Pennichuck East Utility, Inc.
Overall Rate of Return
For the Twelve Months Ended December 31, 2012
Schedule 1

| Capital Component | Pro Forma Test Year | $\frac{\text { Component }}{\text { Ratio }}$ | $\frac{\text { Component }}{\text { Cost Rate }}$ | Weighted Average Cost Rate |
| :---: | :---: | :---: | :---: | :---: |
| Long-term Debt | 6,246,505 | 61.64\% | 4.64\% |  |
| Intercompany Debt | 3,781,513 | 37.31\% | 2.54\% | 2.86\% |
| Preferred Stock | - | 0.00\% | 0.00\% | 0.94\% $0.00 \%$ |
| Common Equity | 106,360 | 1.05\% | 5.90\% (2) | 0.06\% |
| Overall Rate of Return | \$ 10,134,378 | 100.00\% |  | 3.86\% |

## Notes:

(1) The interest reflected is the effective interest rates for 2012 per Schedule F-35 of the Annual Report
(2) The return on equity based on Order 25,292 in DW 11-026 is as follows:

Average 201230 year Treasury bonds $\quad 2.90 \%$

| Plus $3.0 \%$ | $3.00 \%$ |
| ---: | :--- |
| Total | $5.90 \%$ |

## Pennichuck East Utility, Inc.

## Capital Structure for Ratemaking Purposes

For the Twelve Months Ended December 31, 2012

## Schedule 2

|  |  | Test Year | Pro Forma Adjustments |  | Pro Forma Test Year | $\frac{\text { Component }}{\text { Ratio }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Long-term Debt |  | 7,978,791 | $(1,732,287)$ | (1) | 6,246,505 | 61.64\% |
| Intercompany Debt | \$ | 6,359,294 | $(2,577,780)$ | (1) | 3,781,513 | 37.31\% |
| Common Equity: |  |  |  |  |  |  |
| Common Stock |  |  |  |  |  |  |
| Paid In Capital Comprehensive Income |  | $15,904,329$ |  |  |  |  |
| Comprehensive Income Retained Earnings |  | $(495,228)$ | (15,529,702 | (2) | $\begin{aligned} & (0) \\ & 34,474 \end{aligned}$ |  |
| Total Common Equity |  | $\begin{array}{r} 71,787 \\ \hline 15,480,987 \end{array}$ |  |  | $\begin{array}{r} 71,787 \\ \hline \end{array}$ | 105\% |
| Total Capital | \$ | 29,819,072 |  |  | \$ 10,134,378 | 100.00\% |

## Notes:

(1) Eliminate Capital Recovery Surcharge Related Assets with the offset to Long Term Debt and Intercompany Debt

The Long Term Debt consists of the SRF Loan for the Birch Hill interconnection. The remainder is Intercompany Debt.
(2) Per Order 25,292 in DW 11-026, eliminate the MARA and related equity:

$$
\text { MARA } \quad 8,964,574
$$

Equity as of $1 / 25 / 12 \quad 939,755$
Paid in Capital as of $1 / 25 / 12 \begin{array}{r}6,000,000 \\ \hline 15,904,329 \\ \hline\end{array}$
Comprehensive Income as of $1 / 25 / 12$

| $15,904,329$ |
| ---: |

## Pennichuck East Utility, Inc. <br> Historical Capital Structure

 For the Twelve Months Ended December 31, 2008-2012Schedule 3

| Bonds | $\underline{2012}$ |  | 2011 |  | $\underline{2010}$ |  | $\underline{2009}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Other LTD |  | 4,057,544 |  |  |  |  |  |  |  | $\underline{2008}$ |
| Long-term Debt |  | 3,921,247 |  | $5,173,568$ $3,248,970$ |  | 5,383,936 |  | 1,075,000 |  | 5,660,000 |
|  | \$ | 7,978,791 | \$ | 8,422,538 | \$ | $\begin{array}{r}3,322,814 \\ \hline 706750\end{array}$ |  | 3,239,106 |  | 1,108,527 |
| Intercompany Debt | 6,359,294 |  |  | 4,179,078 |  | 3,661,815 | \$ | 4,314,106 | \$ | 6,768,527 |
|  |  |  |  |  |  |  | 8,188,698 |  | 23,911 |
| Common Stock |  |  |  |  |  |  |  |  |  |
| Paid In Capital |  | 100 |  |  | 100 |  |  |  |  |  |  |  |
| Comprehensive Income |  | 15,904,329 |  | 6,000,000 |  | 6,000100 |  | 100 |  | 100 |
| Retained Earnings |  | $(495,228)$ |  | (500,333) |  | $\begin{gathered} 6,000,000 \\ (188,326) \end{gathered}$ |  | 6,000,000 |  | $4,000,000$ |
| Total Common Equity |  | $\begin{array}{r}71,787 \\ \hline 1548098\end{array}$ |  | 1,040,297 |  | $\begin{array}{r} (188,326) \\ 1,205,096 \\ \hline \end{array}$ |  | 915322 |  | (110,875) |
|  |  | 15,480,987 | \$ | 6,540,063 | \$ | 7,016.870 | \$ | -915,322 |  | 2,648,795 |

Total Capital

| $\$ 29,819,072$ | $\$$ | $19,141,679$ | $\$$ | $19,385,435$ | $\$$ | $19,418,226$ | $\$ 13,330,458$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Notes:

[^0]Pennichuck East Utility, Inc.
Historical Capitalization Ratios
For the Twelve Months Ended December 31, 2008-2012

|  | 2012 | $\underline{2011}$ | $\underline{2010}$ | $\underline{2009}$ | $\underline{2008}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Long-term Debt | 26.76\% | 44.00\% | 44.91\% | 22.22\% | 50.77\% |
| Total Common Equity | 51.92\% | 34.17\% | 36.20\% | 35.61\% | 49.05\% |
| Intercompany Debt | 21.33\% | 21.83\% | 18.89\% | 42.17\% | 0.18\% |
| Total Capital | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |

## Pennichuck East Utility, Inc. <br> Weighted Average Cost of Long-Term Debt For the Twelve Months Ended December 31, 2012

| $\frac{\text { Holder }}{\text { Business Finance Authority of }}$ | Term | Maturity | Rate |  | utstanding <br> Balance | $\begin{gathered} \text { Annual } \\ \text { Interest (2) } \end{gathered}$ | Arnual <br> Amortization | All In Annual Cost |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Business Finance Authority of NH (Series 2005D) (1) CoBank | 20 |  | 4.500\% |  |  |  |  |  | Effectve Rate |
| State of NH SRF (Green Hills) | 20 | 02/28/30 | 5.950\% |  | 4,057,854 |  | 7.214 | 7,214 | - |
| State of NH SRF (Pelham Tank) | 20 | 01/01/25 | 3.728\% |  | 276,558 | 241,442 10,310 | 1.455 | 242,897 | $5.99^{\circ}$ |
| State of NH SRF (imaple Hills) | 20 | 01/01/27 | 3.488\% |  | 435,240 | 15,181 | 247 | 10,310 | 3.76 |
| State of NH SRF (Birch Hill) | 20 | 05/01/30 | 2.952\% |  | 538,349 | 15,892 | 477 | 15,428 | 3.54\% |
| State of NH SRF (Locke Lake - 2007) | 20 | 04/01/30 | 2.864\% |  | 1,732,287 | 49,613 | 549 | 16,363 50,162 | $3.04 \%$ $2.90 \%$ |
| State of NH SRF (Locke Lake - 2011) | 20 | 06/01/33 | 2.952\% |  | 263,022 | 7,764 | 90 | 50,162 7,854 | 2.90\% |
| State of NH SRF (Liberty Tree) (3) | 20 | TBD | 3.864\% |  | 300,000 12,524 | 8,592 | . | 8,592 | $2.99 \%$ $2.86 \%$ |
| State of NH SRF (Locke Lake - 2012) (3) | 20 | TBD | 3.104\% |  | 12,524 362,958 | 389 11,266 | - | 389 | 2.86\% $3.10 \%$ |
|  |  |  |  | \$ | 7.978,791 | \$ 360.450 |  | 11,266 | 3.10\% |
| Notes: |  |  |  |  |  | , 360,450 | 10,026 | 370,476 | 4.64\% |

Notes:
(1) The debt issuance costs and amortization reflected is from retired debt (April 2012).

The annual interest expense is calculated based on the outstanding balance at year end multiplied by the stated interest rate
(3) The interest rates reflected are expected interest rates per Order 25248 in the test year due to loan repayments made during the year

| interco payrec peuiple INTERCO PAYREC PEUTSC INTERCO PAYRREC PEUPWS | $\begin{gathered} 06 c-11 \\ (18,652,989098) \\ (47800) \end{gathered}$ | $\begin{gathered} \sin +12 \\ (18,790.9 \times 0.74) \\ {[479.30)} \end{gathered}$ | $\begin{gathered} F \cdot b-12 \\ (19.121 .58808) \\ (478 \text { co }) \end{gathered}$ | $\begin{gathered} M \times r-12 \\ (19,426,9668) \end{gathered}$ | $\begin{gathered} A p r-12 \\ (18,774,40000) \end{gathered}$ | $\begin{gathered} \text { May-42 } \\ (18.389,47081) \end{gathered}$ | Junti2 <br> (18.871.840.4) | ${ }_{\text {Jul-12 }}$ |  |  | Oct-12 | Nov. 12 | Dec. 12 | 13 Month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INTERCO PAYIREC PEUPAC | 159,746.83 | 154,843.58 | 154.990 36 | $(17880)$ 154987 | (47920) | (479 50) | (470.22) |  | (19.201.840 32) | (10.445.883 53) | (19,542.81) 50 ) |  |  |  |
| interco paytec peutww | $5217,331.95$ 15.737 .317 .98 | 5.223680580 | 5,232,114 67 | 5.240.481 21 | 154.999.77 | 155,091 84 | 155.788.37 | 155.235 59 | (4480 62) | (480 32) | (481 22) |  | 4.636 .14365 |  |
|  |  | 15,906,925 83 | 16,285.41508 | 16.557.69107 | 16.840,347 24 | $5,254,805$ 48 $17,074,20572$ | $\begin{array}{r} 5,262.33906 \\ 17.29541655 \end{array}$ | 5270.52704 | 5.272 25332 | 159,15373 5.288 .58131 | 155,550.39 | 155.648 .19 |  |  |
| Imsteomosmy Shan Temin |  |  |  |  |  |  |  |  | 1.76,452.4 | 18.012.935 04 | 18.200 .58773 | 5.302,38199 $18,440.40925$ |  |  |
| Temo | 2.455.928 | 2.553.956 | 2.550.402 | 2525 |  |  |  |  |  |  |  |  |  |  |
| INTERCO ADVIPCP PROM NOTE SIB |  |  |  | 2.s.5, | 3467,308 | 4.094 .853 | 4040.525 | 4.133 .135 | 4018762 | 46086 |  |  |  |  |
|  | 1,723,150 | 1,723,150 | 1.723,450 | 1,723,150 | 3 |  |  |  |  | 4.6080, | 4.087288 | 4.480 .873 | 4.636144 | 3.6 |
| Intorcompany Long Terti Debi | 1,723,150 | 1.723.150 | 1.723.150 | 1.723150 |  | 1,223,150 | 1.723,150 | 1.723.150 | 1,723.150 | 1,722,150 | 1,723,150 | :.773.150 | (123,50 |  |
| Texal intercompariy Dabt | 4.179.078 | 277103 |  | - | 1.723.150 | 1.723,150 | 1.723 .150 | 1,723.150 | 1.723 .150 | 1723 |  |  | 1 23.150 |  |
|  |  | Lerins | 1.273 .552 | 4.248889 | 3,190,450 | 5810002 | 5783676 |  |  | 1.231.0 | 1.73136 | 1.723160 | 1723150 |  |

[^1]Pennichuck East Utility, Inc.
Weighted Average Cost of Preferred Stock For the Twelve Months Ended December 31, 2012

Schedule 7

| Security | Term | Maturity | Rate | Outstanding <br> Balance | Annual <br> Dividends | Annual | All In Annual | Effectve |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Cost | Rate |

NOT APPLICABLE

## Pennichuck East Utility, Inc. <br> Return on Common Equity <br> For the Twelve Months Ended December 31, 2012

## Schedule 8



H:IPEU 2013 Rate Case - Test Year 201211604.08 SchedulesIPEU 2012 Cost of Capital Schedules 1 to $11 . x \mid s$


[^0]:    Pittsfield and North Country combined). Tht, including the intercompany accounts, were reconciled and balanced at the entity/consolidated level accounts do not necessarily create an amount of assets equal to debtequity in 2008 by 001 (Pittsfield) and 002 (North Country) sub

[^1]:    N
    N
    N 510020;310:3:.

