

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

Re: Pittsfield Aqueduct Company, Inc.

DW 08-052

**JOINT PREFILED DIRECT TESTIMONY
REGARDING PERMANENT RATES
OF
DONALD L. WARE AND BONALYN J. HARTLEY**

MARCH 13, 2009

TABLE OF CONTENTS

Professional and Educational Background	3
Summary of Testimony	4
The Company's Proposal	6
Explanation of attached exhibits	15

1 Q. Please state your names and positions with Pittsfield Aqueduct Company,
2 Inc. (the "Company").

3 A. We are Donald L. Ware, President, and Bonalyn J. Hartley, Vice President
4 Administration and Regulatory Affairs of Pittsfield Aqueduct Company, Inc.

5 **Professional and Educational Background**

6 Q. Please describe your position and educational background.

7 A. I have been employed with the Company since April 1995. I am a licensed
8 professional engineer in New Hampshire, Massachusetts and Maine. I have a
9 Bachelor in Science degree in Civil Engineering from Bucknell University in
10 Lewisburg, Pennsylvania. I have a Masters in Business Administration from the
11 Whittemore Business School at the University of New Hampshire.

12 Q. Mr. Ware please describe your professional background.

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

19 Q. What are your responsibilities as President of the Company?

20 A. I am responsible for the overall operations of the Company, including water
21 quality and supply, distribution, engineering and water system capital
22 improvements. With regard to capital improvements overseen by the
23 Company's Engineering Department, I work directly with the Company's Chief

Engineer and each of the Company's Department managers in the selection and implementation of new capital improvement projects

Q. Ms. Hartley, please state your professional and education background.

A. Prior to my current position, I had served in various capacities including Vice President-Controller, Manager of Systems and Administration and Office Manager. I have been with the Company since 1979. In 1989, I attended the Annual Utility Rate Seminar sponsored by the National Association of Regulatory Commissioners and the University of Utah. I am a graduate of Rivier College with a B. S. in Business Management. In addition, I am a Director of the New England Chapter of the National Association of Water Companies and Chairman. I have had the opportunity to testify in numerous cases before this Commission.

Summary of Testimony

Q. What is the purpose of your testimony?

A. In broad terms, the Company is submitting revised testimony and exhibits in this case (DW 08-052) to propose the transfer of the three North Country ("North Country") water systems known as Locke Lake Colony Association, Birch Hill, and Sunrise Estates located in Barnstead, North Conway and Middleton, New Hampshire respectively to its sister utility, Pennichuck East Utility, Inc ("PEU") and to establish rates at different levels than those originally proposed in the Company's May 2, 2008 rate filing.

Q. Please provide a summary of the basis for this proposal.

1 A. On May 2, 2008, the Company submitted a rate filing with the Commission in
2 which it sought annual gross revenues of \$957,641 for the test year ending
3 December 31, 2007. The Company also requested that the Commission
4 establish separate rates for those customers in the Town of Pittsfield and those
5 served by the remainder of the Company's three water systems located in the
6 North Country. The proposed rate increase would have generated \$200,503 in
7 revenues from customers in the Town of Pittsfield (a 44.01% increase) and
8 \$757,138 in revenues from North Country customers (a 239.52% increase).
9 The Company also requested a step increase that would have generated an
10 additional \$228,836 in revenues from North Country customers (a 72.39%
11 increase). The Company proposed that the step increase would take effect at
12 the time permanent rates were awarded and the related capital improvements
13 were used and useful.

14 **Q. What is the status of the Company's rate request?**

15 A. On December 31, 2008, the Company was awarded a temporary rate
16 increase (Order No. 24,929) effective for service rendered on and after
17 June 6, 2008. The order awarded a 40% temporary increase for customers in
18 Pittsfield which generates an additional \$182,226 in revenues; rates for
19 customers in the North Country were increased by 153%, generating an
20 additional \$483,647 in revenues. Temporary rates are fully reconcilable upon
21 the award of permanent rates.

22 Assuming usage of 7ccf of water per month, the annual cost for an average
23 family would be \$560 in Pittsfield and \$1,013 in the North Country based on

1 temporary rates. In its original filing, the Company is proposing a permanent
2 rate increase of 44.01% for Pittsfield customers and a 311.91% increase for
3 North Country customers that, if awarded, would result in additional revenue of
4 \$18,277 and \$502,327 respectively. Assuming usage of 7ccf of water per
5 month, the annual cost for the average family would now be approximately
6 \$576 in Pittsfield and \$1,649 in the North Country (including the step increase)
7 at the proposed permanent rate level.

8 **The Company's Proposal**

9 **Q. Please explain the Company's proposal that is being submitted as part of**
10 **this testimony.**

11 A. The Company is proposing to transfer the assets used to serve the North
12 Country customers and the corresponding franchise rights to serve those
13 customers to Pennichuck East Utility, Inc. ("PEU"). As described in more detail
14 below, the Company has determined an alternate rate proposal for North
15 Country customers that will result in a lower rate increase and is predicated on
16 the transfer of the North Country assets and franchise rights to PEU.

17 **Q. Why is the Company proposing to separate the Town of Pittsfield and**
18 **North Country customers at this time?**

19 A. The Company is proposing that the North Country systems should be merged
20 with PEU given its larger customer base (5,313 customers) and the similarity of
21 the systems. The Pittsfield system alone is too small (646 customers) to
22 accomplish this. By merging the North Country systems into PEU, the much
23 larger combined customer base will tend to stabilize North Country rates now

1 and in the future. Also, the profile of the water supply and distribution facilities
2 that serve the North Country and PEU customers are similar as they both are
3 served by well systems, while the Pittsfield customers are served by a water
4 treatment plant.

5 **Q. What is the rate impact on the Pennichuck East customers if the**
6 **proposed acquisition of these systems are approved by the Commission?**

7 A. There will be no rate impact for the PEU customers at the time of this
8 acquisition. The Company is proposing a unique capital surcharge based on
9 the actual rate base for each of the three water systems in the North Country.
10 The Capital Surcharge would be a fixed tariff amount, charged monthly to the
11 service address and calculated over 30 years at a favorable interest rate of
12 4.68% (calculated similar to a mortgage amortization). A separate Capital
13 Surcharge will be assessed to each customer of a North Country system with
14 the amount of the surcharge being based on the investment made in each of
15 the North Country system. This creates an equitable payment calculation for
16 each of the three systems based on the actual capital improvements required
17 by that system. As described in the Company's May 2008 pre-filed testimony,
18 the investments incurred to date bring each of the North Country systems up to
19 a standard similar to the PEU systems.

20 **Q. Are there other unique features to the proposal regarding North Country**
21 **customers?**

22 A. Yes. The Company is proposing that each North Country Customer be
23 charged for a minimum of 4 ccf per month for any usage between 0 ccf and 4

1 ccf. This will create parity between those customers using lower usage and
2 those customers using in excess of 4ccf because most of the costs associated
3 with the capital improvements to the North Country systems benefit all
4 customers regardless of usage. The new facilities were designed to provide a
5 safe and reliable source of water with reasonable water pressure through all
6 usage patterns; including peak loads created on holiday weekends/weeks when
7 there is a large influx of seasonal/low consumption users. These rate making
8 initiatives will ensure that North Country customers will be paying their fair
9 share of the capital improvements and the operating expenses while not unduly
10 burdening PEU customers. Other PEU customers will not be charged for
11 volumetric use in this manner.

12 **Q. Will there be a rate impact on existing Pennichuck East customers in the**
13 **in the future?**

14 **A.** Yes, there will be a minimal impact for existing PEU customers at the time PEU
15 files its next rate case. The impact of merging the North Country Systems with
16 PEU will create a change in the cost of capital by merging the equity
17 component of \$1.6 million from the North Country systems. The impact of the
18 equity infusion in combination with the merger of PEU and North Country
19 operating expenses would result in a projected 5.26% rate increase as of the
20 time of the acquisition; however, the Company is not proposing any change in
21 rates for the Pennichuck East customers at this time.

22 **Q. Will the Capital Surcharge remain fixed for the three North Country**
23 **systems post acquisition?**

1 A. Yes. However, the improvements in the North Country have brought
2 these systems up to same standards as those systems in PEU. Going forward,
3 any future capital improvements for both North Country and PEU customers will
4 be included in the blended PEU rate base for the purposes of setting rates.
5 The ebb and flow of capital improvements and operating expenses would be
6 shared by a larger group of customers totaling 6,422 customers including both
7 the North Country and PEU. Over time, all customers will benefit from being
8 part of a larger system by spreading costs across a larger group of customers.
9 This is significant when there are new regulatory mandates, major replacement
10 and upgrades, necessary capital expenditures, and water source and treatment
11 improvements.

12 **Q. How does the Company propose to account for the Capital Surcharge for**
13 **the purpose of rate making?**

14 A. The Company is proposing that the rate base associated with the Capital
15 Surcharge be excluded as a pro forma adjustment at the time rates are put into
16 effect and over the 30 year period. However, property taxes, depreciation and
17 maintenance expense associated with this plant would be included in future
18 rate cases because these expenses are dynamic and will be required to
19 maintain these assets. Depreciation expense will be required for upgrades and
20 replacements in the future. The Company is proposing that PEU's current
21 depreciation rates be applied to the North Country assets at the time of the
22 acquisition.

1 **Q. Does the Company expect a return on equity related to the rate**
2 **base associated with the Capital Surcharges for the three North**
3 **Country systems?**

4 **A.** No, not at this time. The Company is only requesting the 4.68%
5 interest rate which is based on the current weighted average cost of debt for
6 the North Country systems. However, the Company is requesting that the
7 equity component of \$1.6 million related to the North Country systems be
8 included at the time of the next PEU rate filing. The inclusion of this equity will
9 provide PEU a favorable debt to equity ratio of 40% debt and 60% equity as
10 reflected in the attached schedules. It is important to note that this equity
11 infusion will be necessary in order to provide a healthy capital structure when
12 PEU seeks debt refinancing of 4.5 million dollars in the latter part of 2009.

13 **Q. Why is the Company foregoing its allowed return on equity in**
14 **this case?**

15 **A.** The Company realizes that this is a significant rate increase for the
16 North Country customers in a time of unprecedented economic turmoil and thus
17 is proposing this methodology in order to mitigate 'rate shock', set rates that are
18 equitable between the three North Country systems, and avoid significant
19 subsidization for existing PEU customers.

20 For many years, the State of New Hampshire has been plagued with troubled
21 water systems that are poorly managed and did not meet safe drinking water
22 standards. They are considered 'not viable' and do not have the financial
23 resource to stand on their own. They need to be part of a larger system that

1 has both the technical and financial resources to ensure safe, reliable and
2 affordable water service. The Pennichuck utilities have acquired many troubled
3 water systems and has made significant investments to bring them into
4 compliance. However, it has created a challenge for both the Company and
5 the Commission to find a balance in making the necessary improvements while
6 maintaining affordable rates. The Company believes that this methodology will
7 result in a model, if approved, that could now be used for the acquisition of
8 other troubled water systems in the State. Water systems would be studied
9 and analyzed, capital improvements planned and recommended with a one-
10 time fixed capital surcharge. A one year operating period should be allocated
11 before any significant improvements are made in order for the Company to
12 pursue the lowest cost of capital and explore the potential for both state and
13 federal grants. Once improvements are made and a water system meets
14 regulatory standards, the ongoing capital improvements would be blended with
15 the larger system for future rate filings.

16 **Q. Will the Company forego its allowed return on equity in future**
17 **acquisitions using this methodology?**

18 A. No. This is proposed only to facilitate the merger of the North Country systems
19 with PEU and is because of the extent of the rate relief necessary and the
20 current economic climate. The Company will be seeking its allowed return on
21 equity in future acquisitions utilizing this methodology.

22 **Q. Does the Company recommend that Pittsfield customers remain**
23 **independent as part of the Pittsfield Aqueduct Company, Inc.?**

1 A. Yes, as stated previously, the water system in Pittsfield uniquely distinguishes
2 its system from the PEU and North Country systems. No capital surcharge is
3 required for the Pittsfield customers given the extent of the capital investments
4 and no volumetric change is needed as the average residential usage is
5 approximately 7 ccf per month, and most customers are year long residents.
6 Additionally, the proposed rate increase for an average residential customer in
7 Pittsfield on a stand alone basis is \$576 annually or about \$100 less than the
8 average residential PEU customer which is currently at \$669 a year.

9 **Q. Is there any potential for growth in the North Country Systems?**

10 A. Yes, there is a potential to service about 1,100 customers in the Locke Lake
11 System which is an increase of 276 customers over the test year customer
12 count. There is also a potential to serve about 250 customers in the Birch Hill
13 System which is an increase of 44 customers over the test year customer
14 count. The Sunrise Estates System is built out and will not experience any
15 increase in customer count from the present level.

16 **Q. How do you propose to treat new customers in Birch Hill and Locke Lake**
17 **in regards to the Capital Surcharge?**

18 A. The Company is proposing a System Upgrade Fee as part of its tariff.
19 Specifically, the Company is proposing under Section 33, System Upgrade
20 Fees (C)(1)(c) and (C)(2)(b) to assess such a charge to new customers where
21 the Company has made water system improvements that benefit existing
22 customers and new customers that come on to the system. The system

1 upgrade fee for each system will be based on the rate base used to establish
2 the capital surcharge as follows:

3 **Locke Lake System Upgrade Fee = (\$2,705,841/1,100 customers)**
4 **= \$2,460 per connection**

5 **Birch Hill System Upgrade Fee = (\$1,878,504/250 customers)**
6 **= \$7,514 per connection**

7 This will be a one time fee and the new customer paying the fee will not pay a
8 capital surcharge going forward. The payment will be treated as CIAC.

9 **Q. Why is there no system upgrade fee proposed for Sunrise Estates?**

10 **A.** Because the system is fully built out and there will be no new customers in the
11 future.

12 **Q. Is the Company still pursuing federal grant monies to help reduce the**
13 **capital invested in the Locke Lake and Birch Hill Water Systems?**

14 **A.** Yes.

15 **Q. When will the Company be advised if federal grant money is available for**
16 **these systems?**

17 **A.** The Company expects to be advised in October of 2009 if grant money will be
18 available to reduce the Capital Surcharge.

19 **Q. How does the Company propose to handle grant money if it becomes**
20 **available?**

21 **A.** Two types of grant money may become available: the System Interconnection
22 grant funds (SIGI) through the New Hampshire Department of Environmental
23 Services (NHDES) and earmark funds through the Federal Government. The

1 NHDES has awarded a 25% SIGI grant to the Company for the interconnection
2 of the Birch Hill and North Conway Water Precinct. Unfortunately, the NHDES
3 will not be funding that grant at present and it does not appear it will be funded
4 as part of the proposed State Biennium Budget. At present, the Company has
5 recognized the existence of this grant by reducing rate base through an
6 appropriate credit even though this grant is not currently being funded. Relative
7 to the potential for earmark funds, the Company has worked with the Locke
8 Lake Colony Association and Birch Hill to prepare and file applications to
9 Senator Judd Gregg and Representative Shea-Porter requesting support for a
10 Federal earmark to help reduce the amount of the Capital Surcharge for one or
11 both of these systems. The Company proposes reevaluating the Capital
12 Surcharge amount in the late fall after it is clear whether there will be federal
13 earmark money and whether the State will fund the SIGI grant. The amount of
14 the Capital Surcharge will be increased or decreased based on the final
15 availability of grant money for these two water systems.

16 **Q. Please comment on the pro forma capital structure for PEU with the**
17 **addition of the NC equity.**

18 **A.** The pro forma year ending 2007 capital structure is for illustrative purposes
19 only and does not reflect the capital structure that will be filed in the next PEU
20 rate case. In 2008 and 2009, the Company will be investing about \$3.1 million
21 dollars of new plant improvements in PEU and \$400,000 in the North Country
22 systems. This capital will all be funded with debt. This new debt will result in
23 an approximate capital structure of 47% debt and 53% equity for the combined

1 PEU and North Country systems. The equity infusion from the North Country
2 into PEU will provide PEU with a healthy capital structure.

3 **Explanation of attached exhibits**

4 **Q. Please explain how the Company has organized this filing.**

5
6 **A.** The first part of the Company's filing is a revision to its original filing, which
7 presented separate schedules for Pittsfield and North Country each. These
8 schedules include the following:

9 Section 1: Computation of Revenue Deficiency – Pittsfield Only

10
11 Section 2 : Overall Rate of Return – Pittsfield Only

12
13 The second part of the Company's filing relates to its proposal that the three
14 North Country systems be acquired by PEU:

15 Section 3: Computation of Revenue Deficiency – North Country Only

16
17 Section 4: Computation of Revenue Deficiency – North Country Only –
18 Revised Step Increase

19
20 Section 5: Overall Rate of Return – North Country Only

21
22 Section 6 : Computation of Revenue Deficiency – Pennichuck East Utility,
23 Inc.

24
25 Section 7: Computation of Revenue Deficiency – Pennichuck East Utility,
26 Inc., Combined PEU & NC

27
28 Section 8: North Country customers at PEU Rates – Modified Filing

29
30 Section 6 reflects a revenue deficiency for PEU for the twelve months ending
31 December 31, 2007. Section 7 is included for illustrative purposes to provide
32 an estimate of the impact on the PEU customers by combining the North
33 Country systems for that same period and Section 8 reflects the impact of the

North Country Systems at PEU rates and the Capital Recovery Surcharge for each system with supporting schedules.

Q. Please explain the schedules and exhibits found in Section 1 for "Pittsfield Only".

A. Section 1, Schedule A, reflects the "Computation of Revenue Deficiency" for the customers in "Pittsfield Only". The attached schedules have been modified from the original filing to reflect known corrections and adjustments as a result of findings by both the Company and the Commission Staff during the recent discovery period. Each pro forma adjustment is referenced for review. The overall rate of return of 8.07% is multiplied by the pro forma rate base of \$2,031,791, resulting in a required net operating income of \$163,951. As shown on Schedule 1, the pro forma adjustments to operating expenses is \$104,259 resulting in a net operating deficiency of \$54,485. Utilizing a tax factor of 60.39%, the resulting revenue deficiency is \$181,265. Total water revenues for the test year are \$455,564 resulting in a proposed revenue increase of 39.79% for "Pittsfield Only".

Q. Please explain the schedules and exhibits found in Section 2, Schedule 1, Modified Filing, "Overall Rate of Return Pittsfield Only".

A. Schedule 1 reflects the total capital structure for "Pittsfield Only" as \$1,009,278 of long-term debt and \$819,644 of equity resulting in \$1,828,922 of total capital at a weighted average cost of capital or overall rate of return of 8.07%. The return on equity of 9.75% is based on the last found rate of return in the Pennichuck Water Works, Inc. rate case (DW 06-073).

1 Q. Please explain Section 2, Schedule 2, Modified Filing, entitled Capital
2 Structure for Ratemaking Purposes Pittsfield Only."

3 A. Schedule 2 reflects the components of the "Pittsfield Only" total capital at
4 55.18% long-term debt and 44.82% of equity based on a total capital of
5 \$1,828,922. Long-term debt has been adjusted by \$790,898 to eliminate costs
6 associated with the North Country acquisition in May 2006. A pro forma
7 adjustment of \$1,670,932 has also been made to recognize the issuance of
8 long-term debt to repay short term debt in the form of an intercompany advance
9 from the parent company, Pennichuck Corporation (approved by Order No.
10 24,827). A pro forma adjustment is made to reduce long-term debt by
11 \$960,038 for costs related to the North Country construction work in progress
12 (CWIP) as of December 31, 2007. Common Equity has been adjusted by
13 \$2,000,000 to eliminate the 2007 equity infusion that was required to support
14 the capital investments in the North Country.

15 Q. Please continue.

16
17 A. The Company has provided Modified Schedules 3 through 8 as required.
18 Schedule 9, entitled "Report of Proposed Rate Changes, Pittsfield Only,
19 Permanent" reflects the proposed modified rate increase of 39.79%.

20 Q. Please explain the schedules and exhibits found in Section 3 for "North
21 Country Only".

22 A. Section Three, Schedule A, reflects the "Computation of Revenue Deficiency"
23 for the customers in "North Country Only". The attached schedules have been
24 modified from the original filing to reflect known corrections and adjustments as

a result of findings by both the Company and the Commission staff during the recent discovery period. Each pro forma adjustment is referenced for review. The overall rate of return of 6.52% is multiplied by the pro forma rate base of \$3,347,551, resulting in a required net operating income of \$218,156. As shown of Schedule 1, the pro forma adjustments to the operating expenses is (\$138,230) resulting in a net operating deficiency of (\$254,222). Utilizing a tax factor of 60.39%, the resulting revenue deficiency is \$782,212. Total water revenues for the test year are \$316,109 resulting in a proposed revenue increase of 247.45% for "North Country Only".

Q. Please explain the schedules and exhibits found in Section 4 for "North Country Only Revised Step Increase".

A. Section Four, Schedule A, reflects the "Computation of Revenue Deficiency" for the customers in "North Country Only" reflecting a subsequent step increase of 71.70% for capital investments used and useful in 2008 resulting in an additional revenue deficiency of \$226,652. The attached schedules have been modified from the original filing to reflect actual vs. estimated numbers, and known corrections and adjustments as a result of findings by both the Company and the Commission staff during the recent discovery period in this case. Each pro forma adjustment is referenced for review. The overall rate of return of 6.52% is multiplied by the pro forma rate base of \$4,872,983, resulting in a required net operating income of \$317,567. As shown on Schedule 1, the pro forma adjustments to the operating expenses is (\$37,464) resulting in a net operating income of \$180,692. Utilizing a tax factor of 60.39% the resulting

revenue deficiency is \$226,652. Total water revenues for the test year are \$316,109 resulting in a revenue increase of 71.70% for "North Country Only" step increase. The combined pro forma test year for the proposed permanent increase and the step increase results in a total revenue deficiency of \$1,008,864 and total rate increase of 319.15%.

Q. Please explain the schedules and exhibits found in Section 5, Schedule 1, Modified Filing, "Overall Rate of Return North Country Only".

A. Schedule 1 reflects the total capital structure for "North Country Only" as \$3,264,074 of long-term debt and \$1,849,942 of equity resulting in \$5,114,016 of total capital at a weighted average cost of capital or overall rate of return of 6.52%. The return on equity of 9.75% is based on the last found rate of return in Pennichuck Water Works, Inc. rate case (DW 06-073).

Q. Please explain Section 5, Schedule 2, Modified Filing, entitled Capital Structure for Ratemaking Purposes North Country Only."

A. Schedule 2 reflects the components of the "North Country Only" total capital at 63.83% long-term debt and 36.17% of equity based on a total capital of \$5,114,016. Long-term debt has been adjusted by \$790,898 to recognize costs associated with the North Country acquisition in May 2006. A pro forma adjustment of \$763,112 has also been made to recognize the issuance of long-term debt to repay short term debt in the form of an intercompany advance from the parent company, Pennichuck Corporation (approved by Order No. 24,827). A pro forma adjustment of \$1,710,064 is made to recognize the SRF Funding for the North Country step increase (Schedule 5). Common Equity has been

adjusted by \$2,000,000 to recognize the 2007 equity infusion that was required to support the capital investments in the North Country.

Q. Please continue.

A. The Company has provided Modified Schedules 3 through 8 as required. Schedule 9, entitled "Report of Proposed Rate Changes, North Country Only, Permanent" reflects the proposed modified rate increase of 247.45%. Schedule 9, entitled "Report of Proposed Rate Changes, North Country Only, Step" reflects the proposed modified step increase of 71.70%. Schedule 9, entitled "Report of Proposed Rate Changes, North Country Only, Permanent & Step" reflects the proposed modified permanent and step increase of 319.15%

Q. Please explain the schedules and exhibits found in Section 6 for "Pennichuck East Utility, Inc."

A. Section Six, Schedule A, reflects the "Computation of Revenue Deficiency" for the customers in "PEU". The attached schedules are included for illustrative purposes in order to provide an estimate of the impact on the PEU customers by combining the North Country systems for test year or twelve months ending December 31, 2007. It should be noted that there are no pro forma adjustments included for expenses or rate base. The only adjustment is made to Other Operating Revenue to recognize a billing correction made in 2007 for Pelham School District in the amount of \$155,811. The overall rate of return of 7.80% is multiplied by 13 test year average rate base of \$12,563,631, resulting in a required net operating income of \$980,502. As shown of Schedule 1, the pro forma adjustment to operating income is \$155,811 resulting in a net

operating deficiency of \$20,655. Utilizing a tax factor of 60.39% the resulting revenue deficiency is \$34,203. Total water revenues for the test year are \$4,790,508 resulting in a proposed revenue increase of .71% for "PEU".

Q. Please explain the schedules and exhibits found in Section 6, Schedule 1, "Overall Rate of Return Pennichuck East Utility, Inc."

A. Schedule 1 reflects the total capital structure for "PEU" as \$6,506,991 of long-term debt, \$20,056 of short term debt and \$6,046,758 of equity resulting in \$12,573,805 of total capital at a weighted average cost of capital or overall rate of return of 7.80%. The return on equity of 9.75% is based on the last found rate of return in the Pennichuck East Utility, Inc. rate case (DW 07-032).

Q. Please explain Section 6, Schedule 2, entitled Capital Structure for Ratemaking Purposes Pennichuck East Utility, Inc."

A. Schedule 2 reflects the components of the "PEU" total capital at 51.75% long-term debt and 48.09% of equity based on a total capital of \$12,573,805.

Schedule 5 and 6 are provided to reflect the weighted cost of long-term and short-term debt for PEU as of December 31, 2007.

Q. Please explain Section 7, Schedule A, entitled Computation of Revenue Deficiency, Combined PEU & NC.

A. Section 7, Schedule A reflects the pro forma revenue deficiency for PEU as previously explained combined with pro forma adjustments to illustrate the rate impact of combining the North Country systems with PEU as of December 31, 2007. The PEU rate base has been pro formed by \$120,586 to recognize the North Country rate base items not included in the Capital Recovery Charge

(Schedule 3). These items will be included in future PEU rates. The adjusted net Operating Income has been adjusted by (\$107,306) (Schedule 1) and water revenues have been adjusted by \$621,424 to reflect the North Country Systems at PEU rates utilizing a minimum of 4 ccf for customers using 4 ccf or less in the test year (Section 8, Exhibit 1). Again for illustrative purposes, the resultant proposed revenue increase by combining the PEU and NC systems would be 5.97% and the revenue deficiency differential would be 5.26% based on year ending December 31, 2007.

Q. Please explain Section 7, Schedule 1, entitled Operating Income Statement, Combined PEU & NC.

A. This schedule reflects the pro forma combined Operating Income Statements for PEU (Section 6, Schedule 1) and NC (Section 4, Schedule 1). Column 5 reflects the total revenue deficiency/increase of \$600,556 from the North Country Customers at PEU rates (Section 8, Exhibit 1) and Column 6 reflects the adjustment for the Annual Capital Recovery surcharge of \$295,242 (Section 8, Exhibit 1) resulting in a total pro forma adjustment of \$621,424 to water revenues. Accounting for total pro forma income taxes of (\$103,887) results in a total pro forma net operating income of (\$107,306).

Q. Please explain Section 7, Schedule 3, entitled Computation of Rate Base, Combined PEU & NC.

A. Schedule 3 reflects the pro forma rate base for PEU (Section 6, Schedule 3) for the rate base items not included in the Capital Recovery Charge that will have an impact on future revenue increases for combined PEU and NC. These

items are dynamic and are based on operating factors including working capital, materials, supplies, prepayments, deferred charges, customer advances, customer deposits, and deferred income taxes. Total pro forma adjustment for these items is \$120,586.

Q. Please explain Section 7, Schedule 1 entitled Overall Rate of Return, Combined PEU and NC.

A. Section 7, Schedule 1 reflects the total combined capital structure for PEU & NC as \$5,018,668 of long-term debt, \$20,056 of short term debt and \$7,655,66 of equity resulting in \$12,694,391 of total capital at a weighted average cost of capital or overall rate of return of 8.26%. The return on equity of 9.75% is based on the last found rate of return in the Pennichuck East Utility, Inc. rate case (DW 07-032).

Q. Please explain Section 7, Schedule 2 entitled Capital Structure for Ratemaking Purposes, Combined PEU & NC.

A. Section 7, Schedule 2 reflects the components of the Combined PEU and NC total capital at 39.53% long-term Debt, 60.31% of equity, and 0.16% of short-term debt based on a total capital of \$12,694,391. Long-term debt has been adjusted by (\$1,488,323) to account for the equity portion of the North Country assets that is not recovered under the Capital Recovery Surcharge. This is calculated by reducing the total Capital Recovery Surcharge of \$4,752,397 (Section 8, Exhibit 1) by the North Country long-term debt by \$3,264,074 (Section 5, Schedule 1) resulting in \$1,488,323. The equity component is

further adjusted by the pro forma rate base items of \$120,586 (Section 7,
Schedule 3) for a total adjustment to common equity of \$1,608,908.

Q. Please continue.

A. Section 7, Schedule 5 provides the weighted cost of debt.

**Q. Please explain Section 8, Exhibit 1 entitled North Country Customers at
PEU rates.**

A. This exhibit is prepared to reflect NC customers at PEU rates utilizing a
minimum of 4 ccf usage per month for all NC customers, the Capital Recovery
Surcharge for each of the three NC systems based on their net plant, and the
resultant total proposed revenues of \$916,666 for the NC systems resulting in a
189.98% increase in rates.

Q. Please continue.

A. The PEU 5/8 inch meter charge of \$16.49 is multiplied by 824 customers for
Locke Lake, 206 customers for Birch Hill, and 79 customers for Sunrise Estates
resulting in a total annual meter charge of \$163,069, \$40,767 and \$15,634
respectively. The percentage of customers with 4 ccf or less of monthly usage
was 62% for Locke Lake, 56% for Birch Hill, and 58% for Sunrise Estates
resulting in a total annual usage of 25,220 ccf, 6,480 ccf, and 2,504 ccf
respectively. Customers utilizing above 4 ccf or greater per month are based
on their actual usage in 2007 at 27,661 ccf for Locke Lake, 6,835 ccf for Birch
Hill and 2,960 ccf for Sunrise Estates. The total annual usage of 52,881 ccf for
Locke Lake, 13,315 ccf for Birch Hill and 5,464 ccf for Sunrise Estates is then
multiplied by the PEU volumetric rate of \$5.61 per ccf resulting in an annual

usage charge of \$296,619, \$74,686, and \$30,649 respectively. Total revenues at PEU for the NC customers is \$459,688 for Locke Lake, \$115,453, and \$46,283 resulting in total annual revenue of \$621,424.

Q. Please explain the computation for the Capital Recovery Surcharge.

A. The capital recovery period is 30 years or 360 months amortized similar to a typical mortgage. The total Capital Recovery is based on the net plant & other related items for each of the three North Country systems for the twelve months ending December 31, 2007 resulting in \$2,705,841 for Locke Lake, \$1,878,504 for Birch Hill, and \$168,052 for Sunrise Estates with a total net plant of \$4,752,397 for the three systems. The net plant for each system is then calculated at 4.68% based on the cost of capital computation for the North Country weighted average cost of debt (Section 5, Schedule 1) resulting in annual Capital Recovery Surcharge of \$168,100 for Locke Lake, \$116,702 for Birch Hill, and \$10,440 for Sunrise Estates with a total annual Capital Recovery Surcharge of \$295,242 for the three systems.

Q. Will all NC customers be required to pay the meter charge, the 4 ccf minimum usage and Capital Recovery Surcharge?

A. Yes. This methodology requires that all customers pay the minimum meter charge, the 4 ccf minimum and Capital Recovery Surcharge to provide sufficient revenues for the Company to adequately service these systems and to prevent undue subsidy by the existing PEU customers. Therefore, customers turning off their water and removing their Meter will be required to continue to pay their fair share. This will provide parity for the year-round

customers versus the seasonal customers. The system is designed to meet customer demands at all times.

Q. Please continue.

A. The total proposed revenue reflects \$621,424 for the North Country customers at PEU rates with minimum volume of 4 ccf per month and \$295,242 for the Capital Recovery Surcharge resulting in total annual revenues of \$916,666. The test year revenues were \$316,109 resulting in proposed revenue increase of \$600,556 and a 189.98% for the combined NC customers. The proposed annual revenue increase is \$395,776 for Locke Lake customers, \$172,854 for Birch Hill customers and \$31,936 for the Sunrise Estates customers resulting in a 170.57%, 291.48% and 128.85% revenue increase respectively. The total annual revenue per customer utilizing 4 ccf per month or an annual usage of 48 ccf results in \$671.14 for Locke Lake, \$1,033.65 for Birch Hill and \$599.29 for Sunrise Estates.

Q. Please explain how this increase will impact residential customers of families utilizing an estimated 7 ccf of usage per month.

A. The total annual revenue for customers utilizing 7ccf per month or an annual usage of 84 ccf results in \$873.07 for Locke Lake, \$1,235.08 for Birch Hill and \$801.22 for Sunrise estates or \$72.76, \$102.97, and 66.72 per month respectively. Customers utilizing 7 ccf per month at current PEU rates result in \$669.12 annual charge or \$55.76 per month.

Q. Please continue.

1 A. Section 8, Exhibits 2 through 6 are provided to support the calculation of rate
2 base and the basis for the Capital Recovery Surcharge for the three NC
3 systems.

4 **Q. Please summarize the Company's proposed methodology.**

5
6 A. As stated previously, this proposed methodology will provide parity for each of
7 the three North Country systems by creating a Capital Recovery Surcharge
8 based on the capital improvements for each system. The disparity of a
9 significant number of customers with lower usage has been resolved by
10 establishing a minimum usage level of 4 ccf per month per customer. There
11 will be no change in rates for existing PEU customers at this time and the
12 current impact is estimated at 5.26% rate increase as of December 31, 2007.
13 However, given the planned PEU capital improvements in 2008 and 2009 this
14 impact will be minimized. All customers will benefit by being part of a larger
15 group whereby expenses and capital improvements can be spread over a
16 larger base of customers in the future.

17 **Q. Does this conclude your testimony?**

18
19 A. Yes, it does.