Pennichuck East Utility. Inc. Summary of Cost of Service

		Total		W	ater Sal	es	<u>Fire F</u>	rotec	<u>tion</u>	<u>Cı</u>	<u>ustomer</u>	<u>r</u>
Required from Rates & Charges	<u>Co</u>	st of Service	Allocation	<u>Percent</u>		<u>Amount</u>	<u>Percent</u>		<u>Amount</u>	<u>Percent</u>		<u>Amount</u>
Operation & Maintenance	\$	5,804,292	Total O&M	73.8%	\$	4,284,832	5.5%	\$	317,271	20.7%	\$	1,202,189
Amortization		268,729	Depreciation	63.4%		170,374	18.7%		50,310	17.9%		48,045
Taxes - Federal & State		3,775	Composite Allocation	68.5%		2,585	13.3%		500	18.3%		690
Taxes - Property		1,237,010	Plant in Service	60.6%		749,279	24.9%		307,925	14.5%		179,806
Material Operating Expense Factor (MOEF)		438,399	Total O&M	73.8%		323,634	5.5%		23,964	20.7%		90,801
Debt Service Revenue Requirement		1,888,178	Plant in Service	60.6%		1,143,703	24.9%		470,019	14.5%		274,456
City Bond Fixed Revenue Requirement		926,309	Plant in Service	60.6%		561,082	24.9%		230,583	14.5%		134,644
Less Other Revenues		(30,188)	Composite Allocation	68.5%		(20,671)	13.3%		(4,001)	18.3%		(5,516)
Total: Required from Rates & Charges	\$	10,536,504	Composite Allocation	68.5%	\$	7,214,817	13.3%	\$	1,396,571	18.3%	\$	1,925,115

Pennichuck East Utility. Inc. Allocation of O&M Expenses

			w	ater Sal	<u>es</u>	Fire I	rotectio	<u>n</u>	<u>Cu</u>	<u>istomer</u>	
	Pro-Forma	<u>Allocation</u>	<u>Percent</u>		<u>Amount</u>	Percent	<u>A</u>	<u>mount</u>	<u>Percent</u>	<u>An</u>	<u>nount</u>
Source of Supply Expenses											
<u>Operation</u>											
Operation Supervision and Engineering	\$ -	Average Day Demand	99.5%	\$	-	0.5%	\$	-	0.0%	\$	-
Operation Labor and Expenses	45,185	Average Day Demand	99.5%		44,959	0.5%		226	0.0%		-
Purchased Water	1,093,480	Average Day Demand	99.5%		1,088,013	0.5%		5,467	0.0%		-
Miscellaneous Expenses	-	Average Day Demand	99.5%		-	0.5%		-	0.0%		-
Rents	-	Average Day Demand	99.5%		-	0.5%		-	0.0%		-
Subtotal: Operation	\$ 1,138,665			\$	1,132,972		\$	5,693		\$	-
<u>Maintenance</u>											
Maintenance Supervision & Engineering	\$ -	Average Day Demand	99.5%	\$	-	0.5%	\$	-	0.0%	\$	-
Maintenance of Supply Mains	-	Average Day Demand	99.5%		-	0.5%		-	0.0%		-
Maintenance of Miscellaneous Water Source Plant	-	Average Day Demand	99.5%		-	0.5%		-	0.0%		-
Subtotal: Maintenance	\$ -			\$	-		\$	-		\$	-
Total: Source of Supply Expenses	\$ 1,138,665			\$	1,132,972		\$	5,693		\$	-
Pumping Expenses											
<u>Operation</u>											
Operation Supervision and Engineering	\$ -	Average Day Demand	99.5%	\$	-	0.5%	\$	-	0.0%	\$	-
Fuel for Power Production	-	Average Day Demand	99.5%		-	0.5%		-	0.0%		-
Fuel or Power Purchased for Production	337,595	Average Day Demand	99.5%		335,907	0.5%		1,688	0.0%		-
Pumping Labor and Expenses		Average Day Demand	99.5%		-	0.5%		-	0.0%		-
Miscellaneous Expenses	15,383	Average Day Demand	99.5%		15,306	0.5%		77	0.0%		-
Rents	 -	Average Day Demand	99.5%		<u> </u>	0.5%		<u> </u>	0.0%		-
Subtotal: Operation	\$ 352,978			\$	351,213		\$	1,765		\$	-
<u>Maintenance</u>											
Maintenance Supervision and Engineering	\$ -	Average Day Demand	99.5%	\$	-	0.5%	\$	-	0.0%	\$	-
Maintenance of Structures and Improvements	11,812	Average Day Demand	99.5%		11,753	0.5%		59	0.0%		-
Maintenance of Power Production Equipment	-	Average Day Demand	99.5%		-	0.5%		-	0.0%		-
Maintenance of Pumping Equipment	683,819	Average Day Demand	99.5%		680,400	0.5%		3,419	0.0%		-
Subtotal: Maintenance	\$ 695,631			\$	692,153		\$	3,478		\$	-
Total: Pumping Expenses	\$ 1,048,609			\$	1,043,366		\$	5,243		\$	-

Pennichuck East Utility. Inc. Allocation of O&M Expenses

				Water Sales		Fire Protection		<u>Customer</u>				
	<u>P</u>	ro-Forma	<u>Allocation</u>	<u>Percent</u>	<u> </u>	<u>Amount</u>	<u>Percent</u>		<u>Amount</u>	<u>Percent</u>	<u> </u>	<u>Amount</u>
Water Treatment Expenses												
<u>Operation</u>												
Operation Supervision and Engineering	\$	-	Average Day Demand	99.5%	\$	-	0.5%	\$	-	0.0%	\$	-
Chemicals		87,745	Average Day Demand	99.5%		87,306	0.5%		439	0.0%		-
Operation Labor and Expenses		51,051	Average Day Demand	99.5%		50,796	0.5%		255	0.0%		-
Miscellaneous Expenses			Average Day Demand	99.5%		<u> </u>	0.5%		_	0.0%		-
Subtotal: Operation	\$	138,796			\$	138,102		\$	694		\$	-
Maintenance												
Maintenance of Water Treatment Equipment	\$	21,856	Average Day Demand	99.5%	\$	21,747	0.5%	\$	109	0.0%	\$	-
Subtotal: Maintenance	\$	21,856			\$	21,747		\$	109		\$	-
Total: Water Treatment Expenses	\$	160,652			\$	159,849		\$	803		\$	-
Transmission and Distribution Expenses												
<u>Operation</u>												
Operation Supervision and Engineering	\$	-	Trans. & Distr.	12.5%	\$	-	21.2%	\$	-	66.3%	\$	-
Transmission and Distribution Lines Expenses		-	Max Day plus Fire	63.3%		-	36.7%		-	0.0%		-
Meter Expenses		163,377	Customer Service	0.0%		-	0.0%		-	100.0%		163,377
Customer Installation Expense		7,706	Customer Service	0.0%		-	0.0%		-	100.0%		7,706
Miscellaneous Expenses		-	Trans. & Distr.	12.5%		-	21.2%		-	66.3%		-
Rents			Max Day plus Fire	63.3%		<u>-</u>	36.7%		-	0.0%		
Subtotal: Operation	\$	171,083			\$	-		\$	-		\$	171,083
<u>Maintenance</u>												
Maintenance Supervision and Engineering	\$	-	Trans. & Distr.	12.5%	\$	-	21.2%	\$	-	66.3%	\$	-
Maintenance of Structures and Improvements		-	Trans. & Distr.	12.5%		-	21.2%		-	66.3%		-
Maintenance of Dist. Reservoirs & Standpipes		-	Storage	72.1%		-	27.9%		-	0.0%		-
Maintenance of Trans. & Distribution Mains		131,561	Max Day plus Fire	63.3%		83,245	36.7%		48,316	0.0%		-
Maintenance of Fire Mains		-	Hydrants	0.5%		-	99.5%		-	0.0%		-
Maintenance of Services		264,299	Customer Service	0.0%		-	0.0%		-	100.0%		264,299
Maintenance of Meters		10,595	Customer Service	0.0%		-	0.0%		-	100.0%		10,595
Maintenance of Hydrants		94,774	Hydrants	0.5%		474	99.5%		94,300	0.0%		-
Maintenance of Miscellaneous Plant		56,642	Trans. & Distr.	12.5%		7,053	21.2%		12,015	66.3%		37,573
Subtotal: Maintenance	\$	557,871			\$	90,772		\$	154,632		\$	312,467
Total: Transmission & Distribution Expenses	\$	728,954	Trans. & Distr.	12.5%	\$	90,772	21.2%	\$	154,632	66.3%	\$	483,550

Pennichuck East Utility. Inc. Allocation of O&M Expenses

				W	ater Sal	<u>es</u>	Fire I	Protecti	<u>on</u>	<u>C</u>	ustome	<u>r</u>
	<u> </u>	ro-Forma	<u>Allocation</u>	Percent		Amount	Percent		Amount	Percent		Amount
Customer Accounts Expenses												
<u>Operation</u>												
Supervision	\$	-	Customer Service	0.0%	\$	-	0.0%	\$	-	100.0%	\$	-
Meter Reading Salaries		58,102	Customer Service	0.0%		-	0.0%		-	100.0%		58,102
Customer Records & Coll. Expenses-Labor		115,781	Customer Service	0.0%		-	0.0%		-	100.0%		115,781
Uncollectible Accounts		25,101	Customer Service	0.0%		-	0.0%		-	100.0%		25,101
Miscellaneous Customer Account Expense		-	Customer Service	0.0%		-	0.0%		-	100.0%		-
Subtotal: Operation	\$	198,984			\$	-		\$	-		\$	198,984
Total: Customer Accounts Expenses	\$	198,984			\$	-		\$	-		\$	198,984
Administrative and General Expenses												
<u>Operation</u>												
Administrative and General Salaries	\$	-	Total O&M	74.1%	\$	-	5.1%	\$	-	20.8%	\$	-
Office Supplies and Other Expenses		7,298	Total O&M	74.1%		5,407	5.1%		371	20.8%		1,521
Administrative Expenses Transferred		-	Total O&M	74.1%		-	5.1%		-	20.8%		-
Outside Services Employed		18,688	Total O&M	74.1%		13,845	5.1%		949	20.8%		3,894
Property Insurance		113,498	Plant In Service	60.6%		68,748	24.9%		28,253	14.5%		16,498
Injuries and Damages		-	Total O&M	74.1%		-	5.1%		-	20.8%		-
Employee Pension and Benefits		-	Total O&M	74.1%		-	5.1%		-	20.8%		-
Regulatory Commission Expenses		34,108	Total O&M	74.1%		25,269	5.1%		1,732	20.8%		7,106
Miscellaneous General Expenses		2,354,836	Total O&M	74.1%		1,744,605	5.1%		119,595	20.8%		490,636
Rents		-	Total O&M	74.1%		-	5.1%		-	20.8%		-
Subtotal: Operation	\$	2,528,428			\$	1,857,874		\$	150,900		\$	519,654
<u>Maintenance</u>												
Maintenance of General Plant	\$	<u>-</u> _	Total O&M	74.1%	\$		5.1%	\$	-	20.8%	\$	-
Subtotal: Maintenance	\$	-			\$	-		\$	-		\$	-
Total Administrative and General Expenses	\$	2,528,428			\$	1,857,874		\$	150,900		\$	519,654
Total Operation and Maintenance Expenses	\$	5,804,292	Total O&M	73.8%	\$	4,284,832	5.5%	\$	317,271	20.7%	\$	1,202,189

Pennichuck East Utility. Inc. Allocation of Plant in Service

				Water Sales		Fire Protection		Customer		<u>r</u>
	<u>!</u>	Pro-Forma	<u>Allocation</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>		<u>Amount</u>
Plant In Service										
Organization	1% \$	386,400	Customer Service	0.0%	\$ -	0.0%	\$ -	100.0%	\$	386,400
Franchises	0%	69,878	Customer Service	0.0%	-	0.0%	-	100.0%		69,878
L & LR: Supply & Pumping	2%	1,224,782	Average Day Demand	99.5%	1,218,658	0.5%	6,124	0.0%		-
S & I: Supply & Pumping	10%	7,499,075	Average Day Demand	99.5%	7,461,580	0.5%	37,495	0.0%		-
Collecting & Impounding Reserv.	0%	-	Average Day Demand	99.5%	-	0.5%	-	0.0%		-
Lake, River & Other Intake	0%	-	Average Day Demand	99.5%	-	0.5%	-	0.0%		-
Wells & Springs	3%	2,365,509	Average Day Demand	99.5%	2,353,681	0.5%	11,828	0.0%		-
Infiltration Galleries & Tunnels	0%	-	Average Day Demand	99.5%	-	0.5%	-	0.0%		-
Supply Mains	1%	562,249	Average Day Demand	99.5%	559,438	0.5%	2,811	0.0%		-
Power Generation Equipment	1%	759,921	Average Day Demand	99.5%	756,121	0.5%	3,800	0.0%		-
Pumping Equipment	3%	2,023,511	Average Day Demand	99.5%	2,013,393	0.5%	10,118	0.0%		-
Water Treatment Equipment	2%	1,321,060	Average Day Demand	99.5%	1,314,455	0.5%	6,605	0.0%		-
Distribution Reserv. & Standpipes	3%	1,992,420	Storage	72.1%	1,436,557	27.9%	555,863	0.0%		-
Transmission Mains	59%	44,695,023	Max Day plus Fire	63.3%	28,280,630	36.7%	16,414,393	0.0%		-
Distribution Mains	0%	-	Max Day plus Fire	63.3%	-	36.7%	-	0.0%		-
Services	11%	8,383,066	Customer Service	0.0%	-	0.0%	-	100.0%		8,383,066
Meters & Meter Installation	3%	2,055,998	Customer Service	0.0%	-	0.0%	-	100.0%		2,055,998
Hydrants	2%	1,617,812	Hydrants	0.5%	8,089	99.5%	1,609,723	0.0%		-
Other Plant & Misc. Equipment	0%	89,767	Plant in Service	60.6%	54,373	24.9%	22,345	14.5%		13,048
Office Furniture & Equipment	0%	2,689	Plant in Service	60.6%	1,629	24.9%	669	14.5%		391
Transportation Equipment	0%	-	Plant in Service	60.6%	-	24.9%	-	14.5%		-
Stores Equipment	0%	-	Plant in Service	60.6%	-	24.9%	-	14.5%		-
Tools, Shop & Garage Equip.	0%	72,937	Plant in Service	60.6%	44,179	24.9%	18,156	14.5%		10,602
Laboratory Equipment	0%	9,592	Plant in Service	60.6%	5,810	24.9%	2,388	14.5%		1,394
Power Operated Equipment	0%	-	Plant in Service	60.6%	-	24.9%	-	14.5%		-
Communications Equipment	1%	528,230	Plant in Service	60.6%	319,958	24.9%	131,491	14.5%		76,781
Miscellaneous Equipment	0%	92,317	Plant in Service	60.6%	55,918	24.9%	22,980	14.5%		13,419
Other Tangible Equipment	0%	10,364	Plant in Service	60.6%	6,278	24.9%	2,580	14.5%		1,506
Total: Plant In Service	100% \$	75,762,600	Plant in Service	60.6%	\$ 45,890,749	24.9%	\$ 18,859,368	14.5%	\$	11,012,483

Pennichuck East Utility. Inc. Allocation of Depreciation

				Water Sales		Fire Protection		<u>Customer</u>		
		Pro-Forma	<u>Allocation</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>		<u>Amount</u>
<u>Depreciation</u>										
Organization	1% \$	15,284	Customer Service	0.0%	\$ -	0.0%	\$ -	100.0%	\$	15,284
Franchise	0%	3,494	Customer Service	0.0%	-	0.0%	-	100.0%		3,494
S & I: Supply & Pumping	12%	192,328	Average Day Demand	99.5%	191,366	0.5%	962	0.0%		-
Collecting & Impounding Reserv.	0%	-	Average Day Demand	99.5%	-	0.5%	-	0.0%		-
Lake, River & Other Intake	0%	-	Average Day Demand	99.5%	-	0.5%	-	0.0%		-
Wells & Springs	6%	91,764	Average Day Demand	99.5%	91,305	0.5%	459	0.0%		-
Infiltration Galleries & Tunnels	0%	-	Average Day Demand	99.5%	-	0.5%	-	0.0%		-
Supply Mains	1%	8,618	Average Day Demand	99.5%	8,575	0.5%	43	0.0%		-
Power Generation Equipment	3%	39,459	Average Day Demand	99.5%	39,262	0.5%	197	0.0%		-
Pumping Equipment	6%	91,864	Average Day Demand	99.5%	91,405	0.5%	459	0.0%		-
Water Treatment Equipment	5%	81,771	Average Day Demand	99.5%	81,362	0.5%	409	0.0%		-
Distribution Reserv. & Standpipes	2%	37,614	Storage	72.1%	27,120	27.9%	10,494	0.0%		-
Transmission Mains	44%	674,289	Max Day plus Fire	63.3%	426,654	36.7%	247,635	0.0%		-
Distribution Mains	0%	-	Max Day plus Fire	63.3%	-	36.7%	-	0.0%		-
Services	11%	165,428	Customer Service	0.0%	-	0.0%	-	100.0%		165,428
Meters & Meter Installation	6%	85,713	Customer Service	0.0%	-	0.0%	-	100.0%		85,713
Hydrants	1%	22,095	Hydrants	0.5%	110	99.5%	21,985	0.0%		-
Other Plant & Misc. Equipment	0%	1,769	Depreciation	63.4%	1,122	18.7%	331	17.9%		316
Office Furniture & Equipment	0%	-	Depreciation	63.4%	-	18.7%	-	17.9%		-
Transportation Equipment	0%	-	Depreciation	63.4%	-	18.7%	-	17.9%		-
Stores Equipment	0%	-	Depreciation	63.4%	-	18.7%	-	17.9%		-
Tools, Shop & Garage Equip.	0%	211	Depreciation	63.4%	134	18.7%	40	17.9%		38
Laboratory Equipment	0%	480	Depreciation	63.4%	304	18.7%	90	17.9%		86
Power Operated Equipment	0%	-	Depreciation	63.4%	-	18.7%	-	17.9%		-
Communications Equipment	2%	27,710	Depreciation	63.4%	17,568	18.7%	5,188	17.9%		4,954
Miscellaneous Equipment	1%	8,413	Depreciation	63.4%	5,334	18.7%	1,575	17.9%		1,504
Other Tangible Plant	0%	942	Depreciation	63.4%	597	18.7%	176	17.9%		168
Adjustment	0%	(27)	Depreciation	63.4%	(17)	18.7%	(5)	17.9%		(5)
Total Depreciation	100% \$	1,549,219	Depreciation	63.4%	\$ 982,201	18.7%	\$ 290,037	17.9%	\$	276,981

Pennichuck East Utility. Inc. Explanation of Allocations

	Water Service	Fire Prot.	Customer	<u>Total</u>	- "	
Average Day Demand	99.5%	0.5%	0.0%	100.0%	Facilities used to mee	et average demands or maximum day water
Max Day plus Fire	63.3%	36.7%	0.0%	100.0%	Facilities Used for Ma	ximum Day plus Fire
		Gal/Min	<u>Percent</u>			
	Maximum Day	3,446	63.3%		Product/Purch	603,710 1000 gal/yr
	Fire Demand	2,000	<u>36.7%</u>			50,309 1000 gal/month avg
	Max Day Plus Fire	5,446	100.0%			66,912 1000 gal max month
						1.33 max month
						3.00 max day
Customer Service	0.0%	0.0%	100.0%	100.0%	All Customer Service	
Depreciation	63.4%	18.7%	17.9%	100.0%	Based on all allocable	Depresiation Itoms
Depreciation	05.4%	10.770	17.9%	100.0%	based off all allocable	e Depreciation items
Composite Allocation	68.5%	13.3%	18.3%	100.0%	Based on all allocable	expenses
Tabel 0004	74.40/	F 40/	20.00/	400.00/	B	00115
Total O&M	74.1%	5.1%	20.8%	100.0%	Based on all allocable	: O&M Expenses
Hydrants	0.5%	99.5%	0.0%	100.0%	For Hydrants	
Plant In Service	60.6%	24.9%	14.5%	100.0%	Based on all allocable	e Utility Plant Items
Storage	72.1%	27.9%	0.0%	100.0%	For Storage Facilities	
		- 1/2				
	Mar to selle	Gal/Min	Percent 72.40		A	LEVAL B
	Maximum Hour	5,169	72.1%		Assume Max Hour = 1	I.5 X Max Day
	Fire Demand	<u>2,000</u>	<u>27.9%</u>			
	Total	7,169	100.0%			
Transmission & Distribution	12.5%	21.2%	66.3%	100.0%	General T&D O&M Ex	penses

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Pennichuck East Utility. Inc. Retail Units of Service

<u>Monthly</u>	No. of Meters	No. of Bills	Cost Factor	Meter Equivs.	Flow Factor	Cap. Equivs.
5/8"	7,629	91,548	1.00	7,629	1.00	7,629
3/4"	66	792	1.28	85	1.50	99
1"	140	1,680	2.52	352	2.50	350
1 1/2"	45	540	4.97	224	5.00	225
2"	43	516	5.56	239	8.00	344
3"	4	48	25.96	104	16.00	64
4"	-	-	60.40	-	25.00	-
6"	-	-	84.51	-	50.00	-
	7,927	95,124		8,633		8,711

Ccf/year

Billable Water Consumption 705,312

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<u>Pennichuck East Utility. Inc.</u> <u>Fire Protection Units of Service</u>

<u>Inch Feet</u> Hydrants

Londonderry 1,951,858 201 Pelham 461,000 36

Litchfield	2,665,012	248		
Raymond	85,586	12		
Bow	10,798	2		
Windham	207,178	27		
Birch Hill	66,400	6		
Exeter	30,120	6		
Lee	20,016	7		
Total: Inch Feet	5,497,968	545		
	<u>Number</u>	Factor *	Equivs.	Percent
Public				
Hydrants	545	111.3	60,664.5	72.03%
Private				
1 1/2"	111	2.9	322.4	
2"	83	6.2	513.8	
3"	0	18.0	0.0	
4"	22	38.3	843.0	
6"	48	111.3	5,342.9	
8"	30	237.2	7,116.2	
10"	0	426.6	0.0	
12"	3	689.0	2,067.1	
Hydrants	66	111.3	7,346.5	
Subtotal: Private	363		23,552.0	27.97%
Total			84,216.5	100.00%

^{*} Nominal size to the 2.63 power.

<u>Pennichuck East Utility. Inc.</u> <u>Calculation of Fire Protection Charges</u>

Total Fire Protection Allocation (a) Hydrants O&M	\$	1,396,571 94,300		
Plus O&M Admin		•	Bas	ed on General & Admin % of Total = 42.65%
Hydrants Cap.		64,093	Bas	ed on Hydrant % of Fire Assets: 8.54%
Hydrants Taxes		26,325		
Total Direct Hydrant (b)	\$	224,934		
Net Non-Hydrant Fire (a) - (b)	\$	1,171,638		
		Percent		Revenue
Allocation Between Public and Private	<u> </u>	Allocated *		<u>Required</u>
Public Fire Service		72.03%	\$	843,977
Private Fire Service		27.97%		327,661
Total		100.0%	\$	1,171,638

^{*} From Units of Service

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Pennichuck East Utility. Inc. Calculation of Fire Protection Charges

Public Fire Service

Total Costs Allocated to Public Fire \$ 1,068,911

Hydrant Maintenance Charge

Hydrant Allocation \$ 224,934 Direct Hydrant Costs

Hydrants 545

Annual \$/Hydrant Cost \$ 412.72

Per Month \$ 34.39

Inch-Foot Charge

Inch-Foot Allocation \$ 843,977 Public Fire (Excluding Direct Hydrant)
Inch-Feet 5,497,968
Annual \$/Inch-Foot \$ 0.1535
Per Month \$ 0.0128

Pennichuck East Utility. Inc. Calculation of Fire Protection Charges

Private Fire Service

Allocated Cost	\$ 327,661	
=	=	\$13.91 per 1" equivalent per year
Number of Equivs	23,552.0	

		Demand	Billing	Monthly
Service Size	<u>Factor</u>	<u>Charge</u>	<u>Charge</u>	<u>Charge</u>
1 1/2"	2.9	\$ 3.37 \$	3.78 \$	7.15
2"	6.2	7.18	3.78	10.96
3"	18.0	20.85	3.78	24.63
4"	38.3	44.43	3.78	48.21
6"	111.3	129.05	3.78	132.83
8"	237.2	275.01	3.78	278.79
10"	426.6	494.56	3.78	498.34
12"	689.0	798.84	3.78	802.62
Hydrants	111.3	129.05	3.78	132.83

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Pennichuck East Utility. Inc. Summary of Customer Expense Allocations

		Customer			METERS/SERVICES			<u>BILLINGS</u>		
Required from Customer Charges	<u>Total *</u>		<u>Allocation</u>	<u>Percent</u>		<u>Amount</u>	<u>Percent</u>		<u>Amount</u>	
Operation & Maintenance	\$	1,202,189	Customer O&M	70.8%	\$	851,706	29.2%	\$	350,485	
Amortization		48,045	Customer Depreciation	100.0%		48,045	0.0%		-	
Taxes - Federal & State		690	All Customer Expenses	80.5%		555	19.5%		135	
Taxes - Property		179,806	Customer Plant	100.0%		179,806	0.0%		-	
Operating Expense Contingency		90,801	Customer O&M	70.8%		64,329	29.2%		26,472	
Debt Service Revenue Requirement		274,456	Customer Plant	100.0%		274,456	0.0%		-	
City Bond Fixed Revenue Requirement		134,644	Customer Plant	100.0%		134,644	0.0%		-	
Less Other Revenues		(5,516)	All Customer Expenses	80.5%		(4,438)	19.5%		(1,077)	
Total: Required from Customer Charges	\$	1,925,115	All Customer Expenses	80.5%	\$	1,549,104	19.5%	\$	376,015	

^{*} From allocation of O&M, Plant & Depreciation allocated to Customer Costs

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Pennichuck East Utility. Inc. Allocation of Customer Expenses

	Customer			METERS/SERVICES			<u>BILLINGS</u>		
		<u>Total</u>	<u>Allocation</u>	Percent		<u>Amount</u>	Percent		<u>Amount</u>
Transmission and Distribution Expenses									
<u>Operation</u>									
Operation Supervision and Engineering	\$	-	Meter	100.0%	\$	-	0.0%	\$	-
Transmission and Distribution Lines Expenses		-	Meter	100.0%		-	0.0%		-
Meter Expenses		163,377	Meter	100.0%		163,377	0.0%		-
Customer Installation Expense		7,706	Meter	100.0%		7,706	0.0%		-
Miscellaneous Expenses		-	Meter	100.0%		-	0.0%		-
Rents		-	Meter	100.0%		-	0.0%		-
Subtotal: Operation	\$	171,083			\$	171,083		\$	-
<u>Maintenance</u>									
Maintenance Supervision and Engineering	\$	-	Meter	100.0%	\$	-	0.0%	\$	-
Maintenance of Structures and Improvements		-	Meter	100.0%		-	0.0%		-
Maintenance of Dist. Reservoirs & Standpipes		-	Meter	100.0%		-	0.0%		-
Maintenance of Trans. & Distribution Mains		-	Meter	100.0%		-	0.0%		-
Maintenance of Fire Mains		-	Meter	100.0%		-	0.0%		-
Maintenance of Services		264,299	Meter	100.0%		264,299	0.0%		-
Maintenance of Meters		10,595	Meter	100.0%		10,595	0.0%		-
Maintenance of Hydrants		-	Meter	100.0%		-	0.0%		-
Maintenance of Miscellaneous Plant		37,573	Meter	100.0%		37,573	0.0%		-
Subtotal: Maintenance	\$	312,467			\$	312,467		\$	-
Total: Transmission & Distribution Expenses	\$	483,550			\$	483,550		\$	-
Customer Accounts Expenses									
<u>Operation</u>									
Supervision	\$	-	Billing/Cust. Svc.	0.0%	\$	-	100.0%	\$	-
Meter Reading Salaries		58,102	Billing/Cust. Svc.	0.0%		-	100.0%		58,102
Customer Records & Coll. Expenses-Labor		115,781	Billing/Cust. Svc.	0.0%		-	100.0%		115,781
Uncollectible Accounts		25,101	Billing/Cust. Svc.	0.0%		-	100.0%		25,101
Miscellaneous Customer Account Expense		-	Billing/Cust. Svc.	0.0%		-	100.0%		-
Subtotal: Operation	\$	198,984			\$	-		\$	198,984
Total: Customer Accounts Expenses	\$	198,984			\$	-		\$	198,984

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Pennichuck East Utility. Inc. Allocation of Customer Expenses

	Customer		METERS/SERVICES			<u>BILLINGS</u>			
	<u>Total</u>	<u>Allocation</u>	<u>Percent</u>	<u>Amount</u>		<u>Percent</u>		<u>Amount</u>	
Administrative and General Expenses									
<u>Operation</u>									
Administrative and General Salaries	\$ -	Customer O&M	70.8%	\$	-	29.2%	\$	-	
Office Supplies and Other Expenses	1,521	Customer O&M	70.8%		1,077	29.2%		443	
Administrative Expenses Transferred	-	Customer O&M	70.8%		-	29.2%		-	
Outside Services Employed	3,894	Customer O&M	70.8%		2,759	29.2%		1,135	
Property Insurance	16,498	Customer O&M	70.8%		11,688	29.2%		4,810	
Injuries and Damages	-	Customer O&M	70.8%		-	29.2%		-	
Employee Pension and Benefits	-	Customer O&M	70.8%		-	29.2%		-	
Regulatory Commission Expenses	7,106	Customer O&M	70.8%		5,035	29.2%		2,072	
Miscellaneous General Expenses	490,636	Customer O&M	70.8%		347,597	29.2%		143,039	
Rents	-	Customer O&M	70.8%		-	29.2%		-	
Subtotal: Operation	\$ 519,654			\$	368,156		\$	151,498	
<u>Maintenance</u>									
Maintenance of General Plant	\$ -	Customer O&M	70.8%	\$	-	29.2%	\$	-	
Subtotal: Maintenance	\$ -			\$	-		\$	-	
Total Administrative and General Expenses	\$ 519,654			\$	368,156		\$	151,498	
Total Oper. and Maint. Expenses	\$ 1,202,189	Customer O&M	70.8%	\$	851,706	29.2%	\$	350,485	

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Pennichuck East Utility. Inc. Allocation of Customer Plant Investment

	Customer			METERS/SERVICES			<u>BILLINGS</u>		
		<u>Total</u>	<u>Allocation</u>	<u>Percent</u>	<u>Amount</u>		<u>Percent</u>		<u>Amount</u>
Plant Investment									
Organization	\$	386,400	Customer Plant	100.0%	\$	386,400	0.0%	\$	-
Franchises		69,878	Customer Plant	100.0%		69,878	0.0%		-
Services		8,383,066	Meter	100.0%		8,383,066	0.0%		-
Meters & Meter Installation		2,055,998	Meter	100.0%		2,055,998	0.0%		-
Other Plant & Misc. Equipment		13,048	Customer Plant	100.0%		13,048	0.0%		-
Office Furniture & Equipment		391	Billing/Cust. Svc.	0.0%		-	100.0%		391
Transportation Equipment		-	Customer Plant	100.0%		-	0.0%		-
Stores Equipment		-	Customer Plant	100.0%		-	0.0%		-
Tools, Shop & Garage Equip.		10,602	Customer Plant	100.0%		10,602	0.0%		-
Laboratory Equipment		1,394	Customer Plant	100.0%		1,394	0.0%		-
Power Operated Equipment		-	Customer Plant	100.0%		-	0.0%		-
Communications Equipment		76,781	Customer Plant	100.0%		76,781	0.0%		-
Miscellaneous Equipment		13,419	Customer Plant	100.0%		13,419	0.0%		-
Other Tangible Plant		1,506	Customer Plant	100.0%		1,506	0.0%		-
Total Cust. Plant In Service	\$	11,012,483	Customer Plant	100.0%	\$	11,012,092	0.0%	\$	391

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Pennichuck East Utility. Inc. Allocation of Customer Depreciation

	Customer			METERS/SERVICES			<u>BILLINGS</u>		
		<u>Total</u>	<u>Allocation</u>	<u>Percent</u> <u>Amou</u>		<u>Amount</u>	<u>nount</u> <u>Percent</u>		<u>Amount</u>
<u>Depreciation</u>									
Organization	\$	15,284	Customer Depreciation	100.0%	\$	15,284	0.0%	\$	-
Franchise		3,494	Customer Depreciation	100.0%		3,494	0.0%		-
Services		165,428	Meter	100.0%		165,428	0.0%		-
Meters & Meter Installation		85,713	Meter	100.0%		85,713	0.0%		-
Other Plant & Misc. Equipment		316	Customer Depreciation	100.0%		316	0.0%		-
Office Furniture & Equipment		-	Billing/Cust. Svc.	0.0%		-	100.0%		-
Transportation Equipment		-	Customer Depreciation	100.0%		-	0.0%		-
Stores Equipment		-	Customer Depreciation	100.0%		-	0.0%		-
Tools, Shop & Garage Equip.		38	Customer Depreciation	100.0%		38	0.0%		-
Laboratory Equipment		86	Customer Depreciation	100.0%		86	0.0%		-
Power Operated Equipment		-	Customer Depreciation	100.0%		-	0.0%		-
Communications Equipment		4,954	Customer Depreciation	100.0%		4,954	0.0%		-
Miscellaneous Equipment		1,504	Customer Depreciation	100.0%		1,504	0.0%		-
Other Tangible Plant		168	Customer Depreciation	100.0%		168	0.0%		-
Adjustment		(5)	Customer Depreciation	100.0%		(5)	0.0%		
Total Depreciation	\$	276,981	Customer Depreciation	100.0%	\$	276,981	0.0%	\$	

Pennichuck East Utility. Inc. Explanation of Customer Allocations

	Meters	Billings	Total
Billing/Cust. Svc.	0.0%	100.0%	100.0% Billing & Customer Service
Meter	100.0%	0.0%	100.0% Meter/Service Related
Customer O&M	70.8%	29.2%	100.0% Based on all other Customer Related O&M
Customer Plant	100.0%	0.0%	100.0% Based on all other Customer Related Plant
Customer Depreciation	100.0%	0.0%	100.0% Based on all other Customer Related Depreciation
All Customer Expenses	80.5%	19.5%	100.0% Based on all allocable expenses

Pennichuck East Utility. Inc. Calculation of Customer Service Charges

BILLING CHARGE

	\$376,015	Billing Cost
\$3.780 per billing	=	=
	99.480	No. of Billings (including Priv. Fire)

METER/SERVICE CHARGE

Meter/Service Cost	\$1,549,104	
=	=	\$179.438 per equivalent per year
No. of Meter Faulys.	8.633.1	

READY TO SERVE (PORTION OF FIXED COSTS)

1/3 of Water Related Debt Service Requirements	\$ 568,262	
=	 =	\$65.235 per equivalent per year
No. of Capacity Equivs.	8,711.0	

Monthly	Billing Charge	Meter Charge	Readiness-to-Serve	Total Charge	Revenue
5/8"	\$ 3.78	\$ 14.95	\$ 5.44	\$ 24.17	\$ 2,212,641
3/4"	3.78	19.20	8.15	31.13	24,658
1"	3.78	37.64	13.59	55.01	92,418
1 1/2"	3.78	74.39	27.18	105.35	56,888
2"	3.78	83.20	43.49	130.47	67,323
3"	3.78	388.15	86.98	478.91	22,988
4"	3.78	903.10	135.91	1,042.79	-
6"	3.78	1,263.67	271.81	1,539.26	-
8" and up	3.78	2,616.80	434.90	3,055.48	-
					\$ 2,476,915

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Pennichuck East Utility. Inc. Calculation of Metered Rates

Total Cost of Service	\$	10,536,504
Less Revenues from Fire Charges		(1,396,571)
Less Revenues from Customer Service Charges		(2,493,380)
Equals Required Volumetric Revenue	\$	6,646,552
Metered Sales (Ccf/year)		705,312
Cost Based Metered Rate (per Ccf)	Ś	9.42

Pennichuck East Utility. Inc. Summary of Cost of Service

<u>Customer Service Charge (\$/month</u>	<u>1)</u>	<u>Current</u>	Cos	st Of Service	% Change	\$ Change
<u>Meter Size</u>						
5/8"	\$	20.70	\$	24.17	17%	\$ 3.47
3/4"		44.03		31.13	-29%	(12.90)
1"		62.32		55.01	-12%	(7.31)
1 1/2"		135.68		105.35	-22%	(30.33)
2"		201.30		130.47	-35%	(70.83)
3"		427.09		478.91	12%	51.82
4"		670.55		1,042.79	56%	372.24
6"		1,341.07		1,539.26	15%	198.19
8" and up		1,674.93		3,055.48	82%	1,380.55
Metered Rate (\$/100 cubic feet)						
	\$	7.51	\$	9.42	25%	\$ 1.91

<u>Pennichuck East Utility. Inc.</u> <u>Summary of Cost of Service</u>

Public Fire Protection (per month)		<u>Current</u>		st Of Service	% Change		\$ Change	
\$/hydrant/month (HM) \$/inch-foot/month (IF)	\$ \$	16.07 0.01231	\$ \$	34.39 0.01279	114% 4%	\$ \$	18.32 0.00049	
<u>Private Fire Protection</u> <u>Service Size</u>		<u>Current</u>	Co	st of Service	% Change		\$ Change	
1 1/2"	\$	9.71	\$	7.15	-26%	\$	(2.56)	
2"		17.25		10.96	-36%		(6.29)	
3"		38.82		24.63	-37%		(14.19)	
4"		69.02		48.21	-30%		(20.81)	
6"		155.33		132.83	-14%		(22.50)	
8"		276.10		278.79	1%		2.69	
10"		455.26		498.34	9%		43.08	
12"		733.22		802.62	9%		69.40	
Hydrants		121.37		132.83	9%		11.46	

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Pennichuck East Utility. Inc. Revenue Proof

Customer Service Charge:		Number of	Cost of S	ervic	e Rates
		<u>Bills</u>	<u>Rate</u>		<u>Revenue</u>
Monthly	5/8"	91,548 \$	24.17	\$	2,212,641
	3/4"	792	31.13		24,658
	1"	1,680	55.01		92,418
	1 1/2"	540	105.35		56,888
	2"	516	130.47		67,323
	3"	48	478.91		22,988
	4"	-	1,042.79		-
	6"	-	1,539.26		-
	8" and up	-	3,055.48		-
	Total Customer Servic	e Charges		\$	2,476,915
Consumption Charges					
		<u>Use (ccf)</u>			
	Metered Rate	705,312 \$	9.42	\$	6,646,552
	Total Consumption Ch	arges		\$	6,646,552

Pennichuck East Utility. Inc. Revenue Proof

Fire Protection - Monthly Charges

Grand Total Revenue

		Cost of Service Rates			
			<u>Rate</u>		<u>Revenue</u>
	Hydrants	Ну	d.Maint. Chg		HydMaint Rev
Hydrant Maintenance	545	\$	34.39	\$	224,934
	Inch-Feet		In-Ft Cng		In-Ft Rev
<u>Inch-Foot</u>	5,497,968	\$	0.01279	\$	843,977
Total Public Fire Reven	<u>ue</u>			\$	1,068,911
<u>Private Fire</u>					
1 1/2"	111	\$	7.15	\$	9,520
2"	83		10.96		10,913
3"	0		24.63		-
4"	22		48.21		12,726
6"	48		132.83		76,509
8"	30		278.79		100,363
10"	0		498.34		-
12"	3		802.62		28,894
Hydrants	66		132.83		105,200
Total Private Fire				\$	344,126
Total Private & Public F	ire			\$	1,413,036
				\$	10,536,504

Pennichuck East Utility. Inc. Customer Impacts Schedule

		Existing				Cost of Service			
		Volumetric	Monthly Cust.	Monthly	Volumetric	Monthly Cust.	Monthly	<u>Cha</u>	nge
Cons. (Ccf/Month)	Meter Size	<u>Charge</u>	<u>Charge</u>	Total Bill	<u>Charge</u>	<u>Charge</u>	Total Bill	<u>\$</u>	<u>%</u>
3	5/8"	\$ 22.53	\$ 20.70	\$ 43.23	\$ 28.27	\$ 24.17	\$ 52.44	\$ 9.21	21.3%
5	5/8"	37.55	20.70	58.25	47.12	24.17	71.29	13.04	22.4%
10	5/8"	75.10	20.70	95.80	94.24	24.17	118.40	22.60	23.6%
25	1"	187.75	62.32	250.07	235.59	55.01	290.60	40.53	16.2%
50	1"	375.50	62.32	437.82	471.18	55.01	526.19	88.37	20.2%
50	1 1/2"	375.50	135.68	511.18	471.18	105.35	576.53	65.35	12.8%
75	2"	563.25	201.30	764.55	706.77	130.47	837.24	72.69	9.5%
150	2"	1,126.50	201.30	1,327.80	1,413.53	130.47	1,544.00	216.20	16.3%
250	2"	1,877.50	201.30	2,078.80	2,355.89	130.47	2,486.36	407.56	19.6%
500	2"	3,755.00	201.30	3,956.30	4,711.78	130.47	4,842.25	885.95	22.4%

			Ca	lculated Annual
Class of Service	Inch-Ft	# of Hydrants		Charge
FP - Hydrants ¹				
Londonderry FP Hydrants -	1,951,858	201	\$	382,581
Pelham FP Hydrants -	461,000	36	\$	85,625
Litchfield FP Hydrants -	2,665,012	248	\$	511,453
Raymond FP Hydrants ³ -	85,586	12	\$	9,045
	Tot	al FP Hydrants -	\$	988,705
Bow Public Hydrant -	10,798	2	\$	2,483
Windham Public Hydrant	207,178	27	\$	42,947
Birch Hill Public Hydrant -	66,400	6	\$	12,669
Exeter Public Hydrant -	30,120	6	\$	7,100
Lee Public Hydrant -	20,016	7	\$	5,962
Raymond Public Hydrant ³ -	85,586	12	\$	9,045
	Total Public Hydrants -		\$	80,206
	Total Public	Fire Protection -	\$	1,068,911

Notes:

- 1. FP Hydrant charges are billed to the Municipality
- 2. Public Hydrant Charges are billed to the Customers of the Water systems in those communities with Fire Hydrants in they water system
- 3. The Town of Raymond pays for 50% of the FP Hydrants charge in Raymond. The remaining 50% of the Public FP-Hydrants charge is paid for via the Raymond Public Hydrant charge.