

**STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION**

DG 17-048

**In the Matter of:
Liberty Utilities (EnergyNorth Natural Gas) Corp., d/b/a Liberty Utilities
Request for Change in Rates**

Direct Testimony

of

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November 30, 2017

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1 **Introduction**

2
3 **Q. Please state your name, occupation and business address.**

4 **A.** My name is Al-Azad Iqbal, and I am employed by the New Hampshire Public Utilities Commission
5 (Commission) as Utility Analyst. My business address is 21 South Fruit Street, Suite 10, Concord,
6 New Hampshire, 03301.

7 **Q. Please summarize your educational and professional experience.**

8 **A.** My educational and professional backgrounds are summarized in Appendix A.

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

10 **A.** The purpose of my testimony is to provide Staff’s recommendations on three issues related to
11 the Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities’ (Liberty or
12 Company) proposal: 1) on Depreciation Study ; 2) on Decoupling; and, 3) Recovery of
13 Concord Training center.

14 **Q. Please summarize Staff’s recommendations on these issues.**

15 **A.** The depreciation expenses should be adjusted as recommended by Staff and the reserve
16 variance amortization term should be twelve years instead of three years. The decoupling
17 methods proposed by the Company need to be changed in light of the guidance provided by
18 the Commission in relevant dockets and discussed in my testimony. Staff recommends that
19 the Commission deny recovery of training center costs but allow recovery of training costs
20 unrelated to the training center

1 **Depreciation Study**

2
3 **Q. When was the last depreciation study done for EnergyNorth? Is the current study**
4 **consistent with that last study?**

5 **A.** EnergyNorth’s last depreciation study was done in Docket DG 08-009. In that study, Mr.
6 Normand used the same methodology as presented in this case. In both cases, he used a
7 Simulated Plant Record (“SPR”) life analysis approach using a straight line method, broad
8 group procedure, average whole life technique using the “Iowa”-type survivor curves at the
9 account level. Then he evaluated the results using other factors including the character of the
10 depreciable assets, experience, engineering knowledge, and judgment etc. Liberty states that
11 the only difference between the current study and the prior study is that the current study is
12 based on FERC accounts and the prior study was based on PUC accounts.¹

13 **Q. Please summarize your recommendation on depreciation and amortization expenses.**

14 **A.** EnergyNorth proposes an overall depreciation and amortization expense of \$18,932,544. My
15 recommendation is \$15,830,829, a reduction of \$3,101,715. Schedule AI-DEP-1 provides a
16 summary of my recommendation. There are two components reflected in my overall
17 recommendation: Depreciation expenses, and the amortization of the depreciation reserve
18 variance. I recommend depreciation expense of \$15,001,931 and amortization of depreciation
19 reserve variance of \$828,898.

20
21 Please refer to Schedule AI-DEP-1 for a summary of my recommendation for depreciation
22 expense. I adjusted the average service life for some accounts based on the outcome of

1 Staff 2-37

1 statistical analysis done by Mr. Normand.² I kept net salvage as proposed by the Company. I
2 agree with Mr. Normand's recommendation to stop the monthly reserve adjustment (Order
3 No. 25,202) and to amortize the reserve variance over two depreciation cycles or 12 years.
4 And thus, my recommendation reflects a 12 year amortization.

5 **Q. Please explain why you adjusted ASL for account 381 and subaccounts.**

6 **A.** In this study, for the first time for EnergyNorth, different ASL and curves are used at sub-
7 account level. This has created a large impact on depreciation accrual levels as well as
8 reserve variance. In the last study, assets were grouped at the account level (as opposed to the
9 sub-account level in this study). Customer meters and installation were under Account 1360,
10 with an ASL of 35 years (Curve R2.5). In the current study, the assets included under
11 Customer meters and installations are spread across 4 different sub-accounts, each with its
12 own ASL and accrual rate; specifically, accounts for Meters (381), Meter Instruments
13 (381.10), and Meter Installation (382) and Meters-ERTS (381.20). In this study, the first three
14 items (Meters, Meter Instruments and meter Installations) are assigned an ASL 32 and an
15 accrual rate of 3.13%, while Meters – ERTS has an ASL of 15 years and a corresponding
16 accrual rate of 6.7%. This change alone increased the proposed annual accrual amount for
17 the assets in the Meters Group (Account 1360 in the last study) by \$150,000. Further,
18 because of this change Meters-ERTS (381.20) now has an average remaining life (ARL) of
19 2.54 years, compared to the rest of the Meters subaccounts which have an ARL of 18-25
20 years. This change has a very large impact on Reserve Variance. During its lifespan, accrual
21 rate for Meters ERTS was around 3% (as part of account 381). This rate is much lower than

2 [Staff 2-38.b](#)

1 the proposed 6.7% and this change created a reserve variance of 2.6 million in last 18 years
2 (1997-2015).

3 **Q. What is your recommendation?**

4 **A.** As indicated Attachment AI-DEP-2, Staff recommends a more gradual approach, which is to
5 use an ASL of 25 years for account 381.20 instead of the 35 years which was recommended
6 for the rest of the 381 sub-accounts. This will help to smooth out the reserve variance. Staff
7 and the Company can revisit this issue and adjust the ASL accordingly in future studies.

8 **Q. What is your recommendation about reserve variance?**

9 **A.** Staff recommends that the reserve variance be recalculated with staff schedule (AI-DEP-1)
10 and amortized the variance for 12 years, as suggested by Mr. Normand.

11

12 **Q. Did Liberty incorporate Mr. Normand's recommendation to amortize the reserve
13 variance over 12 years in the revenue requirement proposed in this case?**

14 **A.** No. The company proposes a 3 year amortization period for the reserve variance. The
15 Company provided no explanation for this in its initial their filing, but did discuss the
16 reasoning in responses to Staff data requests. In response to a Staff data request (Attachment
17 AI-DEP-3), the Company cited generational equity as the reason for the shorter amortization
18 period meaning that a shorter amortization period will help assign the cost of the of the
19 variance to the same customers who took service while the reserve accumulated. But, the
20 company did not provide any analysis which supports their position.

21 **Q. Does the current study support Company's position for a 3 years amortization period?**

22 **A.** No. the biggest contributor to the reserve variances are Mains and Services. If one looks at

1 the average consumed life and average remaining life, and variance percentages, it is clear
2 that there is no generational inequity in these accounts.

3
4 Table 1

Account	Description	Reserve Variance	Average Service Life	Average Consumed Life	Average Remaining Life	Variance (% of plant Balance)
367.00	MAINS	\$9,128,041	60	14.08	45.92	4.38%
380.00	SERVICES	\$2,169,199	45	13.20	31.80	1.61%

6
7
8 This level of reserve variances in these two accounts is not unexpected considering the high
9 level of recent investment, which can create ups and downs in the reserve. The depreciation
10 rate is set using the straight-line method and theoretical reserve follows an Iowa curve.
11 Depending on what point of its service life the asset is at the time of reserve calculation, and
12 time span between the two depreciation studies, a certain level mismatch is expected. This is
13 one of the reasons depreciation studies are recommended at regular intervals. I agree with
14 Mr. Normand that that stopping the monthly reserve adjustment will reduce the reserve
15 variances in future years.

1 **Decoupling**

2
3 **Q. Has the Commission discussed the issue of decoupling in the past? If so, please**
4 **summarize these discussions.**

5 **A.** The Commission conducted an investigation on Energy Efficiency Rate Mechanism in Docket
6 DE 07-064. In that context, decoupling was considered as an alternative. The proceeding was
7 opened to “investigate the merits of instituting...appropriate rate mechanisms, such as
8 revenue decoupling, which would have the effect of removing obstacles to, and encouraging
9 investment in, energy efficiency.”³ In it order in that case, the Commission stated, “energy
10 efficiency rate mechanisms will need to be tailored to the energy efficiency load loss and
11 fixed and variable cost structure of each company.” Further, the Commission stated
12 decoupling was considered as a rate design option. “Revenue decoupling could be also be
13 implemented through changes in rate design. That is, the Commission could consider changes
14 to the fixed charge component of the rate design to more accurately align cost causation of the
15 utility’s actual fixed costs with the fixed charge component of the rate design.” The
16 Commission was mindful about the possible consequences on small rate classes - “any
17 decoupling proposal to change the rate design needs to consider the impact on small rate
18 classes to ensure that such classes are not unduly impacted by such changes.” The
19 Commission was also aware of the potential inappropriate risk shifting from decoupling -
20 “revenue decoupling could enhance the utility’s revenue stability and reduce earnings
21 volatility; hence, revenue decoupling may result in a shift of risk away from the utility and
22 toward the customer.”

3 Order No. 24,934

1 In Docket DE 15-137, the Commission revisited the issues related to decoupling under
2 the Energy Efficiency Resource Standard. In Order No 25,932, the Commission stated “we are
3 mindful that, with an LRAM, [Lost Revenue Adjustment Mechanism] the utilities’ revenues
4 can increase above their authorized revenue requirements from increased sales, and, for that
5 reason and others, some parties prefer decoupling. This is because decoupling provides
6 reconciliations to the last-approved revenue requirement (i.e., in the case of a utility collecting
7 more revenue than its last-approved revenue requirement, the utility would be required to
8 prospectively credit customers for any such over-collection)”.

9
10 **Q. Please briefly describe the Company’s decoupling proposal in this matter.**

11 **A.** The Company proposed a revenue per customer (RPC) decoupling mechanism for all rate
12 classes, with a seasonal adjustment. The RPC for each season will be set in this rate case and
13 then will be used as the starting point to calculate allowed revenues by season. The Actual
14 Revenues per Customer and the RDM revenue shortfall/surplus will be calculated monthly on
15 a calendar month basis. Then, the sum of all the monthly data will be used to calculate actual
16 RPC on a seasonal basis. The difference between the allowed and actual will be adjusted in
17 the next seasonal rates. Here are salient features of the proposal:

- 18 ○ The Company’s firm rate classes will be combined into RDM Customer Groups for
19 revenue calculations.
- 20 ○ The RDM adjustment rates will be calculated using the Company’s total revenue shortfall
21 or surplus and projected therm deliveries for the upcoming season.

- 1 ○ Expansion rate customers will be excluded from the RDM calculation and not be charged
2 or credited the RDM rate.
- 3 ○ The RDM adjustment will be capped at +/- 5 percent of distribution revenues. Any excess
4 over the 5 percent limit will be deferred for recovery or pass- back in the next period with
5 carrying charges at the prime lending rate.
- 6 ○ A mid-period adjustment will be made if the projected end of the season RDM under or
7 over collection exceeds 10 percent of total projected seasonal distribution revenues.

8 **Q. Please summarize Staff's position.**

9 **A.** In light of the guidance provided by the Commission in relevant dockets as
10 summarized earlier, Staff believes that the following changes should be included in the
11 decoupling mechanism:

- 12 1) The adjustment should be based on weather normalized revenues.
- 13 2) The adjustment should be performed at the rate class level (instead of at the company
14 level).
- 15 3) Expected revenue should be calculated at individual rate class level, not at combined rate
16 class level.
- 17 4) Expansion rate customers should be included in the RDM calculation.
- 18 5) The RDM adjustment should be capped at +/- 2 percent.
- 19 6) No mid-period adjustment should be made; if needed, an adjustment can be made at the
20 time of Company's next rate case.
- 21

1 **Q. Q. Please explain weather normalization of revenue in the context of decoupling (Issue 1**
2 **above).**

3 **A.** The company proposed a full decoupling where the rates will be adjusted based on the
4 difference between total revenue expected (calculated using RPC) and actual revenue
5 realized, that is, without any weather normalization of expected or actual revenues. Under
6 Staff’s proposal, the actual revenue realized will be weather normalized and the difference
7 between weather normalized revenue expected and actual weather normalized revenue
8 realized will be used for as a basis for the rate adjustment.

9

10 **Q. Please explain the reason for this recommendation.**

11 **A.** As discussed earlier, the Commission decisions discussed decoupling as a mechanism for
12 lessening the impact on utility revenues associated with reductions in sales from increased
13 efficiency and conservation. The Commission was also concerned with the potential for risk
14 shifting via decoupling. The Company’s proposal adjusts for all impacts on revenue (e.g., the
15 economy, energy efficiency, weather etc.) which is well beyond the efficiency and
16 conservation related sales reductions. It also eliminates, all risk except the risk of
17 management inefficiency⁴. Under Liberty’s proposal, the RPC is set on weather normalized
18 test year revenue levels. By also weather normalizing the actual revenue realized (as Staff
19 proposes), the risk of colder or warmer temperatures will stay with the Company. The

4 Testimony of Gregg H. Therrien, Bates 289-90 “The utility remains at risk for managing its expenses commensurate with the level set for the test year base rates. This means the utility must manage its capital expenditure programs, its operations (e.g., salaries and wages, benefits, overtime, maintenance programs, uncollectible, outside services, etc.), and pay taxes (including property taxes that are adjusted annually by most municipalities)”.

1 decoupling adjustment will compensate the utility for the revenues that it would have
2 collected had sales-impacting events including energy efficiency and ups and downs in the
3 economy. Staff's position in this case is consistent with Staff testimony in the EERS
4 docket⁵ and aligns more closely to the guidance provided by the Commission concerning
5 decoupling.

6 **Q. Did Liberty discuss the concept of a weather normalized true up calculation?**

7 **A.** Yes. Mr. Therrien stated - "The true up calculation could be performed by determining the
8 difference between target revenues and weather normalized actual revenues. Using this
9 approach, the revenue true-up calculation would not be affected by colder or warmer than
10 normal weather."⁶ He stated that this method would involve "a complicated normalization
11 calculation and subsequent Commission review" and discarded the idea on that basis.

12 However, given that in most gas company filings in New Hampshire (for example, rate cases,
13 cost of gas, etc.) weather normalization is standard practice, this concern is not valid.

14 **Q. Please explain the reasons for combining the rate classes in groups for purposes of**
15 **calculating a decoupling adjustment (Issues 2 and 3 above).**

16 **A.** Mr. Therrien cited two reasons – 1) the potential shifting of C&I customers between rate
17 classes causing unintended results in the RDM calculations, and 2) significant year-to-year variability
18 in normal revenue per customer for several C&I rate classes. He concluded that RDM rate adjustments
19 for each C&I rate class would likely result in noticeable rate volatility for some C&I rate classes and

5 DE 15-137, Staff Testimony at 7 "In order to compensate the utilities for lost revenues associated with energy efficiency, Staff recommends the adoption of a lost revenue recovery mechanism for an initial three-year period, to be replaced by a decoupling mechanism in the future".

6 Testimony of Gregg H. Therrien, Bates 294

1 that this potential volatility is avoided with a single RDM true-up calculation for all C&I rate classes
2 combined.

3 **Q. Do you agree with this observation?**

4 **A.** I agree that RDM rate adjustments for each C&I rate class would likely result in noticeable
5 rate volatility for some C&I rate classes which could be avoided with a single RDM true-up
6 calculation for all C&I rate classes combined. I disagree that expected revenue should be
7 calculated at the group level.

8 **Q. Please explain.**

9 **A.** There are two parts of revenue adjustments – one is the calculation of expected revenue, and
10 the other is how to distribute the difference between actual and expected revenue. Accuracy
11 on both fronts is important. The C&I customers are not homogenous in their usage and
12 corresponding RPCs. For example, the annual RPC of a G-41 customer is \$1,285 and for a G-
13 54 customer is \$40,000. When the C&I classes are combined, RPC is only \$2,533. So, if a
14 G-54 customer is added or leaves the system, the expected revenue will change only \$2,533
15 instead of \$40,000. So the Company, or the rest of the C&I customers, have to account for
16 the difference of \$37,500. By calculating expected revenue at the rate class level, this
17 inaccuracy is eliminated. After calculating expected revenue for each class, one can sum those
18 up to arrive at the expected total C&I revenue. Once we know the difference between
19 expected revenue (as calculated for all the C&I classes) and actual revenue at for all C&I
20 classes combined, we can allocate the difference on a per therm basis for the combined C&I
21 classes. This way we calculate the expected revenue accurately and address the volatility issue
22 too. This method will also accurately catch any impact of inter-class migration, whereas the

1 Company's proposed method is indifferent to inter-class migration.

2 **Q. Do you agree that the decoupling adjustment to rates should be at the Company level?**

3 **A.** No. The whole reason for revenue decoupling stems from energy efficiency program. Unlike
4 electric utility's System Benefits charge (SBC), gas utilities have a different mechanism to
5 budget and recover the cost of energy efficiency program. Due to class specific the program
6 design, cost recovery is generally different for residential and C&I sectors. In the past years,
7 there have been significant differences in gas energy efficiency ("EE") programs between the
8 sectors. The two sectors have significantly different EE charges per therm in the LDAC.

9 Energy savings and corresponding lost revenue would differ by sector as well. Currently, for
10 the same reason, LRAM is calculated at sector level. Thus, Staff believes that any decoupling
11 adjustment should be done at the sector level, consistent with the planning, budgeting and
12 implementation of the gas EE programs.

13 **Q. Please explain how expansion rate (MEP) customers should be treated for decoupling**
14 **(Issue 4 above).**

15 **A.** The Company proposed to exclude the MEP customer in the decoupling adjustment rate
16 calculation. Staff believes these customers should be included in determining RPC and when
17 calculating the rate adjustments. It is important that their usage should be counted in its
18 original rate class. Staff believes RPC for MEP customer should be included in the rate class
19 revenue calculation after the MEP premium is separated. MEP premium is a known
20 percentage added to the various class delivery rates, so it is simple to separate and remove the
21 premium for purposes of calculating a decoupling adjustment.

22 **Q. Please explain why you are proposing 2% cap instead of 5% cap as proposed by the**

1 **Company and elimination of the midyear adjustment (Issues 5 and 6 above).**

2 **A.** By weather normalizing the actual revenue for the purpose of the decoupling adjustment, one
3 of the biggest reasons for revenue fluctuation (the weather) is removed. Nationwide
4 experience has shown that annual adjustments are typically in the range of -2% (a refund) to
5 +2% (a surcharge), when weather is removed. So Staff believes that a 2% cap is reasonable.
6 For the same reason, Staff believes that there will be no need for mid-term adjustment (Issue 6
7 above). If needed, the adjustment could be done in the Company's next rate case.

8 **Q. Do you have any other comments or recommendations??**

9 **A.** Staff believes that any decoupling related adjustment should be tied to the Company's energy
10 efficiency program performance. If the Company does not meet its EE goals, there should be
11 some restriction in decoupling adjustment because the logical conclusion is that the
12 decoupling adjustment was attributed to something other than EE. In the event that a
13 decoupling adjustment is calculated in any year where Liberty does not meet its EE goals as
14 established in the docket where EE programs are approved, Staff recommends that the
15 Company be required to demonstrate that its EE efforts were the primary factor in reducing its
16 energy sales in order for any amount above the decoupling cap to be carried forward for
17 recovery in a subsequent year. This would not apply on any refund, because that would occur
18 in a year where revenues are growing, and thus on its face it is clear that the decoupling
19 adjustment is not attributable to EE efforts.

20

1 **Rate Design Issues**

2
3 **Q. Please explain why a rate design change is needed if a decoupling adjustment is**
4 **approved in this case?**

5 **A.** In the context of decoupling and the associated policy goal of energy conservation, Liberty's
6 the current rate design is incompatible. For example, currently, there are two rate blocks -
7 head block and tail block. The rate is higher for the head block to provide the utility a
8 reasonable opportunity to collect fixed costs which are not recovered through the customer
9 charge. The idea is that most of the customers' usage will fall in the head block and thus the
10 fixed costs will be recovered. However, from an energy efficiency perspective, this gives the
11 wrong signal to the consumers as they pay less on per unit basis for higher energy use. Under
12 decoupling, the Company has a much greater assurance of collecting its fixed costs and that
13 opens the door to address the "anti-conservation" price signal of declining rate blocks.

14 **Q. Please describe your recommendation regarding rate design in the context of**
15 **decoupling.**

16 **A.** Staff believes that the decoupling provides an opportunity to change rate design without
17 harming the Company and at the same time, further the goal of energy conservation. In this
18 context, Staff proposes the following changes:

- 19 1. Set the rates for both head and tail block at the same level
- 20 2. Any decoupling adjustment would be allocated to the head or tail blocks based on whether it is
21 a surcharge or refund. Refunds will be allocated to head block and surcharges will be collected
22 from the tail block for the residential sector and high winter use C&I customers.

1 **Q. Please explain why you recommend setting both head and tail block rate at the same**
2 **level.**

3 **A.** The only reason the head block rates are set higher than the tail block is to allow the Company
4 to recover its customer related fixed cost from the customers whose customer charge is set
5 below the level need to recover these fixed costs. In absence of decoupling, Staff is
6 supportive of gradual increases in the customer charge to approach recovery of the fixed
7 costs. As discussed earlier, with decoupling, Staff believes that there is no longer a need for
8 higher head block rates. But, Staff is not recommending elimination of the two blocks, just
9 that the rates be set at the same level, before any decoupling adjustment is made.

10 **Q. Why is it reasonable to allocate decoupling refunds to the head block and surcharges to**
11 **the tail block?**

12 **A.** There are several reasons it is compatible with energy conservation policy. First of all, over
13 time, this will create the same dynamic as an inclining rate block structure, which is a known
14 tool in the context of energy conservation. It will provide a proper price signal to the
15 customers to encourage energy conservation. This approach would also benefit lower
16 consumption households that could tend to include be lower income households with smaller
17 homes and less energy use compared to higher income households. Low use households, on
18 average, have relatively little or no consumption in the tail block and thus would see little or
19 no rate increases from decoupling. This addresses the stated concern of the Commission that
20 “any decoupling proposal to change the rate design needs to consider the impact on small rate

1 classes to ensure that such classes are not unduly impacted by such changes”⁷. It also reduces
2 the volatility of gas bills for low use customers.

3

⁷ Order No. 24,934 (January 16, 2009)

1 **Concord Training Center**

2
3 **Q. What is the purpose of your testimony about Concord Training center?**

4 **A.** The purpose of my testimony is to provide Staff's recommendation as to whether the costs
5 associated with the Liberty's Concord Training Center costs should be recovered through the
6 rates proposed in this proceeding. Last year, in Docket 16-383 involving the Company's
7 electric affiliate, Granite State Electric Company, Staff addressed this same issue and
8 recommended further investigation. Staff cited a lack of reliable analysis and support in the
9 decision-making process and questioned whether the construction of the training center was a
10 prudent investment for Liberty compared to other alternatives available for training. A copy
11 of my testimony and schedules from Docket 16-383 is provided as Attachment AI-TR1. In
12 this docket, Staff has completed its review of the training center and recommends that the
13 Commission disallow recovery of all training center related cost from rates.

14 **Q. Did you review Company's Business Cases during this proceeding?**

15 **A.** Yes. The Company provided two Business Cases related to the Concord Training Center. The
16 first business case, dated January 24, 2014 (Attachment AI-TR 2) provided a brief description
17 of the training center and mentioned training at National Grid's facility in Millbury, MA as an
18 alternative to an estimated cost of training \$400,000/year. Under the Financial Assessment
19 section, the Business Case stated a payback period of fewer than 3 years for the investment in
20 the training center. The second business case, dated May 1, 2014, had fewer details and
21 contained no analysis of alternative options and no financial assessments. None of the
22 documents, indicated that the Company made any consideration of the operating and
23 maintenance expenses Liberty would incur for the training center, in addition to training costs.

1 **Q. Did the Company provide any support for its alternatives and financial assessment in its**
2 **business cases?**

3 **A.** Several times, Staff requested that Liberty provide any financial analysis supporting Liberty’s
4 decision to build the training center, but no reasonably adequate analysis was provided. In
5 data response Staff 2-3 from DE 16-560 (provided as Attachment AI-TR 3), the Company
6 did perform a cost-benefit analysis, for the first time, between a training center and training at
7 a National Grid facility in Millbury, MA, which was the alternative cited in their initial
8 business case. When Staff raised questions about the usefulness of the analysis (Staff
9 Testimony DE 16-383 at bates 000010-11, Attachment AI-TR1), the Company responded that
10 the analysis has “little relevance to the decision to build the training center”⁸ and the analysis
11 is “pointless” because training at the National Grid facility was no longer an option.

12 **Q. Did the Company consider any other alternatives to building its own training center?**

13 **A.** According to the business cases, no other alternatives were considered. Later, the Company
14 argued that only alternative it had was to build a training center due to the absence of National
15 Grid facilities. “If training center had not been constructed, Liberty would have been without
16 any viable option for training employees.”⁹

17 **Q. Did the Company provide any support for its conclusion that building its own training**
18 **center was the only option available?**

19 **A.** No. To the contrary, when asked about organizations Liberty reached out to explore possible
20 alternatives to the National Grid’s training arrangement, the Company stated “Company

8 [Rebuttal Testimony of Smith and Mullen DE 16-383 at 227-229](#)

9 [Ibid](#) at page 227-228

1 personnel contacted management employees at Unitil Energy Systems (UES), New
2 Hampshire Electric Cooperative (NHEC), and Green Mountain Power (GMP) and discussed
3 their current training methods. UES and NHEC train on the job with the training conducted by
4 supervisors rather than dedicated trainers. GMP has a dedicated trainer who performs
5 classroom and field based training”¹⁰. Liberty also reached out to Eversource, which had a
6 training facility in Pittsfield, which has subsequently closed. This demonstrates that Liberty
7 knew that other New Hampshire utilities performed training without a dedicated building and
8 without dedicated trainers, yet Liberty did not consider or analyze any of these alternative
9 training models or methods as an alternative to building its training center. Instead, Liberty
10 determined that those methods were not viable alternatives for providing the range of gas and
11 electric training needs required by Liberty, and therefore it concluded that no
12 financial/economic analysis of those options was warranted.¹¹

13 **Q. Why, according to Liberty, were alternative methods of training not viable?**

14 **A.** Liberty simply states that on the job training is “insufficient” to ensure employees to “fully
15 learn” and safely perform their function.¹² When asked to provide analyses, rules/standards,
16 studies etc. supporting this conclusion, the Company provided none and stated that “it is the
17 Company’s view that “exclusive” reliance on that [on the job] training method would not
18 provide the optimal training experience”.¹³

19 **Q. Did the Company attempt to obtain training services from an outside provider?**

20 **A.** No. The Company stated that “although Liberty did not issue RFPs, Liberty did reach out to

10 Staff 4-24

11 Staff 5-43

12 DE 16-383, at Smith/Mullen Rebuttal Testimony, 229-230;

13 Staff 5-40

1 other regional utilities to explore training alternatives.”¹⁴ Staff believes that a simple and
2 appropriate way to explore the market for any services is to issue an RFP and that Liberty
3 should have issued an RFP for its training needs prior to undertaking the construction of the
4 dedicated training center.

5 **Q. Has Liberty mentioned other benefits of a dedicated training center?**

6 **A.** The Company cites flexibility of scheduling, the ability to train non-field employees on gas
7 and electric utility topics, and the ability to make the facility available at times to
8 accommodate training-related events including use of the facility by outside parties as other
9 benefits¹⁵.

10 **Q. Did the Company provide any analysis of those benefits?**

11 **A.** No, when asked for financial/economic analysis of any efficiency gains, Liberty rehashed
12 reasons already stated and concluded that: “Even without any financial analysis, it is clear that
13 each of those training conditions offers efficiencies in terms of consistency of training,
14 scheduling, planning, travel time, and controlled training conditions, among other things”.¹⁶
15 The Company further explained “a financial/economic analysis was not performed as
16 attempting to quantify the gains would have involved complex analyses of a number of
17 variable factors including travel distances, number of employees who could be trained at each
18 job location, ability of supervisors to take time from other job tasks to perform training,
19 variability in training among supervisors, potential follow-up training due to that variability,
20 ability to train specific tasks due to job site conditions, ability of training personnel to

14 Staff 5-42
15 Testimony of Mr..Mullen, filed on June 30, 2017 at page 023-027
16 Staff 4-26

1 effectively schedule training at numerous locations, etc. Thus, the results of any
2 financial/economic analysis would be highly variable, subject to a range of challenges, and
3 thus of questionable value.”¹⁷

4
5 In another data response Company stated “While some of those items may involve
6 quantifiable benefits, the majority involve non-quantifiable benefits. Hence, there is no
7 analysis responsive to this request”¹⁸.

8
9 Further, Staff asked about the policy or guideline etc. related to using non-quantifiable costs
10 or benefits in its decision making. Liberty referred to the Business case¹⁹, section on Risk
11 assessment and Qualitative Evaluation. Staff could not find any mention of non-quantifiable
12 costs or benefits in either of the business cases concerning the training center.

13 **Q. In your view, should Liberty have attempted to perform more in depth analyses of the**
14 **perceived benefits of building a stand-alone training center?**

15 **A.** Yes. Every decision involves dealing with different future scenarios and options. A rational
16 decision maker would use reasonable assumptions to assess those scenarios and options
17 instead of discarding them outright. That is particularly true in this instance, where the
18 perceived benefits (efficiency, scheduling, improved quality of training etc.) form the basis of
19 the decision to build the training center, not analyzing these factors is not acceptable. The
20 fact that performing analyses is difficult and complex, and that such analyses could face

17 *ibid.* (Staff 4-26.)

18 Staff 4-32

19 Staff 5-45

1 challenges should not be used as a rationale for not doing any analyses.

2 The most basic analysis Liberty could have done is to compare its expiring option (training at
3 National Grid) and their preferred option (dedicated training center) to address the variability
4 in cost of these two alternatives. Had the Company done a thorough analysis of these two
5 alternatives and reviewed the analysis as a sanity test (as was done by Staff in DA 16-560,
6 Staff 2-3 – attached here as Attachment AI-TR 3), Liberty’s ultimate decision to build a
7 training center may have been different²⁰.

8 **Q. Why is that?**

9 **A.** Going back to the first business case, the Company would have known that the
10 \$400,000/training cost (the National Grid option)²¹ would not automatically translate to a
11 fewer than three year payback period for a \$1,000,000 plus investment. Such an analysis
12 would have revealed that most of Liberty’s historic training costs (particularly the payroll cost
13 of the trainees), would remain irrespective of what alternatives Liberty choose. The analysis
14 would have revealed that Liberty should have been evaluating options based only on the
15 incremental cost or savings of the options and Liberty should ignore trainee payroll costs that
16 would remain under any option. Staff believes this would have provided tremendous value in
17 the context of the training center decision making.

18 **Q. Did the Company analyze the incremental cost related to Training center?**

19 **A.** As best as Staff can determine, the Company did not analyze incremental costs. These
20 incremental costs would include: costs for the trainers, operation and maintenance cost,

20 Staff Testimony in DE 16-383 (attached here at Attachment AI-TR 1) discussed that analysis in detail.

21 Staff was told in 2014 that Liberty historic annual training costs approximated \$400,000. (DG 14-180, Staff 2-6, response, 2014 costs of \$448,210; DG 14-180, Staff 2-107, costs of \$413,250 for the test year and \$341,040 from April 2014 through March 2015),

1 property tax, return on the investment, etc. These costs could have been estimated reliably
 2 and should have been part of any financial analysis, had the Company undertaken any
 3 financial analyses in its decision-making process.

4 **Q. Did the company perform any financial analysis in the face of increasing cost of its**
 5 **selected option – the dedicated training center?**

6 **A.** No. although the Company states that “Cost increases were reviewed, analyzed, and
 7 approved as they arose”²², it did not perform any financial analysis, even in the case of three
 8 fold increase of the cost²³.

9
 10 **Q. Did you looked at the training cost trend pre and post training center for Energy North?**

11 **A.** Yes, in my testimony in DE 16-383: Table 5 - Annual Training Cost, I provided an analysis of
 12 EnergyNorth’s training costs, expressed on a \$ per hour of training basis. Below is an
 13 updated version of the analysis.

14 **Table 2 Energy North Training Costs**

	Training Cost	Training Center Cost ²⁴	Total	Hours	Training Cost/Hour	Training Cost/Hour (without training center cost)
2013	\$288,163	\$0	\$288,163	3,233	\$89	\$89
2014	\$325,724	\$0	\$325,724	3,918	\$83	\$83
2015	\$305,302	\$439,678	\$744,980	3,446	\$216	\$89
2016	\$237,084	\$384,411	\$621,495	2,756	\$226	\$86

17

22 Staff 5-44
 23 Staff 7-12
 24 Staff 2-26

1 This illustrates that the average hourly training cost did not change much over time, when the
2 training center costs were excluded. It also supports our earlier assertion that a financial
3 analysis based on incremental training costs would have made clear to the decision makers
4 that the proposed project would not generate sufficient savings to pay for itself in less than
5 three years. And it shows that Liberty's decision to build a dedicated, stand-alone training
6 center actually harmed its ratepayers by significantly increasing the average training
7 cost/hour.

8 **Q. Please summarize your findings?**

9 **A.** Staff investigation is summarized here:

- 10 • Business cases were used as the basis for the decision by the management to build the
11 training center, but the business cases are not supported by any detailed financial
12 analysis:
 - 13 ○ the financial assessment used was erroneous or inadequate and without support
 - 14 ○ no qualitative evaluation was done
 - 15 ○ no analysis of incremental costs was performed.
- 16 • None of the alternative methods to train employees were explored to any significant
17 degree:
 - 18 ○ Liberty was aware of the alternative methods used for training by other utilities
 - 19 ○ Liberty's rationale for not exploring alternatives is not supported by any data,
20 standard, rule, study or report
 - 21 ○ Liberty did not explore training alternatives by issuing an RFP to training
22 service providers.

- 1 • Liberty disregarded any need for financial analysis at every step of its decision making
2 (except when asked by Staff).

3
4 The absence of any credible analysis of its chosen path to build a training center and its failure
5 to analyze available viable alternatives based on unsupported conclusion raise serious
6 concerns about Liberty's decision to build the training center and its decision making
7 process. Credible analyses would have provided the decision makers the information (that was
8 known or should have been known at the time of the decision) that should have led to a
9 decision not to build a training center (at least not with significantly more study of the costs of
10 the center and any alternatives).

11 **Q. What is your recommendation?**

12 **A.** It is clear that Liberty did not perform any credible analysis in the process of the deciding to
13 build the Training center, and consequently harming its ratepayer with increased cost. Staff
14 believes the Company failed to meet any standard applicable to any reasonable decision-
15 making process involving a substantial investment. Staff recommends that the commission
16 deny recovery of training center costs but allow recovery of training costs unrelated to the
17 training center.

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

19 **A.** Yes.

20