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N.H.P.U.C. Case No.	DW 11-026
Exhibit No.	# 6
Witness	Panel 2
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STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION

Re: City of Nashua Acquisition of Pennichuck Corporation

Docket DW 11-026

DIRECT TESTIMONY OF

BONALYN J. HARTLEY

February 18, 2011

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1 **Introduction and Qualifications**

2 **Q. Please state your name and business address.**

3 A. Bonalyn J. Hartley. My business address is 25 Manchester Street, Merrimack, New  
4 Hampshire.

5 **Q. Please state your position with Pennichuck Water Works, Inc. and summarize your**  
6 **professional and educational background.**

7 A. I serve as Vice President of Administration and Regulatory Affairs for Pennichuck Water  
8 Works, Inc. ("PWW") and Pennichuck Corporation, which holds all the Company's  
9 common stock. I was appointed to this position in April 2001. Prior to that, I served in  
10 various capacities including Vice President-Controller, Manager of Systems and  
11 Administration and Office Manager. I have been with PWW for over 32 years. In 1989,  
12 I attended the Annual Utility Rate Seminar sponsored by the National Association of  
13 Regulatory Commissioners and the University of Utah. I am a graduate of Rivier College  
14 with a B. S. in Business Management. In addition, I serve as a Director of the YMCA of  
15 Greater Nashua, on the Finance Committee for Home Health and Hospice, Nashua. I am  
16 a Director of the New England Chapter of the National Association of Water Companies.

17 **Q. Ms. Hartley, what are your duties as Vice President of Administration and**  
18 **Regulatory Affairs for PWW?**

19 A. As Vice President of Administration and Regulatory Affairs, I am primarily responsible  
20 for the management of administrative services for PWW, including regulatory affairs,  
21 information technology, human resource functions and customer service. I also serve as  
22 a liaison to the accounting department particularly in the area of government and  
23 regulatory matters, system acquisitions and information technology. I am also

1 responsible for providing these services to Pennichuck East Utility, Inc. ("PEU"),  
2 Pittsfield Aqueduct Company, Inc. ("PAC"), Pennichuck Water Service Company, Inc.,  
3 and Pennichuck Corporation.

4 **Q. Have you testified before the New Hampshire Public Utilities Commission on any**  
5 **previous occasions?**

6 A. Yes. I have testified before the Commission in a number of matters, including the docket  
7 regarding the City of Nashua's proposed taking of Pennichuck Water Works, Inc. by  
8 eminent domain, Docket DW 04-048, as well as other matters such as two pending rate  
9 cases: Pennichuck Water Works, which is docketed as DW 10-091, and Pittsfield  
10 Aqueduct Company, which is docketed as DW 10-090. I have previously testified in  
11 other rate cases involving Pennichuck utilities: DW 08-073 (PWW), DW 08-052 (PAC),  
12 DW-07-032 (PEU), DW 06-073 (PWW), DR 91-055, DR 92-220 (PWW), DR 97-058  
13 (PWW), DW 01-081 (PWW), DW 04-056 (PWW), DW 05-072 (PEU), and DW-03-107  
14 (PAC).

15 **Summary of Testimony**

16 **Q. Please provide an overview of the purpose of your testimony in this proceeding.**

17 A. The purpose of my testimony is to present an analysis reflecting how the City of Nashua  
18 (the "City") proposes to reflect its purchase of the stock of Pennichuck Corporation in the  
19 rates of PWW, PEU and PAC (the "Pennichuck Utilities") based on certain assumptions  
20 made by the City.

21 **Q. Ms. Hartley, please summarize the manner in which you have analyzed the rates for**  
22 **the Pennichuck Utilities under City ownership.**

1 A. The exhibits attached to my testimony reflect a method for calculating the rates for the  
2 Pennichuck Utilities in future rate proceedings that contains the following key elements:  
3 (1) a pro rata fixed revenue requirement for each of the Pennichuck Utilities that is  
4 designed to allow the Pennichuck Utilities to generate the cash flow necessary to allow  
5 the City to pay the debt service associated with the bond the City plans to issue to acquire  
6 the stock of Pennichuck Corporation; (2) a pro rata Rate Stabilization Fund for each of  
7 the Pennichuck Utilities that would be booked as equity on each of the utilities' books at  
8 closing and recognized in rate base in future rate cases; (3) a regulatory asset in the  
9 amount of \$5,000,000 for the recovery of the City's eminent domain costs which would  
10 be amortized over a 30-year period; and (4) an adjustment to reduce depreciation expense  
11 for the assets related to the equity purchased by the City which would be made in future  
12 rate cases by multiplying the equity as of the closing for each utility by the then current  
13 composite depreciation rate approved by the Commission.

14 **Discussion of Rate Comparison Analysis**

15 **Q. Please describe the analysis you have prepared.**

16 A. I have taken the financial assumptions provided by the City and reflected those  
17 assumptions in schedules that develop a revenue requirement for each of PWW, PEU and  
18 PAC in a manner that is similar to what is typically used to present proposed rates to the  
19 Commission. These assumptions, which are detailed in Mr. Patenaude's testimony,  
20 include the following:

21 (1) The City will issue general obligation bonds in a principal amount of  
22 approximately \$157 million to be repaid over a 30-year term (the "City  
23 Acquisition Bonds"). Consistent with the worst case assumption described in Mr.

1           Gottlieb's testimony, my schedules have assumed that the annual interest rate on  
2           these bonds would be 6.5%, so that the annual payment on the bonds would be  
3           approximately \$12 million. If the actual interest rate is lower than 6.5%, the  
4           revenue requirements required under City ownership would be lower.

5           (2)    The City will establish a Rate Stabilization Fund of \$5,000,000, which will be  
6           divided pro rata among the three Pennichuck Utilities based on their allocated  
7           portion of the total rate base of the three Regulated Utilities of \$112,086,760.

8           (3)    The revenue requirement will include \$5,000,000 in eminent domain costs  
9           incurred by the City, which will be booked as a regulatory asset and amortized  
10          and recovered with a return over 30 years.

11          (4)    The City plans to retain the current long term debt instruments in each of the  
12          Pennichuck Utilities.

13          (5)    Operating expenses will be reduced by approximately \$1.7 million based on the  
14          elimination of certain officer-level positions and other costs associated with  
15          Pennichuck Corporation's change from a publicly traded company to one that is  
16          owned by a single shareholder and other related management changes.

17          (6)    The City plans to maintain the existing Management Fee Allocation dated June  
18          13, 2007 and on file with the Commission.

19   **Q.    What is the result of your revenue requirement analysis?**

20   A.    This analysis illustrates that rates for each of the Pennichuck Utilities based on the  
21          assumptions provided by the City are expected to be at or below the rates expected for the  
22          Pennichuck Utilities under current ownership.

23   **Q.    Are you providing the Commission with a copy of your analysis?**

1 A. Yes. I have prepared schedules and exhibits reflecting my analysis that are attached to  
2 my testimony as Exhibit BJH-1, Exhibit BJH-2 and Exhibit BJH-3 and which are  
3 identified below:

4 Exhibit BJH-1: Pennichuck Water Works, Inc.

- 5 • Schedule A, Computation of Revenue Deficiency
- 6 • Schedule A, Attachment A, Pro Forma Adjustment to Revenue Requirement
- 7 • Schedule 1, Operating Income Statement
- 8 • Schedule 1, Attachments A, Pages 1-2, Pro Forma Adjustments to Income/ Expense
- 9 • Schedule 3, Computation of Rate Base
- 10 • Schedule 3, Attachments A, Pro Forma Adjustments to Rate Base
- 11 • Schedule 4, Overall Rate of Return
- 12 • Schedule 4, Attachment A, Pro Forma Adjustment to Rate of Return

13 Similar schedules for Pennichuck East Utility, Inc. and Pittsfield Aqueduct Company,  
14 Inc. are attached as Exhibits BJH-2 and BJH-3. All of these exhibits were prepared by  
15 me or under my supervision.

16 **Q. Ms. Hartley would you please explain the analysis contained in Exhibit BJH-1,**  
17 **Schedule A, entitled “Pennichuck Water Works, Inc., Computation of Revenue**  
18 **Deficiency, For the Twelve Months Ended December 31, 2009”?**

19 A. The purpose of this schedule is to calculate the revenue requirement for PWW under City  
20 ownership based on the City’s financial assumptions. Specifically, the first column states  
21 the pro forma revenue requirement as of December 31, 2009 as found in the currently  
22 pending PWW rate case in which PWW has requested a permanent increase of 16.23%  
23 resulting in \$28,031,601 of total revenue. This column is based on a 2009 test year and

1 pro forma adjustments included in PWW's rate case filing in DW 10-091, which provides  
2 a known and measurable starting-point. Columns 2 and 3 reflect pro forma adjustments  
3 for certain items resulting from discovery in DW 10-091, as a result of which the revenue  
4 requirement increases to \$28,212,098, or an increase of 16.98% over current rates.  
5 Columns 4 and 5 reflect a pro forma adjustment based on an estimated 2.68% Step  
6 Increase sought in DW 10-091, as a result of which the revenue requirement would  
7 further increase to \$28,858,834, or a 19.66% increase. Columns 6 and 7 eliminate \$5.1  
8 million of eminent domain defense costs sought by PWW in DW 10-091, which reduces  
9 the revenue requirement to \$27,687,698, which represents a 14.81% increase over current  
10 rates. (If PWW is acquired by the City, then the City has stated that it would not seek  
11 recovery of the PWW's eminent domain expenses, which have been previously  
12 expensed.) Column 8 contains pro forma adjustments the City of Nashua would reflect in  
13 rates as well as the elimination of certain operating expenses that would result from the  
14 City's acquisition of Pennichuck Corporation, which I will explain later. Column 9  
15 reflects the combined pro forma PWW test year, with all of the adjustments described  
16 above. It shows that the overall revenue requirement for PWW under City ownership is  
17 expected to be \$27,244,454, as compared to \$28,858,834 under current ownership and  
18 management. This revenue requirement is arrived at by removing from rate base an  
19 amount equal to the equity in PWW as of the closing, which results in a revenue  
20 requirement of \$17,948,547 using only the remainder of PWW's rate base, and then  
21 adding back an additional revenue requirement of \$9,295,906, which represents the  
22 revenue requirement necessary to support PWW's share of the City Acquisition Bonds.  
23 This additional revenue requirement necessary to support the City Acquisition Bonds is



1 referred to as the "Fixed Annual Revenue Requirement," and is further described below  
2 and in Schedule A, Attachment A. Also reflected and explained by Mr. Patenaude in his  
3 testimony, that during the years following the merger, the Pennichuck Corporation  
4 federal taxable group of companies will realize a tax benefit associated with Pennichuck  
5 Corporation's payment of interest to the City and depreciation expense associated with  
6 the equity related assets.

7 In summary, Schedule A demonstrates that use of the City's proposed method for  
8 calculation of PWW's rates would result in a lower rate increase under City ownership  
9 than the rate increase currently requested by PWW in DW10-091; that is 12.97% versus  
10 19.66%, respectively. Also as stated by Mr. Ware, this illustration is only for the pro  
11 forma test year 2009. At the time of closing, there will be approximately \$10 million of  
12 additional capital expenditures for 2010 and 2011 that will be included in the purchase  
13 price but that is not reflected in this illustration for PWW under current ownership.

14 **Q. Ms. Hartley, would you please summarize Schedule A, Attachment A (Exhibit BJH-**  
15 **1, p. 2) entitled Pennichuck Water Works, Inc., Pro Forma Adjustments to Revenue**  
16 **Requirement for the Twelve Months Ended December 31, 2009?**

17 **A.** As Mr. Patenaude explains in his testimony, in order to establish a revenue requirement  
18 that will provide sufficient cash to enable the City to meet its debt service obligation  
19 throughout the thirty-year term of the City Acquisition Bonds, we have calculated a  
20 separate fixed revenue requirement associated with the equity being purchased by the  
21 City. Schedule A, Attachment A shows the calculation for the pro forma adjustment for  
22 this Fixed Annual Revenue Requirement, which needs to be included in the overall  
23 Revenue Requirement under City ownership until the City Acquisition Bonds have been

1 paid in full. As stated in Mr. Patenaude's testimony, the City is expecting to issue  
2 general obligation bonds in the total principal amount of approximately \$157,011,440 to  
3 be repaid over a 30-year term to fund the costs of acquiring the stock of Pennichuck  
4 Corporation. As noted earlier, my analysis assumes a 6.5% annual interest rate on these  
5 City Acquisition Bonds. Following the merger, Pennichuck Corporation will be  
6 obligated through a combination of equity and debt instruments issued to the City to pay  
7 to the City an annual payment equal to the debt service on the City Acquisition Bonds.  
8 As explained by Mr. Patenaude, the City anticipates that PWW, PAC, PEU and The  
9 Southwood Corporation will each dividend their respective pro rata share of the debt  
10 service on a monthly basis to Pennichuck Corporation in order to meet the expected cash  
11 flow obligation to the City. The pro rata share for each utility will be based on the  
12 current rate base of each utility and the book value for Southwood at the time the City's  
13 acquisition of the Parent closes. (Pennichuck Water Service Company has not been  
14 included because it does not have any book assets and is primarily based on service  
15 contracts of limited terms that may or may not provide a revenue flow in the future.) The  
16 pro rata annual payment for each company will then be calculated as a constant payment  
17 and at a constant interest rate. The pro rata share for each company used in the  
18 illustration in Schedule A, Attachment A is based on the current rate base reflected in the  
19 pending PWW and PAC rate cases, the PEU rate base as of 12/31/2009, and the book  
20 value of Southwood at 12/31/2009, all totaling \$115,099,865. Therefore, the PWW pro  
21 forma rate base of \$95,782,461 (Schedule A) results in PWW being allocated  
22 \$130,664,920 of the City Acquisition Bonds, that is 83.22% of the total estimated bond of  
23 \$157,011,040.

1   **Q.     Why has the City proposed this Fixed Annual Revenue Requirement methodology?**

2   A.     The fixed revenue requirement approach is similar to the methodology approved by the  
3           Commission in DW 08-052 for the North Country systems whereby a Capital Recovery  
4           Surcharge was fixed over a 30-year period of time. As explained by Mr. Patenaude, this  
5           methodology allows for the certain generation of the cash flow necessary to ensure that  
6           the City will be able to pay all of the debt service on the City Acquisition Bonds from  
7           operations of Pennichuck Corporation and its subsidiaries, while at the same time  
8           mitigating rate increases and stabilizing rates in the future for customers.

9   **Q.     Please explain the Rate Stabilization Fund that is reflected on the Schedule.**

10  A.     As described in Mr. Patenaude's testimony, the City bond will include \$5,000,000 that  
11           will be used to establish a Rate Stabilization Fund ("RSF") which will also be allocated  
12           on a pro rata basis to each of the Pennichuck Utilities. The City proposes to establish the  
13           RSF as so allocated to each of the Pennichuck Utilities for the purpose of providing a  
14           reserve to ensure that the utilities have enough cash, even in adverse conditions such as  
15           wet weather, to meet their obligations to permit the City to pay debt service on the City  
16           Acquisition Bonds. This will enable the utilities to meet their debt service obligations  
17           related to the City bond during periods of lower than anticipated income and mitigate the  
18           need for future rate increases. The pro rata share of the RSF' will be contributed as equity  
19           and included in rate base for each of the Pennichuck Utilities. The pro rata share of the  
20           RSF will increase or decrease for each of the utilities depending on their profitability.

21  **Q.     Please explain how the RSF applies to the Fixed Annual Revenue Requirement as**  
22  **requested by the City.**

1 A. The pro rata share of the RSF for PWW is \$4,272,693, which is 85.45% (PWW's rate  
2 base is \$95,782,461 versus the total rate base of \$112,086,760 for the Pennichuck  
3 Utilities—see Schedule 3, Attachment A) of the total RSF of \$5,000,000. Additionally,  
4 the City is seeking approximately \$5,000,000 for its recovery of eminent domain costs.  
5 Because these amounts are recovered through rate base treatment, they are being  
6 removed from the calculation of the Fixed Annual Revenue Requirement. Specifically,  
7 the PWW share of \$130,664,920 for the City bond is reduced by the pro rata share of  
8 \$4,272,693 for the RSF and by the \$5,000,000 for recovery of the City's eminent domain  
9 costs, resulting in a total pro rata share of \$121,392,227 related to the City bond. The  
10 Fixed Annual Revenue Requirement to meet the City's bond obligation of \$121,392,227  
11 based on the assumed interest rate of 6.50% for a period of 30 years is \$9,295,906.

12 **Q. Will the bond amount and bond rate remain the same for 30 years?**

13 A. Yes, however, as stated in Mr. Patenaude's testimony, the actual bond amount and rate  
14 will not be known until the acquisition is approved by the Commission and the City  
15 Acquisition Bonds are issued. The amount of the City Acquisition Bonds utilized in this  
16 illustration is based on the City's best estimates at this time, but the methodology I have  
17 described would be used for rate setting purposes regardless of the actual amounts that  
18 are finally determined. The methodology reflected in Schedule A, Attachment A will be  
19 updated with the actual amount of the bond and rate at the time of the acquisition.

20 **Q. How would this analysis apply to future rates for the Pennichuck Utilities?**

21 A. Schedule A, Attachment A will be submitted as part of future rate cases for PWW, PEU,  
22 and PAC to reflect the Fixed Annual Revenue Requirement associated with the City  
23 Acquisition Bonds. At that time, the actual principal amount and actual rate will be

1 known. The pro rata percentage for each of the Pennichuck Utilities will be calculated  
2 based on their respective rate base at the time of the acquisition by the City and the  
3 percentage for The Southwood Corporation will be based on its book value at the time of  
4 the acquisition. These percentages will not change over time, regardless of any actual  
5 changes in rate base or book value. The Fixed Annual Revenue Requirement may be  
6 subject to increases in later years to reflect adjustments related to income taxes that may  
7 become due by each of the Pennichuck Utilities as the tax benefit associated with interest  
8 payments by Pennichuck Corporation to the City declines over time. However, the  
9 general methodology that I am describing and the manner in which these amounts are  
10 input would not change. Therefore, we are seeking a determination in this case that this  
11 methodology will be used to determine the revenue requirement associated with recovery  
12 of the cost of the bond until the bond has been paid in full. The Fixed Annual Revenue  
13 Requirement calculated in the manner I have described is then included as set forth in  
14 Column 9 of Schedule A and added to the total revenue required to support the balance of  
15 the Company's rate base and all of its operating expenses. The aggregate amount of  
16 these two figures is the revenue requirement anticipated for PWW under City ownership.

17 **Q. Please explain Schedule 1 entitled, Pennichuck Water Works, Inc. Operating**  
18 **Income Statement for the Twelve Months ended December 31, 2009.**

19 A. This schedule reflects the operating income for PWW based on the analysis described  
20 above. The first column of the schedule reflects the pro forma income statement as of  
21 December 31, 2009 as presented in DW10-091 utilizing the 2009 test year and pro forma  
22 adjustments in that case to provide a known and measurable starting point. Columns 2  
23 and 3 reflect pro forma adjustments for certain items identified through discovery in the

1 pending rate case, resulting in a total pro forma Net Operating Income of \$5,260,266  
2 (DW10-091, Data Response OCA 3-1). Columns 4 and 5 reflect an adjustment for the  
3 Step Increase proposed in that case, resulting in a total pro forma Net Operating Income  
4 of \$5,132,622 (DW10-091, Data Response Staff 3-13). Columns 6 and 7 reflect a pro  
5 forma adjustment to eliminate the recovery of Pennichuck Corporation's eminent domain  
6 defense costs as I discussed earlier, resulting in pro forma total Net Operating Income of  
7 \$5,456,373.

8 **Q. Please explain each of the pro forma adjustments made to the operating revenues**  
9 **and expenses as shown in Schedule 1, Columns 8 and 9.**

10 A. Column 8 reflects the pro forma adjustments expected under City ownership which are  
11 explained in Mr. Patenaude's testimony. Operating Revenues have been decreased by  
12 (\$9,295,906) as a result of the Fixed Annual Revenue Requirement as previously  
13 described. (Schedule A, Attachment A). These revenues are added back as a separate  
14 item, as is discussed below. Total Operating Expense and Deductions have been  
15 decreased by (\$5,264,020) to reflect expected changes that will occur within twelve  
16 months under City ownership. This reduction results in changes from the fact that the  
17 Pennichuck Corporation will no longer be publicly traded and other operating expense  
18 deductions as explained below. Schedule 1, Attachments A, Pages 1 and 2 provide in  
19 detail the nature and specific computation for each pro forma adjustment to each  
20 operating account. Column 9 of Schedule 1 reflects the resulting pro forma Net  
21 Operating Income of \$1,424,485.

22 **Q. Please explain Schedule 1, Attachment A, Pages 1 and 2, entitled ProForma**  
23 **Adjustments to the Net Operating Income.**

1 A. The purpose of this schedule is to show the detail behind the adjustments to PWW's net  
2 operating income under City ownership. The first adjustment is to decrease Revenue by  
3 the amount of the Fixed Annual Revenue Requirement of (\$9,295,906). Because the  
4 portion of the revenue requirement necessary to cover the cost of servicing the City  
5 Acquisition Bonds is being calculated separately, for purposes of determining the revenue  
6 requirement for the remainder of PWW's rate base and expenses, the amount of the Fixed  
7 Annual Revenue Requirement must be removed from pro forma revenues. The next  
8 adjustments are to decrease certain Administrative and General Expenses by (\$1,125,625)  
9 primarily from savings related to corporate administration and regulatory requirements  
10 under the current ownership, which are derived from Mr. Patenaude's testimony. This  
11 schedule also reflects an adjustment for the salary and benefits of the City's CEO  
12 \$215,000 and savings of (\$19,600) for meetings and conventions, (\$1,000) for an  
13 executive vehicle, and (\$22,466) for memberships. Payroll taxes are reduced by  
14 (\$54,044) for the pro forma salary adjustments. As explained in Mr. Patenaude's  
15 testimony, the management fee allocation is based on the current percentage allocations.  
16 Expense allocations from the Parent will be reduced by (\$586,203) primarily for matters  
17 and expenses related to being a public company, which are also derived from Mr.  
18 Patenaude's testimony. The corporate expense allocation will be reduced by (\$439,066),  
19 and PWW's expense allocation to affiliates will be \$304,081 resulting in a net  
20 adjustment of (\$134,985) to the management fee paid by PWW.

21 **Q. Please explain the adjustments for Depreciation and Amortization Expense.**

22 A. The total current equity recorded for PWW is \$52,553,720 (Schedule 4, DW10-091, Data  
23 Response OCA 3-1). Because this equity is being purchased with the proceeds of the

1 City Acquisition Bonds, the revenue requirement for this portion of the Company's  
2 capital will be calculated through the Fixed Annual Revenue Requirement process that I  
3 have described. Because this portion of the Company's capital will be removed from rate  
4 base for purposes of calculating the revenue requirement, the associated depreciation  
5 expense of \$1,471,504 (based on a composite depreciation rate of 2.80%) must also be  
6 removed. For book purposes, the Company will continue depreciating the assets  
7 represented by this equity, but for ratemaking purposes an adjustment will be made to  
8 reduce depreciation expense by (\$1,471,504). It is possible that the composite  
9 depreciation rate associated with the assets could change from time to time as approved  
10 by the Commission, in which case an adjustment will be made to reflect this change at  
11 the time of a rate filing. In such a case, the depreciation expense adjustment will be  
12 calculated by multiplying the new composite depreciation rate by \$52,553,720. It should  
13 be noted that the equity of \$52,553,720 is as of 12/31/2009 for illustrative purposes only  
14 and will be updated at the time of the closing.

15 In addition, the City is seeking recovery of approximately \$5,000,000 in eminent domain  
16 costs that it has incurred, and therefore an adjustment has been made to recognize the  
17 amortization and recovery with a return of this expense over a 30-year period, resulting in  
18 an annual expense of \$166,667. Finally, a pro forma adjustment of (\$2,644,528) is made  
19 to income taxes as calculated on Schedule 1.

20 **Q. Will there be particular assets identified as those being removed from rate base as**  
21 **part of the \$52,553,720 for purposes of determining rates?**

22 A. No, the identified amount is intended to reflect the level of equity in PWW as of the  
23 closing, and does not reflect any specific assets. Since the Company's rate base is



1 financed by both debt and equity, it is not possible to trace the equity portion to any  
2 specific assets.

3 **Q. Please explain Schedule 3, entitled “Pennichuck Water Works, Computation of Rate**  
4 **Base, For the Twelve Months ended December 31, 2009.”**

5 A. The overall purpose of this schedule is to calculate a pro forma rate base utilized to  
6 determine PWW’s revenue requirement exclusive of the Fixed Annual Revenue  
7 Requirement that supports the City Acquisition Bonds. Column 1 reflects the pro forma  
8 rate base calculation as of December 31, 2009 as submitted in DW10-091. Columns 2  
9 and 3 reflect pro form adjustments for certain items identified through discovery in the  
10 pending rate case, resulting in a total pro forma Rate Base of \$97,299,491 (DW 10-091,  
11 Data Response OCA 3-1). Columns 4 and 5 reflect an adjustment for the Step Increase  
12 proposed in the rate case, resulting in a total pro forma Rate Base of \$100,607,368 (DW  
13 10-091, Data Response Staff 3-13). Columns 6 and 7 reflect a pro forma adjustment to  
14 eliminate the recovery of PWW’s eminent domain costs, resulting in pro forma Rate Base  
15 of \$95,782,461. For ratemaking purposes, the eminent domain expenses have been  
16 treated as if they were a rate base item because they have been booked as a deferred asset.

17 **Q. Please explain each of the pro forma adjustments made to the Rate Base as reflected**  
18 **in Columns 8 and 9.**

19 A. Column 8 reflects the pro forma adjustments expected under City ownership. Working  
20 Capital has been decreased by (\$155,433) using a standard net lag assumption of 45 days  
21 (or 12.33% of 365 days ) due to the decrease in operating expenses of (\$1,260,610). Rate  
22 base has been reduced by (\$52,553,720) to eliminate the existing equity in PWW as  
23 explained above. Rate base has also been increased by \$4,272,693 for the PWW pro rata

1 share of the RSF and by \$5,000,000 to recognize the City's eminent domain costs that are  
2 being included as a deferred asset. The net result of all these adjustments to rate base is a  
3 decrease of (\$43,436,460). Schedule 3, Attachment A provides detail to the nature and  
4 specific computation for each pro forma adjustment to rate base. Column 9 reflects the  
5 resulting pro forma Rate Base of \$52,346,000.

6 **Q. Ms. Hartley would you please explain Schedule 4 entitled Overall Rate of Return?**

7 A. Yes. Schedule 4 reflects the calculation of Overall Rate of Return. Column 1 reflects the  
8 capital component of PWW as of December 31, 2009 from DW 10-091. Columns 2 and  
9 3 reflect pro forma adjustments to the capital structure to recognize \$2,301,100 of  
10 additional SRF Debt expected to be issued prior to the closing on the sale to the City  
11 (Schedule 4, Attachment A), resulting in total Long Term Debt of \$49,553,907. As  
12 stated in Mr. Patenaude's testimony, the City plans to retain the current long term debt  
13 instruments in each of the Pennichuck Utilities. Therefore, as shown in Column 6 the  
14 total Long Term Debt remains at \$49,553,907 at a cost of 6.04%. Columns 4 and 5  
15 reflect the removal of the equity (\$52,553,720) purchased by the City (and recovered  
16 separately through the Fixed Annual Revenue Requirement) and \$4,272,693 for the  
17 additional equity from PWW's pro rata share of the RSF. The return on equity applied in  
18 calculating the weighted average cost of capital is 9.75%. Column 9 reflects the  
19 weighted average cost of capital at 6.33% under City ownership versus an average cost of  
20 7.95% under current ownership; a difference of (1.62%).

21 **Q. Ms. Hartley please explain the basis for using the 9.75% ROE.**

22 A. The 9.75% ROE is the last found rate of return on equity awarded in the Pennichuck  
23 Utilities' most recent rate cases for PWW in DW 08-073 and for PAC in DW 08-052.

1 This is also the same return on equity used by PWW and PAC in their pending rate cases,  
2 DW 10-091 and DW 10-090, respectively.

3 **Q. Please explain Section 2, Pennichuck East Utility, Inc. entitled Schedule A,**  
4 **Computation of Revenue Deficiency for the Twelve Months ended December 31,**  
5 **2009.**

6 A. Similar to the schedules for PWW, the first column reflects the pro forma revenue  
7 requirement as of December 31, 2009 based on a 2009 test year to provide a known and  
8 measurable starting point. Columns 2 and 3 reflect pro forma adjustments to eliminate  
9 the North County Capital Recovery Surcharge assets and related revenues and  
10 depreciation expense from DW 08-052, resulting in pro forma total revenues of  
11 \$6,233,736 and requiring a 10.34% rate increase over current rates. Column 4 reflects  
12 the pro forma test year with the addition of \$295,242 for the North Country Capital  
13 Recovery Surcharge revenue, resulting in total revenues of \$6,528,978. Column 5  
14 illustrates the pro forma adjustments sought by the City as well as the elimination of  
15 certain operating expenses, all of which are consistent with the changes I described with  
16 regard to PWW. Column 6 reflects the addition of \$1,444,505 for the Fixed Annual  
17 Revenue Requirement related to PEU's portion of the City bond, resulting in a 8.66% rate  
18 increase being required under City ownership. Total revenues under City ownership  
19 including the North Country Capital Recovery Surcharge would be \$6,434,231. Using  
20 this analysis, the rate increase projected under City ownership (8.66%) would be less than  
21 that projected under current ownership (10.34%).

1 **Q. Ms. Hartley, please summarize Schedule A, Attachment A entitled Pennichuck East**  
2 **Utility, Inc., Pro Forma Adjustments to Revenue Requirement for the Twelve**  
3 **Months Ended December 31, 2009?**

4 A. This schedule shows the pro forma adjustments for PEU using this same form of analysis.  
5 The calculation for the PEU pro rata share of the City Acquisition Bonds is the same as  
6 previously described for PWW. Therefore, this schedule reflects the PEU rate base at  
7 \$14,290,910 as of 12/31/2009 (Schedule A), and the pro rata share of \$115,099,865 is  
8 12.42%. The total principal amount of the City Acquisition Bonds of \$157,011,440 is  
9 then multiplied by 12.42% resulting in a PEU pro rata share of \$19,500,821. PEU's pro  
10 rata share of the RSF is \$637,500 (Schedule 3, Attachment A), resulting in a pro rata  
11 share of \$18,863,321 of the City Acquisition Bonds for the purpose of calculating the  
12 Fixed Annual Revenue Requirement which will be \$1,444,505 assuming interest at  
13 6.50% for a period of 30 years.

14 **Q. Please explain Schedule 1 entitled, Pennichuck East Utility, Inc., Operating Income**  
15 **Statement for the Twelve Months ended December 31, 2009.**

16 A. Columns 1 thru 4 reflect adjustments related to the merger of the North Country systems  
17 into PEU, which was approved by the Commission in DW 08-052. These adjustments  
18 result in \$733,284 net operating income for the pro forma test year ending 12/31/2009.  
19 Column 5 reflects the pro forma adjustments expected under City ownership. Revenues  
20 have been decreased by (\$1,444,505) as a result of the Fixed Annual Revenue  
21 Requirement previously described (Schedule A, Attachment A). Total Operating  
22 Deductions have been decreased by (\$818,671) to reflect expected changes that will  
23 occur within twelve months under City ownership. Schedule 1, Attachment A provides

1 in detail the nature and specific computation for each pro forma adjustment to each  
2 operating account. Column 6 reflects the resulting pro forma Net Operating Income of  
3 \$107,449.

4 **Q. Ms. Hartley would you now explain Schedule 1, Attachment A, entitled Pennichuck**  
5 **East Utility, Inc., Pro Forma Adjustments to Net Operating Income?**

6 A. Yes. The first adjustment is to decrease Revenue recognizing the Fixed Revenue  
7 Requirement of (\$1,444,505) consistent with what was done for PWW as described  
8 above. The next adjustments are to reduce Administrative and General Expenses for a  
9 total of (\$256,736), Corporate expense allocations will be reduced by (\$87,930), and the  
10 PWW allocation will be reduced by (\$168,806), resulting in a total adjustment of  
11 (\$256,736) to the Management Fee.

12 **Q. Please explain the adjustments for Depreciation Expense.**

13 A. As stated previously, the City will be purchasing all of the equity of Pennichuck Utilities.  
14 As of 12/31/2009, the total recorded equity for PEU is \$6,915,421. Again, this is for  
15 illustrative purposes for the test year ending 12/31/2009 and will change at the time of the  
16 acquisition by the City. An adjustment of (\$151,448) is made to depreciation expense at  
17 a composite depreciation rate of 2.19% to recognize the elimination of depreciation  
18 expense for the equity portion of the rate base purchased by the City using the bond  
19 proceeds. The equity amount will remain the same over the 30-year period; however, the  
20 composite depreciation rate could change from time to time as approved by the  
21 Commission. Finally, a pro forma adjustment of (\$410,487) is made to income taxes as  
22 calculated on Schedule 1.

1 **Q. Please explain Schedule 3, entitled “Pennichuck East Utility, Inc., Computation of**  
2 **Rate Base, For the Twelve Months ended December 31, 2009.”**

3 A. As with PWW, the overall purpose of this schedule is to calculate a pro forma rate base  
4 for PEU in order to determine the basis on which to compute its allowed rate of return.  
5 Columns 1 thru 4 reflect adjustments related to the inclusion of the North Country  
6 Systems into PEU resulting in a total pro forma rate base of \$14,290,910. Column 5  
7 reflects the pro forma adjustments expected under City ownership. Working Capital has  
8 been decreased by (\$31,656). An adjustment of (\$6,915,421) has been made to reduce  
9 rate base by those assets associated with the City’s purchase of the equity in PEU and an  
10 adjustment of \$637,500 has been made to rate base for the PEU pro rata share of the RSF  
11 resulting in a total adjustment to rate base (\$6,309,577). Schedule 3, Attachment A  
12 provides detail to the nature and specific computation for each pro forma adjustment to  
13 Rate Base. Column 9 reflects the resulting pro forma rate base of \$7,981,333.

14 **Q. Ms. Hartley would you please explain Schedule 4 entitled Overall Rate of Return?**

15 A. Yes. Schedule 4 reflects the calculation of Overall Rate of Return. Column 1 reflects the  
16 capital component of PEU as of December 31, 2009. As stated in Mr. Patenaude’s  
17 testimony, the City plans to retain the current long term debt instruments in each of the  
18 Pennichuck Utilities. Therefore, as shown in Column 4, total long term debt remains  
19 \$7,856,291 at a cost of 4.67%. Columns 2 and 3 reflect the equity purchase of  
20 (\$6,915,421) by the City at the time of closing and the infusion of \$637,500 for the PEU  
21 equity of the pro rata RSF resulting in total equity of \$637,500 at a cost of 9.75%.  
22 Column 7 reflects the weighted average cost of capital at 5.05% under City ownership

1 versus an average cost of capital at 7.60% under current ownership which is a difference  
2 of (2.55%).

3 **Q. Please explain Section 3, Pittsfield Aqueduct Company, Inc. entitled Schedule A,**  
4 **Computation of Revenue Deficiency for the Twelve Months ended December 31,**  
5 **2009.**

6 A. This exhibit shows in the first column the pro forma revenue deficiency as of December  
7 31, 2009 as filed in the currently pending PAC rate case, which seeks an increase of  
8 19.98% resulting in \$728,461 of total revenue (DW 10-090). Columns 2 and 3 reflect pro  
9 forma adjustments for certain items identified through discovery in that case, which  
10 adjusts the proposed increase to 17.73%, or \$714,945 in total revenues (DW 10-090, Data  
11 Response OCA 3-1). Columns 4 and 5 reflect a pro forma adjustment for an estimated  
12 3.32% Step Increase, resulting in an overall rate increase of 21.05%, or \$735,106 in total  
13 revenues (DW 10-090, Data Response Staff 3-13). Columns 6 and 7 illustrate the pro  
14 forma adjustments requested by the City as well as the elimination of certain operating  
15 expenses. Column 7 reflects an adjustment of \$203,534 for the Fixed Revenue  
16 Requirement related to the City bond, resulting in a total 19.60% rate increase. This  
17 schedule shows that a lower rate increase results under City ownership (19.60%) than  
18 under current ownership (21.05%).

19 **Q. Ms. Hartley, would you please summarize Schedule A, Attachment A entitled**  
20 **Pittsfield Aqueduct Company, Inc., Pro Forma Adjustments to Revenue**  
21 **Requirement for the Twelve Months Ended December 31, 2009?**

22 A. Yes. This schedule shows the pro forma adjustments for PAC that are projected by the  
23 City on a going forward basis. The calculation for the PAC pro rata share of the City

1 bond is consistent with that previously described for PWW. Therefore, this schedule  
2 reflects the PAC rate base at \$2,013,389 and PAC's pro rata share of \$115,099,865 for all  
3 companies is 1.75%. The total principal amount of the City Acquisition Bonds of  
4 \$157,011,440 is then multiplied by 1.75%, resulting in a PAC pro rata share of  
5 \$2,747,700. The pro rata RSF share is calculated at \$89,814 (Schedule 3, Attachment A),  
6 resulting in \$2,657,886 for the purpose of calculating the Fixed Revenue Requirement at  
7 \$203,534 at a cost of 6.50% for a period of 30 years.

8 **Q. Now Ms. Hartley, please explain Schedule 1 entitled, Pittsfield Aqueduct Company,**  
9 **Inc., Operating Income Statement for the Twelve Months ended December 31, 2009.**

10 A. The first column of this schedule shows the pro forma income statement as of December  
11 31, 2009 as filed in the pending PAC rate case (DW 10-090). Columns 2 and 3 reflect  
12 pro forma adjustments for certain items identified through discovery in the pending rate  
13 case, resulting in a total pro forma Net Operating Income of \$79,348 (DW 10-090, Data  
14 Response OCA 3-1). Columns 4 and 5 reflect an adjustment for the Step Increase,  
15 resulting in a total pro forma Net Operating Income of \$75,716 (DW 10-090, Data  
16 Response Staff 3-13). Column 6 reflects the pro forma adjustments expected under City  
17 ownership. Operating Revenues have been decreased by (\$203,534) as a result of the  
18 Fixed Revenue Requirement as previously described. (Schedule A, Attachment A). Total  
19 Operating and Expense Deductions have been decreased by (\$115,926) to reflect  
20 expected changes that will occur within twelve months under City ownership. Schedule  
21 1, Attachments A, Page 1 provides in detail the nature and specific computation for each  
22 pro forma adjustment to each operating account. Column 9 reflects the resulting pro  
23 forma Net Operating Income of (\$11,892).



1   **Q.     Ms. Hartley would you now explain Schedule 1, Attachment A, entitled Pittsfield**  
2       **Aqueduct Company, Inc., Pro Forma Adjustments to the Net Operating Income?.**

3   A.     Yes, the first adjustment is to decrease Revenue to recognize the Fixed Annual Revenue  
4       Requirement of (\$203,534) as described earlier. The next adjustments are to reduce  
5       Administrative and General Expenses by (\$31,364) as a result of certain expense  
6       reductions identified in Mr. Patenaude's testimony.

7   **Q.     Please explain the adjustments for Depreciation Expense and Income Taxes.**

8   A.     The total equity recorded for PAC as of 12/31/2009 is \$1,054,459. An adjustment of  
9       (\$27,100) is made to depreciation expense at a composite depreciation rate of 2.57% to  
10      recognize the elimination of depreciation expense for the equity portion of rate base  
11      purchased by the City Acquisition Bonds, consistent with the adjustments made for  
12      PWW and PEU. Finally, a pro forma adjustment of (\$57,462) is made for income taxes  
13      as calculated on Schedule 1

14   **Q.     Please explain Schedule 3, entitled "Pittsfield Aqueduct Company, Inc.,**  
15       **Computation of Rate Base, For the Twelve Months ended December 31, 2009."**

16   A.     The overall purpose of this schedule is to calculate a pro forma rate base for PAC in order  
17      to determine the basis on which to compute its allowed rate of return. Column 1 reflects  
18      the pro forma rate base calculation as of December 31, 2009 based on DW10-090.  
19      Columns 2 and 3 reflect pro form adjustments for certain items identified through  
20      discovery in the pending rate case, resulting in a total pro forma Rate Base of \$1,900,913  
21      (DW 10-090, Data Response OCA 3-1). Columns 4 and 5 reflect an adjustment for the  
22      Step Increase proposed in the pending rate case, resulting in a total pro forma Rate Base  
23      of \$2,013,389 (DW 10-090, Data Response Staff 3-13).

1 **Q. Please explain each of the pro forma adjustments made to the Rate Base as reflected**  
2 **in Columns 6 and 7.**

3 A. Column 6 reflects the pro forma adjustments expected under City ownership. Working  
4 Capital has been decreased by (\$3,867). An adjustment of (\$1,054,459) has been made to  
5 reduce rate base for the equity-related rate base, and an adjustment of \$89,814 has been  
6 made to rate base for the PAC pro rata share of the RSF, resulting in total adjustments to  
7 rate base of (\$968,513). Schedule 3, Attachment A provides detail to the nature and  
8 specific computation for each pro forma adjustment to Rate Base. Column 9 reflects the  
9 resulting pro forma rate base of \$1,044,876.

10 **Q. Ms. Hartley would you please explain Schedule 4 entitled Overall Rate of Return?**

11 A. Yes. Schedule 4 reflects the calculation of Overall Rate of Return. Column 1 reflects the  
12 capital component of PAC as of December 31, 2009. As stated in Mr. Patenaude's  
13 testimony, the City plans to retain the current long term debt instruments in each of the  
14 Pennichuck Utilities. Therefore, as shown in Column 4, the total long term debt remains  
15 at \$776,850 at a cost of 7.00% and short term debt at \$255,038 at the cost of 0.50%.  
16 Columns 2 and 3 reflect the purchase of (\$1,054,459) of equity by the City at the time of  
17 closing and the infusion of \$89,814 in equity into PAC for the pro rata share of the RSF,  
18 resulting in total equity of \$89,814 at a cost of 9.75%. Column 7 reflects the weighted  
19 average cost of capital at 5.74% under City ownership versus an average cost of 7.60%  
20 under current ownership; a difference of (1.85%).

21 **Conclusion**

22 **Q. What is the result of your analysis of the rates for PWW, PEU and PAC?**  
23

1     A.     Using the methodology I have described above as well as the assumptions provided by  
2           the City, my analysis reflects that rates for each of PWW, PEU and PAC can expected to  
3           be at or below projected rates under the current ownership and management of the  
4           Pennichuck Utilities.

5     **Q.     Ms. Hartley does this conclude your testimony at this time?**

6     A.     Yes.