TAB 8

Testimony of Donald L. Ware

Puc 1604.02(a)(3)

STATE OF NEW HAMPSHIRE

BEFORE THE

PUBLIC UTILITIES COMMISSION

Docket No. DW 22-032

Pennichuck Water Works, Inc.
Rate Proceeding

DIRECT TESTIMONY OF DONALD L. WARE

June 27, 2022

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I. INTRODUCTION

Q. What is your name and what is your position with Pennichuck Water Works, Inc.?

A. My name is Donald L. Ware. I am the Chief Operating Officer of Pennichuck Water Works, Inc. ("PWW" or "Company"). I have worked for PWW since 1995. I am a licensed professional engineer in New Hampshire, Massachusetts, and Maine.

Q. Please describe your educational background.

A. I have a bachelor's in science degree in Civil Engineering from Bucknell University in Lewisburg, Pennsylvania and I completed all the required courses, with the exception of my thesis, for a master's degree in civil engineering from the same institution. I have a master's in business administration from the Whittemore Business School at the University of New Hampshire.

Q. Please describe your professional background.

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

Q. What are your responsibilities as Chief Operating Officer of the Company?

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

II. PURPOSE OF THIS TESTIMONY

Q. What is the purpose of your testimony?

A. I will be discussing the operations of PWW and how these operations relate to and justify the requested rate increase. I have been principally responsible for preparation of the Filing Requirement Schedules and Rate of Return Information filed at Tabs 11 and 12, respectively, of PWW's rate case filing. My testimony will provide insight into each of these schedules. My testimony will interface with Larry Goodhue's in regard to addressing the revenue and operational pro forma that are part of 1604.06 Schedule 1 ("FR Sch 1") and the financing necessary to support the Company's Capital Improvements in 1604.08 Schedule 5 ("RoR Sch 5").

A. SUMMARY OF NEED FOR RATE INCREASE

Q. Why is PWW filing rate schedules to increase customer rates?

A. Based on the Filing Requirement Schedules and Rate of Return Information, PWW is in an earnings deficiency. The revenues collected in 2021 fell well below the revenue requirements the Company needs to fully fund, the monies needed to: (1) maintain its operations, (2) make its required payments to the City under the CBFRR, and (3) make its debt payments. It is projected that the Company's 2022 Revenues will fall about $1.05 million short of its 2022 expenses with the cash shortfall being covered by withdrawals from the Company's RSF accounts. As explained in the testimony of Larry Goodhue, that revenue deficiency is at 13.06% using the rate methodology approved in Docket No. DW 19-084. I will also note that in the settlement agreement approved by the Commission in Docket No. DW 19-084, PWW committed to filing general rate cases every three years. See, Order No. 26,383, at 10 and 19.

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

A. The primary drivers of the proposed 13.06% revenue deficiency ($4,732,302) are:

1. The debt service and property taxes associated with the capital expenditures made in 2019, 2020 and 2021, which accounts for $2,572,682 or 6.99% of the requested 13.06% increase.
2. Compounded annual increases to the Company's operating expenses since its last permanent rate case 2018 Test Year (TY); most specifically:
   a. Increases in Production expenses driven primarily by increased chemical costs and electric supply rates which account for $760,303 or about 2.1% of the requested 13.06% increase.
   b. Increases in staff salary, benefit and payroll tax expenses allocable to PWW since its last permanent rate case filing in DW19-084 which accounts for about $980,000 translates to about 2.7% of the requested 13.06% rate change.

Q. Please describe what PWW has done to control these drivers of the revenue deficiency.

A. The Company is focused on controlling expenses in an intelligent fashion. In order to accomplish that control the Company has established the following practices:

1. Staffing levels are evaluated as part of the annual budgeting process. The evaluation is completed to ensure that each Department uses the right mix of full time, part time and seasonal employees along with outside consultants, contractors and technology to accomplish the regulatory tasks and "best" utility operating practices that each Department needs to complete each year. The current staffing levels required to meet its customer and regulatory requirements, with the exception of the Distribution

Department, are not expected to change in the near future for the Company. The Distribution Department, which was fully staffed (33 union employees) in 2018 currently has 30 employees. This Department has experienced a number of retirements over the past several years and has been unable to fill all the retired positions due to the tight labor market, all of which remain as "open requisitions" to fill those necessary positions. The Company is hopeful that it will be able to bring the Distribution Department up to full staffing levels by the end of 2022. The Company had 126 Full Time Equivalent Employees (FTE's) as of the 12/31/2021. The Company had 124 FTE's as of 12/31/2018, the TY for DW19-084.

2. The Company seeks competitive bids for products and services when it is feasible. It seeks bids for inventory, power supply, chemicals, print house services, insurances (health, dental, property and liability) and natural gas, as well as other products and services to attract the lowest possible pricing for its customers.
3. It seeks competitive bids for its capital expenditures.
4. It completes annual assessments of market valued wages to ensure that the Company maintains a competitive wage and benefit package, which attracts and retains good employees, to the long-term benefit of running the utility as a service to our customers. These assessments are conducted using data for local, regional and national studies and metrics, both within the water industry and across industries, as it relates to market data for wages, on a position-by-position basis.
5. The Company continues to make efforts to control Health care premiums by:

a. Employees being educated on how to use their Health care services efficiently and how to be well (via Company sponsored wellness plans) resulting in lower utilization rates,

b. A third, less expensive plan option (A narrow network HMO plan) was added to the Company's existing HMO and PPO High deductible plan. These plans are mated with both a Health Savings and Health Reimbursement Accounts. The combination of all of these elements results in an overall plan architecture which comes at a lower overall cost to both the Company and the employees. In particular, as older retiring workers are being replaced with new, younger employees the Company has seen a shift in employees selecting the HMO plan toward the selection of the PPO and Narrow network plans. In 2018 about 83% of the Company's employees were enrolled in the HMO plan while in 2022 only 73% are enrolled in the HMO plan.

c. Increased level of employee contribution toward premium costs for their health plan selection from 19% to 20% since the last rate case.

6. Use of seasonal employees to accomplish seasonal work, such as: station yard maintenance, hydrant painting, watershed inspections, water quality monitoring, water main inspections and other work that does not result in a year-round workload and does not require the skills of a certified operator.

7. Use of outside contractors to supplement the Company's staff, allowing the Company to keep up with the gate and hydrant maintenance and service replacement work created by the expanded paving programs being completed by the communities the Company serves. Outside contractors can, and are, hired as needed to supplement full time staff, while limiting overtime created by the seasonality of this work.

B. DISCUSSION OF EFFECT OF QCPAC ON PROPOSED RATE INCREASE

Q. Will this rate case be addressing the Company's Capital Improvements?

A. No. The Company's Capital Improvements are addressed through its' annual Qualified Capital Project Adjustment Charge ("QCPAC") filings. Pennichuck is currently seeking a QCPAC for the Capital Improvements that were completed, used and useful during the 2021 TY via Docket No. DW 22-006.

Q. Please describe how the QCPAC sought in DW 22-006 will interface with the revenue requirement sought in DW 22-032.

A. The QCPAC being sought for the Company's 2021 capital improvements is a surcharge on the permanent rates granted in DW 19-084. The QCPAC will result in additional revenues that will cover the 1.1 times the principal and interest associated with the Bonds issued on April 26, 2022 as well as the property taxes associated with the capital improvements that were placed into service during 2021 by the Company. The QCPAC will be recoupable back to the date of the issuance of the Bonds (April 26, 2022). The QCPAC revenues associated with the 2021 improvements, along with the QCPAC revenues associated with the 2019 and 2020 capital improvements (granted in DW 20-020 and DW21-23) are included in the permanent rate increase being sought in this docket and are part of the 13.06% revenue deficiency. The QCPAC associated with the Company's 2022 Capital improvements, to be filed in February of 2023, will be treated as a surcharge on the revenue requirement granted in this docket.

III. <u>SUMMARY OF RATE SCHEDULES PER ORDER NO. 26,383</u>

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

A. Yes. The format of the filed schedules is consistent with the format approved in Order No. 26,383 for Docket No. DW 19-084. The order approved the modified ratemaking structure described in the settlement agreement in that proceeding. The schedules filed reflect the building of a revenue requirement consisting of the following expenses components:

1. The City Bond Fixed Payment Expense, as approved in Docket No. DW 11-026, which is the basis of the City Bond Fixed Revenue Requirement (CBFRR).
2. The Company's Operating Expenses which consist of:
   a. The Company's Material Operating Expenses (MOE's). The MOE's consist of the Company's operating expenses, not including the Company's non-material operating expenses. The MOE's include the Company's amortization expenses.
   b. The Company's Non-Material Operating Expenses (NOE's), which are the basis of the Company's Non-Material Operating Revenue Requirement (NOERR).
3. A Material Operating Expense Factor (MOEF) which is applied against the Company's MOE's, exclusive of its amortization expenses. The MOEF is applied to the Company's MOE's, less amortization expenses and then amortization expenses are added in which are the basis of the Company's Material Operating Expense Revenue Requirement (MOERR).
3. The Company's Debt Service expenses are the Company's annual principal and interest payments on its outstanding debt. These expenses are the basis of 1.0 Debt Service Revenue Requirement (DSRR)
4. A Debt Service coverage factor of 0.1 which provides for the coverage of the Company's Debt Service payments in accordance with its bond coverage

requirements. This expense is the basis of the 0.1 Debt Service Revenue Requirement (0.1 DSRR).

The sum of the expenses noted above provide the basis of the Company's Total Revenue Requirement. All of the noted expenses, where appropriate, were adjusted:

1. For known and measurable changes to these expenses that are anticipated to occur within 12 months of the end of 2021 Test year.
2. The difference in expenses associated with variances in volumetric expenses (Chemical, electric and purchased water expenses) between the 2021 test year pumpage and the five-year average for volumetric sales and volumetric related expenses.

IV. DISCUSSION OF SPECIFIC RATE CASE SCHEDULES AND INFORMATION

Q. Please discuss the revenue components detailed on the Filing Requirements ("FR") Schedule A of the 1604.06 schedules as presented in the filing.

A. FR Schedule A is used to determine the revenue requirement of the Company. As described above the Company's Revenue requirement consists of four components, the CBFRR, the OERR, the DSRR and the 0.1 DSRR. FR Schedule A details each of these revenue requirements for the Test Year ending 12/31/2021. FR Schedule A details a set of pro forma adjustments to the 12/31/2021 year ending revenue requirements to account for known and measurable changes to those revenue requirements, which will occur within 12 months of the end of the 2021 TY. A second set of pro forma adjustments to:

1. the TY revenues are made to reflect the revenues that would be derived by an average of the last five years of volumetric sales

2. the TY operating expenses to reflect changes to variable expenses associated with producing/purchasing the volumes of water produced/purchase based on an average of the last five years of production/purchased water volumes.

Q. Please discuss the pro forma detailed on FR Schedule A to the TY actual revenue requirement and as detailed in the column titled "PRO FORMA Adjustments to 2021 Test Year".

A. The pro forma adjustments to the TY revenue requirements on FR Schedule A are as follows:

1. The TY operating expenses (OE's) were increased by $108,268 from $23,501,111 to $23,609,378 reflecting pro forma adjustments to TY OEs as detailed on FR Sch 1 of the 1604.06 schedules.
2. The TY NOE's were increased by $53,918 from $492,716 to $546,634 reflecting pro forma adjustments to TY NOE's as detailed on FR Sch 1 of the 1604.06 schedules.
3. The TY Amortization expenses were increased by $1,134 from $150,002 to $151,136 reflecting pro forma adjustments to TY amortization expenses as detailed on FR Sch 1 of the 1604.06 schedules.
4. The TY MOEF was decreased from 1.095 to 1.090 reflecting the Company's experience with: (1) the MOEF since DW 19-084, (2) the timing and implementation of temporary rates in DW 19-084 versus the timing and implementation of temporary rates sought in this Docket and (3) the anticipated changes to operating expenses over the three years following the test year.
5. The Debt Service Expense was increased by $655,997 from $6,777,778 (which reflects the actual debt service expenses incurred during 2021 TY) to $7,433,774

which reflects the total principal and interest expenses that the Company will be paying on all debt issued and in repayment mode, before the end of 2022, for assets that were used and useful prior to the end of the 2021 TY.

Q. Please discuss the Pro Forma detailed on FR Schedule A to the 12/31/2021 Pro Forma TY revenue requirement based on the Five-Year Average.

A. The Pro Forma adjustments made to the Pro Forma 12 months ending 12/31/2021 revenue requirements are as follows:

1. OEs were decreased by $30,382 to reflect the combination of:
   a. the additional variable expenses associated with producing the Five-Year Average of 5,773,457 hundred cubic feet (CCF) versus the 5,686,408 CCF water produced during the TY (Produced volume is the total of WTP and CWS pumpage).
   b. Decreased expenses associated with 2021's purchased water amount of 261,789 CFF compared against the five-year average of purchased water of 235,568 CCF.

   The calculation of the Five-Year Average is detailed on FR Schedule 1C of the 1604.06 schedules.
2. Reflecting a pro forma 3-year credit to the Total Revenue requirement in the amount of $39,166 per year. The pro forma 3-year credit is based the projected 2022 Year ending combined RSF balance of $4,127,499 resulting an overfilling of the combines RSF's of $207,499 per FR Sch 1 Attach A Pg 3 of the 1604.06 schedules.
3. The portion of the TY revenues not subject to a rate increase associated with the fixed fees for special contracts that are under consideration at the NHPUC. The pro forma accounts for the requested changes to these special fixed fee revenues during the TY (the fixed contract revenues associated with the Anheuser-Busch, LLC (A-B), PEU,

and Town of Hudson (Hudson) special contracts). The $479,244 pro forma reflects the requested increase in annual fixed fees for these contracts from $606,442 to $1,085,686.

4. The Total current revenues were increased by $854,172 to reflect the increased volumetric sales for the Five-Year Average in addition to changes to the fixed and volumetric rates associated with the A-B, PEU and Hudson special contracts per FR Schedule 1C.

Q. Please discuss the pro forma to the Total Revenues detailed in FR Schedule 1, the Operating Income Statement.

A. The Company's FR Schedule 1 begins with the test year ending 12/31/2021 Revenues. These revenues are divided into Water Sales, less QCPAC revenues, QCPAC Revenues, Water Sales for Resale, and Other Operating Revenues. The TY ending Water Sales, less QCPAC Revenues were pro formed in a series of steps to the Revenues Based on Five Year Average Water Sales as follows:

1. TY Water Sales were increased by 854,172 reflecting:
   a. An adjustment to revenues reflecting to 5-Year Ave volumetric sales per FR Schedule 1C
   b. An adjustment to revenues for the projected change in sales to PEU and Hudson due to closure of Hudson Dame/Ducharme wells per FR Schedule 1C.
   c. An adjustment for changes in rates and fixed fees associated with A-B, PEU and Hudson special contracts per FR Schedule 1C.

2. The TY QCPAC Revenues were increased by $64,104 reflecting the collection of a full year of QCPAC Revenues based on the QCPAC's granted in DW 20-020 and DW

21-023 as well as 8.13 months of that being sought in DW 22-006 per FR Sch 1 Attach A Pg 1.

The TY Other Operating Revenues were increased by $841 to reflect projected revenue increases associated with the margins on increased wages associated with jobbing activities per FR Schedule 1, Attach A, Pg 1.

3. The TY Other Operating Revenues we increased by $139,906 reflecting:
    a. Increase associated with 2022 wage increases associated with 2021 jobbing revenues per FR Schedule 1, Attach A, Pg 1.
    b. Change to Miscellaneous Fee revenues associated with the increases in these fees being sought as part of this rate filing per FR Schedule 1, Attach A, Pg 1. Please also see Attachment C (Misc. Fees tariff revision) of the prefiled testimony the Company provided in DW 22-002 in support of the change in these fees. Please note, that in accordance with DOE and OCA staff during the prehearing conference associated with DW 22-002, that the Company withdrew that petition in favor of seeking changes to its Miscellaneous Fee tariff as part of this rate filing. Additionally, as part of the discussions at that meeting the Company agreed it would not seek a change to the fees associated with turn on and offs associated with disconnection activities based on the fact that an increase in these fees, while merited, would create additional cost to customers who were already struggling to pay their past and current water bills. A calculation of the increase in miscellaneous revenues associated with the requested change in fees can be found in FR Misc Fee Impact.
    c. Solar Lease Revenues per FR Schedule 1, Attachment A, Page 1.

Q. Please discuss the pro forma to the Operating Expenses detailed in FR Schedule 1, the Operating Income Statement.

A. PWW's FR Schedule 1 begins with the TY ending 12/31/2021. The Pro forma adjustments reflect known and measurable increases/decreases to the 12/31 TY Operating Expenses that occurred during the TY or will occur within 12 months of the end of 2021 TY resulting in the PRO FORMA 12 Months ending 12/31/2021 Operating Expenses. The next PRO FORMA set of adjustments to the Operating Expenses on FR Schedule 1 are associated with the change in pumpage and purchased water expenses associated with using the Five-Year average production and purchased water volumes versus the 2021 TY production and purchased water volumes. Each of the PRO FORMA adjustments in FR Schedule 1 are explained on the Schedule 1 support schedules.

Q. Please discuss each of the FR Schedule 1 Support Schedules between the Twelve Months 12/31/2021 and the Pro Forma Test Year ending 12/31/2021 in regard to Operating Expenses.

A. **FR Sch. 1 Attachment B – Production Account**. Pro forma Production expenses are expected to be $790,684 greater than the actual 2021 TY production expenses or about a 14.0% increase. This increase is associated with increases in wages, purchased water expenses, electrical expenses and chemical expenses. Of these increased expenses the largest increases are associated with:

(1) Increased chemical costs. The price for water treatment chemicals in 2022 is on average 57.3% higher than the pricing for those chemicals in 2021 resulting in a pro forma to 2021 chemical expenses of $455,887.

(2) Increase electrical supply charges from $0.0695 to $0.09100 or $0.09020 (GV and G accounts) per Kilowatt Hour resulting in a pro forma increase of $235,159.

FR Sch. 1 Attachment C – Distribution Account. Pro forma Distribution expenses are expected to be $63,580 greater than the 2021 TY Distribution expenses or about a 1.9% increase. This increase is associated with increases in nonunion and union labor wage rates.

FR Sch. 1 Attachment D – Engineering Account. Pro forma Engineering expenses are expected to be $17,374 less than the 2021 TY Engineering expenses or about a 1.8% decrease. The decrease in engineering expense is the result of a recent retirement offset by increased wage rates.

FR Sch. 1 Attachment E – Information Systems Account. Pro forma Information Systems expenses are expected to be $142,042 greater than the 2021 TY Information Systems expenses or about a 11.9% increase. This increase is associated with increases in wage rates and the addition of a new employee. The new employee was added to support and write field applications associated with the Company's GIS and Asset management programs as well as help writing reports necessary to the Company to meet its regulatory compliance filings.

FR Sch. 1 Attachment F - Customer Accounts and Collection. Pro forma Customer Accounts and Collection expenses are expected to be about $25,174 greater than the 2021 TY expenses or about a 1.49% increase. The increase in expenses is the result of increased postage costs as well as contractual increases associated with the Company print vendor.

FR Sch 1 Attachment G, Pg 1 through 3 - Administrative and General Material Operating Account. Pro forma Administrative and General expenses are expected to be $404,521 greater than the actual 2021 TY expenses or about an 6.2% increase. The primary causes of this increase were:

(a) Increase in payroll of $150,255 associated with changes in staffing levels and wage increases. The average non-union wage increase awarded in 2022 was slightly less than 3%.
(b) A projected increase in NHPUC regulatory assessment of $50,140.
(c) An actual decrease in the Company's Pension expense of $447,710.
(d) A projected increase in the Company's Insurance expense of $151,379.
(e) A projected increase in Health Insurance expense of $257,368, which is inclusive of a 9.9% increase in health care premiums between 2021 and 2022, offset by an increase in employee contributions to the premiums.
(f) A projected increase in Dental Insurance expense of $17,208.

Per the notes found on FR Sch 1 Attachment G, Pg 1 the change in expenses noted in para. (b), (d), (e) and (f) are estimated and the Company proposes to adjust the estimated expenses to actual expenses incurred during 2022 in the final calculation of the pro forma expense adjustments associated with the final determination of the Company's Revenue requirement.

FR Sch. 1 Attachment H – Intercompany Management Fee. The increase in intercompany management fee allocated out to Pennichuck Corporations subsidiaries of Pennichuck Water Works General and Administrative expenses of $139,504. This increase in the Company's allocation to Pennichuck Corporations other subsidiaries is the result of allocating 27.68% of the Company's projects increase in general and administrative expenses to the other subsidiaries of Pennichuck Corporation (Pennichuck East Utility, Inc., Pittsfield Aqueduct Company and Pennichuck Water Service Company) in accordance with the 2006 Cost Allocation Agreement between Pennichuck Corporation's subsidiaries previously approved by the Commission.

FR Sch. 1 Attachment I – This schedule projects a pro forma increase in Property Taxes of $10,673 based on plant additions, plant deletions and adjustments based on changes in community tax rates and valuations between the June 2021 and December 2021 Tax bills. As in past rate cases the Company expects that the property tax expense allowed in this case will be trued up to the actual property taxes incurred by the Company in 2022.

FR Sch. 1 Attachment J – This schedule projects a pro forma increase of $1,134 to Amortization Expenses based on the addition of new deferred assets during the TY and within 12 months of the TY less any amortization expense on any deferred asset that was fully amortized during the TY or will be within 12 months of the TY.

FR Sch. 1 Attachment K – This schedule projects a pro forma decrease in State and Federal Income taxes from the book basis included in the Company's income statement to the actual cash taxes paid by the Company in 2021. Book basis Income Taxes (State and Federal) for the Company's year ending 12/31/2021 were $1,286,410. The Company does not pay or file State and Federal income taxes directly as its' income is consolidated with all of Pennichuck Corporation's subsidiary's' and the Corporation filed a Consolidated Tax Return, and pays any Federal and State Income taxes due, based upon those filings. The income taxes accrued as a current or deferred provision are shared by each of the Subsidiaries in accordance with their proportionate share of taxable income, and the components of the current and deferred tax positions. Likewise, the portion of income taxes paid, in any given year, are shared by each of the Subsidiaries in accordance with the Corporate management fee allocation. In 2021 the Corporation paid a total of $93,482 in Taxes which was associated with the NH Business Enterprise Tax. The Company's share of these Consolidated NH Business Enterprise Taxes paid was $59,828.

FR Sch. 1 Attachment L – This schedule develops a pro forma for the 2021 TY nonmaterial operating expenses. The basis and need for this proforma is that activities, such as employee activities, employee training, educational seminars, meetings and conventions, is that these activities during the TY were well below normal annual expenses due to restrictions placed on these activities during 2020 and 2021 by COVID 19. The pro forma sets the level of these expenses to the average expenses in these areas of nonmaterial operating expenses at the average expense of the 3 years (2017 to 2019) that proceeded the onset of the pandemic.

FR Sch. 1 Attachment 1C – This schedule is used to develop the proforma from 2021 sales and production volumes to those that would be generated if the 5-year average of sales and production volumes occurred. This schedule also creates pro forma in relation to change in sales amounts and pricing for proposed A-B and Hudson special contracts under consideration by the Commission in DW 21-115 and DW 22-029 as well as the special contract with Pennichuck East Utility that is pending filing with the Commission as of this testimony. The schedule also adjusts 2021 sales to MVD based on the late October to December 2021 sales of about 1.0 Million Gallons per Day being a non-reoccurring event due to the PFAS contamination of their wells. The MVD adjustment reduces the Company's sales to MVD from 50,640 CCF (amount sold to MVD during the TY) to 13,879 CCF which was the average annual sales to MVD between 2017 and 2020.

Q. Can you please compare the total operating expenses for the pro forma Test Year Ending 12/31/21 against the YE 2019 total operating expenses.

A. The pro forma TY 2021 operating expenses, exclusive of income taxes (which is the equivalent to the projected YE 2022 operating expenses) were $3,642,608 greater than the year ending 12/31/2019 operating expenses total, of which $1,051,315 is associated with variable costs of production (Electricity, chemicals, sludge disposal) and purchased water resulting in a difference in fixed costs of $2,591,294 between the noted YE's or an increase of about 15.8% over three years (YE 2019 through pro forma 2021which equates to projected 2022 operating expenses) resulting in an average annual increase in fixed total operating expenses of about 5.0%.

Q. Please explain the Pro Forma adjustments based on Five Year Average made in FR Schedule 1 which were applied to the PRO FORMA 12 Months 12/31/2021.

A. Just as revenue levels were normalized in FR Schedule 1 to reflect the Five-Year average of volumetric sales, all operating expenses that are impacted by the change in volumetric sales have been normalized to reflect the expenses associated with producing or purchasing the Five-Year Average volumetric sales volumes versus the TY 2021volumetric sales volumes.

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

A. The primary production expenses impacted by a change in volumetric sales are the electric, chemical and sludge disposal expenses required to produce the water for its customers as well as the electric expenses required to deliver the water to its customers. Purchased water expenses are also directly impacted by a change in volumetric sales.

Q. What is the total impact on the operating expenses detailed above as a result of using the Five-Year Average volumetric sales instead of the 2021 TY volumetric sales?

A. The impact on operating expenses, per FR Sch 1 Attachment B, was decrease expenses of $30,908 which are the result of the following pro forma adjustments:

(1) A decrease in purchased water expenses associated with a 10.78% decrease in purchased water expense of the Five-Year Average purchased water versus of the 2021 TY purchased water resulting in a decreased expense in the amount of $62,050.

(2) An increase in electric expenses associated with a 1.58% increase in plant production and a 0.66% decrease in electric pumping expenses (comparing the Five-Year average production versus the 2021 TY production) resulting in a projected increase in electrical expenses in the amount of $10,831.

(3) An increase in WTP and CWS chemical expenses associated with a 1.58% increase in plant production and a 0.66% decrease in CWS production (comparing the Five-Year average production versus the 2021 TY production) resulting in a projected increase in Chemical expenses in the amount of $20,837.

Q. Please describe Sch 5 of the 1604.08 Rate of Return (RoR") Schedules

A. RoR Sch 5 of the 1604.08 schedules provides a complete listing of all of the Company's outstanding debt instruments along with specific information for each bond or debt instrument. The bond and debt instrument specific information is detailed in the columns between and including the columns titled "Term" to "Coupon Rate". The bottom line to this schedule is that the Company has $121,310,093 of outstanding debt inclusive of the issuance of the BNY Mellon 2022 Series A and B in April of 2022. The average Funded Effective Rate for all of the Company's outstanding debt is 3.00%, which is the Component Cost Rate for the Company's Long-term Debt used in the calculation of the company's Overall Rate of Return. The columns to the right of the "Coupon Rate" in RoR Schedule 5 of the 1604.08 schedules reflect the calculation of the Principal and Interest payments ("P&I") made on these bonds and debt instruments, as follows:

(1) The P&I payments made by the Company during the 2021 TY in the amount of $6,777,778.

(2) The pro forma 2021 P&I payments in the amount of $7,433,774 reflecting the total annual P&I payments that the Company will need to make on the outstanding bond and loan amounts of $121,310,083, which was borrowed to fund the Company's Plant in Service as of 12/31/2021.

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

A. The P&I payments made during the 2021 TY reflect actual cash payments on the outstanding bonds and other debt instruments in service during 2021. The pro forma 2021 P&I payments of $655,997 reflect the following pro forma:

1. In 2021 the Company made no principal payments and a partial year interest payment of $106,450 on the BNY Mellon-2021 A Series Bonds. No principal payments were made on these series bonds during 2021, as the first semi-annual payment on these annually issued bonds is an interest only payment in October, with the first P&I payment occurring in the following April. In 2022 the full debt

service on these series bonds will consist of $80,000 in principal payments and $211,900 in interest payments resulting in total debt service payments of $291,900 on these Series bonds in 2022. The resultant pro forma are $80,000 in principal repayment and $105,450 in interest payment.

2. In 2021 the Company made no principal payments and a partial year interest payment of $656 on the BNY Mellon-2021 B Series Bonds. No principal payments were made on these series bonds during 2021, as the first semi-annual payment on these annually issued bonds is an interest only payment in October, with the first P&I payment occurring in the following April. In 2022 the full debt service on these series bonds will consist of $40,000 in principal payments and $1,103 in interest payments resulting in total debt service payments of $41,103 on these series bonds. The resultant pro forma are $40,000 in principal repayment and $447 in interest payment.

3. In 2021 no principal or interest payments were made on the BNY Mellon 2022 A. All the proceeds from these Bonds were invested in plant placed in service between 1/1/2021 and 12/31/2021. The 2021 P&I payment pro forma of $397,553 reflects the annual principal and interest payment that must be paid each year on this bond series, beginning in 2022 through the maturity on this serialized bond series in 2052.

4. In 2021 no principal or interest payments were made on the BNY Mellon 2022 B. All the proceeds from these bonds were invested in plant placed in service between 1/1/2021 and 12/31/2021. The 2021 P&I payment pro forma of $32,566 reflects the annual principal and interest payment that must be paid each year on

this bond series, beginning in 2022 through the maturity on this serialized bond series in 2025.

V. COST OF SERVICE STUDY

Q. Did the Company have a Cost of Service Study (COSS) completed as part of this rate filing?

A. No. A COSS was completed in DW 19-084. The final order in DW 19-084 resulted in the recommended cost recovery from each Customer Class that resulted from that COSS be phased in over a period of 6 years and that no COSS be completed as part of the next (this current) rate filing. The phase in required a 3% increase to the FP-Hydrants (Municipal fire inch-ft and hydrant charges) each year in November in conjunction with an offsetting decrease (about 0.49%) to All other G-M charges (primarily volumetric charges) as well as monthly fixed charges based on meter size with the exception of the 5/8" fixed meter charge which is not adjusted. Additionally, private fire protection charges are not adjusted each November but remain at the levels set in DW 19-084 and those being sought in this rate filing. A COSS will be completed as part of the next projected rate filing in 2025 based on a 2024 TY.

Please discuss the 1604.08 Schedule 9 (RoR Sch 9).

A. The RoR Schedule 9 Bingo Perm details the rate increase, both in percentage and total dollars for each customer class. The rate increases, by customer class detailed in this schedule are based on the following facts:

(1) The total percentage revenue increase being sought is 13.06%. Pennichuck has special contracts with A-B, PEU, Hudson, and the Town of Milford with contract charges that are not subject to rate increases. To create the desired revenues an

increase of 13.49% must be applied against all customer class rates that are subject to increases.

(2) As discussed, a second adjustment was made to the revenues being sought from each customer class as follows:

a. G-M Fixed Charges – 5/8”, no adjustment. Increase set at 13.46%.

b. G-M Fixed Charges – All other meter sizes adjusted down from 13.46% to 12.97% as an offset to the increased revenues generated from the 3% increase to FP – Hydrants customer class.

c. G-M Volumetric Charges – adjusted down from 13.46% to 12.97% as an offset to the increased revenues generated from a 3% increase to FP – Hydrants customer class.

d. Private FP - no adjustment. Increase set at 13.46%.

e. FP – Hydrants (Municipal Fire inch-ft and Hydrant charges) - Adjusted to reflect the 3% annual adjustment to FP-Hydrants, as stipulated in the DW19-084 rate order, applied to the overall requested rate increase of 13.46% which results in a 16.46% increase to this customer class.

f. All Special Contract Volumetric and Meter Charges – adjusted down from 13.46% to 12.97% as an offset to the increased revenues generated from a 3% increase to FP – Hydrants customer class.

Q. Is the proposed 3% increase to FP – Hydrants and corresponding decreases to other customer class being sought as part of this rate case in lieu of the November 2022 shift in rates stipulated in DW 19-084?

A. Yes. The Company proposes that the next annual adjustment to rates, in accordance with the order issued in DW 19-084, (beyond that sought in the permanent rates for this case) would occur in November 2023 and would be applied against the permanent rates granted in this rate filing.

VI. RATE CHANGES TO RATE CLASSES

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

A. The Tariff pages and Report of Proposed Changes sheets which detail the impact or the rate increase by customer class are found on RoR Schedule 9 in Sections 6 and 12 of the filing:

G-M Fixed Charge Customers – 5/8" meters – 13.46%

G-M Fixed Charges – All other meter sizes Customers – 12.97%

G-M Volumetric Charge Customers – 12.97%

Private Fire Customers – 13.46%

Municipal Fire Customers – 16.46%

Special Contract Customers – Contract Charges – 0.0%

Special Contract Customers – Volumetric and Meter Charges – 12.97%

VII. DISCUSSION OF RATE STABILIZATION MECHANISMS

Q. Please provide an overview and status update of PWW's Rate Stabilization Funds (RSF).

A. Please See FR Schedule 1, Attach A, Page 3 for the status of each RSF fund at the end of the 2021 TY as well as a projection of the status of the RSF funds at the end of 2022. Per the referenced Schedule the MOERR and 1.0 DSRR RSF's were over funded and the

CBFRR RSF was underfunded as of the end of 2021. The combined balance of the three RSF Balances as of 12/31/2021, when compared against the established target total of the three RSF funds was an overfunding. The 12/31/2021 fund balances compared against the established target values of each of the RSF were as follows:

	12/31/2021 Balance	**RSF Target Balance**
CBFRR RSF	$587,411	$680,000
MOERR RSF	$3,195,549	$2,850,000
1.0 DSRR RSF	$1,380,292	$390,000
Combined RSF	$5,163,252	$3,920,000

The year ending 12/31/2021 over funding of these RSF's was created by the implementation of the MOEF in DW 19-084. The MOEF generated revenues in excess of expenses for the pro forma test year. During the pendency of the current case (expected to be completed in Spring of 2023) the Company projects that the over funding of the RSF balances will be significantly reduced. The projected 12/31/2022 RSF Balances in comparison to the RSF Target Balanced are as follows:

	Projected 12/31/2022 Balance	**RSF Target Balance**
CBFRR RSF	$661,951	$680,000
MOERR RSF	$1,795,761	$2,850,000
1.0 DSRR RSF	$1,669,788	$390,000
Combined RSF	$4,127,499	$3,920,000

Q. What is the basis of the projected 12/31/2022 RSF Balances?

A. The 2022 expenses used in the projection are found on FR Schedule 1, Attach A, Pg 3 and are based on Projected Total 2022 Operating Expenses less Nonmaterial operating expenses based on Five Year Average Proforma Expenses less Non-Material Operating expense as detailed in FR Sch 1.

The projected 2022 revenues are based on the 2022 Water Sales, less QCPAC Revenues per pro forma found on FR Sch 1, Five Year Average added to Projected 2022 QCPAC Revenues from DW20-021, DW20-023 and DW22-006 per pro forma on 1604.06 Sch 1, Attach A, Pg 1.

Q. What does the Company propose to do with the projected YE 2022 $200,656 excess RSF Funds?

A. The Company has included a deferred credit to of $69,166 to its requested revenue requirement (See FR Sch A, Cell H25) which returns the overfunded RSF balance over three years in accordance with the rate setting mechanism established in DW 16-806.

Q. Is the Company proposing the deferred credit to its revenue requirement regardless of what happens to its expenses and revenues in 2022?

A. No. As with other aspects of this rate filing (property taxes, certain projected administrative expenses) the Company expects to work with the Department of Energy Staff to determine the actual 2022 Revenues and Expenses and their allocation to the RSF accounts upon the close of 2022 prior to the final rate case hearing to establish the appropriate deferred credit or debit to the Company's revenue requirement.

VIII. <u>MATERIAL OPERATING EXPENSE FACTOR (MOEF)</u>

Q. The Company was granted a 9.5% MOEF in DW19-084. Does the Company believe that the MOEF worked the way it expected?

A. Yes. Without the 9.5% MOEF the Company would have collected about $1.3

million less cash in 2020 (based on 8 months of permanent rates) and about $2.0 million less in cash in 2021 and about an additional $2.0 million less in cash in 2022. Without the cash generated by the MOEF The Company's combined 12/31/2021 RSF level would have been about $1.8 million resulting in the combined RSF funds being about $2.1 million below their YE combined target level. Without the MOEF cash being collected in 2022 the combined 2022 YE RSF levels would have been approximately a negative 0.2 million, or over $4.0 million below the target RSF combined balance of $3.92 million which would have required a 3-year deferred debit of about $1.4 million per year on top of the requested rates to restore the RSF funds to their combined target levels.

Q. Were there other benefits gained from the MOEF?

A. Yes. Because the MOEF resulting in the combined RSF balances at the end of 2021 being over funded the Company did not have to use 0.1 DSRR Cash to refill the RSF's. As a result, the Company was able to pay for over $700,000 of shorter-lived capital assets, such as trucks and computer equipment, with cash from the 0.1 DSRR account rather than sell bonds to pay for these assets over a period of 30 years.

Q. What level MOEF is the Company seeking as part of this rate case filing?

A. The Company is seeking a 9.0% MOEF as part of this filing. Based on the calculations detailed in DLW Exhibit 1 (attached to this testimony) the 9% MOEF is designed to offset increases in operating expenses of 4.5% per year over the three years between rate cases and will result in a projected/estimated combined RSF balance of $3,892,925 at the end of July 2025, which is the projected time frame when the next set of permanent rates would take effect based on a 2024 TY and on a 1/1/2023 RSF starting balance of $3,920,000. The 1/1/2023 RSF balance is equal to the target combined RSF balance based on the fact that the current rate case will reset the RSF Balance to its target level over three years via either a deferred credit or debit to revenue requirement being sought in this rate filing.

Q. What is the basis for using 4.5% as the projected increase in Material Operating Expenses?

A. Per DLW Exhibit 1 the increase in Material operating expenses over the past 3 years between rate filings (12/31/2018 to 12/31/2021) was 16.11% or 5.11% per year. Based on a review of the primary expenses associated with this increase (power, chemicals, sludge disposal, property taxes, staffing levels, wages and benefits) the Company decided to model the rate increase based on a 4.5% increase in these operating expenses, as opposed to 5.11% for the next three years based on the following factors:

1. A portion of the increased MOE's, property taxes, are recovered annually via the QCPAC.
2. Power prices are locked in until the end of 2023 and not subject to increase.
3. The Company's Union contract has locked in union wages at 3.0 and 3.3% for 2023 and 2024 in conjunction with increased levels of employee contributions to Health care from 19% to 20%. Nonunion wages typically follow at similar percentages.
4. Staffing levels are expected to be stable. With a number of key employees retiring in the next three years staff compensation may be tempered by the effect of newer employees with lower wages will be replacing more expensive older employees.

5. If MOE's were to increase at the past three years trend of 5.11% instead of 4.5% the projected level of the Combined RSF's would drop from $3,892,925 to $3,192,490 so the Company would not be completed drained of cash as it was at the beginning of its last two rate filings.

DLW Exhibit 1 details the calculation of the RSF funding levels based on the revenue requirements sought in this rate case.

IX. TRENDS IN CUSTOMER USAGE

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

A. Yes. The 2021/2022 base wintertime consumption has dropped 3.4% since the 2019/2020 wintertime consumption.

X. CUSTOMER BILL IMPACTS

Q. How do the proposed rate increases impact the average single-family residential water bill?

A. Please see FR Customer Impact for the impact of the requested permanent increase on an average single-family residential bill on a monthly basis. The Company is seeking a total increase of 13.06% increase in its' revenue requirement from its pro forma TY 2021 Five Year Average Revenues. Assuming the overall revenue requirement sought by the Company is distributed as detailed in my testimony the effective rate increase being sought for a single family residential customer would be 13.18%, which would result in a monthly bill of $62.77 or an increase of $7.31 per month to the average single family current monthly water bill of $58.49 per month based on the permanent rates approved in DW 19-084, plus the 5.46%, which is the cumulative QCPAC increase granted in DW

20-20 and DW 21-023, or a monthly increase of the current bill of $4.28 per month. The Company is currently seeking a 1.75% QCPAC increase in DW 22-006 which would increase the QCPAC surcharge on the permanent rates granted in DW 19-084 by 1.75%, resulting in a cumulative QCPAC surcharge of 7.21%. Please note that the QCPAC charges are eliminated when the permanent rates being sought in this filing are granted. For the average single-family residential customer, the net increase in rates being sought in this filing is 5.57% (Difference between the 13.18% blend of the fixed meter charge at 13.46% and the volumetric charge at 12.97% and usage of 7.76 CCF per month and the 7.21% QCPAC).

XI. CUSTOMER NOTIFICATION

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

A. In accordance with PUC 1203.02(c) and (d), the Company will be notifying its customers regarding the rate filing by providing a form of notice. The notice will be sent in the form of an insert with each customers July 2022 bills. All customers will have received the notice on or before July 24th. A copy of the notification that will be sent to customers is attached to this rate filing at Tab 6. This notice will be accompanied with a “Frequently Asked Questions” (FAQ) letter, as has been done in the past, as an effort to properly and fully customers of the rate case process, and the factors and timing involved therein. Additionally, when the Commission issues the order to suspend tariffs and schedules a prehearing conference, the Company will provide notification of that Commission order to its customers via a posting on its on its website.

Q. Do you have any other testimony to offer?

A. No.