TAB 9

Testimony of Donald L. Ware

STATE OF NEW HAMPSHIRE

BEFORE THE

PUBLIC UTILITIES COMMISSION

Docket No. DW 16-806

Pennichuck Water Works, Inc.
Request for Change in Rates

DIRECT TESTIMONY OF DONALD L. WARE

September 23, 2016

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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 the Pennichuck Water Works, Inc. ("PWW"). 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 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 Masters degree in Civil Engineering from the same institution. I have a Masters 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 13 and 14 of PWW's rate case filing. My testimony will specific details of these schedules. My testimony will interface with Larry Goodhue's and John Boisvert's testimony in regard to addressing the revenue and operational pro formas that are part of 1604.06 Schedule 1 ("Sch 1"), requested changes in rate design that are part of 1604.06 Schedule A ("Sch A") and the capital investments that impact 1604.06 Schedule 3 ("Sch 3") and the financing necessary to support the Company's Capital Improvements in 1604.08 Schedule 5 ("Sch 5").

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

A. Yes. The format of the schedules is generally consistent with the format required by Order No. 25,292 in Docket No. DW 11-026, approving, among other things, the modified ratemaking structure described in the settlement agreement in that proceeding. To facilitate review of PWW's proposed rate relief, including the proposals for modifications to the ratemaking structure, I have incorporated within these schedules analysis of several scenarios. One scenario applies the ratemaking structure as it was approved in DW 11-026. This scenario is referred to in the schedules as "Current Rate Model" (see, for example, Exhibit DLW-1) or as "Conventional" (see, for example, Schedule A Perm – Conventional). A second scenario applies the modifications requested by PWW in its Petition for Specific Modifications to Ratemaking Structure. This scenario is referred to in the schedules as "Modified Rate Model" (see, for example, Exhibit DLW-1) or as "Modified" (see, for example, Schedule A – Modified). A third scenario presented in the schedules is referred to as the "Pre-Acquisition Rate Model" (see, for example, Exhibit DLW-1) or as "Pre-Acquisition Ownership" (see various Schedule A pages). This reference to "Pre-Acquisition" refers to PWW's operating and financial structure as it existed prior to the City of Nashua's acquisition of Pennichuck Corporation ("Pennichuck") in January 2012. In contrast, the schedules also refer at times to "Post-Acquisition," which refers to PWW's operating and financial structure as it exists now after the City's acquisition of Pennichuck.

Q. Why have you incorporated these various scenarios in the ratemaking schedules and rate of return information?

A. As indicated by PWW's full rate case filing, PWW requires rate relief that will allow it to generate revenues sufficient to cover its reasonable operating expenses, it obligations to the City as reflected by the City Bond Fixed Revenue Requirement ("CBFRR"), its principal and interest obligations on its debt, and its obligations under its covenants. As described in more detail in Mr. Goodhue's testimony, PWW's experience with consummating several significant financing transactions and working with underwriters, advisors and potential lenders, and its knowledge regarding the practical impacts of PWW's post-acquisition operations, have allowed PWW to identify modifications to PWW's ratemaking structure that are required in order for PWW to continue to be able to provide safe, high quality water service at affordable prices. This experience and knowledge has led to the specific modifications proposed in this proceeding. PWW has prepared the ratemaking schedules and rate of return information to incorporate and demonstrate the effects of the proposed modifications within the same analysis that applies the approved ratemaking structure. I believe that this integrated presentation will allow parties to understand the operation of the proposed modifications in the most effective and efficient manner possible.

III. <u>DISCUSSION OF SPECIFIC SCHEDULES AND INFORMATION</u>

Q. Please discuss the various Schedule A's that are part of the filing.

A. I have included three Schedule A's as part of the 1604.06 schedules titled as follows:

1. Sch A Perm-Conventional ("Sch A P-C")
2. Sch A Perm Five Year Average Consumption ("Sch A 5 Yr Ave") and
3. Schedule A-Modified

Q. Please explain the formation Sch A Perm-Conventional.

A. The first column Sch A P-C reflects data from the Test Year ("TY") ending December 31, 2015 without any pro formas for the City Acquisition. Sch A P-C follows the rate making methodology used?? by the Post Acquisition Company as approved in DW11-026 with the exception of the pro forma associated with incorporating the repayment of the City Eminent Domain costs as part of the City Bond Fixed Revenue Requirement ("CBFRR") as detailed in para. 3.c. below. The first pro forma column titled "PRO FORMA Adjustments to Test Year" adjusts the 2015 TY data as follows:

(1) The 2015 TY ending rate base was reduced by $122,082,072 reflecting the removal of the equity that was purchased by the City along with the Municipal

Acquisition Regulatory Adjustment ("MARA"). The Pre-Acquisition Equity and MARA were removed from the Company's rate base because in DW 11-026, the Commission granted the Post Acquisition Company the CBFRR component to its revenues in lieu of a return on these equity related portions of rate base.

(2) The 2015 TY Adjusted Net Operating Income was pro formed to reflect known and measurable changes to the 2015 TY revenues, operating expenses and operating deductions that were only partially incurred during 2015 or will be incurred within 12 months of the end of the 2015 TY. These operating expense and deduction pro formas will be discussed in detail later in my testimony when I discuss the formulation of Sch 1.

(3) The 2015 TY Current Revenues w/CBFRR and WICA were pro formed as follows:

(a) The revenues were reduced by the Company's share of the City Bond Fixed Revenue Requirement ("CBFRR"), or $7,465,139, per Sch 1 Attachment A.

(b) The revenues were reduced by the WICA surcharge collected in 2015 in the amount of $367,548 per Sch 1 Attachment A1.

(c) The revenues were reduced by a pro rata share of the dollars required to pay the City of Nashua back for the expenses incurred in its eminent domain litigation with the Pre-Acquisition Company amortized over a 10 year time frame in accordance with Sch 1 Attachment A. Per Mr. Goodhue's testimony, the Company believes the repayment of the City of Nashua's Eminent Domain expenses in the amount of $440,620 per year for the next 10 years should be part of the CBFRR.

Q. Please describe the proforma column on Sch A P-C titled "PRO FORMA Adjustments for 2016 Step Increase".

A. The pro forms in this column adjust the PRO FORMA 12 Months Ending 12/31/2015 to the PRO FORMA 2016 Step Increase for Capital additions as follows:

(1) The consolidated rate base was pro formed to reflect additions to rate base that were completed or the Company expects will be completed and used and useful by the end of 2016 net of asset retirements that occurred during 2016. The 2016 plant additions and the expenses associated with those additions are found in Sch 3-Step Additions. The 2016 plant retirements and the associated reduction in expenses are found in Sch 3 Attachment A-Step.

(2) The PRO FORMA 12 Months Ending 12/31/2015 were pro formed to reflect changes to the Company's operating deductions associated with 2016 plant additions and retirements. These operating expense deduction pro formas will be discussed in detail later in my testimony when I discuss the formulation of Sch 1.

Q. Are you asking for the Step increase in addition to the requested 2015 WICA surcharge?

A. No. The Company is asking for a Step increase in lieu of the WICA Surcharge. The Company is requesting that the WICA pilot be eliminated in favor of Step increases for this and future rate cases. This request is based on the fact that the Company completes many projects that are not WICA eligible. The non-WICA eligible projects must be financed and the associated debt service for these projects are not recoverable in the WICA surcharge. Examples of non-WICA eligible projects are the new distribution building, the replacement of meters with leaded brass, the reconstruction of the Harris Pond Spillway, the rehabilitation of the Dean and Main Station, information technology, and operating equipment. The Company's capital structure, without an equity return, does not provide the free cash flow necessary to pay the debt service associated with these types of non-WICA capital investments between rate cases.

Q. Please explain the last two columns of Sch A P-C.

A. The last two columns pro form the revenue requirement of the Post Acquisition Company, including the 2016 Step increase to the projected revenue requirement of the Pre-Acquisition Company, including the Step increase. The proforma to the rate base of the Post Acquisition to the Pre-Acquisition Company is reflected in Sch 3. The calculation of the Pre-Acquisition versus Post Acquisition Company Rate of Return is reflected in Sch A1. The pro forma to the Post Acquisition Net Operating Income is calculated per Note (3) on Sch A P-C. Lastly, the Current Water Revenues are pro formed by adding back the CBFRR and City Eminent Domain Recovery Revenues.

Q. Please explain the reasoning behind providing two additional Schedule A's, one titled "Schedule A Perm – Five Year Average" ("Sch A 5 Yr Ave") and one titled "Schedule A-Modified".

A. The two additional Schedule A's reflect the Company's request for the use of alternate revenue requirement methodologies to the conventional revenue requirement methodology followed in Schedule A P-C.

Q. Please explain the alternate rate treatment sought by the Company on Schedule A Perm Five Yr Average.

A. The requested rate treatment involves modifying the test year ending revenues to reflect the average of last five years of volumetric sales (2011 through 2015). The purpose of this adjustment is to eliminate the wide swings in revenues that can occur between a wet test year followed by a dry year or a dry test year followed by wet year. The normalization of volumetric sales and expenses from the test year to the average of five years of volumetric sales and the associated production related expenses results in smaller swings in Net Income than would otherwise be associated with swings in summer consumption. The Sch A Perm-5 Yr Ave average consumption uses the base PRO FORMA 12 Months Ending 12/13/15 from Sch A P-C to calculate the required permanent revenue requirement based on the five-year average as well as the base PRO FORMA 2016 Step Increase for Capital Additions to calculate the required Step Increase revenue requirement based on the five-year average. The impact of using the five-year average consumption on the revenues and operating expenses are reflected in Sch 1 in the column titled PRO FORMA for 2016 Step Increase Based On Five Year Average.

Q. Is there any difference between the pro forma to revenues and operating expenses between the pro forma test year ending 12/31/2015 Based on Five Year Ave and the PROI FORMA 2016 Step Increase?

A. No. The only change to Sch 1 between these Five Year Ave columns is the net change in operating deductions associated with depreciation expense and property taxes associated with the additions to and retirements of plant between 1/1/2016 and 12/31/2016.

Q. Please explain how the Rate of Return for Post Acquisition Company was calculated for each of the Sch A's?

A. The Rate of Return for the Post Acquisition Company was calculated on the Rate of Return 1604.08 Sch 1. This schedule reflects the Company's 2015 TY cost of debt as detailed on 1604.08 Sch 5. The Common Equity for the Post Acquisition Company is the Equity on the Company's Books as of 12/31/2015. The Return on Equity of 5.84% is calculated per Order 25,292 in DW 11-026 and as detailed on Rate of Return 1604.08 Sch 1.

Q. Please explain how the Rate of Return for Pre Acquisition Company was calculated for each of the Sch A's?

A. The Rate of Return for the Pre Acquisition Company was calculated in the Rate of Return 1604.08 Sch 1. For purposes of calculating the Pre Acquisition Company's Rate of Return the following assumptions were made:

(1) That the Capital Structure would have a debt to equity ratio of 50/50

(2) That the cost of debt for the Pre Acquisition Company would be the same as the cost of debt for the Post Acquisition Company. This is a conservative approach as the Pre Acquisition Company has a Bond rating of BBB versus the Post Acquisition Company's Bond Rating of A+.

(3) The allowed Return on Equity for the Pre Acquisition Company was set at 9.60% which was the last found ROE for the Aquarion Water Company.

Q. Please explain Sch A – Modified?

A. Sch A – Modified derives the Company's revenue requirement by adding the sum of:

(1) The CBFRR including the repayment of the City's eminent domain expenses;

(2) the revenue required to cover the Company's operating expenses which are the result of adding the Total Operating expenses to the expenses associated with the Amoritzation Expense, Property tax and Payroll tax operating deductions found on Sch 1; and

(3) The revenue necessary to cover the Company's annual debt service (principal and interest payments) associated with all plant in service by the end of the Test Year ending 12/31/2015 and in the case of the requested Step increase for all plant in service as of the end of 12/31/2016 as detailed in Sch 5 of the 1604.08 Schedules. This revenue requirement replaces the conventional revenue requirement methodology that is based on rate base, rate of return and depreciation expense as further detailed in Mr. Goodhue's testimony.

Q. Are the results of the revenue requirement derived from conventional rate making methodology with the CBFRR versus the modified rate making methodology for the Post Acquisition Company versus conventional methodology summarized anywhere within your testimony?

A. Yes. Please see Exhibit DLW-1 for this comparison. The comparison of the revenue requirements includes the requested Step increase. This Exhibit details revenue requirements as follows:

(1) Post Acquisition Company - Current rate making methodology - $32,656,581 or a 12.92% increase over current revenue requirement. There is no 5 year normalization of the revenue requirement in this model.

(2) Post Acquisition Company – Modified Rate Model - $33,432,344 or a 17.21% revenue increase over the current revenue requirement including an adjustment reflecting the impact to the Net Operating Income of using the 5-year average for volumetric sales.

(3) Pre-Acquisition Company - Current rate making methodology - $38,034,512 or a 31.52% increase over current revenue requirement. There is no 5 year normalization of the revenue requirement in this model.

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

A. Please see Exhibit DLW-1 for the impact of each of the revenue requirement increases detailed above on the average single family residential bill on a monthly basis. In regard to the Company's request for the modified rate making methodology, which resulted in a requested overall rate increase of 17.21%, it would result in an increase of $8.63 per month to the average single family monthly water bill of $50.14 per month. This would result in an average monthly water bill of $58.77.

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

A. The Company's Schedule 1 begins with the TY ending 12/31/2015 Revenues. The TY ending Revenues were pro formed in a series of steps as follows:

(1) In arriving at the PRO FORMA Revenues for the 12 months ended 12/31/2015, the TY Revenues were pro formed for the 12 months ending 12/31/2015, by reducing the TY revenues by the sum of: (a) the CBFRR allowed revenues, inclusive of an amount needed in the allowed revenue which is required to repay the City of Nashua for the

Company's prorated share of the City's eminent domain expense (per Sch 1 Attachment A); and (b) by the WICA surcharge revenues (per Sch 1 Attachment A1). Other operating revenues are also adjusted to reflect an increase in other operating revenue, per Sch 1 Attachment A.

(2) No adjustments were required to the revenues between the PRO FORMA 12 Months 12/31/15 Revenues and the PRO FORMA 2016 Step Increase for Capital Additions Revenues. The PRO FORMA 2016 Step Increase for Capital Additions Revenues were pro formed to the PROF FORMA 2016 Step Increase revenues Based On Five Year Ave by adjusting the pro forma 2016 Step Increase Revenues by the difference in PRO FORMA TY volumetric sales revenues and the average volumetric sales revenues over the past five years (2011-2015) as detailed in Sch 1 Attachment A1.

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

A. PWW's Schedule 1 begins with the TY ending 12/31/2015. The Pro forma adjustments reflect known and measurable increases/decreases to the 12/31/2015 Test Year Operating Expenses that occurred during the test year or will occur within 12 months of the end of 2015 TY resulting in the PRO FORMA 12 Months ending 12/31/2015 Operating Expenses. The next PRO FORMA column reflects changes in the Operating Expenses associated with the 2016 Step Increase for Capital Additions. The final PRO FORMA Adjustments to the Operating Expenses on Sch 1 are associated with the change in pumpage expenses associated with using the Five Year average production versus the

2015 TY production. Each of the PRO FORMA adjustments in Schedule 1 are explained on the Schedule 1 support schedules.

Q. Please discuss each of the Sch 1 Support Schedules between the Twelve Months 12/31/2015 and the Pro Forma Test Year ending 12/31/2015 in regard to Operating Expenses.

A. **Sch 1 Attachment B Page 1 – Production Account**. Pro forma Production expenses are expected to be $56,179 greater than the actual 2015 TY production expenses or about a 1.2% increase. This increase is associated with increases in wages and purchased water costs. These increased expenses are partially offset by reduced purchased power and chemical expenses. The reduction in purchased power and chemical expenses reflect new contract pricing for 2016 which will result in lower electrical and chemical costs for 2016 than 2015.

Sch 1 Attachment B Page 2 – Distribution Account. Pro forma Distribution expenses are expected to be $24,529 greater than the 2015 TY Distribution expenses or about a 1.3% increase. This increase is associated with increases in nonunion and union labor wage rates which includes the full annualization of the 2015 TY Engineering salaries to their 2016 wage rate. The wage increases were partially offset by replacement of retiring employees with new employees at lower compensation levels.

Sch 1 Attachment B Page 3 – Engineering Account. Pro forma Engineering expenses are expected to be $44,904 greater than the 2015 TY Engineering expenses or about a 4.9% increase. The increase in engineering expense is the result of increased wage rates which includes the full annualization of the 2015 TY Engineering salaries to their 2016 wage rate **Sch 1 Attachment B Page 4 Customer Accounts and Collection.** Pro forma Customer Accounts and Collection expenses are expected to be $3,057 greater than the 2015 TY expenses or about a 0.7% increase. The increase in expenses is the result of increased print management costs of $9,171 which, in turn, are partially offset by a projected $6,114 decrease in mailing expense. Specifically, there was a $0.02 per piece decrease in postage that went into effect on April 10, 2016.

Sch 1 Attachment C Page 1 Administrative and General Account. Pro forma Administrative and General expenses are expected to be $1,147,022 greater than the actual 2015 TY expenses or about an 18.8% increase. The largest portion of the pro forma increase (58.9%) is associated with a one-time write off of $674,750 of Early Retirement Health Expense that occurred in 2015 resulting in a non-reoccurring expense reduction. This write-off is based upon a change in the dynamics of the plan, with no ongoing contributions to the plan on behalf of the Company, as all the benefits under the plan are paid for by enrolled employees with monthly premium payments by them as enrolled. There is no expense associated with the Early Retirement Health Expense in 2016. The impact is a pro forma increase of $674,750.

Q. Please explain the remaining pro forma changes to the Administrative and General Account expenses.

A. Annualized Salary increases and the addition of new employees accounted for an increase in wages in the Administrative and General account of $269.856 or 11.8%. Schedule 1 Attachment C Page 2 details the changes in wages by Company Department.

Q. Please explain the changes to and additional salaries by Department.

A. **Officer's Salaries and Wages** are pro formed to decrease by $166,267 of 26.9%. The decrease is the due to the fact that the new CEO was the Company's former CFO. The new CEO will continue to perform the duties of the CFO and as such the Company will not be replacing the CFO position. Some of the CFO duties of the combined CEO/CFO position were down-streamed to the Accounting Department which is part of the reason for the increase in the Accounting Department wages.

Salaries & Wages: Accounting are pro formed to increase by $74,533 or 13.2%. This increase is the result of:

1. Increased salaries resulting from a shift in job responsibilities as the Company's accounting manager in 2015 took on the CFO's controller duties and the Company's Regulatory/Treasury Financial Analyst took on a portion of the CFO's Treasury duties.
2. The Company hired a Regulatory/Financial Analyst to pick up certain duties from the accounting employees mentioned above as a result of their taking on some of the CFO's duties.

Wages: Revenue and Customer Operations are pro formed to increase $241,301 or 40.9%. This increase in salaries is the result of backfilling a Senior Supervisor position that was vacant for most of 2015 in addition to replacing 4 customer service specialists that left the company during 2015 and were initially replaced with temporary employees until their positions could be filled with full time employees. Additionally two new customer service employees have been hired in 2016 to fully staff the department.

Salaries & Wages: Admin are pro formed to increase by $9,091 or 5.4%. This increase was the primarily the result of a market adjustment to the HR Director's salary.

Salaries & Wages: IS are pro formed to increase by $111,198 or 24.3%. This increase was the primarily the result of adding a fifth employee to the Information Systems ("IS") team. The fifth employee is required to help the IS Department keep up with the growing demands of the hardware and software infrastructure necessary to support the Company's implementation of Geographical Informational Systems ("GIS"), Asset Management, Electronic Time Keeping and Customer Appointments as well as supporting the Company's existing IS infrastructure. A portion of this increase in wages was funded by the decrease in Officer's Salaries and Wages, resulting from the CEO/CFO transition in late 2015.

Q. Please explain the other pro formas to the Administrative and General Account detailed on Schedule 1, Attachment C, Page 1

A. The following pro forma adjustments were made:

(1) Increase in benefits costs in the amount of $208,094 associated with the increase in payroll associated with both Union and Non Union employees.

(2) Increase in the Company's Regulatory Commission Expense in the amount of $13,138.

(3) Increase in Pension Expenses of $84,036 offset by a decrease in Post 65 Health Retirement Plan expenses of $23,686 for a net increase in Pension expense of $60,350. These increases and decreases are the result of fluctuations in the discount rate on future pension and post-retirement health obligations, due to

interest rate conditions in the bond market, pursuant to Federal regulations related to the actuarial valuation of these plans.

(4) A decrease in Insurance Expense of $91,050, primarily related to favorable experience modification for the Company's worker's compensation plan.

(5) An increase in Computer Maintenance Expenses of $66,582 primarily the result of maintenance and licensing costs associated with the implementation of GIS, Asset Management and Electronic time keeping and customer appointments. The increased software/hardware expenses are documented in Sch 1 Attach C, Pg 4.

(6) A decrease in Outside Services Expenses of $54,698 associated with a reduction in temporary customer service employees who have been replaced with full time customer service employees.

Q. There are no proforma increases associated with Health Care expense. Please explain.

A. The increases to the Company Health Insurance expense were offset by an increase in employee contributions toward their health insurance premiums.

Q. Please explain the Pro forma increase in Interdivisional Management fee, pursuant to the 2006 Cost Allocation Agreement, of $321,333

A. This increase is the result of allocating 26% of the Company's 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. The calculation of the $321,333 allocation is detailed on Sch 1 Attachment C Page 5.

Q. Please compare the total operating expenses for the pro formed Year Ending ("YE") 12/31/15 operating expenses when compared to the YE 2013 total operating expenses?

A. The Pro forma TY 15 operating expenses (which is the equivalent to the projected YE 2016 operating expenses) are $1,736,893 greater than the year ending YE 13 operating expenses. During 2015 the Company pumped 12.0% more water than in 2013 resulting in a year over year increase in production costs of $248,100. Therefore the comparable Pro forma TY 15 operating expenses (adjusted for reduced pumpage expenses) were $1,488,793 greater than the year ending YE 13 operating expenses or an increase of about 13.4% over three years resulting in an average annual increase in total operating expenses of about 4.3%.

Q. Please discuss the pro formas to the Total Operating Deductions as detailed in Schedule 1, the Operating Income Statement.

A. The progression of pro formas to the Company's Total Operating Deductions as detailed in Schedule 1 follows the same steps as detailed in response to the question regarding pro formas to Total Operating Expenses, detailed previously in this testimony.

Q. Please discuss each of the Sch 1 Support Schedules between the Twelve Months 12/31/2015 and the Pro Forma Test Year ending 12/31/2015 in regards to Operating Deductions.

A. The pro forma to the Operating Deductions associated with changes to Depreciation and the Acquisition Adjustment Expenses are as reflected in Sch 1 Attachment E. These expenses were reduced by $1,250,715 reflecting the impact of four (4) pro formas as follows:

(1) The annualization of a half year of depreciation expense to a full year of depreciation expense for plant placed in service between 1/1/2015 and 12/31/2015. This resulted in a pro forma increase in depreciation expense of $234,166.

(2) The elimination of a full year's worth of depreciation associated with plant that was retired from service between 1/1/2015 and 12/31/2015. This resulted in a pro forma decrease in depreciation expense of $46,679.

(3) A reduction in depreciation expense in the amount of $69,701 associated with a settlement agreement reached in DW 06-073 and approved in Order No. 24,751 in regard to the accounting treatment related to Cost of Removal.

(4) A reduction in depreciation expense in the amount of $1,368,501. This was associated with the elimination of depreciation expense related to the elimination of $48,875,050 of equity-related assets in accordance with Order 25,292 in Docket No. DW11-026.

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

A. The pro forma to the Operating Deductions associated with changes to Amortization Expenses are as reflected in Sch 1 Attachment F. These Expenses were reduced by $2,103,253 reflecting the impact of five pro formas as follows:

(1) The annualization of deferred charges that the Company began amortizing during 2015. This resulted in a pro forma increase in the amount of $12,078.

(2) The elimination of amortization expenses associated with deferred charges that the Company had fully amortized before the end of 2015. This resulted in a reduction in amortization expenses of $36,799.

(3) The elimination of the 2012 Rate Case Expenses that were fully amortized by the end of 2015. This resulted in a reduction of expenses of $95,664.

(4) The elimination of the amortization of the MARA in accordance with Order 25,292 (DW11-026) in the amount of $1,735,394.

(5) The return of the deferred credit via three years of amortization of the Rate Stabilization Funds in excess of $5,000,000 as of 12/31/2015. This resulted in a reduction of amortization expense in the amount of $247,474.

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

A. The pro forma to the Operating Deductions associated with Property Tax Expense are as reflected in Sch 1 Attachment G and reflect the change in property tax expenses associated with Plant additions and retirements that occurred during 2015. This resulted in a pro forma increase in the amount of $328,944.

Q. What is the overall impact of the change in Property Taxes between the YE 15 and YE 13?

A. Property tax expenses increased $439,337 between the YE 2013 and YE 2015 or 12.2%. During this same time frame Plant in Service, net of depreciation expense and the Municipal Acquisition Regulatory Asset, increased by 7.6%.

Q. Please explain the Pro Forma adjustments to Sch 1 in regard to the request Step Increase associated with the plant additions made between 1/1/2016 and 12/31/2016.

A. There are no pro forma adjustments to the Total Operating Expenses associated with the Step Increase request. There is a total pro forma increase of $721,553 related to increased Operating Deduction expenses associated with the Step Increase as follows:

(1) An Increase in depreciation expense of $581,893 per Sch 3 – STEP Additions. The increase in depreciation expense is associated with the plant projected to be added and retired between 1/1/2016 and 12/31/2016.

(2) An increase in property tax expense of $598,028 per Sch 3 – STEP Additions. The increase in property tax expenses are associated with the plant projected to be added and retired between 1/1/2016 and 12/31/2016.

(3) A reduction in Income tax expense of $458,369 per Sch 1 Attachment G associated with the reduction in Net Income created by higher depreciation and property tax expenses associated with the 2016 plant additions.

Q. Please explain the Pro Forma adjustments made in Sch 1 to the Total Operating Expenses applied to the PRO FORMA 2016 Step Increase for Capital Additions

resulting from using the FIVE YEAR AVE for volumetric sales as opposed to the TY 2015 volumetric sales.

A. Just as revenue levels were normalized in Sch 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 the Five Year Average volumetric sales volumes versus the TY 2015 volumetric sales volumes.

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

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

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 2015 TY volumetric sales?

A. The impact on operating expenses, per Sch 1 Attachment B Page 1, is a reduction of $166,859 in expenses which are the result of the following pro forma adjustments:

(1) A reduction in purchased water expenses in the amount of $83,175.

(2) A reduction in electric expenses associated with a 6.64% reduction in plant production in the amount of $43,064.

(3) A reduction in WTP chemical costs associated with a 6.56% reduction in plant production in the amount of $40,620.

Q. Please describe Sch 3 and the pro fromas made to it:

A. Sch 3 is used to develop the Company's Total Rate Base. The Schedule begins with the Company's 2015 TY Average Rate Base. The following pro formas were made to the 2015 TY Ave. Rate Base to create the Pro forma Test Year Rate Base:

(1) Plant in Service was adjusted per Sch 3 Attachment A as follows:

(a) A reduction of $48,875,050 in the 2015 TY Average rate base resulting from the elimination of the equity on the Company's books at the time of the acquisition by the City of Nashua.

(b) An increase in the 2015 TY Average rate base of $4,879,748 to reflect the difference between the 13 month average and 2015 TY rate base value for plant additions that occurred between 1/1/2015 and 12/31/2015.

(c) A reduction in 2015 TY Average rate base of $1,223,863 to reflect the difference between the 13 month average and 2015 YE rate base value for plant retirements that occurred between 1/1/2015 and 12/31/2015.

(2) Accumulated Depreciation was increased by $234,166 reflecting the net impact of adjusting depreciation expense for plant additions and retirements made between 1/1/2015 and 12/31/2015 to reflect a full years depreciation expense per Sch 3 Attachment C.

(3) The Rate Stabilization Fund ("RSF") was reduced by $376,389 reflecting the return of RSF funds in excess of $5 million as of 12/31/2015 per Sch 3 Attachment B.

(4) Working Capital was increased by $117,672 reflecting the 2015 pro forma increases to the 2015 TY operating expenses and a 12.33% Working Capital Rate per Sch 3 Attachment D.

(5) Other & Deferred Charges were reduced by $72,881,037 reflecting the elimination of of the MARA and adjustments for other deferred debits per Sch 3 Attachment B.

(6) Deferred Credits were increased by $1,336,715, primarily associated with the Rate Stabilization Fund and Principal Forgiveness associated with State Revolving Fund loans per Sch 3 Attachment F.

(7) The Unfunded FAS 106 and 158 costs were increased by $2,152,272 per Sch 3 Attachment E.

Q. Please explain the pro formas made to the Pro Forma 2015 Test Year Rate Base to reflect the impact of the 2016 Capital additions associated with the requested 2016 Step Increase.

A. The following pro forma was made to the Pro Forma Test Year Rate Base to create the Pro Forma 2016 Step Increase for Capital Additions made during 2016:

A net increase of Plant in Service in the amount of $19,733,892. The net increase reflects the year end rate base values of plant added between 1/1/2016 and 12/31/2016 less the elimination of any rate base associated with plant retirements that occurred between 1/1/2016 and 12/31/2016.

Q. Please explain the pro forma reduction to working capital associated with using the Five Year Average Revenue modification to rate making.

A. The $20,574 reduction in working capital is due to the fact that annual operating expenses associated with using the five year average volumetric sales versus the 2015 TY volumetric sales results in decreased operating expenses of $166,859 associated with producing this water.

Q. Please explain the pro formas made to the Post Acquisition Pro Forma 2016 Step Increase for Capital Additions Rate Base to the Pro Formas Pre Acquisition Ownership for 2016 Step Increase Rate Base.

A. (1) Increase in Plant in Service by $48,875,050 for the equity related plant that was eliminated from the Post Acquisition Company plant.

(2) Eliminate $4,987,046 to reflect the elimination of the Rate Stabilization Fund.

(3) Increase working capital by $174,941 reflecting the increased operating costs associated with operating the Pre Acquisition Company versus the Post Acquisition Company per Sch 3 Attach D.

(4) Decrease in Deferred Credits associated with the elimination of the Rate Stabilization Fund.

Q. Please explain Sch 3 – STEP additions.

A. Sch 3 STEP Additions schedule provides the information necessary to calculate the pro formas to Sch 1, Sch 3 and the Sch A's necessary to calculate the requested Step increase revenue requirements. Sch 3 STEP Additions provides the following information:

A list of each capital project that the Company plans to complete between 1/1/2016 and 12/31/2016. Each project has the following information contained within this schedule:

a. Project Name

b. Project Description

c. Project Work Order Number

d. Estimated project cost. The final cost for each project through 12/31/2016 will be available for audit by the end of January 2017.

e. The NHPUC Chart of Account number for each project.

f. The estimated cost that will be assigned to NHPUC Chart of Account for each project.

g. The community in which each project is being completed.

h. Whether the project is subject to the Statewide utility tax or not.

i. The combined local property and State utility tax rate where each project is being constructed.

j. The projected Annual Utility and property tax associated with each project.

Q. Please explain the Sch 1 pro formas associated with the requested 2016 Step Increase.

A. The three pro forma adjustments to the Sch 1 expenses associated with the proposed 2016 additions to plant are as follows:

(1) The net increase in depreciation expense of $581,893 associated with the plant additions and the plant retirements projected to be completed between 1/1/2016 and 12/31/2016. The additional depreciation expense associated with the plant additions are calculated on Sch 3 – STEP additions. The reduction in depreciation expense associated with plant retirements is detailed on Sch 3 Attachment A – STEP.

(2) The net increase in property tax expense of $598,028 associated with the plant additions and the plant retirements projected to be completed between 1/1/2016 and 12/31/2016. The additional property tax expense associated with the plant additions are calculated on Sch 3 – STEP additions. The reduction in property tax expense associated with the plant retirements is detailed on Sch 3 Attachment A – STEP.

(3) The decrease in income tax expense in the amount of $458.369 resulting from the taxable deductions due to increased depreciation and property tax expenses associated with the 2016 additions to plant.

Q. Please explain the Sch 3 pro forma associated with the requested 2016 Step Increase.

A. There is a net increase of $19,733,892 to Plant in Service associated with the projected plant additions and retirements that are expected to be completed between 1/1/2016 and 12/31/2016. The projected cost of the plant additions are detailed on Sch 3 – STEP Additions. The projected reduction in Plant in Service associated with projected plant retirements are detailed on Sch 3 Attachment A – STEP.

Q. Please describe Sch 5 of the 1604.08 schedules

A. 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. The bond 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 $83,770,655 of outstanding debt as of 12/31/2015 with an average Funded Effective Rate of 4.79% 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. All the columns to the right of the "Coupon Rate" in Sch 5 of the 1604.08 schedules are new to this schedule and reflect the calculation of the Principal and Interest payments ("P&I") made on these bonds as follows:

(1) The P&I payments made by the Company during the 2015 TY in the amount of $3,104,660.

(2) The pro formed 2015 P&I payments in the amount of $4,632,538 reflecting the total annual P&I payments that the Company will need to make on the outstanding bond and loan amounts of about $64,359,813 borrowed to fund the Company's Plant in Service as of 12/31/2015.

(3) The pro formed 2016 P&I payments in the amount of $6,286,441 reflecting the total P&I payments that the Company will need to make on the outstanding bond and loan amounts of $86,170,032 borrowed to fund the Company's Plant in Service as of 12/31/2016.

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

A. The P&I payments made during the 2015 TY reflect actual cash payments on the outstanding bonds in service during 2015. The pro forma 2015 P&I payments of $4632538 reflect the following pro formas:

(1) In 2015 only interest payments were made on the BNY Mellon-2014 A Series Bonds. As of 12/31/2015 $9,080,781 of the $19,500,000 in new money associated with this Bond had been invested into new Plant that was used and useful. An additional $23,350,000 of this Bond was used to refinance an existing

bond with a higher coupon rate. The details of this financing can be found in DW14-130. The pro forma interest payment was calculated by multiplying the total interest payment due in 2016 by the ratio of $32,430,781 (debt associated with plant in service as of 12/31/2015) to $42,544,503 (The total debt issued) and subtracting the $1,006,879 interest payment made on this bond in 2015. The 2016 Pro forma adjustments to the 2015 pro forma P&I payments were those required to adjust the P&I payments to those required to be made from 2017 through the maturity of the bond.

(2) In 2015 only interest payments were made on the BNY Mellon 2014 B Series Bonds. All the proceeds from these Bonds were invested in plant placed in service between 1/1/2013 and 4/1/2014. The 2015 P&I payment pro formas were those required to adjust the P&I payments to those required to be made from 2016 through the maturity of the bond.

(3) In 2015 only interest payments were made on the 2005 Series A and Series 2005A Bonds that were refinanced by the BNY Mellon-2015 A Series Bonds 2016/2017. The $97,230 pro forma reduction in the 2015 TY interest payment on this Bond reflects the interest savings and timing differences that resulted from the refinancing of the 2005 series Bonds. There was no principal paid during 2015 on these Bonds. The 2015 pro forma of $345,754 reflects the principal payments due on the $13,890,000 of bonds that were refinanced from an interest only bond to a fully amortizing bond in accordance with DW15-196. The 2016 pro forma adjustments to the principal payment of $174,246 and the interest payment of

$295,610 were those required to adjust the P&I payments on these Bonds to those required to be made from 2017 through the maturity of the bonds.

(4) In 2015 only interest payments were made on the 2005B Series Bonds that were refinanced by the BNY Mellon-2015 B Series Bonds 2016/2017. The $37,296 pro forma reduction in the 2015 TY interest payment on this Bond reflects the interest savings snf timing differences that resulted from the refinancing of the 2005B series Bonds. There was no principal paid during 2015 on these Bonds. The 2015 principal pro forma of $95,000 reflects the principal payments due on the $2,310,000 of bonds that were refinanced from an interest only bond to a fully amortizing bond in accordance with DW15-196. The $30,411 interest proforma when added to the $68,964 2015 pro forma interest results in a total pro forma interest payment of $99,375.

(5) 2016 pro formas were made to the 2015 TY Year P&I Payments associated with the SRF loans for Cross Street in Nashua, the Timberline Booster Station in Nashua, the Raw Water Transmission Main in Merrimack and the Amherst Street Water Main replacement project in Nashua. There were no P&I payments on any of these SRF loans in 2015 as the projects did not become used and useful until 2016. The pro forma P&I payments on these SRF loans reflect the annual P&I payments that will made from 2017 through the maturity of these bonds.

IV. DISCUSSION OF OTHER OPERATIONAL MATTERS

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

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

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 average single family water usage for the months of December through March, which reflects indoor water usage patterns has shown a drop in average monthly usage between 2012 and 2016.

Q. Was a Cost of Service Study prepared as part of this case?

A. No. The last cost of service study was prepared as part of DW 10-091. Because there has been little change in the mix of customers, assets, and expenses since DW10-091, the Company determined that preparing a Cost of Service Study was not justified.

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 in Sections 6 and 13 of the filing. The Company proposes to spread the propose rate increase uniformly across all customers classes.

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 via a direct mailing to its customers. The direct mailing will also include information regarding the suspension of the Company's rates and the date of the prehearing conference. Additionally, when the Commission issues the order to suspend tariffs and schedule a prehearing conference, the Company will provide notification in area newspaper(s).

Q. Do you have any other testimony to offer?

A. No.