# DW 10-091 PENNICHUCK WATER WORKS, INC. REVENUE REQUIREMENT

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Rate Base (Sch 2)	\$ 92,219,994
Rate of Return (Sch 1A)	7.98%
Operating Income Requirement	7,362,859
Operating Income (Sch 3)	5,623,182
Revenue Deficiency Before Taxes	1,739,678
Divided by Tax Factor (Sch 1B)	60.39%
Revenue Deficiency	2,880,738
Test Year Water Revenue (Sch 3)	24,116,426
Revenue Requirement	\$ 26,997,164
Percent Increase	11.95%

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# DW 10-091 PENNICHUCK WATER WORKS, INC. RATE OF RETURN

Capital Component	Amounts Per Original Filing	Adjustments	Adjusted Amounts	Adjusted Component Ratio	Adjusted Component Cost Rate	Adjusted Average Cost Rate
Long Term Debt (see calculation below)	\$ 55,703,948	\$ (4,080,100) (a)	\$ 51,623,848	49.55%	6.19% (b)	3.07%
Common Equity	52,553,720		52,553,720	50.45%	9.75% (c)	4.92%
Overall Rate of Return	\$ 108,257,668	\$ (4,080,100)	\$ 104,177,568	100.00%		7.98%

# Adjustments to Long Term Debt Component:

	Outstanding Debt	All In Annual Cost	Funded Effective Rate
Pro-forma Cost of Long Term Debt (Original Filing: Tab 15; Sch 5)	\$ 51,855,007	\$ 3,077,604	5.94%
Adjustments per Co Response to Staff Data Request 2-22	(2,301,100)	(85,785)	
Elimination of Remaining Debt Related to Step Additions	(1,766,522)	(35,585)	
Total Eliminated Debt	(4,067,622) (a	)(121,370)	
Revised Cost of Long Term Debt	\$ 47,787,385	\$ 2,956,234	<u> </u>

(c) Cost of Equity Authorized in DW 08-073

# DW 10-091 PENNICHUCK WATER WORKS, INC. EFFECTIVE TAX FACTOR

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Taxable Income	100.00%
Less: NH Business Profits Tax	8.50%
Federal Taxable Income	91.50%
Federal Income Tax Rate	34.00%
Effective Federal Income Tax Rate	31.11%
Add: NH Business Profits Tax	8.50%
Effective Tax Rate	39.61%
Percent of Income Available if No Tax	100.00%
Effective Tax Rate	39.61%
Percent Used as a Divisor in Determining	<u> </u>
the Revenue Requirement	60.39%
Tax Multiplier	0.65590

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#### DW 10-091 PENNICHUCK WATER WORKS, INC. RATE BASE

		Company Filing		Response	to OCA 3-1	Staff Testimony				
	(1)	(2)	(3)	(4) (5)		(6)	(7)	(8)		
	Test Year	Pro-forma Adj's	Pro-forma	Additional	Adjusted Pro-forma					
	Average	Per Company	Test Year	Pro-forma Adj's	Test Year Per Co			Adjusted		
	(Co Filing - Tab 13; Sch 3)	(Co Filing - Tab 13; Sch 3; Att's A - E)	(Co Filing - Tab13; Sch 3)	(Per Co Response to OCA 3-1)	to OCA 3-1)	Pro-forma Adj's Per Staff	Cab 04	Rate Base		
	140 10, 001 0/	3013, All SA - E)	14015, 3013)	10 OCA 3-1)	10 OCA 3-1)	Per Stall	Sch 2A	Per Staff		
Plant in Service	\$ 150,247,311	\$ 3,439,982	\$ 153,687,293	\$ (421,246)	\$ 153,266,047			\$ 153,266,047		
Accumulated Depreciation	(31,386,678)	(232,187)	(31,618,865)	7,888	(31,610,977)	(44,079)	1	(31,655,056)		
Deferred Rental Credits	(105,550)	(, · • · )	(105,550)	,,	(105,550)	(11,010)	•	(105,550)		
Acquisition Adjustment - Net	(548,383)		(548,383)		(548,383)			(548,383)		
Contributions in Aid of Construction - Net	(22,860,628)		(22,860,628)		(22,860,628)	••••••		(22,860,628)		
Net Plant in Service	95,346,072	3,207,795	98,553,867	(413,358)	98,140,509	(44,079)		98,096,430		
Cash Working Capital	1,300,304	(3,933)	1,296,371	(9,203)	1,287,168	(1,394)	2	1,285,774		
Materials and Supplies	825,124		825,124		825,124			825,124		
Prepayments	446,704		446,704		446,704			446,704		
Unamortized Deferred Debits	7,648,762	4,881,211	12,529,973	(11,438)	12,518,535	(4,876,767)	3 - 6	7,641,768		
Customer Advances	(84,000)		(84,000)		(84,000)			(84,000)		
Customer Deposits	(138,756)		(138,756)		(138,756)			(138,756)		
Deferred Income Taxes	(12,920,917)		(12,920,917)		(12,920,917)			(12,920,917)		
Regulatory Liability	(855,191)		(855,191)		(855,191)			(855,191)		
Unamortized Investment Credit	(784,440)		(784,440)		(784,440)			(784,440)		
Unfunded FAS 106 and 158 Costs	-	(1,135,245)	(1,135,245)		(1,135,245)			(1,135,245)		
Deferred Revenue from Sale of Cell Tower Leases						(157,256)	7	(157,256)		
TOTAL RATE BASE	\$ 90,783,662	\$ 6,949,828	\$ 97,733,490	\$ (433,999)	\$ 97,299,491	\$ (5,079,497)		\$ 92,219,994		

#### DW 10-091 PENNICHUCK WATER WORKS, INC. PRO-FORMA ADJUSTMENTS TO RATE BASE

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Adj #	_		
	ACCUMULATED DEPRECIATION		
1	To eliminate Co pro-forma adj to decrease accumulated depreciation relative to a similar adj to reduce depreciation expense for retired assets. (Co Filing; Tab 13; Sch 3; Att C; Adj I B)		\$ (44,079)
	CASH WORKING CAPITAL		
2	To adjust Cash Working Capital to reflect Staff's pro-forma adj's to O&M expenses: Total O & M Expense adj's per Staff (Att JPL-2; Sch 3; Column (6)) X 45 days / 365 days (Reflective of Monthly Customer Billing)	\$ (11,309) 12.33%	\$ (1,394)
	UNAMORTIZED DEFERRED DEBITS		
3	To eliminate Co pro-forma adj to increase unamortized deferred debits relative to a similar adj to reduce amortization expense. (Co Filing; Tab 13; Sch 3; Att B; Adj II B)		\$ (49,310)
4	To eliminate Co pro-forma adj to record net unamortized eminent domain costs. (Co Filing; Tab 13; Sch 3; Att B; Adj II C)		(4,824,907)
5	To eliminate Co pro-forma adj to increase unamortized deferred debits relative to a similar adj to reduce amortization expense for union negotiations. (Co response to OCA 3-1; Sch 3; Att A; Adj 6)		(2,123)
6	To eliminate Co pro-forma adj to increase unamortized deferred debits relative to a similar adj to increase unamortized deferred debits for union negotiations. (Co response to OCA 3-1; Sch 3; Att A; Adj 7)		(427)
	Total Adjustments - Unamortized Deferred Debits		\$ (4,876,767)
	DEFERRED REVENUE FROM SALE OF CELL TOWER LEASES		
7	To record deferred income from Co's sale of Cell Tower Leases:   Net income from sale of cell tower leases (Staff 3-6) \$ (615,636)   Total income to be shared with ratepayers x	\$ (307,818)	
	Less: Income previously recognized by Co in prior rates: Annual cell tower lease income recognized in prior rates \$ 52,189   Years prior rates in effect (07/28/08 - 06/15/10) x 1.9	98,373	
	Less: Annual recognition of income in future rates proposed by Staff	52,189	\$ (157,256)
	Net Pro-forma Adjustments to Rate Base per Settlement		\$ (5,079,497)

Attachment A Schedule 3

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# DW 10-091 PENNICHUCK WATER WORKS, INC. OPERATING INCOME STATEMENT

			Com	pany Filing				Response	to O	CA 3-1	Staff Testimony								
	(1) (2) (3) Pro-forma Adj's Pro-forma		(4) (5) Additional Adjusted Pro-forma				(6) (7)		(8)		(9) Revenue		(10) Revenue						
		12 Months Ended	(Co Fi	Company ling - Tab 13;		er Company (Co Filing -	(Per Co	rma Adj's Response	(Per	er Company Co Response	Ac	Pro-forma djustments			Pro-forma Test Year		eficiency Per Staff	R	equirement Per Staff
OPERATING REVENUES		12/31/09	Sch 1	; Att's A - G)	;	ab 13; Sch 1)	to O	CA 3-1)	t	o OCA 3-1)		Per Staff	Sch 3A		Per Staff		(Sch 1)		(Sch 1)
Water Sales	\$	23.087.262	\$	1,029,164	\$	24,116,426			s	24,116,426				\$	24,116,426	\$	2,880,738	\$	26,997,164
Water Sales for Resale	•	698	•	1,020,101	•	698			•	698				¥	698	Ť	2,000,100	Ŷ	698
Other		217,364		147,902		365,266		(1,330)		363,936		52,189	8		416,125				416,125
Total Operating Revenues		23,305,324		1,177,066		24,482,390		(1,330)		24,481,060		52,189			24,533,249		2,880,738		27,413,987
OPERATING EXPENSES																			
O & M Expenses:																			
Production		3,404,896		(66,963)		3,337,933		(36,485)		3,301,448					3,301,448				3,301,448
Transmission and Distribution		1,349,277		29,901		1,379,178		(3,214)		1,375,964					1,375,964				1,375,964
Engineering		560,190		14,205		574,395				574,395					574,395				574,395
Customer Accounting		434,974				434,974				434,974					434,974				434,974
Administrative and General		6,106,901		35,586		6,142,487		(42,904)		6,099,583		(11,309)	9		6,088,274				6,088,274
Inter-Division Management Fee		(1,431,687)		(44,628)		(1,476,315)		7,961		(1,468,354)					(1,468,354)				(1,468,354)
Total O & M Expenses		10,424,551		(31,899)		10,392,652		(74,642)		10,318,010		(11,309)			10,306,701		-		10,306,701
Depreciation Exp / Acquisition Adj		3,908,054		162,486		4,070,540		(7,888)		4,062,652					4,062,652				4,062,652
Amortization Expense - CIAC		(480,385)				(480,385)				(480,385)					(480,385)				(480,385)
Amortization Expense - Other		(16,008)		511,893		495,885		(1,696)		494,189		(536,101)	10		(41,912)				(41,912)
Payroll Taxes		520,118				520,118				520,118					520,118				520,118
Real Estate Taxes		2,447,350		226,759		2,674,109		169,984		2,844,093		(1,354)	11		2,842,739				2,842,739
Total Operating Expenses		16,803,680		869,239		17,672,919		85,758		17,758,677		(548,764)			17,209,913		-		17,209,913
Net Operating Income																			
Before Income Tax		6,501,644		307,827		6,809,471		(87,088)		6,722,383	-	600,953			7,323,336		2,880,738		10,204,074
Income Taxes:																			
NH Business Profits Tax *		369,455		26,165		395,620		(7,402)		388,218		51,081	Sch 3B		439,299		244,863		684,162
Federal Income Taxes *		1,038,264		95,764		1,134,028		(27,093)		1,106,935		186,956	Sch 3B		1,293,891		896,198		2,190,089
Provision for ITC		(33,036)				(33,036)				(33,036)					(33,036)				(33,036)
Total Income Taxes		1,374,683		121,929		1,496,612		(34,495)		1,462,117		238,037			1,700,154		1,141,060		2,841,215
NET OPERATING INCOME	\$	5,126,961	\$	185,898	\$	5,312,859	\$	(52,593)	\$	5,260,266	\$	362,916		\$	5,623,182	\$	1,739,678	\$	7,362,859

\* Includes deferred taxes

#### DW 10-091 PENNICHUCK WATER WORKS, INC. PRO-FORMA ADJUSTMENTS TO REVENUE AND EXPENSES

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Adj #	_	
	PRO-FORMA ADJUSTMENTS TO REVENUES:	
	OTHER OPERATING REVENUES	
8	To record annual recognition of deferred revenues from sale of cell tower leases.	\$ 52,189
	PRO-FORMA ADJUSTMENTS TO EXPENSES:	
	ADMINISTRATIVE and GENERAL	
9	To eliminate test year expense relative to "Treatment Plant Event" deemed to be non-recurring per the Final Audit Report.	\$ (11,309)
	AMORTIZATION EXPENSE - OTHER	
10	To eliminate Co pro-forma adj to record amortization expense of eminent domain costs. (Co Filing; Tab 13; Sch 1; Att F; Adj I E)	\$ (536,101)
	REAL ESTATE TAXES	
11	To adjust real estate tax expense to amount per Staff's analysis (Att JPL-3).	\$ (1,354)
	Net Pro-forma Adjustments to Operating Income before Income Tax Effect	\$ 600,953

# DW 10-091 PENNICHUCK WATER WORKS, INC. PRO-FORMA ADJUSTMENTS TO INCOME TAXES

### INCOME TAXES

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To reflect the income tax effect of pro-forma adjustments to revenue and expense:

<u>Pro-forma Adjustments per Settlement:</u> Water Sales Water Sales for Resale	\$ - -
Other Revenue	52,189
Production Expense Transmission and Distribution Expense	-
Engineering Expense	-
Customer Accounting Expense	-
Administrative & General Expense	11,309
Inter-Division Management Fee	-
Depreciation Expense / Acquisition Adj	-
Amortization Expense - CIAC	-
Amortization Expense - Other	536,101
Payroll Tax Expense Real Estate Tax Expense	- 1,354
Net Income/(Expense) before Income Tax Resulting from Pro-forma Adjustments	600,953
	000,000
Less: New Hampshire Business Profits Tax @ 8.5%	(51,081)
Net Income/(Expense) from Pro-forma Adjustments Subject to Federal Income Tax	549,872
Less: Federal income Tax @ 34%	(186,956)
Net Pro-forma Adjustments per Settlement	\$ 362,916