

# **TAB 10**

**Testimony of Donald Ware and Attachments**

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

Docket No. DW 20-156

Pennichuck East Utility, Inc.  
Permanent Rate Proceeding

**DIRECT TESTIMONY OF DONALD L. WARE**

November 23, 2020

**TABLE OF CONTENTS**

I. INTRODUCTION ..... 3

II. PURPOSE OF THIS TESTIMONY ..... 4

III. DISCUSSION OF EFFECT OF QCPAC ON PROPOSED RATE INCREASE..... 11

IV. SUMMARY OF RATE SCHEDULES PER ORDER NO. 26,074 ..... 14

V. DISCUSSION OF SPECIFIC SCHEDULES AND INFORMATION ..... 14

VI. DISCUSSION OF OTHER OPERATIONAL MATTERS ..... 22

1 **I. INTRODUCTION**

2 **Q. What is your name and what is your position with Pennichuck East Utility, Inc.?**

3 **A.** My name is Donald L. Ware. I am the Chief Operating Officer of the Pennichuck East  
4 Utility, Inc. (“PEU” or “the Company”) which is a subsidiary of Pennichuck Corporation.  
5 I am employed by and have worked for Pennichuck Water Works, Inc. 1995. I am a  
6 licensed professional engineer in New Hampshire, Massachusetts and Maine.

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

8 **A.** I have a Bachelor in Science degree in Civil Engineering from Bucknell University in  
9 Lewisburg, Pennsylvania and I completed all the required courses, with the exception of  
10 my thesis, for a Master’s degree in Civil Engineering from the same institution. I have a  
11 Master’s in Business Administration from the Whittemore Business School at the  
12 University of New Hampshire.

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

14 **A.** Prior to joining the Company, I served as the General Manager of the Augusta Water  
15 District in Augusta, Maine from 1986 to 1995. I served as the District’s engineer  
16 between 1982 and 1986. Prior to my engagement with the District, I served as a design  
17 engineer for the State of Maine Department of Transportation for six months and before  
18 that as a design engineer for Buchar-Horn Consulting Engineers from 1979 to 1982.

19 **Q. What are your responsibilities as Chief Operating Officer of PEU?**

20 **A.** As Chief Operating Officer, I am responsible for PEU’s overall operations, including  
21 customer service, water supply, distribution and engineering. I work closely with PEU’s  
22 Chief Engineer and other senior managers to help develop PEU’s Annual and Three-Year  
23 Capital Improvement Plans.

1 **II. PURPOSE OF THIS TESTIMONY**

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

3 **A.** I will be discussing the operations of PEU and how these operations relate to and justify  
4 the requested rate increase. I have been principally responsible for preparation of the  
5 Filing Requirement Schedules and Rate of Return Information filed at Tabs 13 and 14 of  
6 PEU's rate case filing. My testimony will address specific details of these schedules.  
7 My testimony will interface with Larry Goodhue's testimony in regard to addressing the  
8 revenue and operational pro formas that are part of 1604.06 Schedule 1 ("Sch 1"),  
9 requested changes in rate design that are part of 1604.06 Schedule A ("Sch A") and the  
10 financing necessary to support the Company's Capital Improvements in 1604.08  
11 Schedule 5 ("Sch 5").

12 **Q. Do you have any general comments regarding these schedules?**

13 **A.** Yes. The format of the schedules is generally consistent with the format described in the  
14 Settlement Agreement filed in DW 19-084. The filed schedules follow the methodology  
15 approved by Order No. 25,292 in Docket No. DW 11-026 and as amended and described  
16 in Order No. 26,070 in the DW 16-806 Settlement Agreement and reflect further  
17 modifications approved in Order No. 26,383 in Docket No. DW 19-084 for Pennichuck  
18 Water Works, Inc. ("PWW").

19 **Q. Please explain the revenue components sought by the Company in Puc 1604.06**

20 **Schedule A:**

21 **A.** The requested rate treatment involves the following revenue requirements and  
22 adjustments to revenue requirements as approved in DW 17-128:

1 1. Modifying the test year ending revenues to reflect the average of last five years of  
2 volumetric sales (2015 through 2019). The purpose of this adjustment is to eliminate the  
3 swings in revenues that can occur between a wet test year followed by a dry year or a dry  
4 test year followed by wet year. The normalization of volumetric sales and the associated  
5 production expenses between the test year and the five-year average results in smaller  
6 swings in Net Income than would otherwise be associated with swings in summer  
7 consumption. The Sch A-5 Yr Ave Current Revenues used are based on Puc 1604.06  
8 Schedule 1C. The calculation of the impact on operating expenses of using the five-year  
9 average is found in Puc 1604.06 Sch 1, Attachment B.

10 2. A Material Operating Expense Revenue Requirement (MOERR) based on the  
11 Material Operating Expenses incurred during the Test Year with proformas reflecting  
12 known and measurable changes to the Test Year expenses in addition to changes to those  
13 operating expenses that are impacted by a change in production expenses associated with  
14 using a 5-year average of water produced. The Material Operating expenses (MOE's)  
15 used for this revenue requirement do not include Non-Material Operating Expenses  
16 (NOE's) as detailed on Puc 1604.06 Sch 1, Attachment I. The MOE's are inclusive of  
17 total operating expenses as well as amortization, property tax, and income tax expenses.

18 3. The addition of a Material Operating Expense Factor (MOEF) of 6% to provide for a  
19 factor applied and calculated upon test year material operating expenses which typically  
20 grow year over year due to inflation and other operational pressures, such as changes in  
21 regulatory requirements. As was demonstrated in the rate case for PWW in Docket No.  
22 DW 19-084, as a debt-only funded entity, cash flow coverage is essential to the  
23 Company, and as such, in order to continue to access the debt markets, support the RSF

1 funds behind the revenue buckets, maintain an ability to fund operating expenses between  
2 rate cases without the full effect of regulatory lag, this factor is essential as a component  
3 of the Company's overall rate structure.

4  
5 An example of a regulatory requirement impact is the reduction in the NHDES arsenic  
6 standard from 10 parts per billion (ppb) to 5 ppb, going into effect as of July 1, 2021,  
7 which will double the amount of arsenic removal media that is used each year in order to  
8 fully comply with drinking water standards for the removal of this element in the water  
9 supplied to customers.

10  
11 As addressed above, the MOEF is intended to provide for sufficient cash needed to cover  
12 the increases in operating expenses, which are not covered by the revenues granted in the  
13 last rate case, as determined and based upon a fixed historical test year. The Company's  
14 goal in implementing the MOEF is to eliminate the need to borrow cash from an outside  
15 entity to cover operating expenses when the annual revenues are not sufficient to pay for  
16 those expenses, and/or the need to borrow money in order to refill and reinforce the RSF  
17 funds intended to facilitate temporary coverage of cash flow anomalies which occur due  
18 to seasonal water consumption pattern changes, or other short term fluctuations. This is  
19 very important as there is no rate mechanism currently in existence for the Company  
20 which allows for the recovery of cash borrowed to pay the deficit between operating  
21 revenues and expenses. And as these needs would be working capital borrowing needs,  
22 as opposed to debt to fund capital projects and investments, there are very few, if any,  
23 borrowing mechanisms that allow an entity to borrow funds on a long-term basis to cover

1 deficits between operating expenses and revenues, for working capital needs. The  
 2 proposed MOEF was not requested or approved in DW 17-128, as this facet of the overall  
 3 rate structure was first introduced for the regulated utility companies as a part of the  
 4 consolidated Pennichuck family of companies, in the most recent docket for PWW, as  
 5 indicated earlier. As such, the Company is seeking a MOEF as part of the revenue  
 6 requirement formulate in this rate filing for the same reason, and in a similar form, to the  
 7 MOEF allowed in PWW's recently approved revenue requirement determination, as  
 8 approved in DW19-084.

9 4. A Non-Material Operating Expense Revenue Requirement (NOERR) which provides  
 10 the cash to cover approved Test Year expenses that are deemed nonmaterial based on the  
 11 chart of accounts to which these expenses are ascribed. The applicable chart of accounts  
 12 from Non-Material Operating Expenses (NOE's) are as approved in DW 16-806 and as  
 13 detailed on Puc 1604.06, Sch 1, Attachment I of this filing.

14 5. A Debt Service Revenue Requirement (DSRR 1.0) which reflects the revenue  
 15 necessary to cover the Company's annual debt service (principal and interest payments)  
 16 associated with all plant in service by the end of the Test Year ending 12/31/2019 as  
 17 found in Sch 5 of the Puc 1604.08 Schedules.

18 6. A Debt Service and Interest Coverage Requirements (0.1 DSRR) equal to 10% of the  
 19 DSRR 1.0.

20 7. The recovery of the North Country Capital Recovery Surcharge in the amount of  
 21 \$178,915 as established and approved in DW 17-128.

22 **Q. Why is PEU filing rate schedules to increase customer rates?**

1    **A.**    Based on the Puc 1604.06 Schedule A, PEU was in an earnings deficiency during the  
2            2019 Test Year. The revenues collected in 2019 fell well below the revenue  
3            requirements the Company needed to: (1) maintain its operations, (2) make its required  
4            payments to the City under the CBFRR, and (3) make its debt payments to its lenders.  
5            On this basis solely, the actual test year revenues would require a 17.96% increase to  
6            cover the 2019 expenses as allowed in DW17-128. Per Mr. Goodhue’s testimony, PEU  
7            is seeking a 21.05% increase in revenues after including:

- 8            •    pro forma reflecting known and measurable increases in expenses and revenues  
9            are made to the Test year, and
- 10           •    a Material Expense Operating Factor (MOEF) of 6.0% (which is being requested  
11           as part of this rate filing), are factored in.

12    **Q.**    **Please describe the primary drivers of this revenue deficiency.**

13    **A.**    The drivers in the 21.05% revenue deficiency are:

- 14           1. The debt service on Capital expenditures made in 2018 and 2019, which accounts for  
15           4.95% of the 21.05% increase being sought.
- 16           2. A 6% MOEF which accounts for 4.14% of the 21.05% increase being sought. The  
17           need and reasoning behind the Company’s request for the MOEF will be discussed  
18           later in this testimony.
- 19           3. Compounded annual inflationary and operating pressures of the Company’s operating  
20           expenses since its last permanent rate case account for the remaining 11.96% of the  
21           21.05% increase being sought; most specifically:

- 1           a. Increases in Production expenses driven by increased purification chemical costs  
2           (primarily associated with arsenic removal), increases in purchase water costs,  
3           and increases in labor expenses.
- 4           b. Increases in Transmission and Distribution expenses resulting from:
- 5           i. Increased meter operating labor costs resulting from the labor costs that had  
6           been capitalized in the recent past, when that labor was used to replace leaded  
7           brass meters (in accordance with regulatory requirements), but is now being  
8           expensed, as this labor is now being used to complete routine and required  
9           meter periodic tests (again, in accordance with regulatory testing  
10           requirements). Meter Operating and Labor expense in 2016 was \$27,662 and  
11           in 2019 it was \$154,624.
- 12           ii. Increased levels of main and service repairs, resulting from a continued focus  
13           on finding and repairing leaks for the Company's aging infrastructure. In the  
14           case of PEU, the aging infrastructure is primarily substandard PVC and HDPE  
15           water main that was installed in systems that PEU acquired, as approved by  
16           the Commission, from the Consumers New Hampshire Water Company in  
17           1998. The Company has been working to replace this piping over a period of  
18           several years, but much of this pipe still remains in the infrastructure of its  
19           distribution systems and is the reason unaccounted for water in PEU typically  
20           runs around 20%. In 2016, the Company incurred \$365,659 in Distribution  
21           and Service-related work associated with leak repairs. In 2019, the Company  
22           incurred \$475,630 of expenses in this area.

1 c. Increases in property taxes, based upon the addition and replacement of property,  
2 plant and equipment, as well as valuation and millage rate changes by the  
3 communities that the Company serves.

4 d. Increases in PEU's management fee associated with its' share of the increases in  
5 PWW's management fee associated with shared expenses. The expenses  
6 associated with the PWW management fee have increased since the 2016 TY and  
7 those increases are the result of: (1) an increase in employees (primarily  
8 associated with the implementation of GIS and Asset Management), (2)  
9 adjustments to wages and increased expenses associated with employee benefits,  
10 and (3) lastly, increases in the amount of shared property utilized by the Company  
11 to the direct and indirect benefit of customers, like the Company's GIS and asset  
12 management program, and all the hardware and software required to support that  
13 program.

14 **Q. Please describe what PEU has done to control these drivers of the revenue**  
15 **deficiency.**

16 **A.** The Company obtains its labor resources, inventory, and management from PWW. The  
17 Company acquires its own long-term debt to fund its annual capital improvements and  
18 infrastructure replacements. In all cases, the Company is focused on controlling expenses  
19 in an intelligent fashion. In order to accomplish that control the Company has established  
20 the following practices:

21 1. PWW's Department managers evaluate staffing levels required by PEU as part of the  
22 annual budgeting process. The evaluation is completed to ensure that PEU's work is  
23 performed by the best mix of full time, part time, and seasonal employees along with

1 outside consultants and technology required to accomplish the regulatory tasks and  
2 “best” utility operating practices that the Company needs to complete each year. It is  
3 important to note that the current use of PWW staff to perform PEU’s required  
4 operational tasks is not expected to change significantly in the future for the  
5 Company to meet its customer and regulatory needs. The efficiency of the labor  
6 employed should improve as the Company’s deployment of Asset Management and  
7 Geographical Information System programs progress from the creation and  
8 implementation phases, and the programs are placed into full service. Once in full  
9 service, these programs will result in increased employee efficiency in the field and  
10 enhance and further streamline the office activities that support the field operations.  
11 A fully operational Asset Management program will also help the Company’s capital  
12 projects planning by providing individual asset level data that focuses on a balance  
13 of: (1) asset vulnerability to failure, (2) the impact of an asset failure, and (3) the asset  
14 repair and maintenance records and expenses, with the objective of replacing the  
15 Company’s assets at the proper time to minimize the life cycle cost of its assets.

16 2. The Company seeks competitive bids for services whenever it is feasible. It seeks  
17 bids for power supply, chemicals, print house services, insurances (health, dental,  
18 property and liability), as well as other services to attract the lowest possible pricing  
19 for its customers.

20 3. It seeks competitive bids for its capital expenditures.

21 **III. DISCUSSION OF EFFECT OF QCPAC ON PROPOSED RATE INCREASE**

22 **Q. Will this rate case be addressing the Company’s Capital Improvements?**

1   **A.**    No, not directly. The Company’s Capital Improvements are addressed through its annual  
2           Qualified Capital Project Adjustment Charge (“QCPAC”) filings. Pennichuck is  
3           currently seeking a QCPAC for the Capital Improvements it completed in 2019 via  
4           DW20-019.

5   **Q.**    **Please describe how the QCPAC sought in DW20-019 will interface with the**  
6           **revenue requirement sought in DW 20-156.**

7   **A.**    The QCPAC being sought for the Company’s 2019 capital improvements will be a  
8           surcharge on the permanent rates that were granted in Docket No. DW 17-128. The  
9           QCPAC granted in Docket No. DW 20-019 will result in additional revenues which will  
10          cover the 1.1 times the principal and interest associated with the pending loan from  
11          CoBank which was approved by NHPUC in Order No. 26,418 in Docket No. DW 20-  
12          081, as well as the property taxes associated with the capital improvements that were  
13          placed into service during 2019, by the Company. The QCPAC revenues associated with  
14          the 2019 improvements, along with the QCPAC revenues associated with the 2018  
15          capital improvements (granted in DW 19-035) will be rolled into the permanent rate  
16          increase being sought in this docket and are included in the 21.05% revenue deficiency.  
17          PEU anticipates that the QCPAC associated with the Company’s 2020 Capital  
18          improvements (to be filed in February of 2021) will be treated as a surcharge on the  
19          revenue requirement approved in this docket. The QCPAC filed in 2021 will be  
20          equivalent to the step increases granted in previous rate filings, which allowed the  
21          Company to recover its investment, and associated expenses, for capital improvements  
22          placed in service within 12 months of the end of the test year. Because of this integration  
23          of the QCPAC into the permanent rates, PEU has proposed that if temporary rates are

1 awarded, that the temporary rate be high enough to capture the QCPAC revenues and that  
2 the QCPAC rate increases themselves not occur during the pendency of this proceeding.  
3 This is further explained in my joint testimony with Mr. Goodhue. on temporary rates.

4 **Q. How do these increases impact the average single-family residential water bill?**

5 **A.** Please see the Customer Impact tab of the attached electronic Puc 1604.06 schedules or  
6 in hardcopy, see Tab 7, “Rate Impact on Average Single Family Residential Customer”  
7 for the impact on the average single-family residential bill (exclusive of the NCCRS) on a  
8 monthly basis based on the Company’s request for the modified rate making  
9 methodology, which resulted in a requested overall rate increase of 21.05%. The actual  
10 requested rate increase varies between customer classes in accordance with the  
11 recommendations of the Cost of Service Study (COSS) completed by Raftelis Associates.  
12 Please see the testimony provided by Mr. Dave Fox, in regard to the COSS in Tab 11 of  
13 this filing, as it pertains to the recommended increases for each customer class, required  
14 to result in the requested 21.05% overall increase in the revenue requirement. In the case  
15 of the average single-family residential customer with a 5/8” meter using 6.50 CCF per  
16 month, the rates tariffed in DW 17-128 resulted in a monthly bill of \$69.52. Based on the  
17 COSS recommendations, that same average single-family residential customer would pay  
18 \$85.40 per month, or a 22.84% increase. I will discuss the Company’s position with  
19 regards to the recommendations of the COSS later in my testimony.

20 **Q.** What is the basis for the use of the Single Family residential monthly customer usage of  
21 6.50 CCF?

22 **A.** The single family residential monthly customer usage of 6.50 CCF is based on taking the  
23 5-year average of the annual single-family usage (excluding the North Country

1 customers) and dividing it by 12. The annual five-year average was used as it is  
2 consistent with the rate making methodology of using the five-year average consumption  
3 for determining the rate per CCF.

4 **IV. SUMMARY OF RATE SCHEDULES PER ORDER NO. 26,074**

5 **Q. Do you have any summary comments regarding the filing schedules?**

6 **A.** Yes. The format of the filed Puc 1604.01, Puc 1604.06 and Puc 1604.08 schedules is  
7 consistent with the format approved in Order No. 26,179 for Docket No. DW 17-128 and  
8 No. 26,383 for Docket No. DW 19-084. The orders approved the modified ratemaking  
9 structure described in the settlement agreement in those proceedings.

10 **V. DISCUSSION OF SPECIFIC SCHEDULES AND INFORMATION**

11 **Q. Please discuss the pro forma to the Total Revenues detailed in Puc 1604.06 Schedule**  
12 **1, the Operating Income Statement.**

13 **A.** The Company's Puc 1604.06 Schedule 1 begins with the TY ending 12/31/2019  
14 Revenues. The TY ending Revenues were pro formed in a series of steps as follows:

15 (1) In arriving at the PRO FORMA Revenues for the 12 months ended 12/31/2019, the TY  
16 Revenues were pro formed for the 12 months ending 12/31/2019 by reducing the TY  
17 revenues by the sum of:

18 (a) the CBFRR allowed (per Sch 1 Attachment A);

19 (b) by the NCCRS revenues (per Sch 1 Attachment A) and

20 (c) the QCPAC revenues (per Sch 1C)

21 (2) The PRO FORMA 12 Months 12/31/19 were pro formed to the PRO FORMA Revenues  
22 12 months Based on Five Year 12/31/19 by increasing the Water Sales and QCPAC

1 revenues by \$178,946 per Sch 1C to reflect the fact that 2019 volumetric water sales were  
2 lower than the FIVE YR average sales.

3 **Q. Please discuss the pro forma to the Total Operating Expenses detailed in Puc  
4 1604.06 Schedule 1, the Operating Income Statement.**

5 **A.** PEU's Schedule 1 begins with the TY ending 12/31/2019. The pro forma adjustments  
6 reflect known and measurable increases/decreases to the 12/31/2019 Test Year Operating  
7 Expenses that occurred during the test year or will occur within 12 months of the end of  
8 2019 TY resulting in the PRO FORMA 12 Months ending 12/31/2019 Operating  
9 Expenses. The next PRO FORMA Adjustments to the Operating Expenses on Sch 1 are  
10 associated with the change in pumpage expenses associated with using the Five-Year  
11 average production versus the 2019 TY production. Each of the PRO FORMA  
12 adjustments in Schedule 1 are explained on the Schedule 1 support schedules.

13 **Q. Please discuss each of the Puc 1604.06 Sch 1 Support Schedules between the Twelve  
14 Months 12/31/2019 and the Pro Forma Test Year ending 12/31/2019 in regard to  
15 Operating Expenses.**

16 **A. Sch 1 Attachment B – Production Account.** Pro forma Production expenses are  
17 expected to be \$44,657 more than the actual 2019 TY production expenses or about a  
18 2.0% increase. This increase is associated with increases to union labor rates and  
19 purchased water costs, offset by a decrease in purchased power expenses. The reduction  
20 in purchased power expenses is the result of the Company's supply side electric expense  
21 dropping from \$.07403 per KWH to \$0.06950 per KWH, which became effective  
22 11/01/2020 due to a new two-year power contract obtained via a public bid process. The  
23 Company also adjusted production expenses up by \$46,160 to reflect the increased levels

1 of purchased water and production expenses associated with using the Five-Year Average  
2 consumption levels which resulted in an increase in the TY Revenue proforma  
3 adjustment of \$178,946.

4 **Sch 1 Attachment C – Distribution Account.** Pro forma Distribution expenses were  
5 pro formed to be \$277,276 less than the 2019 TY Distribution expenses or about a 1.8%  
6 decrease. This decrease is associated with a projected decrease in labor and benefits  
7 associated with 2019 TY leak detection efforts, down to levels which are reflective of the  
8 expenses experienced over the four years prior to the 2019 TY, in the area of leak  
9 detection.

10 **Sch 1 Attachment D Customer Accounts and Collection.** Pro forma Customer  
11 Accounts and Collection expenses are expected to be \$5,733 less than the 2019 TY  
12 expenses, or about a 2.8% decrease. The decrease in expenses is the result of the  
13 Company attaining a new print vendor contract in July of 2020, through a public bid  
14 process.

15 **Sch 1 Attachment E Administrative and General Account.** Pro forma Administrative  
16 and General expenses are expected to be \$12,459 greater than the actual 2019 TY  
17 expenses, or about an 6.9% increase, reflecting increases in insurance and regulatory  
18 commission expenses.

19 **Q. Please explain the pro forma reduction of \$42,053 to the Inter-Divisional**  
20 **Management Fee expenses found on Sch 1, Attach F.**

21 **A.** The decreased expenses of \$42,053 are the result of:

- 22 1. The Company's 19.05% share of reduced annualized salary and benefits of  
23 \$134,080 at Pennichuck Water Works.

1           2. The Company's 19.05% share of the decrease in Pennichuck Water Works  
2           office lease \$3,035 or \$578.

3           3. The Company's 19.05% share of the \$22,147 increase in Pennichuck Water  
4           Works Pension and Health Retirement expenses or \$4,219.

5           4. A reduction in PWW management fee in the amount of \$20,152 associated  
6           with PWW revenues increasing as a result of the order issued in DW19-084

7   **Q.   Please compare the total operating expenses for the pro formed Year Ending ("YE")**  
8           **12/31/19 operating expenses when compared to the actual YE 2017 total operating**  
9           **expenses.**

10   **A.**   The Pro forma Five-Year TY 19 operating expenses (which is the equivalent to the  
11           projected YE 2020 operating expenses adjusted to the five-year production average) are  
12           \$1,189,203 greater than the YE 17 operating expenses, or an increase of about 20.1%.

13           The primary drivers of this increase in expenses are as follows:

14           a. An increase in production expenses of \$381,863 which was largely driven by  
15           increased production costs associated with arsenic treatment and in purchased water  
16           expenses.

17           b. An increase in the Interdivisional management fee allocation of \$256,809.

18           c. An increase of Amortization expense of \$207,760 which is attributable to the recovery  
19           of the projected 2020 year ending RSF accounts deficit of \$2,087,598 over ten years.

20           d. An increase in property tax expenses in the amount of \$345,594 which was driven by  
21           increased property, plant and equipment (PP&E), with the largest increase occurring in  
22           the Town of Litchfield where PP&E increased by over \$4.2 million associated with new

1 water main and services that were installed by St. Gobain, to provide service to private  
2 wells in Litchfield contaminated with PFOA.

3 **Q. Please discuss the pro forma to the Operating Deductions related to Amortization**  
4 **Expense.**

5 **A.** The pro forma to the Operating Deductions associated with changes to Amortization  
6 Expenses are as reflected in Sch 1 Attachment H. These Expenses were reduced by  
7 \$93,590 reflecting the impact of three pro forma as follows:

8 (1) The elimination of amortization expenses associated with deferred charges that  
9 the Company had fully amortized before the end of 2019 and 2020. This resulted  
10 in a reduction in TY amortization expenses of \$67,471.

11 (2) The elimination of the amortization of the MARA in accordance with Order  
12 25,292 (DW11-026) resulting in a reduction of TY amortization expense in the  
13 amount of \$213,318.

14 (4) The amortization expense associated with the refilling of the projected year  
15 ending 2020 RSF accounts deficit of \$1,107,598 to the DW17-128 approved level  
16 of \$980,000 over a ten-year frame resulting in an increased amortization expense  
17 of \$208,760 as detailed in Puc1604.06 Sch 1, Attachment A, Page 3.

18 **Q. Please discuss the pro forma to the Operating Deductions related to Property Tax**  
19 **Expense.**

20 **A.** The pro forma to the Operating Deductions associated with Property Tax Expense are as  
21 reflected in Sch 1 Attachment G and reflect the change in property tax expenses  
22 associated with Plant additions and retirements that occurred during 2019, resulting in a  
23 pro forma increase in the amount of \$62,965.

1 **Q. What is the overall impact of the change in Property Taxes between the YE 19 and**  
2 **YE 16?**

3 **A.** Property tax expenses increased \$345,594 between the YE 2016 and YE 2019, or 38.8%.  
4 During this same time frame Plant in Service, net of depreciation expense and the  
5 Municipal Acquisition Regulatory Asset, increased by about 35.2%, so the increase in  
6 property tax expenses is in line with the changed in net PP&E.

7 **Q. Please explain the Pro Forma adjustments made in Sch 1 to the Total Operating**  
8 **Expenses applied to the 12 Months PRO FORMA 12/31/2019 resulting from using**  
9 **the FIVE-YEAR AVE for volumetric sales.**

10 **A.** Just as revenue levels were normalized in Sch 1 to reflect the difference between the  
11 2019 volumetric sales and the Five Year average of volumetric sales, all operating  
12 expenses that were impacted by the change in volumetric sales have been pro formed to  
13 reflect the expenses associated with producing volumetric sales equal to the difference  
14 between the Five Year Average volumetric sales volumes and the TY 2019 volumetric  
15 sales volumes. This proforma was made to the pro forma 12 months 12/31/2019 Test  
16 Year expenses.

17 **Q. What operating expenses are impacted by a change in volumetric sales.**

18 **A.** The primary expenses impacted by a change in volumetric sales are the electric expenses  
19 required to produce and deliver the water to customers, as well as the cost of purchasing  
20 water for the Company's customers from other water systems.

21 **Q. What is the total impact on the operating expenses detailed above as a result of**  
22 **adjusted volumetric sales as detailed previously?**

1    **A.**    The impact on operating expenses, per Sch 1 Attachment B is an increase \$46,160 in  
2            expenses which are the result of the following pro forma adjustments:

3            (1)    An increase in purchased water expenses in the amount of \$42,663

4            (2)    An increase in electrical expenses associated with a 2.87% increase in plant  
5                electrical expenses (as found in Sch 1C) in the amount of \$3,497

6    **Q.    Please describe Sch 5 of the Puc 1604.08 schedules**

7    **A.**    Sch 5 of the 1604.08 schedules provides a complete listing of all of the Company’s  
8            outstanding debt instruments along with specific information for each instrument. The  
9            debt instrument specific information is detailed in the columns between and including the  
10           columns titled “Term” to “Coupon Rate”. The bottom line to this schedule is that the  
11           Company is projecting \$23,517,231 of outstanding debt as of 12/31/2019 (inclusive of  
12           \$2,313,432 of debt associated with the North Country Surcharge and \$800,122 in debt  
13           associated with the CoBank loan approved in DW 20-081 to fund QCP’s completed  
14           during the 2019TY) with an average Funded Effective Rate of 3.68% which is the  
15           Component Cost Rate for the Company’s Long-term Debt used in the calculation of the  
16           company’s Overall Rate of Return. All the columns to the right of the “Coupon Rate” in  
17           Sch 5 of the 1604.08 schedules reflect the calculation of the Principal and Interest  
18           payments (“P&I”) made on these bonds as follows:

19           (1)    The P&I payments made by the Company during the 2019 TY in the amount of  
20                \$1,633,922 which is inclusive of \$178,392 of P&I payments associated with the  
21                North Country Surcharge.

22           (2)    The pro forma 2019 P&I payments in the amount of \$1,716,526 reflect the total  
23                annual P&I payments that the Company will need to make on the outstanding

1 bond and loan amounts of about \$21,203,799 borrowed, exclusive of the  
2 \$2,313,432 of outstanding debt associated with the North Country Surcharge, to  
3 fund the Company's Plant in Service as of 12/31/2019 and inclusive of the  
4 pending CoBank Loan to be closed on in late November or early December 2020  
5 in the amount of \$800,122.

6 **Q. How were the annual P&I payments detailed in para. 1 and 3 above calculated?**

7 **A.** The P&I payments made during the 2019 TY reflect actual cash payments on the actual  
8 outstanding debt instruments during 2019. The pro forma 2019 P&I payments of  
9 \$1,716,526 reflect the following pro forma:

- 10 (1) A reduction of P&I payments of \$178,392 associated with the P&I payments  
11 associated with the North Country Surcharge
- 12 (2) The addition of \$47,041 in P&I payments associated with the portion of the  
13 NHDES SRF \$4.24 million loan approved by the NHPUC in Order #26,189 in  
14 response to DW 18-132, used to construct the Georgetown area water main  
15 replacements in Locke Lake in the amount of \$958,333 that were completed in  
16 2019.
- 17 (4) The addition of \$49,606 in P&I payments associated with the pending CoBank  
18 Loan in the amount of \$800,122 associated with capital improvements placed in  
19 service by PEU during 2019 as approved in order #26,418 in response to DW 20-  
20 081.
- 21 (5) The addition of \$49,783 in P&I payments to annualize the 2019 partial payment  
22 of \$26,747 associated with the CoBank Loan in the amount of \$1,153,000 entered

1 into in July of 2019 and related with capital improvements placed in service by  
2 PEU during 2018 as approved in order #26,253 in response to DW 19-069.

3 (6) The addition of \$54,366 in P&I payments to annualize the 2019 partial payment  
4 of \$97,229 associated with the NHDES SRF loan in the amount of \$3,215,000  
5 entered into in September of 2019 and related the installation of the Merrimack  
6 River Crossing watermain between Pennichuck Water Works and PEU as well as  
7 the replacement of water mains along Hillcrest road in Litchfield and along Brady  
8 Avenue in Derry, all of which were placed into service in 2019 as approved in  
9 Order No. 26,006 in response to DW 17-055.

10 **VI. DISCUSSION OF OTHER OPERATIONAL MATTERS**

11 **Q. Thank you for walking through the schedule details. Are there any operational**  
12 **issues you would like to discuss?**

13 **A.** Yes, I would like to discuss the Company's request to refill its' Rate Stabilization Funds  
14 ("RSF") to the imprest level total of \$980,000 approved in DW17-128 with the individual  
15 RSF's underlying the CBFRR, MOER and 1.0 DSRR at the levels detailed in DLW Exh.  
16 1 of my testimony.

17 **Q. What RSF levels are being sought on DLW Exh.1?**

18 **A.** The levels of each RSF being sought are as follows:

19 CBFRR RSF - \$31,000

20 MOERR RSF - \$898,000

21 1.0 DSRR RSF - \$51,000

22 These levels of RSF are less than those calculated below and are only considered to be  
23 sufficient levels of individual funding, if a MOEF is approved as part of this rate filing.

1 **Q. Please explain how the requested RSF levels were calculated?**

2 **A.** The calculations used to establish the requested RSF levels can be found in DLW-Exhibit  
3 1 of my testimony. Each RSF is calculated to provide sufficient cash funding levels  
4 needed to meet the Company's obligations over three years of reduced revenues resulting  
5 from wet weather, as well as 3 years of inflation or operating expense increases at 3.0%  
6 per annum, with regards to the Material Operating Expenses. These calculations detail a  
7 need for a total RSF amount of \$2,050,000. The Company reduced the requested levels  
8 each of the RSF funds from those calculated in DLW Exh. 1 as follows:

9 CBFRR RSF from \$60,000 to \$29,000

10 MOERR RSF from \$1,860,000 to \$889,000

11 1.0 DSRR RSF from \$130,000 to 62,000

12 Resulting in total aggregate RSF levels being sought being \$980,000. The Company's  
13 requested level for each RSF is based upon the assumption that its request to implement a  
14 MOEF as part of this rate filing is approved.

15 **Q. What are the projected 2020 year ending totals in each of the RSF accounts**  
16 **established in DW17-128?**

17 **A.** The projected level of each RSF account at the end of 2020 is calculated in Puc1604.06  
18 Sch. 1 Attachment A Page 3 and are as follows:

19 CBFRR RSF - \$207,069

20 MOERR RSF - (\$1,562,000)

21 1.0 DSRR RSF - \$247,334

1 For a total projected RSF account balance of (\$1,107,598) at the end of 2020 resulting in  
2 a need to acquire \$2,087,598 to reestablish each of the RSF funds to the levels approved  
3 in DW 17-128.

4 **Q. How does the Company propose to fund \$2,087,598 required to reestablish the year**  
5 **ending 2020 RSF levels of \$980,000?**

6 **A.** The Company, per Order No. 26,179 in DW 17-128 could set up a deferred debit in the  
7 amount of \$2,087,598 (projected year end 2020 RSF account deficit) and amortize that  
8 debit over three years resulting in an increased annual amortization expense of \$695,866,  
9 which would result, under the proposed rate making formula in a projected rate increase  
10 of 26.98%. In lieu of that, the Company is proposing to set up the deferred debit and  
11 amortize that debit over 10 years, which would result in increased annual amortization  
12 expense of \$208,760, and which would result, under the proposed rate making formula,  
13 in a projected rate increase of 21.05%.

14 **Q. Please explain the purpose of the MOEF?**

15 **A.** The MOEF is a contingency factor applied to the approved Material Operating Revenues  
16 to ensure that the Company has sufficient cash flow from water sales under approved  
17 rates to pay for material operating expenses for the years between rate case test years. In  
18 the proposed rate structure, the Material Operating expense revenues are granted based  
19 upon a pro forma adjustment to the Test Year expenses for known and measurable  
20 changes to the Test Year expenses which occur within 12-months of the end of the test  
21 year. Given the normal progression of a rate case, which is typically filed 6 to 9 months  
22 after the TY. And, assuming that the new permanent rates take effect at the date of  
23 customer notice (typically between 7 to 11 months after the TY) the revenues granted in a

1 rate case, without a MOEF, are only sufficient to cover expense increases that occurred  
 2 within the first 12 months after the test year. The year after the filing (two years after the  
 3 TY) the revenues being collected are only sufficient to cover the expenses for the year  
 4 following the TY and if there are upward pressures on the material operating expenses,  
 5 year over year, the revenues being collect two years after the TY would be insufficient to  
 6 pay for expenses of that year. This shortage of revenues is further exacerbated during the  
 7 3<sup>rd</sup> year after the test year as the revenues being collected are still based upon the pro  
 8 forma TY expenses which are now two-years old, resulting in a larger gap between  
 9 revenues collected and current year expenses. The rate making mechanisms approved in  
 10 DW 11-026 did not provide for this cash flow deficit, resulting in the Company having to  
 11 borrow money in the form of short-term debt to pay for the expenses not covered by the  
 12 collected revenues. There currently is no rate making mechanism which allows for the  
 13 Company to collect revenues needed to pay-off the short term debt incurred between rate  
 14 cases, which results from the inevitable deficit in cash created by the difference between  
 15 approved revenues based on test year expenses and actual expenses incurred in future  
 16 years between rate cases. The MOEF is a mechanism to provide the Company with the  
 17 cash flow to go three years between rate cases without having to borrow money to cover  
 18 increased operating expenses.

19 **Q. Wasn't the purpose of the RSF funds to provide operating cash necessary to cover**  
 20 **the shortfall between rate case granted revenues and increased operating expenses?**

21 **A.** No. The RSF was designed to cover cash short falls created by differences in revenues  
 22 and expenses that were either related to weather impacts or other economic factors  
 23 outside the Company's control. Experience with both Pennichuck Water Works and

1 Pennichuck East Utilities show that when the cash from the RSF funds was used, in  
 2 accordance with DW 11-026, DW 16-806, DW 19-084 and DW 17-128, that these funds  
 3 were drawn down to \$0 between rate cases and forced those Companies to borrow money  
 4 on a short-term basis to bridge the cash gap between revenues that are fixed to a test year,  
 5 compared with expenses that were growing in a compounded fashion from those  
 6 approved for from the pro forma test year. The depletion of RSF funds, as investigated in  
 7 DW 19-084, was so large that the replenishment of the funds to their imprest values over  
 8 three years in the form of a deferred debit would have resulted in very large rate  
 9 increases. The MOEF is designed to minimize the usage of RSF cash; limiting it to usage  
 10 only to cover deficits created by a reduction in revenues associated with consumption  
 11 levels that fall below those used to establish the test year revenues.

12 **Q. How was the proposed MOEF factor level of 6.0% determined?**

13 **A.** The proposed 6% MOEF, which would be recognized as part of the MOERR portion of  
 14 allowed revenues, was designed to provide three years of material operating revenues that  
 15 would equal three years of upward trending material operating expenses. In the PEU's  
 16 case, the calculation is detailed on DLW Exhibit 1 and is based upon a 3% per year  
 17 change in operating expenses. The MOEF should result in the Company collecting more  
 18 MOERR revenues in the first year outside the rate case than required, with those funds  
 19 being deposited into the MOER RSF. In the second year outside of the rate case, it is  
 20 projected that the MOERR revenues would essentially equal the MOE's for that year, and  
 21 those funds would neither flow into or out of the MOER RSF during that year. In the  
 22 third year outside of the rate case the projected MOERR revenues would not produce  
 23 sufficient cash to pay for the increased operating expenses, and the shortfall would be

1 covered by withdrawing cash from the MOER RSF, as deposited into the fund in year  
2 one outside the test year. In an ideal world, assuming that the consumption each year  
3 equaled the consumption used to develop the MOERR portion of allowed revenues, the  
4 RSF would be back to its originally established level at the end of three years which  
5 would also be the next Test Year for a rate case.

6 **Q. Is the Company doing anything to promote conservation by its customers?**

7 **A.** Yes. The Company continues to work with its customers with regards to sustainable  
8 conservation efforts through the use of semi-annual mailings promoting water saving  
9 fixtures, good water use habits and proper lawn irrigation practices. The Company is a  
10 member of the EPA WaterSense program and uses its website to direct customers to the  
11 EPA WaterSense program where there is an extension amount of information regarding  
12 water conservation and water saving fixtures.

13 **Q. Is the Company continuing to see a reduction in base residential water use as a  
14 result of conservation efforts by its customers?**

15 **A.** The average annual single-family base usage is calculated using the customer usage  
16 during the months of Nov. through March in order to eliminate outside usage. In 2016  
17 the base single family residential usage was 5.0 CCF (125 gallons per day per household)  
18 compared to 4.55 CCF (113 gpd) per single family residential user in 2019 or a reduction  
19 of about 10%. The Company attributes a portion of this drop to conservation.

20 **Q. Was a Cost of Service Study (COSS) prepared as part of this case?**

21 **A.** Yes. The last COSS was prepared as part of DW 07-032, so it was deemed necessary to  
22 have a COSS prepared as part of this case to ensure that the revenue requirement sought

1 from each customer class matched the expenses associated with providing service to each  
2 customer class.

3 **Q. Who prepared the COSS for the Company?**

4 **A.** The COSS was prepared by Raftelis Financial Consultants, Inc. under the direction of  
5 Mr. David Fox. The COSS is attached in Tab 11 of this rate filing along with testimony  
6 detailing the development and results of the COSS.

7 **Q. How did the COSS recommend that the proposed 21.05% rate increase be  
8 distributed among the Company's customer classes?**

9 **A.** The COSS shifted the overall 21.05% increase to varying increases across all the  
10 customer classes (G-M, Private Fire, Muni Fire), GM meter charges and GM volumetric  
11 rates and service sizes for Private Fire protection. The breakout of recommended  
12 increases/decreases to the current tariffed rates is found on Puc1604.08 Schedule 9 –  
13 Perm found on Tab 14 of this filing.

14 **Q. Does the Company agree with the findings of the COSS?**

15 **A.** Yes. The Company plans to implement the recommendations of the COSS in the  
16 distribution of the increased in revenue requirements among its customer classes.

17 **Q. Please summarize the impact of the Company's rate increase request by Customer  
18 Class.**

19 **A.** The Tariff pages and Report of Proposed Changes sheets which detail the impact or the  
20 rate increase by customer class are found in Tabs 15 and 7 of the filing. The Company  
21 proposes to spread the proposed rate increase across the customers classes as  
22 recommended in the COSS.

23 **Q. How does the Company plan to notify its customers of the pending rate increase?**

1 **A.** In accordance with Puc 1203.02(c) and (d), the Company will be notifying its customers  
 2 regarding the rate filing by providing a form of notice. The notice will be sent via a  
 3 direct mailing to its customers, along with a FAQ document, as further explained in Mr.  
 4 Goodhue’s testimony. The notice will be sent to customer’s prior to December 11, 2020.  
 5 The direct mailing will also include information pointing customers to the Company’s  
 6 web page and to watch for a publication of notice regarding the suspension of the  
 7 Company’s rates and the date of the prehearing conference. Additionally, when the  
 8 Commission issues the order to suspend the proposed tariffs and schedule a prehearing  
 9 conference, the Company will provide notification in area newspaper(s) in addition to the  
 10 individual customer notification.

11 **Q. Will there be any changes to the NCCRS tariffed levels?**

12 **A.** Yes, while the required revenues to cover the payment of the NCCRS related debt of  
 13 \$178,315 has not changed since Docket DW17-128 the number of customers has  
 14 increased in each of the three Community Water Systems, Locke Lake CWS, Birch Hill  
 15 CWS and the Sunrise Estates CWS have increased slightly and as a result the fixed  
 16 revenue requirement of the NCCRS is spread across more customers resulting in a slight  
 17 decrease of the NCCRS in each of the systems noted above. The following is the  
 18 information related to the calculation of the proposed revised NCCRS rates for each  
 19 CWS and appears at Tab 15 of PEU’s rate filing:

<b>Service Area</b>	<b>Current Rate</b>	<b>DW17-128 Customer Count</b>	<b>12/31/2019 Customer Count</b>	<b>Proposed Rate</b>
Barnstead: Locke Lake	\$ 12.81	882	898	\$ 12.58
North Conway: Birch Hill	\$ 12.81	214	216	\$ 12.69
Middleton: Sunrise Estates	\$ 10.74	81	84	\$ 10.36

1 **Q. Do you have any other testimony to offer?**

2 **A. No.**