

Pennichuck Water Works, Inc.
Overall Rate of Return
For the Twelve Months Ended December 31, 2009

Schedule 1

<u>Capital Component</u>	<u>Amount</u>	<u>Component Ratio</u>	<u>Component Cost Rate</u>	<u>Average Cost Rate</u>
Long-term Debt	\$ 51,855,007 (2)	49.67%	5.94% (2)	2.95%
Short-term Debt	-	0.00%	0.00%	0.00%
Preferred Stock	-	0.00%	0.00%	0.00%
Common Equity	<u>52,553,720</u>	<u>50.33%</u>	9.75% (1)	<u>4.91%</u>
Overall Rate of Return	<u>\$ 104,408,727</u>	<u>100.00%</u>		<u>7.86%</u>

Notes:

- (1) The return on equity is based on the last authorized return (DW 08-073)
- (2) The long term debt and interest rate includes proforma adjustments as reflected on Schedules 5 and is calculated on debt net of debt issuance costs

**Pennichuck Water Works, Inc.
Capital Structure for Ratemaking Purposes
For the Twelve Months Ended December 31, 2009**

Schedule 2

	<u>Component Ratio</u>	<u>Test Year</u>	<u>Pro Forma Adjustments</u>	<u>Pro Forma Test Year</u>	<u>Component Ratio</u>
Long-term Debt (2)	49.90%	\$ 52,337,385	(482,378) (1)	\$ 51,855,007	49.67%
<u>Common Equity:</u>					
Common Stock		30,000	-	30,000	
Paid In Capital		39,011,141	-	39,011,141	
Comprehensive Income		-	-	-	
Retained Earnings		13,512,579	-	13,512,579	
Total Common Equity	50.10%	<u>\$52,553,720</u>		<u>52,553,720</u>	50.33%
Short-term Debt		-	-	-	
Total Capital	100.00%	<u>\$ 104,891,105</u>	<u>(482,378)</u>	<u>\$ 104,408,727</u>	100.00%

Notes:

(1) reflects the debt additions/retirements pro forma adjustment per Schedule 5.

(2) reflects the long term debt net of debt issuance costs per Schedule 5.

Pennichuck Water Works, Inc.
Historical Capital Structure
For the Twelve Months Ended December 31, 2009

Schedule 3

	<u>2008</u>	<u>2007</u>	<u>2006</u>	<u>2005</u>	<u>2004</u>
Bonds	\$ 53,212,827	\$ 54,805,361	\$ 41,624,883	\$ 35,458,105	\$ 19,985,486
Other LTD	3,322,155	3,359,326	-	-	504,677
Long-term Debt	<u>56,534,982</u>	<u>58,164,687</u>	<u>41,624,883</u>	<u>35,458,105</u>	<u>20,490,163</u>
Common Equity:					
Common Stock	30,000	30,000	30,000	30,000	30,000
Paid In Capital	29,306,141	27,056,141	27,056,141	27,056,141	12,056,141
Comprehensive Income	-	-	1,834,598	(808,533)	(605,581)
Retained Earnings	<u>12,823,626</u>	<u>13,172,313</u>	<u>10,999,060</u>	<u>10,650,369</u>	<u>8,889,844</u>
Total Common Equity	<u>42,159,767</u>	<u>40,258,454</u>	<u>39,919,799</u>	<u>36,927,977</u>	<u>20,370,404</u>
Short-term Debt	-	-	-	-	-
Total Capital	<u>\$ 98,694,749</u>	<u>\$ 98,423,141</u>	<u>\$ 81,544,682</u>	<u>\$ 72,386,083</u>	<u>\$ 40,860,567</u>

**Pennichuck Water Works, Inc.
Historical Capitalization Ratios
For the Twelve Months Ended December 31, 2009**

Schedule 4

	<u>2008</u>	<u>2007</u>	<u>2006</u>	<u>2005</u>	<u>2004</u>
Long-term Debt	57.3%	59.1%	51.0%	49.0%	50.1%
Total Common Equity	<u>42.7%</u>	<u>40.9%</u>	<u>49.0%</u>	<u>51.0%</u>	<u>49.9%</u>
Total Capital	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

Pennichuck Water Works, Inc.
Weighted Average Cost of Long-Term Debt
For the Twelve Months Ended December 31, 2009

Schedule 5

Holder	Term	Maturity	Rate	Outstanding Balance	Unamort Debt Issue Costs	Unamort Prem/Disc	Outstanding Debt Funded	Annual Interest	Annual Amort Issue Costs	Annual Amort Disc/Prem Costs	All In Annual Cost	Funded Effective Rate
IDA Loans (1)				-	39,660		(39,660)	-	5,766		5,766	N/A
American United Life (7)	25	3/1/21	7.40%	6,800,000	73,358		6,726,642	503,200	6,619		509,819	7.58%
American United Life	5	3/4/10	5.00%	5,000,000	4,087		4,995,913	250,000	4,087		254,087	5.09%
BFA of NH - WTP (2005 Series A) (6)	30	10/1/35	4.70%	12,125,000	1,271,526	(312,219)	10,541,256	569,875	49,205	12,125	631,205	5.99%
BFA of NH - WTP (2005 Series B-1) (5)				-	177,612	56,273	(121,338)	-	11,006	(2,185)	8,820	N/A
BFA of NH (Series A)	30	1/1/35	4.70%	1,810,000	216,324		1,593,676	85,070	8,679		93,749	5.88%
BFA of NH (Series B)	25	1/1/30	4.60%	2,335,000	346,689		1,988,311	107,410	17,301		124,711	6.27%
BFA of NH (Series C)	20	1/1/25	4.50%	1,205,000	168,333		1,036,667	54,225	11,251		65,476	6.32%
BFA of NH (Series BC-3) (6)	10	4/1/18	5.00%	7,500,000	604,742	182,713	7,077,971	375,000	69,189	(21,870)	422,319	5.97%
BFA of NH (Series BC-4) (6)	27	4/1/35	5.375%	12,500,000	1,080,026	336,251	11,756,225	671,875	41,207	(13,052)	700,030	5.95%
BFA of NH	25	4/1/22	6.30%	3,600,000	108,767		3,491,233	226,800	8,819		235,619	6.75%
State of NH	20	5/1/22	3.80%	272,562	2,507		270,056	10,357	281		10,639	3.94%
WTP SRF (3)	20	10/1/29	4.488%	2,976,693	4,568		2,972,125	133,594	234		133,828	4.50%
Twin Ridge SRF	10	4/1/13	2.315%	49,593	1,284		48,309	1,148	593		1,741	3.60%
				\$ 56,173,848	\$ 4,099,482	\$ 263,018	\$ 52,337,385	\$ 2,988,554	\$ 234,237	\$ (24,983)	\$ 3,197,809	6.11%
Pro Forma Adjustments:												
American United Life (2)	5	3/4/10	5.00%	(5,000,000)	-		(5,000,000)	(250,000)	-		(250,000)	5.00%
ARRA Ashley Commons Debt (4)	20	TBD	1.872%	450,000			450,000	8,424			8,424	1.87%
ARRA Step Additions Debt (3)	20	TBD	1.872%	1,656,000	12,478		1,643,522	31,000		-	31,000	1.89%
SRF Step Additions Debt (3)	20	TBD	3.728%	2,424,100			2,424,100	90,370			90,370	3.73%
Pro Forma Cost of Long Term Debt				\$ 55,703,948	\$ 4,111,959	\$ 263,018	\$ 51,855,007	\$ 2,868,349	\$ 234,237	\$ (24,983)	\$ 3,077,604	5.94%

Notes:

- (1) The debt issuance costs and amortization reflected is from retired debt.
- (2) Reflects the debt retirement in March 2010
- (3) Reflects the additional low interest SRF/ARRA debt that will be incurred in 2010 related to the step increase capital additions.
- (4) The Debt was issued in January 2010 for capital additions placed in service in December 2009.
- (5) On October 1, 2008, the Company repurchased/retired \$6 million 2005 Series B-1 Revenue Bonds and deposited them as treasury bonds with the escrow agent.
The Company continues to amortize the related debt issuance costs and premium.
- (6) The annual amortization of debt issuance costs reflects the additional debt issuance costs allocated in January 2010 for the BFA financing.
- (7) The AULI note has an annual principal payment due on March 1st of each year in the amount of \$400,000. The full year interest is calculated on the balance of \$6.8 million

Pennichuck Water Works, Inc.
Cost of Short-Term Debt
For the Thirteen Months Ended December 31, 2009

Schedule 6

	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	13 Month Average
INTERCO PAY/REC: PENN CORP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INTERCO PAY/REC: PWW/PCP	2,227,398	2,334,745	4,113,596	4,542,036	5,468,691	6,511,381	7,688,696	7,904,479	8,964,844	8,840,457	8,720,312	6,269,945	(1,411,111)	
INTERCO PAY/REC: PWW/TSC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INTERCO PAY/REC: PWW/TSC	(606,939)	(608,876)	(610,422)	(612,388)	(614,167)	(618,291)	(621,618)	(623,953)	(625,826)	(628,554)	(630,209)	(631,970)	(634,071)	
INTERCO PAY/REC: PWW/PWS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INTERCO PAY/REC: PWW/PWS	(4,832,114)	(5,004,168)	(5,193,190)	(5,386,366)	(5,567,772)	(5,825,712)	(6,039,469)	(6,205,532)	(6,368,016)	(6,548,919)	(6,744,384)	(6,908,254)	(7,138,958)	
INTERCO PAY/REC: PWW/PAC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INTERCO PAY/REC: PWW/PAC	(2,732,152)	(2,806,054)	(2,867,287)	(2,935,623)	(2,998,393)	(3,067,157)	(3,147,971)	(3,220,458)	(3,309,792)	(3,429,351)	(3,504,190)	(3,575,675)	(3,661,556)	
INTERCO PAY/REC: PWW/PEU	(35)	-	-	-	-	-	-	-	-	-	-	-	-	-
INTERCO PAY/REC: PWW/PEU	(4,667,807)	(4,843,462)	(5,030,525)	(5,289,325)	(5,590,897)	(5,800,361)	(6,008,141)	(6,210,224)	(6,410,499)	(7,279,118)	(7,442,233)	(7,601,647)	(7,792,577)	
Pennichuck Interco Net Liability	(10,611,650)	(10,927,816)	(9,587,829)	(9,681,667)	(9,302,539)	(8,800,140)	(8,128,503)	(8,355,689)	(7,749,290)	(9,045,484)	(9,600,704)	(12,447,602)	(20,638,273)	(10,375,168)

**Pennichuck Water Works, Inc.
Weighted Average Cost of Preferred Stock
For the Twelve Months Ended December 31, 2009**

Schedule 7

Security	Term	Maturity	Rate	Outstanding Balance	Annual Dividends	Annual Amortization	All In Annual Cost	Effective Rate
-----------------	-------------	-----------------	-------------	--------------------------------	-----------------------------	--------------------------------	-------------------------------	---------------------------

NOT APPLICABLE

**Pennichuck Water Works, Inc.
Cost of Common Equity Capital
For the Twelve Months Ended December 31, 2009**

Schedule 8

NOT APPLICABLE

**Pennichuck Water Works, Inc.
Report of Proposed Rate Changes
For the Twelve Months Ended December 31, 2009**

**Pro Forma
Schedule 9
Temporary**

DOCKET NO: DW 10-091 DATE FILED: 5/6/2010
TARIFF NO.: 5 or PAGE NOS. 40-42 and 57 EFF. DATE: _____

<u>Rate or Class of Service</u>	<u>Effect of Proposed Change</u>	<u>Average Number of Customers</u>	<u>Pro Forma</u>		<u>Proposed Change</u>	
			<u>Present Rates</u>	<u>Proposed Rates</u>	<u>Amount</u>	<u>%</u>
G-M	Increase	25,304	19,111,902	\$21,056,413	\$1,944,511	10.17%
Private FP	Increase	807	852,380	1,005,371	152,991	17.95%
FP - Hydrants	No Increase	5	2,817,166	2,810,468	(6,698)	-0.24%
Anheuser-Busch Contract	Increase	2	862,048	1,390,148	528,101	61.26%
<u>Milford Contract</u>						
Contract Charges	No Increase	1	81,000	81,000	-	0.00%
Volumetric Charges	Increase	-	68,551	82,553	14,002	20.43%
<u>Hudson Contract</u>						
Contract Charges	No Increase	1	32,800	32,800	-	0.00%
Volumetric Charges	No Increase	-	290,579	264,084	(26,494)	-9.12%
TOTALS		26,120	\$24,116,425	\$26,722,838	\$2,606,413	10.81%

Notes:

The Proposed rates and the amount of the increase is based on the Cost of Service Study. In the Study, a slight difference is noted in the allocation of the proposed revenue vs. the revenue requirement reflected in the rate filing schedules.

Signed by:

Bonalyn J. Hartley

Title:

Vice President - Administration

Pennichuck Water Works, Inc.
Report of Proposed Rate Changes
For the Twelve Months Ended December 31, 2009

Pro Forma
Schedule 9
Permanent

DOCKET NO: DW 10-091 DATE FILED: 5/6/2010
TARIFF NO.: 5 or PAGE NOS. 40-42 and 57 EFF. DATE:

Proposed Change

<u>Rate or Class of Service</u>	<u>Effect of Proposed Change</u>	<u>Average Number of Customers</u>	<u>Pro Forma Present Rates</u>	<u>Proposed Rates</u>	<u>Amount</u>	<u>%</u>
G-M	Increase	25,304	\$ 19,111,902	\$ 22,209,914	\$ 3,098,013	16.21%
Private FP	Increase	807	852,380	1,005,371	152,991	17.95%
FP - Hydrants	Increase	5	2,817,166	2,952,887	135,720	4.82%
Anheuser-Busch Contract	Increase	2	862,048	1,390,148	528,101	61.26%
<u>Milford Contract</u>						
Contract Charges	No Increase	1	81,000	81,000	-	0.00%
Volumetric Charges	Increase	-	68,551	85,846	17,295	25.23%
<u>Hudson Contract</u>						
Contract Charges	No Increase	1	32,800	32,800	-	0.00%
Volumetric Charges	No Increase	-	290,579	274,622	(15,956)	-5.49%
TOTALS		26,120	\$24,116,426	\$ 28,032,589	\$3,916,164	16.24%

Notes:

The Proposed rates and the amount of the increase is based on the Cost of Service Study. In the Study, a slight difference is noted in the allocation of the proposed revenue vs. the revenue requirement reflected in the rate filing schedules.

Signed by:

Bonalyn J. Hartley

Title:

Vice President - Administration

Pennichuck Water Works, Inc.
Report of Proposed Rate Changes
For the Twelve Months Ended December 31, 2009

Pro Forma
Schedule 9
Step

DOCKET NO: DW 10-091 DATE FILED: 5/6/2010
TARIFF NO.: 5 or PAGE NOS. 40-42 and 57 EFF. DATE: _____

Proposed Change

<u>Rate or Class of Service</u>	<u>Effect of Proposed Change</u>	<u>Average Number of Customers</u>	<u>Pro Forma</u>		<u>Proposed Rates</u>	<u>Amount</u>	<u>%</u>
			<u>Present Rates</u>				
G-M	Increase	25,304	\$ 19,111,902	\$	19,837,595	\$ 725,693	3.80%
Private FP	Increase	807	852,380		885,155	32,775	3.85%
FP - Hydrants	Increase	5	2,817,166		2,913,234	96,068	3.41%
Anheuser-Busch Contract	Increase	2	862,048		883,221	21,174	2.46%
<u>Milford Contract</u>							
Contract Charges	No Increase	1	81,000		81,000	-	0.00%
Volumetric Charges	Increase	-	68,551		71,360	2,809	4.10%
<u>Hudson Contract</u>							
Contract Charges	No Increase	1	32,800		32,800	-	0.00%
Volumetric Charges	Increase	-	290,579		299,554	8,975	3.09%
TOTALS		26,120	\$24,116,426	\$	25,003,919	\$887,494	3.68%

Notes:

The Proposed rates and the amount of the increase is based on the Cost of Service Study. In the Study, a slight difference is noted in the allocation of the proposed revenue vs. the revenue requirement reflected in the rate filing schedules.

Signed by:

Bonalyn J. Hartley

Title:

Vice President - Administration

**Pennichuck Water Works, Inc.
Report of Proposed Rate Changes
For the Twelve Months Ended December 31, 2009**

**Pro Forma
Schedule 9
Combined**

DOCKET NO: DW 10-091 DATE FILED: 5/6/2010
TARIFF NO.: 5 or PAGE NOS. 40-42 and 57 EFF. DATE: _____

<u>Rate or Class of Service</u>	<u>Effect of Proposed Change</u>	<u>Average Number of Customers</u>	<u>Pro Forma</u>		<u>Proposed Change</u>	
			<u>Present Rates</u>	<u>Proposed Rates</u>	<u>Amount</u>	<u>%</u>
G-M	Increase	25,304	\$ 19,111,902	\$ 22,935,608	\$ 3,823,706	20.01%
Private FP	Increase	807	852,380	1,038,146	185,766	21.79%
FP - Hydrants	Increase	5	2,817,166	3,048,954	231,788	8.23%
Anheuser-Busch Contract	Increase	2	862,048	1,411,322	549,275	63.72%
<u>Milford Contract</u>						
Contract Charges	No Increase	1	81,000	81,000	-	0.00%
Volumetric Charges	Increase	-	68,551	88,655	20,105	29.33%
<u>Hudson Contract</u>						
Contract Charges	No Increase	1	32,800	32,800	\$0	0.00%
Volumetric Charges	No Increase	-	290,579	283,598	(6,981)	-2.40%
TOTALS		26,120	\$24,116,426	\$ 28,920,083	\$4,803,658	19.92%

Notes:

The Proposed rates and the amount of the increase is based on the Cost of Service Study. In the Study, a slight difference is noted in the allocation of the proposed revenue vs. the revenue requirement reflected in the rate filing schedules.

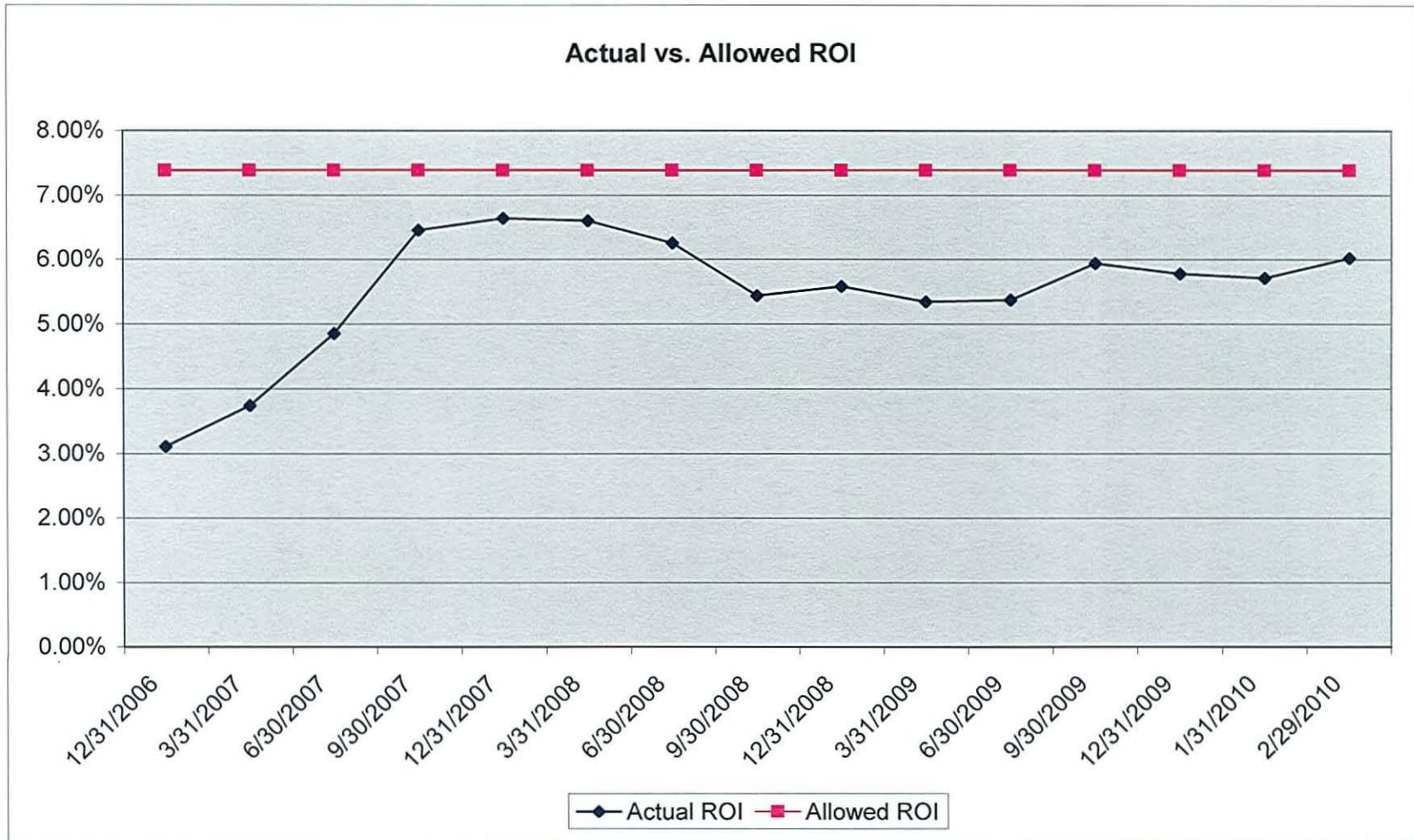
Signed by:

Bonalyn J. Hartley

Title:

Vice President - Administration

Pennichuck Water Works, Inc.
ROI Historical Trends
For the Twelve Months Ended December 31, 2009



Pennichuck Water Works, Inc.
ROE Historical Trends
For the Twelve Months Ended December 31, 2009

