities. The DRAM as proposed by Eversource would recover expenses related to

- 5 • Major Storm Cost Recovery
- 6 • Vegetation Management
- 7 • Regulatory Reconciliation Adjustment
- 8 • “New Start” Arrearage Management, and
- 9 • Grid Transformation and Enablement Program (GTEP).

10 **Q. Does Staff support the creation of a DRAM rate?**

11 A. Staff does not support the creation of a DRAM rate. In brief, the DRAM provides for full
12 cost recovery for Eversource at ratepayer expense, with no risk for shareholders. Eversource
13 should recover the costs of all the covered activities through base distribution rates and if the
14 Company believes it is under-earning, the remedy is to file a rate case.

15 **Q. Please briefly explain how the DRAM would work.**

16 A. According to Eversource’s testimony, approval of the DRAM would allow the Company to
17 file a comprehensive DRAM “umbrella” filing each May 1 for the Commission’s review and
18 approval in advance of a single July 1 rate adjustment. As I understand it, that July 1 rate
19 adjustment would constitute a distribution rate increase to fully recover the costs incurred by
20 Eversource in the prior year for storm recovery, vegetation management, regulatory
21 assessment, “New Start” arrearage, and the GTEP.

22 **Q. Are there provisions in Eversource’s proposed base distribution rates for any of the five**
23 **activities proposed for the DRAM?**

1 A. Yes. Distribution rates recover costs association with the recovery from major storms,
2 vegetation management, PUC assessments, and various components of GTEP.
3 I will discuss each component below.
4

5 **IV. MAJOR STORM COST RESERVE**

6 Currently, Eversource recovers \$12 million annually from customers through distribution
7 base rates for the Major Storm Cost Reserve (MSCR). On an annual basis, Eversource is
8 required to provide a report on the storms that occurred in the prior year that caused damage
9 to its energy system and outages for its ratepayers. The report includes a detailed explanation
10 of the costs incurred by the Company in repairing the damages associated the storms that
11 occurred. Commission staff audits the costs incurred, and then Eversource reconciles those
12 costs the MSCR collected from ratepayers.² A similar process is employed by the other two
13 regulated electric distribution utilities in New Hampshire.

14 **Q. Does the MSCR collect sufficient money for Eversource to pay all the costs associated**
15 **with major storm damage?**

16 A. No. The storm reserve fund will often run in the negative. For that reason, the Commission
17 has approved the recovery of costs associated with major storms that cause extraordinary
18 damage to a utility delivery system through a surcharge that is recovered over a period of 3 to
19 5 years, depending on amount subject to recovery.

20 **Q. How would major storm cost recovery work under Eversource's proposal?**

² As noted in the temporary rate portion of this case, instead of applying the funds in the MSCR on an annual basis to the audited costs allowed by the Commission, the Company accumulated storm costs over a period of years. As a result, in Order No. 26,265, the Commission authorized the Company to recover the sum of \$68,474,355 over a five-year period beginning August 1, 2019 to recovery those excess costs.

1 A. As part of its DRAM request, Eversource proposes to reduce the annual ratepayer
2 contribution to storm recovery costs, from \$12 million to \$8 million. Then, each year,
3 Eversource would file a petition to reconcile any over- or under-collection (typically, an
4 under-collection) for the previous year through the DRAM.

5 **Q. Does Staff support this proposal?**

6 A. No. Staff believes it is preferable to address funding for major storm cost recovery through
7 base distribution rates instead of using an annual reconciliation. Staff also does not agree
8 with Eversource's proposal to change the annual ratepayer contribution to storm recovery
9 costs from \$12 million to \$8 million. Please see Bates Page 321. Eversource reported over
10 \$25 million in storm costs during its 2018 test year. Eversource reportedly spent an average
11 of \$12.9 million per year on storm costs from 2016 through 2018, excluding the costs of the
12 exceptionally large storm event on October 29, 2017 of approximately \$32.1 Million.

13 **Q. Why does Staff believe that recovery the costs through base distribution rates is a**
14 **preferred form of cost recovery?**

15 A. There are a number of reasons, some of which apply generally to the DRAM proposed by
16 Eversource. First, as a major electric distribution utility, Eversource should have the
17 technical, managerial, and financial ability to establish an estimate of costs for repairing
18 damage associated with the typical number of storms that occur in a year, and the derived
19 amount should be included in the calculation of base distribution rates. Second, if significant
20 damage occurs as a result of an infrequent storm of major strength, Eversource can request
21 recovery through a surcharge amortized over a period of limited years in a similar manner as
22 costs incurred during the Ice Storm of 2008. Finally, one of the results of a distribution rate
23 case is rate predictability and stability for Eversource's customers. Staff's fundamental

1 concern in this matter is that customer rates are just and reasonable, and that the interests of
2 ratepayers are balanced with the interests of shareholders.

3 **Q. What is Staff's recommendation for the funding amount for major storm cost recovery**
4 **through base distribution rates in this proceeding?**

5 A. Staff recommends keeping the annual ratepayer contribution to storm recovery costs in base
6 rates at the current amount of \$12 million. Staff also recommends that if significant damage
7 occurs as a result of an infrequent storm of major strength, Eversource should utilize current
8 approved methods to request recovery through a surcharge over a period of limited years as
9 discussed above.

10
11 **V. VEGETATION MANAGEMENT**

12 **Q. Please address the DRAM as it applies to vegetation management.**

13 A. I note at the outset that Staff has filed the testimony of Kurt Demmer. That testimony
14 addresses vegetation management issues. I will only address vegetation management as it
15 relates to cost recovery.

16 Eversource recovers costs associated with vegetation management through base distribution
17 rates. As with major storm costs, Eversource should have the technical, managerial and
18 financial ability to estimate annual vegetation management costs in a distribution rate case.

19 As I understand from Mr. Demmer, cycle tree trimming is a core function for any public
20 electric distribution utility operating in New Hampshire. The Company should have the
21 discipline and expertise to derive a reasonable calculation of the costs of necessary
22 vegetation management activities. Eversource can continue its vegetation management
23 activities within a budgeted plan.

1 **Q. The Company says it would use a tracking mechanism to address the variability in costs**
2 **incurred in connection with cycle tree trimming. Does that satisfy any of your**
3 **concerns?**

4 A. No. Under the recent iteration of Eversource's reliability enhancement program (REP), the
5 Commission authorized Eversource to recover certain reliability spending and vegetation
6 management expense through a reconciling mechanism. Staff believes that the distribution
7 rate case presents an opportunity to provide more discipline to vegetation management by
8 addressing these activities as proposed by Mr. Demmer. Approval of a reconciliation
9 mechanism would undermine that opportunity. The Company should be required to file
10 annual reports to the Commission to ensure vegetation management is being is fully funded
11 annually.

12 **Q. Do you have any other concerns about using the DRAM for vegetation management**
13 **cost recovery?**

14 A. As I explained in connection with the MSCR annual reconciliation proposal within the
15 proposed DRAM, rate stability, and just and reasonable rates, are principles that argue
16 against the DRAM.

18 **VI. REGULATORY RECONCILIATION ADJUSTMENT MECHANISM**

19 **Q. What expenses does Eversource propose to recover through the DRAM for regulatory**
20 **reconciliation adjustment?**

21 A. Eversource proposes to recover the following costs through the Regulatory Reconciliation
22 Adjustment Mechanism: (1) changes in the amounts above or below the total Commission
23 assessment allowed for recovery in base distribution and energy service rates; (2) prior

1 calendar year deferred Office of Consumer Advocate and Commission proceeding expenses;
2 and (3) other Commission approved regulatory expenses or recoveries, like costs associated
3 with net metering pilot programs.

4 Eversource testified that as part of its annual May 1 compliance filing to the Commission, the
5 Company will file information reconciling prior year activity and submit for recovery the
6 prior year's calendar expenses that fall into this category. *See* Testimony of Chung and
7 Dixon at Bates Page 176.

8 **Q. Please tell us Staff's position on this proposed DRAM rate for regulatory reconciliation**
9 **of costs.**

10 A. Staff opposes this proposed Regulatory Reconciliation in the proposed DRAM because it
11 makes the Company whole and disregards the interests of ratepayers. There is no balancing
12 of the interests of shareholders and ratepayers. It's simply full cost recovery for the
13 Company for this category of expenses outside of a rate case. Eversource should base its
14 regulatory expenses on actual expenses that occurred in the test year. Simply put, annual
15 reconciliation of utility operating expenses does not result in just and reasonable rates and is
16 not in the public interest.

17
18 **VII. NEW START ARREARAGE FOREGIVENESS PROGRAM**

19 **Q. Does Staff support the Company's New Start Arrearage Forgiveness Program (New**
20 **Start)?**

21 A. Yes. Please refer to Amanda Noonan's testimony on Bates Page 5 of Staff's filing.

22 **Q. What are the costs that the Company is seeking to recover associated with the New**
23 **Start program for New Hampshire?**

1 A. According to the Company's testimony on Bates page 780, the Company estimates that it will
2 cost approximately 1.7 million dollars to implement the New Start program for New
3 Hampshire customers.

4 **Q. How does the Company propose to recover the \$1.7 million from customers?**

5 A. On Bates page 178, the Company explains that if the New Start program is approved by the
6 Commission, the Company would seek recovery of the capital costs associated with the
7 program implementation through the DRAM.

8 **Q. Does Staff support the Company's proposal of recovering capital costs associated with**
9 **the program implementation through the DRAM?**

10 A No. Staff does not support this method of recovery.

11 **Q. What does Staff recommend?**

12 A. Staff recommends as follows:

- 13 • First, the recovery of \$1.7 million in costs of implementing the program for New
14 Hampshire customers should be recovered over a five-year period beginning July 1,
15 2020. This is approximately \$340,000 annualized (\$1.7 million / 5 years).
- 16 • Second, Staff recommends recovery to begin through rates effective July 1, 2020. Staff
17 recommends the approximate annual recovery of \$340,000 to end on June 30, 2025.
- 18 • Third, if the Company files a rate case for permanent rates or temporary rates in 2025,
19 any over or under-collection for the actual implementation as described above will be
20 fully reconciled for rates effective July 1, 2025.
- 21 • Fourth, if the Company does not file a rate case for permanent rates or temporary rates in
22 2025 or before, any over or under-collection for the actual implementation as described
23 above will be fully reconciled for rates effective July 1, 2025.

- Fifth, if the Company files a rate case for permanent rates or temporary rates prior to 2025, then dollars associated with the actual implementation costs as described above, will be appropriately addressed in that rate case.

Q. How does the Company propose to recover the forgiven past due balance amounts from customers?

A On Bates page 177, the Company notes “[c]onsistent with its approach in Massachusetts, the Company is seeking to recover 100 percent of the forgiven past due balance amounts for customers enrolled in the New Start program through the DRAM.”

Q. Does Staff support this method of recovery?

A No. Staff recommends recovery of approximately \$842,000 annually in rates effective July 1, 2020 to recover 100 percent of the forgiven past due balance amounts for customers enrolled in the New Start program.

Q. Please explain Staff’s assumptions leading up to revenue recovery for the New Start program.

A Please see the Company’s data response Staff 9-025-SP01 (Attachment RTC-4). In its response, the Company reports that there are 3,825 customer accounts coded as financial hardship with balances greater than \$300 and more than 60 days past due. The total past due receivables associated with the 3,825 accounts is \$5,325,656.42. Staff estimates the average past due for each of these accounts is \$1,392.

In the Company’s data response to Staff 9-023 (Attachment RTC-5), the Company estimates that 3,000 customers would participate in the proposed New Start program. Staff is adopting the Company’s estimated 3,000 participation for revenue recovery calculation of the program

1 in this rate case. Staff estimates that with an average past due of \$1,392 for each of the 3,000
2 customers, the associated revenue recovery target is \$4,176,985 for these customers.

3 Although Staff fully understands that there are multiple moving parts in attempting to
4 identify target revenue recovery for these accounts, and that this amount of \$4,176,985
5 proposed by Staff is the amount estimated to be 100 percent of the past due amount for
6 approximately 3,000 customers, Staff believes that is a logical target to consider.

7 **Q. What amount does Staff believe should be in base rates beginning July 1, 2020?**

8 **A** Staff believes that the amount in base rates effective July 1, 2020 for the \$4,176,985 should
9 be the annual amount of \$928,219. In Amanda Noonan's testimony on Bates Page 8, she
10 recommends that the New Start program begin on January 1, 2021. If Ms. Noonan's
11 proposed start date is adopted, the Company would have time to complete the IT
12 programming required, and to promote this new program to customers. Staff believes that
13 the amount of \$4,176,985 is a reasonable amount to recover through the first four years of the
14 New Start Program. However, Staff proposes to actually recover this amount over the four
15 and a half years beginning July 1, 2020.

16 **Q. Are there any other adjustments required from Staff as a part of the New Start**
17 **program?**

18 **A** Yes. In the Company's data response to Staff 9-020 (Attachment RTC-6), the Company
19 estimates a total annual avoided cost associated with New Start customers at \$97,000. Staff
20 estimates the annual adjustment to rates effective July 1, 2020 at \$86,222 ($\$97,000 * 4 \text{ years}$
21 $= \$388,000$) ($\$388,000 / 4.5 \text{ years} = \$86,222$).

22 **Q. What is Staff's recommendation for revenue recovery for the New Start program,**
23 **excluding IT costs?**

1 **A** Staff recommends the amount of approximately \$842,000 ($\$928,219 - \$86,222 = \$841,997$).

2 **Q. Does Staff have any additional recommendations regarding revenue requirements for**
3 **the New Start program?**

4 **A** Yes. Staff recommends that the Company create a reserve account for funds collected
5 through rates for the New Start program. The reserve account should also reflect all amounts
6 charged to the New Start program created by the forgiven past due balance amounts for
7 customers enrolled in the New Start program, as well as monthly balances of the account.
8 Any over-collection in the reserve fund would incur interest (credit) on monthly balances.
9 Staff also recommends that any under-collection would not incur monthly carrying charges.

10 **Q. Why does Staff recommend that any under-collection not incur monthly carrying**
11 **charges?**

12 **A** Because the Company has only provided estimates of the potential number of customers who
13 may participate in the New Start program, and the actual past due amount to be forgiven are
14 also unknown, Staff believes that the Company has the burden to prove the costs and savings
15 of its proposed New Start program. Instead, the Company has only proposed to reconcile
16 whatever the results of the program are on an annual basis, with the focus being to make the
17 Company whole.

18 Staff recognizes that it is a challenge for any utility to estimate actual results anticipated;
19 however, instead of Staff challenging the Company on potential Cash Working Capital
20 effects on Eversource's lead lag study in anticipation of a lower accounts receivable over
21 time, and the potential reduction of uncollectibles over time, Staff believes its proposal
22 represents an appropriate balance to help bring the New Start program to New Hampshire
23 customers.

1 **Q. What is the total annual cost of the program for Staff's recommendation?**

2 A The total annual cost of the program would be \$1,181,997 through June 30, 2025.

3
4 **VIII. GRID TRANSFORMATION AND ENHANCMENT PROGRAM**

5 **Q. What is Staff's position on GTEP?**

6 A. Mr. Demmer, who analyzes GTEP in his testimony, states the Staff's opposition to the
7 program. To the extent that Staff opposes the GTEP, the issue of cost recovery is moot;
8 however, Staff would oppose using a reconciling mechanism like DRAM for cost recovery of
9 the GTEP via a reconciling mechanism for the same reasons I set out for the other proposed
10 DRAM elements.

11 **Q. The Company proposes to leverage the Excess Deferred Income Taxes (EDIT) that**
12 **resulted from the proceeding in Docket No. DE 18-049, to offset the costs of the GTEP**
13 **in the first year. If GTEP is not approved, how do you propose to address the**
14 **approximately \$7.6 million in EDIT?**

15 A. I would propose that the \$7.6 million be applied as a credit to customer rates effective July 1,
16 2020.

17 **Q. Do you have any final comments about the Company's proposal to create a DRAM**
18 **mechanism?**

19 A. Yes. In essence, the DRAM provides for full cost recovery for selected operating expenses.
20 Eversource is a public utility subject to rate regulation. In this case, Eversource seems to
21 have put much effort into devising a rate proposal which allows them to operate at little risk.
22 According to the testimony of Mr. Davis, the proposed step increases and the GTEP DRAM
23 would increase distribution base rates every year after the rate case. Instead of requiring

1 ratepayers to pay increased distribution rates every year, the Company should demonstrate
2 some discipline and plan to run the company within the revenue requirement developed
3 according to the pro-formed test year expenses.

4 Mr. Davis refers to average bill impact in his testimony, based on current energy service and
5 transmission rates. For the sake of transparency, the Company should clearly explain the
6 effect of the proposed annual increase in distribution rates over the four years depicted on
7 Bates Page 1823 of his testimony. The table on that page, which includes millions of dollars
8 in rate increases for each year, does not include the annual reconciliation for storm recovery,
9 vegetation management, arrearage management or regulatory expense. Only the GTEP
10 DRAM component is included in the calculation of average bill impact.

11 In any petition filed by a public utility with the Commission requesting a rate increase, the
12 burden is on the utility to demonstrate that its requested relief is reasonable and in the public
13 interest. With respect to the Step Adjustment for certain operating expenses, and the annual
14 reconciliation of other operating expenses through the DRAM, Eversource has not
15 demonstrated why these rate mechanism are necessary to recover the costs of the programs,
16 the need for accelerated cost recovery, or how customers benefit from the design of these
17 cost recovery mechanisms.

18 As I stated previously, the Company should have the managerial, technical and financial
19 capability of developing an appropriate level of revenue requirements using traditional
20 ratemaking and cost recovery principles. Allowing Eversource to recover certain operating
21 revenue through the Step Adjustment and recovery of other operating expenses through the
22 DRAM will not result in just and reasonable rates.

Q. Do you have any additional comments on Eversource's proposal related to the Step Adjustment or DRAM proposal?

A. Yes. My comments relates to Eversource's proposal to add a revenue requirement to the proposed step adjustment to recover money to support the creation of a network of electric vehicle (EV) charging stations. Staff recommends that this revenue requirement be removed from consideration in this proceeding.

IX. ELECTRIC VEHICLE CHARGING STATIONS

Q. Did the Company propose a separate rate for electric vehicle (EV) charging stations?

A. No. They did not.

Q. Do you know of other activities in New Hampshire related to electric vehicle rates?

A. Yes. In SB 575, that became effective on August 11, 2018, the Public Utilities Commission ("PUC") must consider and determine whether it is appropriate to implement certain rate designs for electric companies and public service companies for electric vehicle charging. The specific rate design standards for consideration are as follows: 1) cost of service; 2) prohibition of declining block rates; 3) time of day rates; 4) seasonal rates; 5) interruptible rates; 6) load management techniques; and 7) demand charges. This bill also requires the PUC to consider and determine whether it is appropriate to implement "electric vehicle time of day rates" for residential and commercial customers.

Q. Did the Company submit testimony related to electric charging infrastructure?

A. Yes. In the Purington and Lajoie testimony at Bates 394-395, the Company describes a proposal for 'make-ready' electric vehicle charging infrastructure, stating:

PSNH is exploring options for a public-private partnership to develop an electric vehicle ("EV") fast charging corridor for New Hampshire [where] PSNH would

1 invest approximately \$2 million of base capital to construct distribution 20 facilities,
2 primarily service drops, to energize a series of EV fast chargers... The chargers would
3 be owned by third-party charging vendors that are selected through a competitive bid
4 process. This project would support customer deployment of up to 48 50kW DC fast-
5 charging stations at approximately sites throughout the Company's service territory,
6 with the infrastructure to support future expansion of up to 40 additional DC fast
7 chargers.
8

9 When asked whether the costs related to these investments have been requested for inclusion
10 in this rate case, in the Company's data response to Staff 3-012 (Attachment RTC-7) the
11 Company states "[t]he make-ready charging investments are anticipated to be implemented
12 in the near term would therefore be included in the Company's requested steps in this rate
13 case. These investments are considered part of the many base capital investments in the
14 upcoming five years." Prior to discovery, the level of detail provided in the above excerpted
15 block quote was the only information provided by the Company regarding an investment that
16 in other jurisdictions commonly receives prospective analysis and is the subject-matter of
17 testimony or in some cases an entire docket.

18 **Q. Did discovery related to the Company's planned EV charging investment raise any**
19 **concerns?**

20 A. Discovery on the Company's EV charging investment raised several concerns relating to: (1)
21 whether all of the make-ready investments would actually be used and useful; (2) the
22 Company's failure to adopt full decoupling and how it impacts the accuracy of the materials
23 used by the Company to champion these investments to various stakeholders; and (3) the
24 supporting inputs used for the Company's benefit-cost analysis of the proposed investment,
25 including costs related to distribution system upgrades which may not have been included but
26 would actually surpass the costs of the make-ready investments.

1 **Q. Please explain your concern about whether the make-ready investments will actually be**
2 **used and useful.**

3 A. Eversource suggests that approximately \$1,670,000 of the \$2 million will be supporting
4 installed chargers while \$442,000 will fund the “infrastructure to support future expansion”
5 mentioned above. Please see the Company’s data response to OCA 6-031 (Attachment RTC-
6 8) The proposition of cost recovery related to make-ready EV charging infrastructure that
7 has no guarantee of ever becoming used and useful is concerning. When asked about how
8 the Company might assuage concerns related to idle charging infrastructure, the Company
9 expressed an “inten[tion] to work closely with customer to ensure they intend to install
10 additional chargers in the reasonably near future.” This soft commitment from both the
11 Company and the customer is not sufficient assurance to determine those investments will
12 become used and useful; the Commission should adopt a blanket policy that such
13 investments are not recoverable from ratepayers ahead of Eversource’s proposed construction
14 of make-ready infrastructure for future charging stations.

15 **Q. Please explain your concern regarding the accuracy of the Company’s marketing**
16 **materials related to this EV charging infrastructure proposal and how they relate to**
17 **decoupling.**

18 A In response to a request to provide the latest business case or project documentation prepared
19 by Eversource, the Company provided a variation of a presentation provided to the Electric
20 Vehicle Charging Station Infrastructure Commission created by SB 517, in March 2019.³
21 Slide 14 of that presentation describes the benefit of electric vehicle charging infrastructure

³ A copy of the March 2019 presentation is available on the Department of Environmental Services’ website.
Available at: <https://www.des.nh.gov/organization/divisions/air/tsb/tps/msp/documents/20190322-eversource-presentation.pdf>

1 in New Hampshire and states: “Incremental sales flow directly back to customers in the form
2 of additional kWh over which to spread fixed costs – REDUCES RATES.”

3 The Company’s assertion that incremental sales will flow directly back to customers and
4 reduce rates relies on several fundamentally flawed assumptions and therefore is not
5 accurate. Under traditional cost of service ratemaking, which is the paradigm under which
6 Eversource generally operates in New Hampshire, the Company is under no obligation to
7 flow incremental sales directly back to customers in the form of rate reduction. Under that
8 paradigm, increased sales associated with electric vehicle chargers that result in revenues
9 above the Company’s revenue requirement are either remitted to shareholders in the form of
10 increased earnings or re-invested in the system. They do not flow directly to ratepayers
11 between rate cases. In jurisdictions that have adopted full decoupling, revenues above and
12 beyond the cost of service flow back to ratepayers on an annual basis in between rate cases.
13 In such jurisdictions, Eversource’s description of the benefits associated with EV charging
14 infrastructure is much more likely to be true.

15 Navigant recently completed a report for the New Hampshire Evaluation, Measurement, and
16 Verification Working Group examining energy optimization policies, which identified this
17 issue and stated:⁴

18
19 Without decoupling, electrification policies stand to benefit utility shareholders more
20 than ratepayers since ratepayers would only receive the benefits of [increased sales] once
21 a utility files a rate case (and utilities may not need to do so if electrification policies lead

⁴ Navigant. Energy Optimization Through Fuel Switching Study. Prepared for the New Hampshire Evaluation, Measurement, and Verification (EM&V) Working Group. Page 25-26. (September 12, 2019) Available at: https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136_2019-10-31_STAFF_NH_ENERGY_OPTIMIZATION_STUDY.PDF

1 to continued revenue growth). Thus, decoupling should be a prerequisite for
2 electrification policies if such policies are intended to benefit ratepayers rather than utility
3 shareholders.

4
5 Eversource is not currently fully decoupled in New Hampshire, but is required to file a
6 decoupling proposal within its first rate case after January 1, 2021.⁵ The settlement
7 agreement approved by the Commission in its order requiring each of the utilities to file for
8 decoupling actually states “each of the Utilities shall seek approval of a new decoupling
9 mechanism, or another mechanism as an alternative to the Lost Revenue Adjustment
10 Mechanism (LRAM), in its next distribution rate case following the first triennium of the
11 EERS, 2018-2020.

12 Although Eversource is not required to file a proposed new decoupling mechanism until the
13 Company files its first rate case after January 1, 2021, the Company has consistently
14 characterized its LRAM as a form of decoupling. Please see the Company’s data responses
15 to OCA 6-110 (Attachment RTC-9) and CENH 1-013 (Attachment RTC-10). Such a
16 characterization is not in keeping with the generally accepted definition set forth in
17 NARUC’s Decoupling for Electric & Gas Utilities: Frequently Asked Questions (FAQ)
18 (2007), which describes decoupling as “one of three major approaches to dealing with the
19 throughput issue,” and the other two as: (1) straight fixed variable rate design, and (2) lost
20 revenue adjustment mechanisms.”⁶ Additionally, LRAMs are generally non-symmetrical,
21 meaning they do serve as a mechanism to pass back benefits associated with new load

⁵ Order No. 25,932 at 60. (August 2, 2016)

⁶ National Association of Regulatory Utility Commissioners. Decoupling for Electric and Gas Utilities: Frequently Asked Questions (FAQ). Page 4. (September 2007) Available at: https://www.naesb.org/pdf3/dsmee_naruc_decoupling_faq.pdf

1 growth to ratepayers in between rate cases. Eversource's last rate case was nearly a decade
2 ago, and in the instant rate case it has proposed nearly four years' worth of steps,
3 significantly increasing the likelihood that it will be able to avoid a rate case for that duration
4 of time. If the Company were able to avoid adoption of full decoupling during that
5 timeframe, it would be under no obligation to pass benefits associated with sales increases
6 back to ratepayers for an extended period of time during which those same ratepayers might
7 be paying for that investment.

8 Based on the above-described facts, I conclude that there is enough uncertainty related to the
9 Company's adoption of full decoupling that the marketing materials it has been using to build
10 support for its programs rely on fundamentally flawed assumptions in conveying the benefits
11 such chargers are likely to provide to the Company's ratepayers and New Hampshire citizens
12 more broadly.

13 **Q. Please explain your concern about the inputs of the Company's EV charging**
14 **infrastructure benefit-cost analysis, including costs related to distribution system**
15 **upgrades which may not have been included but may surpass the costs of the make-**
16 **ready investments.**

17 **A** In response to a request to provide the latest business case or project documentation prepared
18 by Eversource, the Company provided a benefit-cost analysis and supporting inputs. Please
19 see responses OCA 6-031 Attachment A (Attachment RTC-11) and Staff 13-013 Attachment
20 A (Attachment RTC-12). The level of detail within this analysis is minimal, there are very
21 few citations relating to the assumptions, and some of them do not appear to be accurate. For
22 example, see response Staff 13-013 Attachment A (Attachment RTC-12). The discount rate
23 utilized for utility-funded investments has historically been based on the utility's weighted

1 average cost of capital. In this instance, the Company used a 7% discount rate, but the
2 weighted average cost of capital proposed in the rate case is 7.62%.⁷ The only benefits
3 included in the benefit cost analysis are those associated with sales increases but for the reasons
4 discussed above it is unclear when, or even if, ratepayers will see those benefits. The costs
5 included in the benefit cost analysis also do not appear to reflect costs associated with grid-
6 side investments that may be necessitated by installation of charging infrastructure at a
7 circuit or substation that may be nearing its capacity, since the costs of the EV charging
8 infrastructure investment are described as approximately \$2 million but that figure is roughly
9 equivalent to the Company's cost of replacing a single transformer that is experiencing
10 capacity constraints. A company requesting cost recovery for this type of investment should
11 detail the benefits and costs associated with that investment in its testimony proposing the
12 investment, rather than relying on Staff to find the right details in discovery.

13 **Q. What does the Company's approach to the EV charging proposal indicate about its**
14 **approach to distribution system planning generally as well as in the context of the**
15 **proposed steps?**

16 A. As mentioned above, prior to discovery the level of detail provided in the above excerpted
17 block quote was the only information provided by the Company regarding an investment that
18 in other jurisdictions commonly receives extensive analysis. The Company's proposed
19 treatment of these EV charging infrastructure investments, and my above-discussed concerns,
20 provide an excellent example of how the spend first and answer questions later investment
21 strategy associated with the Company's "illustrative" approach to step adjustments can be
22 problematic and lacks transparency.

⁷ Chung and Dixon Testimony at 69.

1 This \$2 million EV charging infrastructure proposal is just one example from a nearly \$70
2 million portfolio of proposed planned investments on which — by including a requested
3 capital amount in the steps for this rate request but no information related to the investments
4 — the Company is essentially foreclosing constructive input from the Commission, the
5 Consumer Advocate, ratepayers, industry, and all other stakeholders. This is the exact
6 opposite of the type of distribution system planning process Staff has recommended in its
7 grid modernization whitepaper, which would include greater stakeholder input and
8 transparency related to planned distribution system investments. If the Commission were to
9 grant the Company's requested steps, there is a strong argument that it would be foreclosing
10 the opportunity for the type of transparent, proactive, and inclusive integrated distribution
11 planning described in the Staff Recommendation on Grid Modernization for several years.

12 **Q. Do you believe that the Commission should address rates for EV charging stations in**
13 **this rate case?**

14 A. No. While Staff believes that a rate case is typically the proper venue for proposing new
15 rates, Staff recommends that the Commission wait to implement electric vehicle charging
16 rates for Eversource until after the Commission considers and determines the appropriate rate
17 design for implementation across the state.

18
19 **X. PROPOSAL FOR CUSTOMER PAYMENT OPTIONS-FEE FREE**
20 **CREDIT/DEBIT TRANSACTIONS**

21 **Q. Does Staff support the Company's Fee Free Credit/Debit Card Payment option to all**
22 **residential electric customers?**

23 A. Yes. Please refer to Amanda Noonan's testimony on Bates Page 4.

1 **Q. What amount of costs is the Company requesting to recover annually through**
2 **residential distribution rates to fund the transition plan for this fee free payment**
3 **option?**

4 A. On Bates Page 767, the Company is proposing to create a reserve fund and to collect
5 \$738,000 annually over the four-year rate plan. On Bates page 770, the Company estimates
6 approximately \$31,000 per year of savings, resulting in \$707,000 annually on average net of
7 these offsetting savings.

8 **Q. How does the company propose to reconcile this reserve fund?**

9 A. On Bates Page 767, the Company states that “based on a comparison of actual total “fee free”
10 credit/debit card program costs incurred by the Company to the amount allowed in rates, any
11 over-collection would be credited to residential customers and any over or under-collection
12 would be deferred for recovery in rates at the time of the next rate case.”

13 **Q. Does Staff agree with this as proposed?**

14 A. Not completely. Staff recommends that any over-collection would not be credited to
15 residential customers (this is assuming that the Company meant crediting to residential
16 customers on an annual bases through its proposed DRAM mechanism, which Staff does not
17 support) and any over-collection in the reserve fund would incur interest (credit) on monthly
18 balances. Staff also recommends that any under-collection would incur monthly carrying
19 costs.

20 **Q. What is Staff’s recommending for recovery?**

21 A. Staff recommends recovery of \$707,000 annually beginning July 1, 2020 and ending
22 effective the date of its next permanent rate case and approval from the Commission for
23 permanent rates in that preceding. Any over or under-collection in the reserve account would

1 be deferred for refund or recovery in rates at the time permanent rates are approved and
2 effective in the Company's next rate case.

3
4 **XI. AUTOMATIC METER READING (AMR) METERS DEPLOYMENT**

5 **Q. Please explain Eversource's AMR project.**

6 A. In 2013, Eversource began installation of automatic meter reading (AMR) meters to a
7 majority of their customers. The AMR meter project also included information technology
8 (IT) upgrades. Eversource estimated the AMR project for the meter installation was about
9 \$39 million plus about \$3.3 million for the IT upgrades.

10 **Q. What justification did Eversource provide for the AMR project and associated IT**
11 **upgrade?**

12 A. Eversource claimed that it would achieve savings with the AMR meters because meter
13 readers would not be required to read each meter. Instead someone could drive nearby and
14 gather the meter data remotely. Eversource would be able to reduce the number of meter
15 readers and associated costs, such as vehicle expenses. Eversource initially estimated that it
16 would save approximately \$6.7 million, but later revised their estimate to about \$5.1 million.

17 **Q. Did Eversource consider other metering technologies?**

18 A. Yes. Eversource said that it reviewed AMR, AMR bridge meters, which provide a bridge to
19 smart metering, and AMI (advanced metering infrastructure) or smart meters.

20 **Q. Did Eversource ever file a formal proposal with the Commission relating the full**
21 **replacement of its metering fleet or solicit input from the Commission or other**
22 **stakeholders on the appropriate metering infrastructure?**

1 A No. In 2013, Eversource filed a request to waive certain rules relating to testing schedules
2 for watt-hour meters and demand devises. In that waiver request, Eversource noted that it
3 “has begun a process of transitioning from its existing fleet of meters to new Automated
4 Meter Reading (“AMR”) meters. As part of that process, around 540,000 customer meters
5 will be replaced with new meters, over approximately a 3-year period beginning in 2013.”⁸
6 In response to that request, Staff met with the Company on July 17, 2013 and afterward Staff
7 conveyed certain concerns about the proposed project via a letter to Eversource dated July
8 27, 2013. The Staff letter recounted Eversource’s statement during the meeting that it was a
9 “corporate decision” not to move to AMI, also stating “We are concerned that the AMR
10 system may not be upgradable and will not be able to ‘adapt’ to future changes and the
11 potential benefits of a ‘smarter grid,” and warning that “[t]hose risks will be on the company
12 when it seeks to recover the costs of the new meters.”⁹

13 **Q. At a high level, do you have any concerns about Eversource’s strategy regarding the**
14 **rollout of the meter investments?**

15 A. Yes. In spite of Staff’s observation that the risks associated with the major investment in
16 AMR technologies will be reviewed in the Company’s next rate case, the Company filed
17 only six pages of testimony describing the investment. In discovery, the Company stated
18 “The standard AMR meter used in New Hampshire is not capable of measuring Time of Use
19 KWH.” Please see the Company’s response to OCA 6-087 (Attachment RTC-13).

⁸ Docket No. DE 13-215. PSNH Request for Waiver of PUC 305.03. Page 1. (September 24, 2013) Available at: <https://www.puc.nh.gov/Regulatory/Docketbk/2013/13-215/INITIAL%20FILING%20-%20PETITION/13-215%202013-07-24%20PSNH%20REQ%20FOR%20WAIVER.PDF>

⁹ July 24, 2013 Letter from Tom Frantz to Dan Comer. Available at: <https://www.puc.nh.gov/Regulatory/Docketbk/2013/13-215/LETTERS-MEMOS-TARIFFS/13-215%202013-09-23%20STAFF%20MEMO%20RECOMMENDATION.PDF>

1 Eversource's decision to invest in AMR meters incapable of adapting to future changes and
2 the benefits of a smarter grid — such as peak demand reduction and related reductions in
3 capacity investment needs that are associated with time varying rates — is particularly
4 concerning to Staff in light of the 35-year book life associated with the meters.¹⁰ The
5 Commission should weigh the effects of the technology lock-in associated with this planning
6 strategy as it considers the Company's requested step increases, which include very few
7 details on planned projects.

8 **Q. Did Staff have any questions in this rate case related to the AMR meter project?**

9 A. Yes. Staff asked several data requests regarding the AMR meter project and associated IT
10 upgrades. Most recently, at the technical sessions held on October 28 and 29, 2019, Staff
11 asked several questions regarding the AMR project and IT upgrades. Staff requested a
12 written follow-up response to a list of questions that were provide to Eversource on
13 November 1, 2019. Eversource provided responses to the full list of questions in piecemeal
14 fashion. On November 27, 2019, Eversource's counsel advised the parties that while it was
15 preparing responses to the meter related questions, it found errors in their accounting system
16 regarding the meters; therefore, the responses would be delayed. Specifically, it said that it
17 should have retired \$14 million in meter plant asset. Eversource stated that "[t]he lack of
18 complete retirements was due to a problem in the manual process that is required to capture
19 all of the retirements that should have occurred." Note that Staff had already been advised
20 earlier in the rate case process that Eversource had found accounting errors related to the
21 meter project. Those errors related to not retiring the appropriate amount of meter assets in a

¹⁰ New Hampshire Grid Modernization Working Group Report Appendix. Page 40. Table B.13. Available at:
http://www.puc.state.nh.us/Regulatory/Docketbk/2015/15-296/LETTERS-MEMOS-TARIFFS/15-296_2017-03-20_NH_GRID_MOD_GRP_APP_FINAL_RPT.PDF

1 timely fashion, and it had to make adjustments in 2018 regarding meter retirement
2 accounting. Eversource did not supply the response to the data requests related to the meters
3 until December 6, 2019 (38 days after the technical session). In addition, Eversource's error
4 impacted several other data responses for which it supplied supplemental responses on
5 December 10, 2019.

6 **Q. Does Staff have any concerns related to the AMR meters?**

7 A. Yes. Eversource indicated that it has already retired \$11 million in meter assets from the
8 AMR project. That amount seems high (approximately one-third of the initial AMR
9 investment) given that the meters are supposed to have an operating life of 20-25 years, and
10 it began installation in 2013. Also, Eversource says that it has about \$11.5 million in assets
11 of non-AMR meters plus \$31.4 million in meter related equipment and \$2 million in non-
12 classified metering assets. Eversource also changed its quote of the total cost of the IT
13 upgrades several times.

14 **Q. Given Eversource's late submission of data responses and late corrections to meter rate**
15 **base, what does Staff propose regarding the meters?**

16 A. Staff recommends recovery of the meters (including all meter types—e.g., AMR, probe,
17 AMR-bridge) subject to adjustments after a more detailed investigation of all meters and
18 associated equipment (Account 370) and associated costs (e.g., IT upgrades) by Staff.
19

20 **XII. AMORTIZATION OF ENVIRONMENTAL COSTS**

21 **Q. On Bates Page 137, the testimony of Messrs. Chung and Dixon indicate that, pursuant**
22 **to the 1999 Restructuring Settlement Agreement approved by the Commission,**
23 **Eversource was allowed to defer certain future estimated environmental costs for**

1 **recovery in its delivery rate. According to Eversource, the Company has an**
2 **Environmental Reserve Balance at the end of Test Year of \$9,164,729. In this case,**
3 **Eversource is requesting to recover these costs over four years, at a level of \$2 million**
4 **plus per year. Does Staff have any position on the recovery of these costs through**
5 **distribution rates?**

6 A. Yes. The 1999 Restructuring Settlement Agreement relates to the then-proposed divestiture
7 by PSNH (now Eversource) of its generation assets. At that time, those assets included sites
8 of former gas manufacturing plants, and those sites required environmental remediation
9 according to the New Hampshire Department of Environmental Services. The 1999
10 Restructuring Settlement Agreement contains an attachment that lists the sites identified for
11 remediation. According to the Settlement Agreement, Eversource would recover those costs
12 over a period of 33 months.
13 Eversource continued to defer the environmental remediation costs incurred at those sites
14 even though divestiture did not occur until after the 2015 Restructuring Settlement
15 Agreement approved by the Commission in 2016. Most recently, pursuant to the 2015
16 Restructuring Settlement Agreement, Eversource made a filing of costs allowed to be
17 recovered through the stranded cost adjustment charge. The eligible categories of costs
18 include costs related to environmental remediation. Staff believes it would be appropriate to
19 remove the amortization of environment costs from the rate case and move those costs to the
20 new docket. That would allow Staff to audit those costs and include them in the category of
21 stranded costs associated with Eversource's divestiture of its generation assets. Staff
22 believes that the environmental remediation costs are more properly recovered through the
23 stranded costs charge than as a distribution expense.

1 **Q. If the Commission agrees with Staff's proposal, does that decision affect Eversource's**
2 **ability to recover the deferred environmental remediation costs?**

3 A. No. Moving these costs for recovery through the stranded costs recovery charge will more
4 properly categorize those costs as expenses related to divestiture. Consistent with other
5 divestiture stranded costs, they would be subject to audit and recovered from all customers.
6 The only difference is that the costs would be treated as, and grouped with, other divestiture
7 costs.

8 **Q. Did the Commission's Audit Staff audit the Company's historical test year results?**

9 A. Staff's audit is ongoing, and it is my understanding that the final audit report will be
10 complete by the end of the year (after the Company has had an opportunity to comment on a
11 draft audit report). Staff plans to recalculate its proposed revenue requirement to reflect the
12 results of the final audit report.

13
14 **XIII. ADDITIONAL COMMENTS FROM STAFF**

15 **Q. Does Staff have any addition comments regarding this rate case filing?**

16 A. Staff was made aware on December 18 of a leadership change for Eversource NH
17 organization effective January 1, 2020.

18 **Q. Does this leadership change have any effect on the revenue requirement in this rate**
19 **case?**

20 A. It may. Staff has asked for an updated organizational chart for post January 1, 2020.

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

22 A. Yes.

Public Service of New Hampshire d/b/a Eversource Energy
Docket No. DE 19-057

Date Request Received: 07/15/2019

Request No. OCA 3-002

Request from: Office of Consumer Advocate

Date of Response: 07/29/2019

Page 1 of 1

Witness: Troy Dixon, Eric H. Chung

Request:

If Eversource's step year adjustments were approved out to 2022, would this preclude it from filing another rate case until 2023?

Response:

No, approval of the Company's step adjustment proposal would not, in isolation, preclude the Company from filing another rate case until the conclusion of the step adjustment period. Many factors affect the timing of a rate case filing, and it would be speculative at this time to draw conclusions about the timing of the next rate case filing in the normal course of operations.

However, the Company would consider a stay-out provision that would preclude a rate filing in the context of a comprehensive settlement with terms that provide for GTEP investments and an adequate step adjustment mechanism being included in those terms. Over the next several years, the main cost drivers on the system will be capital investment and the cost of new information systems, and the Company's ability to avoid a base-rate filing is predicated on the ability to address those cost items that are the most direct cause of earnings attrition. In addition, the Company has a growing concern regarding the overall condition of the system and the need to accelerate investment to install overhead distribution facilities that have greater resiliency and can better accommodate clean energy technologies. If the Company is able to conclude this case with a supportive framework to enable the continued strengthening of distribution infrastructure and information systems backbone, the Company would find a stay-out provision an agreeable term of settlement.

Public Service of New Hampshire d/b/a Eversource Energy
Docket No. DE 19-057

Date Request Received: 08/13/2019

Request No. OCA 6-049

Request from: Office of Consumer Advocate

Date of Response: 08/27/2019

Page 1 of 1

Witness: Joseph A. Purington, Lee G. Lajoie

Request:

Reference Purington and Lajoie Testimony, Bates 428, Lines 9-10, describing the step adjustments and stating "[t]his proposal is similar to the approach allowed in the Company's 2009 rate case."

- a. How many steps were approved in the Company's last rate case?
- b. What percent of those annual capital investments did the Commission allow the company to recover via steps?
- c. What percentage of annual O&M expenses did the Commission allow the Company to recover via steps, if any?

Response:

Below is the requested comparison. However, it should be noted that the Company's last base rate case was conducted approximately 10 years ago. Since that time, significant changes in the electric distribution industry have occurred (and are continuing to occur), requiring the Company to increase capital investment and to fund process initiatives that did not exist in the past. In addition, the Company is investing substantially in new processes and system automation that requires additional operating and maintenance procedures. As a result, on a collective basis, the Company is facing new challenges that would not have been experienced at the time of the last rate case. The Company's proposals in this case are designed to align with the actual cost pressures and investment requirements that currently exist.

The table below provides a comparison of the step adjustments in the current filing and the Company's 2009 rate case, understanding that the DE 09-035 step adjustment detail was part of a comprehensive settlement agreement that contained other aspects to the settlement than displayed below.

STEP ADJUSTMENT DETAIL	2009 RATE CASE DE 09-035	2019 RATE CASE DE 19-057
Number of Step Adjustments Approved/Proposed	3	4
Percent of Annual Capital Investments Allowed/Proposed	80% of Non-REP	100%
Percent of Annual O&M Expenses Allowed/Proposed	0%	.64%, starting in Step #2 *

* percent would increase to 1.92% if Enterprise IT Projects Depreciation is included

Public Service of New Hampshire d/b/a Eversource Energy
Docket No. DE 19-057

Date Request Received: 10/10/2019

Date of Response: 10/24/2019

Request No. STAFF 13-009

Page 1 of 1

Request from: New Hampshire Public Utilities Commission Staff

Witness: Troy Dixon, Douglas P. Horton

Request:

Reference Company response to OCA 6-45, in which the Company responds to a request for its base capital plan, which contemplates \$135 million in investments annually through 2023, by directing the reader to Bates SFR-003970, which contains only two years of forecasted capital investments broken down into only four categories of distribution base capital investments. Please provide the detailed base capital plan used by the Company to determine the \$135 million in investments it seeks within the step adjustments through 2023.

Response:

The Company's capital planning process begins with a high-level, long-range (5 year) capital expenditure and capital addition forecast by major category of investment developed in the spring timeframe of a given year. This 5 year forecast is also referred to as the strategic plan. Toward the end of the year, a detailed one-year capital expenditures plan at the specific project level is developed for the coming year and forms the basis of the Company's capital budget. This capital budget includes capital additions and cost of removal.

In this proceeding the Company has calculated illustrative step adjustments based on the capital expenditure forecast currently available which, for the out years is still at the major category level and is not yet developed at the specific project level detail that accompanies the one year plan. However, please note that the calculations included in this proceeding are for illustrative purposes. The Company is not at this time requesting that the PUC authorize the precise step adjustment in future years that has been calculated in this case. Here, the Company is requesting to implement step adjustments on a going forward basis that will be calculated based on actual plant placed in service through the end of the year prior to the year the step adjustment goes into rates.

The illustrative step adjustments provided in this rate case are estimated based on the high-level, long range capital addition forecast, which is produced by category of investment and not at a specific project level. However, a detailed plan for capital expenditures at the project level is available for 2019 and is provided in the Company's annual construction budget filing which was provided in SFR-001756 and Attachment OCA 1-009 F.

The base capital plan referenced in the Purington and Lajoie testimony is a subset of the total PSNH capital expenditures budget. OCA 6-045 asked for the 2019 base capital plan as referenced in the Purington and Lajoie testimony. Further detail about this base capital plan for 2019-2023 is provided in the strategic plan as provided in Attachment OCA 4-001, pages 83-107.

Public Service of New Hampshire d/b/a Eversource Energy
Docket No. DE 19-057

Date Request Received: 08/13/2019

Date of Response: 08/27/2019

Date Supplement Request Received: 10/29/2019

Date of Supplement Response: 11/15/2019

Request No. STAFF 9-025-SP01

Page 1 of 1

Request from: New Hampshire Public Utilities Commission Staff

Witness: Penelope Conner

Request:

Reference Testimony of Penelope McLean Connor. Please provide the number of customer accounts coded as financial hardship as of July 31, 2019. Of those accounts, identify the number with balances great than \$300 and more than 60 days past due. Please provide the total past due receivables associated with those accounts.

Response:

ORIGINAL RESPONSE:

The number of customers coded financial hardship as of July 31, 2019 is 25,570. Of those accounts, the number with balances greater than \$300 and more than 60 days past due is 3,825. The total past due receivables associated with the 3,825 accounts is \$5,325,656.42.

SUPPLEMENTAL RESPONSE:

The Company has verified that as of July 31, 2019 the number of customers that are coded financial hardship is 25,570, and the number of those accounts with balances greater than \$300 and more than 60 days past due is 3,825. The total past due receivables associated with the 3,825 accounts is \$5,325,656.42.

The coding for financial hardship and EAP are different in Eversource's C2 system. The vast majority of EAP customers have a financial hardship coding but not all financial hardship customers are EAP. STAFF 9-025 was not impacted by the under reporting of EAP customers due to the separate financial hardship coding.

Public Service of New Hampshire d/b/a Eversource Energy
Docket No. DE 19-057

Date Request Received: 08/13/2019

Date of Response: 08/27/2019

Request No. STAFF 9-023

Page 1 of 1

Request from: New Hampshire Public Utilities Commission Staff

Witness: Penelope Conner

Request:

Reference Testimony of Penelope McLean Connor page 40 (Bates 778), lines 20-21. Please provide the basis for the estimate of 3,000 customers that would participate in the proposed New Start program. If customer interest exceeds that figure, is the company proposing that customer participation be capped at 3,000 customers?

Response:

In the Testimony of Penelope McLean Conner page 40 (Bates 778), lines 20-21 the basis for the estimate of 3,000 customers that would participate in the proposed New Start program is derived from comparing the size of the New Hampshire and Western Massachusetts service territories. In 2018 3,153 Western Massachusetts customers participated in the New Start program, the Company estimates that similar participation levels would be expected in New Hampshire.

The Company is not proposing that customer participation be capped if interest exceeds the 3,000 customer estimate. New Start would be offered to all interested residential customers that meet the program's eligibility criteria in an effort to help the customer eliminate past due balances and avoid disconnection.

Public Service of New Hampshire d/b/a Eversource Energy
Docket No. DE 19-057

Date Request Received: 08/13/2019

Date of Response: 08/28/2019

Request No. STAFF 9-020

Page 1 of 1

Request from: New Hampshire Public Utilities Commission Staff

Witness: Penelope Conner

Request:

Reference Testimony of Penelope McLean Connor page 6 (Bates 744), line 11, and page 35 (Bates 773), lines 2-4. Please quantify how much the company spent in the test year on collection activities associated with accounts coded financial hardship and the projected decrease in collection activity expenses if the proposed New Start program is approved and implemented.

Response:

The Company's total actual collection related costs for the 2018 test year associated with handling delinquent accounts is provided in the table below. The Company does not separately track costs only associated with accounts coded as financial hardship.

Year	Actual NH Collection Costs
2018	\$ 2,247,420

If the proposed New Start program is approved and implemented in NH, the projected decrease in collection activity expenses specifically related to New Start customers who would not be eligible for disconnect for non-payment would be as follows:

Estimated Annual Avoided Cost of Not Sending Disconnect Notices to New Start Customers (includes cost to print and mailing notices): **\$9,000**

Estimated Annual Avoided Cost of Not Disconnecting New Start Customers (includes cost to disconnect / reconnect customers): **\$88,000**

Total Annual Avoided Cost Associated with New Start Customers:
\$97,000

Public Service of New Hampshire d/b/a Eversource Energy
Docket No. DE 19-057

Date Request Received: 10/10/2019

Date of Response: 10/24/2019

Request No. STAFF 13-012

Page 1 of 2

Request from: New Hampshire Public Utilities Commission Staff

Witness: Charlotte Ancel, Kevin Boughan

Request:

Reference Company response to OCA 6-31(a), describing the business case for planned make-ready investments in electric vehicle supply equipment.

- a. Please provide the live excel model supporting the attachment, including the basis for any assumptions used to develop the model.
- b. Please explain why the discount rate is 7%, rather than the Company's Weighted Average Cost of Capital.
- c. Please state whether the cost of the make-ready charging investments is included in the revenue requirements requested in the steps in this rate case. If so, please explain where and why such recovery has been requested.
- d. Please state the level of usage assumed for the electric vehicle supply equipment and provide the basis for that assumption.
- e. Please identify on the exhibits provided in the Chung/Dixon testimony the page and line that show the Company's capital investment and any other costs associated with the EV charging equipment. Please also identify where the investment and costs are included in the calculation of rates.

Response:

- a. The live Excel model is provided as Attachment Staff 13-012.

The net benefits were calculated based on the increased sales to the system resulting from the proposed infrastructure.

The assumptions for increased sales and project capital investment can be found on the 'Increased Sales' tab in column E ('Assumption Notes')

- b. For simplicity and illustrative purposes, the model used 7%. Had the model used a WACC of 7.61%, the resulting Benefit / Cost ratio would have been 1.12 vs. 1.17.
- c. In this proceeding the Company has calculated illustrative step adjustments based on the capital expenditure forecast currently available. However, please note that the calculations included in this proceeding are for illustrative purposes. The Company is not at this time requesting that the PUC authorize the precise step adjustment in future years that has been calculated in this case. Here, the Company is requesting to implement step adjustments on a going forward basis that will be calculated based on actual plant placed in service through the end of the year prior to the year the step adjustment goes into rates.

The make-ready charging investments are anticipated to be implemented in the near term would therefore be included in the Company's requested steps in this rate case. These investments are considered part of the many base capital investments in the upcoming five years.

d. See part (a).

e. As stated in Part (c), these are considered part of the many base capital investments in the upcoming five years. This amount is not broken out specifically and is included with the other base capital investments.

Public Service of New Hampshire d/b/a Eversource Energy
Docket No. DE 19-057

Date Request Received: 08/13/2019
Request No. OCA 6-031
Request from: Office of Consumer Advocate

Date of Response: 08/28/2019
Page 1 of 1

Witness: Charlotte Ancel

Request:

Reference Purington and Lajoie Testimony, Bates 394 Line 16 through Bates 395 Line 7, describing the Company's EV fast charging project.

- a. Please provide the latest business case or project documentation prepared by Eversource in anticipation of the EV fast charging network investment.
- b. When would the "infrastructure to support future expansion of up to 40 additional DC fast chargers" would be used and useful for the purposes of cost recovery at the New Hampshire Public Utilities Commission?
- c. What is the dollar value of the portion of the \$2 million in make ready infrastructure that will actually be supporting a third party charger once it is made ready?
- d. What is the dollar value of the portion of the \$2 million in make-ready infrastructure that will support future expansion?
- e. Is the Company building in idle infrastructure capacity with hope that an additional 40 DC fast chargers will be built in the future?

Response:

- a. Please see Attachments OCA 6-031 A and B.
- b. Eversource intends to work closely with customers to ensure they intend to install additional chargers in the reasonably near future. If the customer does not intend to install additional chargers in the near future (due to physical or other limitations) Eversource will limit the capacity of the make-ready infrastructure to chargers installed.

The infrastructure to support future expansion of charging stations is necessary to avoid costly future excavation and upgrade work. Investments made in future chargers meet the criteria of reasonably foreseeable plant completion and based on projections of electric vehicle adoption.

- c. In a scenario where 12 sites in Eversource territory are selected to receive funding for 4, 50kW DC Fast Chargers each from the VW Settlement D funding (chosen and administered by the State), approximately \$1,670,000 be supporting the installed chargers.
- d. In a scenario where 12 sites in Eversource territory are selected to receive funding for 4, 50kW DC Fast Chargers each from the VW Settlement D funding (chosen and administered by the State), and all 12 sites expressed intent and had physical ability to install additional chargers in the near future, approximately \$442,000 total would be supporting the capacity to install those additional chargers.
- e. Eversource intends to work closely with customers to ensure they intend to install additional chargers in the reasonably near future. If the customer does not intend to install additional chargers in the near future (due to physical or other limitations) Eversource will limit the capacity of the make-ready infrastructure to chargers installed.

Public Service of New Hampshire d/b/a Eversource Energy
Docket No. DE 19-057

Date Request Received: 08/13/2019

Request No. OCA 6-110

Request from: Office of Consumer Advocate

Date of Response: 08/27/2019

Page 1 of 1

Witness: Edward A. Davis

Request:

Reference Davis Testimony, Bates 1820, Lines 17-20, stating "Regarding decoupling, the Company plans to continue its current decoupling mechanism to address prospective sales and revenue impacts of both energy efficiency and distributed generation," and NARUC's Decoupling for Electric & Gas Utilities: Frequently Asked Questions (FAQ) (2007) describing decoupling as "one of three major approaches to dealing with the throughput issue," and the other two as: (1) straight fixed variable rate design, and (2) lost revenue adjustment mechanisms. Please explain how the Company's lost revenue adjustment mechanism is a decoupling mechanism, rather than an alternative to decoupling.

Response:

The Company's lost revenue adjustment mechanism ("LRAM") is indeed a form of decoupling and has been accepted in several recent regulatory proceedings as such, as referenced in the testimony by Mr. Davis for both energy efficiency and alternate net metering dockets. A LRAM may also be referred to as a partial or "limited" decoupling mechanism, relative to a full decoupling, revenue decoupling or revenue per customer mechanism, or other partial decoupling mechanisms. The Company's LRAM is designed to remove the disincentive for energy efficiency and net metering facilities; addresses the so-called throughput issue; and represents a method accepted by the Commission for this purpose.

For additional details, please see the response to CENH 1-013.

Public Service of New Hampshire d/b/a Eversource Energy
Docket No. DE 19-057

Date Request Received: 08/01/2019

Request No. CENH 1-013

Request from: Clean Energy New Hampshire

Date of Response: 08/15/2019

Page 1 of 2

Witness: Edward A. Davis

Request:

Given that the LRAM only creates a surcharge for specific lost revenue, please explain how the Company believes continuing to use LRAM for energy efficiency and distributed generation rather than actual revenue decoupling is in the Company's customer's best interest?

Response:

Public policy initiatives supporting the broad adoption of energy efficiency measures and distributed energy resources are in the customer's best interest. PSNH recognizes and embraces this reality and has put forth a comprehensive filing in this case to further those beneficial customer interests. As explained below, the LRAM will further the interests of customers in the same manner as full revenue decoupling or other forms of decoupling.

The ratemaking challenge that arises in relation to these important public policy objectives is that the traditional cost-of-service model (using a historical test year) relied on the availability of sales volume growth between rate cases to sustain ongoing capital and O&M requirements of the utility. However, achievement of these important public policy goals has the opposite effect in that it eliminates sales growth between rate cases that historically has persisted in the absence of such successful programs. As a result, the more success that occurs in working toward the public policy objectives, the more difficult it becomes for a utility to sustain the revenues necessary to support operations without frequent base-rate proceedings.

Revenue decoupling is a ratemaking mechanism that is intended to remove the disincentive for the distribution company to support the effective deployment of energy efficiency or the interconnection of distributed generation. The LRAM achieves this same result.

Specifically, the Company's LRAM mechanisms are a form of revenue decoupling that function to replace lost revenue incorporated into the revenue requirement in the most recent rate case. The only difference between the two mechanisms is that, rather than trueing a utility's revenue collections up to the revenue requirement set in the past rate case, it replaces revenues lost to the installation of energy efficiency measures and other public policy programs that cause sales volumes to decline. The amount of lost revenue recovered by the utility may or may not be exactly the same under either measure. However, the LRAM has the benefit of being directly tied to measures installed on the Company's system and is effective in generating adequate revenues to accomplish the "decoupling" of revenue collections from actual sales volumes. As a result, the LRAM is fully effective in eliminating any disincentive to hinder the progress of conservation initiatives in the customer interest, as demonstrated

by PSNH's progress and organizational support for energy efficiency and distributed generation initiatives.

The Commission has recognized that application of the LRAM for such purposes is in the public interest. As indicated in response to CENH-1-012, the LRAM for energy efficiency is based on actual measures installed. Any Lost Base Revenue ("LBR") included in the LRAM is subject to review and approval by the Commission. In its decision in Docket No. DE 17-136, the Commission recognized that the currently applicable energy efficiency plan and associated settlement agreement - which includes and adopts LBR recovery by means of the LRAM - promote energy efficiency, reduce market barriers to energy efficiency investment and provide demand side management incentives. In approving this plan, the Commission found that both energy efficiency participants and non-participants will benefit from resulting increased energy efficiency, and that it is consistent with the public interest. With respect to distributed generation, the Commission found that the timely recovery of LBR using the LRAM is just and reasonable, and serves the public interest, as stated in its decision in DE 16-576.

Base Assumptions

Model Assumptions		
Project life	(Years)	25
Year for rollout	(Years)	1
All-in Rate	(\$/kWh)	\$0.08 All-in rate of 16 cents minus 8 cents for supply & policy (wholesale energy + capacity, EE, RPS, etc.)
Chargers	(#)	48
Total Sites	(locations)	12
Chargers Per Site	(#)	4
Open Hours Per Day	(hours)	16
Available Charges	(per hour / per port)	2
Total Charges Capacity	(charges / year)	560,640
Annual NH Tourist Party-Trips* (#)		4,700,000
Party charges / trip	(#)	1
Year 1 EV Trips	(%)	0.5%
Year 1 EV Trips	(#)	23,500
Year 1 EV Charges / Year		23,500
Incremental EV Trips / Year	(%)	0.2%
*http://www.dearunyan.com/NHTravelImpacts/NHTravelImpacts.html		

Accounting Inputs		
Discount rate	(%)	7%
Inflation	(%)	2%
Months per year	(Months)	12

Cashflow Inputs

Total Project Capital	(\$)	\$2,111,400
Capital Rec. Factor	(%)	8.46%
Cust. Annual Copay	(\$/kWh-yr)	\$0

Benefit & Cost Inputs

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Benefits (Increased Sales)	\$0	\$1,233,792	\$2,516,936	\$3,850,912	\$5,237,240	\$6,677,481	\$6,811,030	\$6,947,251	\$7,086,196	\$7,227,920	\$7,372,478	\$7,519,928	\$7,670,326	\$7,823,733	\$7,980,208	\$8,139,812	\$8,302,608	\$8,468,660	\$8,638,033	\$8,810,794	\$8,987,010	\$7,333,400	\$5,610,051	\$3,814,835	\$1,945,566
Costs (Revenue Requirement)	\$1,554,181	\$2,782,806	\$4,461,755	\$6,107,257	\$7,864,178	\$6,021,830	\$5,969,701	\$5,790,789	\$5,616,415	\$5,445,759	\$5,277,845	\$5,111,599	\$4,946,002	\$4,780,488	\$4,614,973	\$4,449,459	\$4,283,946	\$4,118,431	\$3,952,917	\$3,787,403	\$3,623,513	\$3,055,090	\$2,441,637	\$1,579,197	\$770,957

Summary Results

Net Present Benefits	(\$)	(\$2,821,091)
Net Present Cost	(\$)	\$2,405,503
Net Cust. Imp./(Benefit)	(\$)	(\$415,588)
BCR	(Ratio)	1.17

Base Assumptions

Model Assumptions		
Project life	(Years)	25
Year for rollout	(Years)	1
All-In Rate	(\$/kWh)	\$0.08
Chargers	(#)	48
Accounting Inputs		
Discount rate	(%)	7%
Inflation	(%)	2%
Months per year	(Months)	12

26

Cashflow Inputs

Total Project Capital	(\$)	\$2,111,400
Capital Rec. Factor	(%)	8.46%
Cust. Annual Copay	(\$/kWh-yr)	\$0

Summary Results

Net Present Benefits	(\$)	(\$2,821,091)
Net Present Cost	(\$)	\$2,405,503
Net Cust. Imp./(Benefit)	(\$)	(\$415,588)
BCR	(Ratio)	1.17

Benefits		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038			
Value Stream	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Increased Sales	(5)	\$47,000	\$67,116	\$88,018	\$109,729	\$132,273	\$155,675	\$179,961	\$205,155	\$231,286	\$258,379	\$286,464	\$315,568	\$345,723	\$376,957	\$409,302	\$442,791	\$477,455	\$513,329	\$550,446	\$588,843	\$628,556	\$669,621	\$712,078	\$755,966
Total Benefit	(5)	\$47,000	\$67,116	\$88,018	\$109,729	\$132,273	\$155,675	\$179,961	\$205,155	\$231,286	\$258,379	\$286,464	\$315,568	\$345,723	\$376,957	\$409,302	\$442,791	\$477,455	\$513,329	\$550,446	\$588,843	\$628,556	\$669,621	\$712,078	\$755,966
Costs																									
Rate Base	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Gross Plant	\$1,055,700	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400
Accumulated Depreciat	(\$55,952)	(\$111,904)	(\$167,856)	(\$223,808)	(\$279,761)	(\$335,713)	(\$391,665)	(\$447,617)	(\$503,569)	(\$559,521)	(\$615,473)	(\$671,425)	(\$727,377)	(\$783,329)	(\$839,282)	(\$895,234)	(\$951,186)	(\$1,007,138)	(\$1,063,090)	(\$1,119,042)	(\$1,174,994)	(\$1,230,946)	(\$1,286,898)	(\$1,342,850)	(\$1,398,803)
Net Plant	\$999,748	\$1,999,496	\$1,943,544	\$1,887,592	\$1,831,640	\$1,775,687	\$1,719,735	\$1,663,783	\$1,607,831	\$1,551,879	\$1,495,927	\$1,439,975	\$1,384,023	\$1,328,071	\$1,272,119	\$1,216,166	\$1,160,214	\$1,104,262	\$1,048,310	\$992,358	\$936,406	\$880,454	\$824,502	\$768,550	\$712,598
ADIT	(\$6,345)	(\$12,701)	(\$19,057)	(\$25,413)	(\$31,769)	(\$38,125)	(\$44,481)	(\$50,837)	(\$57,193)	(\$63,549)	(\$69,905)	(\$76,261)	(\$82,617)	(\$88,973)	(\$95,329)	(\$101,685)	(\$108,041)	(\$114,397)	(\$120,753)	(\$127,109)	(\$133,465)	(\$139,821)	(\$146,177)	(\$152,533)	(\$158,889)
Ending Rate Base	\$993,403	\$1,966,795	\$1,887,614	\$1,811,137	\$1,737,696	\$1,666,545	\$1,597,683	\$1,530,932	\$1,464,528	\$1,398,130	\$1,331,725	\$1,265,327	\$1,198,922	\$1,132,524	\$1,066,119	\$999,721	\$933,316	\$866,918	\$800,514	\$734,115	\$667,717	\$601,319	\$534,921	\$468,523	\$402,125
Revenue Requirement	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%	9.34%
Ret. On Rate Base Inc. Ta	\$92,784	\$183,699	\$176,303	\$169,177	\$162,301	\$155,655	\$149,224	\$142,989	\$136,787	\$130,585	\$124,383	\$118,182	\$111,979	\$105,778	\$99,576	\$93,374	\$87,172	\$80,970	\$74,768	\$68,566	\$62,364	\$56,162	\$50,000	\$43,838	\$37,676
Depreciation Expense	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952
OBM	\$300,000																								
Revenue Requirement	\$448,736	\$239,651	\$232,255	\$225,129	\$218,253	\$211,607	\$205,176	\$198,941	\$192,739	\$186,537	\$180,335	\$174,134	\$167,931	\$161,730	\$155,528	\$149,326	\$143,124	\$136,922	\$130,720	\$124,518	\$118,316	\$112,114	\$105,912	\$99,710	\$93,508
Benefit/Cost Analysis																									
Non-Participating Customer Impact/(Benefit)																									
(Benefits)	(5)	(\$47,000)	(\$67,116)	(\$88,018)	(\$109,729)	(\$132,273)	(\$155,675)	(\$179,961)	(\$205,155)	(\$231,286)	(\$258,379)	(\$286,464)	(\$315,568)	(\$345,723)	(\$376,957)	(\$409,302)	(\$442,791)	(\$477,455)	(\$513,329)	(\$550,446)	(\$588,843)	(\$628,556)	(\$669,621)	(\$712,078)	(\$755,966)
Cost	\$448,736	\$239,651	\$232,255	\$225,129	\$218,253	\$211,607	\$205,176	\$198,941	\$192,739	\$186,537	\$180,335	\$174,134	\$167,931	\$161,730	\$155,528	\$149,326	\$143,124	\$136,922	\$130,720	\$124,518	\$118,316	\$112,114	\$105,912	\$99,710	\$93,508
Net Cust. Imp./(Benefit)																									
Net Pres Imp./(Benefit)		\$411,588																							

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Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Tax Dep																									
Investment	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400
MACRS 20-yr	4%	7%	7%	6%	6%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	2%	0%	0%	0%	0%
Tax Dep Expense	\$79,178	\$152,422	\$140,978	\$130,421	\$120,624	\$111,587	\$103,205	\$95,478	\$94,211	\$94,190	\$94,211	\$94,190	\$94,211	\$94,190	\$94,211	\$94,190	\$94,211	\$94,190	\$94,211	\$94,190	\$47,455	(\$1)	(\$5)	(\$5)	(\$3)
Accumulated Dep.	\$79,178	\$231,599	\$372,578	\$502,999	\$623,623	\$735,211	\$838,416	\$933,893	\$1,028,104	\$1,122,294	\$1,216,504	\$1,310,694	\$1,404,904	\$1,499,094	\$1,593,305	\$1,687,494	\$1,781,705	\$1,875,894	\$1,970,105	\$2,064,295	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400
Book Dep																									
Investment	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400	\$2,111,400
Book Dep.	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Book Dep Expense	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952	\$55,952
Accumulated Dep.	\$55,952	\$111,904	\$167,856	\$223,808	\$279,761	\$335,713	\$391,665	\$447,617	\$503,569	\$559,521	\$615,473	\$671,425	\$727,377	\$783,329	\$839,282	\$895,234	\$951,186	\$1,007,138	\$1,063,090	\$1,119,042	\$1,174,994	\$1,230,946	\$1,286,898	\$1,342,850	\$1,398,803
ADIT																									
Excess Tax over Boo	(\$23,225)	(\$119,695)	(\$204,721)	(\$279,190)	(\$343,863)	(\$399,498)	(\$446,751)	(\$486,277)	(\$524,535)	(\$562,773)	(\$601,031)	(\$639,269)	(\$677,527)	(\$715,765)	(\$754,023)	(\$792,261)	(\$830,519)	(\$868,757)	(\$907,015)	(\$945,253)	(\$936,406)	(\$880,454)	(\$824,502)	(\$768,550)	(\$712,598)
Composite Tax Rate	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%	27.32%
ADIT	(\$6,345)	(\$32,701)	(\$55,930)	(\$76,275)	(\$93,943)	(\$109,143)	(\$122,052)	(\$132,851)	(\$143,303)	(\$153,749)	(\$164,202)	(\$174,648)	(\$185,100)	(\$195,547)	(\$205,999)	(\$216,446)	(\$226,898)	(\$237,344)	(\$247,797)	(\$258,243)	(\$255,826)	(\$240,540)	(\$225,254)	(\$209,968)	(\$194,682)

Public Service of New Hampshire d/b/a Eversource Energy
Docket No. DE 19-057

Date Request Received: 08/13/2019

Request No. OCA 6-087

Request from: Office of Consumer Advocate

Date of Response: 09/03/2019

Page 1 of 1

Witness: Penelope Conner

Request:

Reference McLean Conner Testimony, Bates 785, Lines 7-9, stating “the AMR option deployed by the Company in 2013 was a solution that was fully and substantially cost justified as a basis for transitioning away from manual meter reading.”

- a. Please explain whether the Company’s AMR meters are capable offering customers a time of use rate and why.
- b. Please explain the expected useful life of the Company’s existing meters.

Response:

- A. The standard AMR meter used in New Hampshire is not capable of measuring Time of Use KWH. The AMR meters strictly measure total usage for the billing period. There is a Time of Use meter in use in New Hampshire for TOU customers. AMR meters are not used for capturing interval data.
- B. It is expected that the AMR meters will have a 20 to 25 year life in practice. This assumption is based partially on the the fact that the manufacturers' information for bridge meters is that the non-replaceable battery installed in the meter (demand and remote disconnect meters) will have a 20-year life. The standard AMR meter does not have a battery, so the expected life of the meter is not dependent on battery life.