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Pennichuck East Utility. Inc. Summary of Cost of Service

		Total		Wa	ater Sal	<u>es</u>	Fire	Protect	ion	C	ustomer	
Required from Rates & Charges	Cos	t of Service	Allocation	Percent		Amount	Percent		Amount	Percent		Amount
Operation & Maintenance	\$	5,833,508	Total O&M	74.1%	\$	4,319,796	4.8%	\$	280,879	21.1%	\$	1,232,833
Amortization		52,281	Depreciation	68.0%		35,537	14.1%		7,397	17.9%		9,347
Taxes - Federal & State		23,882	Composite Allocation	71.1%		16,987	10.3%		2,470	18.5%		4,425
Taxes - Property		1,132,107	Plant in Service	66.7%		754,850	18.8%		212,700	14.5%		164,558
Material Operating Expense Factor (MOEF)		279,293	Total O&M	74.1%		206,821	4.8%		13,448	21.1%		59,025
Debt Service Revenue Requirement		1,918,617	Plant in Service	66.7%		1,279,267	18.8%		360,469	14.5%		278,881
City Bond Fixed Revenue Requirement		926,309	Plant in Service	66.7%		617,631	18.8%		174,035	14.5%		134,644
Less Other Revenues		(30,188)	Composite Allocation	71.1%		(21,472)	10.3%		(3,122)	18.5%		(5,594)
Total: Required from Rates & Charges	\$	10,135,809	Composite Allocation	71.1%	\$	7,209,416	10.3%	\$	1,048,275	18.5%	\$	1,878,119

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

					ater Sale	-		Protection	-		<u>istomer</u>	
	Pro-Forn	<u>na</u>	Allocation	Percent		<u>Amount</u>	Percent	<u>A</u>	mount	Percent	<u>Am</u>	<u>ount</u>
Source of Supply Expenses												
Operation	<u> </u>			00 50/			0.5%	*		0.00/	<u>,</u>	
Operation Supervision and Engineering	\$	-	Average Day Demand	99.5%	\$	-	0.5%	\$	-	0.0%	\$	-
Operation Labor and Expenses		45,186	Average Day Demand	99.5%		44,960	0.5%		226	0.0%		-
Purchased Water	1,0	94,877	Average Day Demand	99.5%		1,089,403	0.5%		5,474	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	\$ 1,1	40,063			\$	1,134,363		\$	5,700		\$	-
Maintenance												
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	\$ 1,1	40,063			\$	1,134,363		\$	5,700		\$	-
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	3	37,595	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%		-	0.5%		-	0.0%		-
Subtotal: Operation	\$ 3	852,978			\$	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	e	83,819	Average Day Demand	99.5%		680,400	0.5%		3,419	0.0%		-
Subtotal: Maintenance	\$ 6	595,631			\$	692,153		\$	3,478		\$	-
Total: Pumping Expenses	\$ 1,0	48,609			\$	1,043,366		\$	5,243		\$	-

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

				Wa	ater Sales	<u>.</u>	Fire	Protectio	<u>n</u>	<u>C</u>	<u>ustomer</u>	
	Pr	o-Forma	Allocation	Percent	<u> </u>	Amount	Percent	<u> </u>	mount	Percent	<u>/</u>	Amount
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%		-	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.	8.1%	\$	-	19.9%	\$	-	72.0%	\$	-
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.	8.1%		-	19.9%		-	72.0%		-
Rents		-	Max Day plus Fire	63.3%		-	36.7%		-	0.0%		-
Subtotal: Operation	\$	171,083			\$	-		\$	-		\$	171,083
Maintenance												
Maintenance Supervision and Engineering	\$	-	Trans. & Distr.	8.1%	\$	-	19.9%	\$	-	72.0%	\$	-
Maintenance of Structures and Improvements		-	Trans. & Distr.	8.1%		-	19.9%		-	72.0%		-
Maintenance of Dist. Reservoirs & Standpipes		-	Storage	72.1%		-	27.9%		-	0.0%		-
Maintenance of Trans. & Distribution Mains		79,034	Max Day plus Fire	63.3%		50,009	36.7%		29,025	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.	8.1%		4,614	19.9%		11,271	72.0%		40,758
Subtotal: Maintenance	\$	505,344			\$	55,096		\$	134,596		\$	315,652
Total: Transmission & Distribution Expenses	\$	676,427	Trans. & Distr.	8.1%	\$	55,096	19.9%	\$	134,596	72.0%	\$	486,735

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

				W	ater Sale	<u>es</u>	Fire	Protectio	<u>on</u>	<u>Ci</u>	<u>ustomer</u>	
	<u>P</u>	ro-Forma	Allocation	Percent		<u>Amount</u>	Percent	/	Amount_	Percent		<u>Amount</u>
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	74.2%	\$	-	4.5%	\$	-	21.3%	\$	-
Office Supplies and Other Expenses		7,298	Total O&M	74.2%		5,415	4.5%		331	21.3%		1,552
Administrative Expenses Transferred		-	Total O&M	74.2%		-	4.5%		-	21.3%		-
Outside Services Employed		18,316	Total O&M	74.2%		13,590	4.5%		831	21.3%		3,895
Property Insurance		113,306	Plant In Service	66.7%		75,549	18.8%		21,288	14.5%		16,470
Injuries and Damages		-	Total O&M	74.2%		-	4.5%		-	21.3%		-
Employee Pension and Benefits		-	Total O&M	74.2%		-	4.5%		-	21.3%		
Regulatory Commission Expenses		35,170	Total O&M	74.2%		26,095	4.5%		1,596	21.3%		7,479
Miscellaneous General Expenses		2,434,683	Total O&M	74.2%		1,806,474	4.5%		110,489	21.3%		517,719
Rents		-	Total O&M	74.2%		-	4.5%		-	21.3%		-
Subtotal: Operation	\$	2,608,773			\$	1,927,123		\$	134,536		\$	547,114
Maintenance												
Maintenance of General Plant	\$	-	Total O&M	74.2%	\$	-	4.5%	Ş	-	21.3%	Ş	-
Subtotal: Maintenance	\$	-			\$	-		\$	-		\$	-
Total Administrative and General Expenses	\$	2,608,773			\$	1,927,123		\$	134,536		\$	547,114
Total Operation and Maintenance Expenses	\$	5,833,508	Total O&M	74.1%	\$	4,319,796	4.8%	\$	280,879	21.1%	\$	1,232,833

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Pennichuck East Utility. Inc. Allocation of Depreciation

				W	ater Sales	Fire	Protection	<u>C</u>	<u>ustomer</u>	
	<u>P</u>	ro-Forma	Allocation	Percent	<u>Amount</u>	Percent	Amount	Percent	<u> </u>	<u>Amount</u>
Depreciation										
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%		-
T&D Mains Providing Fire Protection	31%	483,720	Max Day plus Fire	63.3%	306,072	36.7%	177,648	0.0%		-
T&D Mains Not Providing Fire Protection	12%	190,569	Average Day Demand	99.5%	189,617	0.5%	953	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	68.0%	1,202	14.1%	250	17.9%		316
Office Furniture & Equipment	0%	-	Depreciation	68.0%	-	14.1%	-	17.9%		-
Transportation Equipment	0%	-	Depreciation	68.0%	-	14.1%	-	17.9%		-
Stores Equipment	0%	-	Depreciation	68.0%	-	14.1%	-	17.9%		-
Tools, Shop & Garage Equip.	0%	211	Depreciation	68.0%	143	14.1%	30	17.9%		38
Laboratory Equipment	0%	480	Depreciation	68.0%	326	14.1%	68	17.9%		86
Power Operated Equipment	0%	-	Depreciation	68.0%	-	14.1%	-	17.9%		-
Communications Equipment	2%	27,710	Depreciation	68.0%	18,835	14.1%	3,921	17.9%		4,954
Miscellaneous Equipment	1%	8,413	Depreciation	68.0%	5,719	14.1%	1,190	17.9%		1,504
Other Tangible Plant	0%	942	Depreciation	68.0%	640	14.1%	133	17.9%		168
Adjustment	0%	(27)	Depreciation	68.0%	(18)	14.1%	(4)	17.9%		(5)
Total Depreciation	100% \$	1,549,219	Depreciation	68.0%	\$ 1,053,042	14.1%	\$ 219,196	17.9%	\$	276,981

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Pennichuck East Utility. Inc. Explanation of Allocations

Average Day Demand	Water Service 99.5%	<u>Fire Prot.</u> 0.5%	<u>Customer</u> 0.0%	<u>Total</u> 100.0%	Facilities used to meet average demands or maximum day water	
Max Day plus Fire	63.3%	36.7% Gal/Min	0.0% Percent	100.0%	Facilities Used for Maximum Day plus Fire	
	Maximum Day Fire Demand Max Day Plus Fire	3,446 2,000 5,446	63.3% <u>36.7%</u> 100.0%		Product/Purch 603,710 1000 gal/yr 50,309 1000 gal/month avg 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	68.0%	14.1%	17.9%	100.0%	Based on all allocable Depreciation Items	
Composite Allocation	71.1%	10.3%	18.5%	100.0%	Based on all allocable expenses	
Total O&M	74.2%	4.5%	21.3%	100.0%	Based on all allocable O&M Expenses	
Hydrants	0.5%	99.5%	0.0%	100.0%	For Hydrants	
Plant In Service	66.7%	18.8%	14.5%	100.0%	Based on all allocable Utility Plant Items	
Storage	72.1%	27.9%	0.0%	100.0%	For Storage Facilities	
	Maximum Hour Fire Demand Total	<u>Gal/Min</u> 5,169 <u>2,000</u> 7,169	Percent 72.1% <u>27.9%</u> 100.0%		Assume Max Hour = 1.5 X Max Day	
Transmission & Distribution	8.1%	19.9%	72.0%	100.0%	General T&D O&M Expenses	

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Pennichuck East Utility. Inc. Retail Units of Service

<u>Monthly</u>	No. of Meters	<u>No. of Bills</u>	Cost Factor	<u>Meter Equivs.</u>	Flow Factor	<u>Cap. Equivs.</u>
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

Billable Water Consumption

<u>Ccf/year</u> 687,005

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Pennichuck East Utility. Inc. Fire Protection Units of Service

					Settlement Rate	
			Se	ttlement Rate	per Month per	Settlement
Inch Feet		Hydrants	ре	er month In-ft	Hydant	Revenues
Londonderry	1,951,858	201	\$	0.01062	19.65	\$ 296,130
Pelham	461,000	36	\$	0.01062	19.65	\$ 67,236
Litchfield	2,665,012	248	\$	0.01062	19.65	\$ 398,094
Bow	10,775	5	\$	0.01062	19.65	\$ 2,552
Windham	235,199	41	\$	0.01062	19.65	\$ 39,640
Birch Hill	73,641	6	\$	0.01062	19.65	\$ 10,799
Exeter	30,923	6	\$	0.01062	19.65	\$ 5 <i>,</i> 355
Lee	22,508	7	\$	0.01062	19.65	\$ 4,519
Raymond	97,666	12	\$	0.01062	19.65	\$ 15,276
Total: Inch Feet	5,548,582	562				
	<u>Number</u>	Factor *		<u>Equivs.</u>	<u>Percent</u>	
Public						
Hydrants	562	111.3		62 <i>,</i> 556.7	72.65%	
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	27.35%
Total		86,108.8	100.00%

* Nominal size to the 2.63 power.

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Pennichuck East Utility. Inc. Calculation of Fire Protection Charges

Total Fire Protection Allocation (a) Hydrants O&M Plus O&M Admin Hydrants Cap. Hydrants Taxes	\$	1,048,275 94,300 42,171 61,282 24,333	
Total Direct Hydrant (b)	\$	222,087	
Net Non-Hydrant Fire (a) - (b)	\$	826,187	
Allocation Between Public and Private Public Fire Service Private Fire Service Total	<u>A</u>	Percent <u>Ilocated *</u> 72.65% 27.35% 100.0%	Revenue <u>Required</u> \$ 600,213 <u>225,975</u> \$ 826,187

* 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	\$ 822,300	
Hydrant Maintenance Charge		
Hydrant Allocation	\$ 222,087	Direct Hydrant Costs
Hydrants	562	
Annual \$/Hydrant Cost	\$ 395.17	
Per Month	\$ 32.93	
Inch-Foot Charge		
Inch-Foot Allocation	\$ 600,213	Public Fire (Excluding Direct Hydrant)
Inch-Feet	5,548,582	
Annual \$/Inch-Foot	\$ 0.1082	
Per Month	\$ 0.0090	

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Pennichuck East Utility. Inc. Calculation of Fire Protection Charges

Private Fire Service

Hydrants

Allocated Cost	\$ 225,975		\$9.59 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	\$	2.32 \$	3.77 \$	6.09				
2"	6.2		4.95	3.77	8.72				
3"	18.0		14.38	3.77	18.14				
4"	38.3		30.64	3.77	34.40				
6"	111.3		89.00	3.77	92.77				
8"	237.2		189.66	3.77	193.43				
10"	426.6		341.08	3.77	344.84				
12"	689.0		550.93	3.77	554.70				

89.00

3.77

92.77

111.3

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Pennichuck East Utility. Inc. Summary of Customer Expense Allocations

	Customer			METERS/SERVICES			BILLINGS		
Required from Customer Charges		<u>Total *</u>	Allocation	Percent		<u>Amount</u>	Percent		<u>Amount</u>
Operation & Maintenance	\$	1,232,833	Customer O&M	71.0%	\$	875,086	29.0%	\$	357,750
Amortization		9,347	Customer Depreciation	100.0%		9,347	0.0%		-
Taxes - Federal & State		4,425	All Customer Expenses	80.1%		3,542	19.9%		883
Taxes - Property		164,558	Customer Plant	100.0%		164,558	0.0%		-
Operating Expense Contingency		59,025	Customer O&M	71.0%		41,897	29.0%		17,128
Debt Service Revenue Requirement		278,881	Customer Plant	100.0%		278,881	0.0%		-
City Bond Fixed Revenue Requirement		134,644	Customer Plant	100.0%		134,644	0.0%		-
Less Other Revenues		(5,594)	All Customer Expenses	80.1%		(4,478)	19.9%		(1,116)
Total: Required from Customer Charges	\$	1,878,119	All Customer Expenses	80.1%	\$	1,503,476	19.9%	\$	374,645

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

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Pennichuck East Utility. Inc. Allocation of Customer Expenses

	C	Customer		METERS/SERVICES				BILLINGS		
		<u>Total</u>	Allocation	Percent	<u>/</u>	<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		\$	-	
Maintenance										
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		40,758	Meter	100.0%		40,758	0.0%		-	
Subtotal: Maintenance	\$	315,652			\$	315,652		\$	-	
Total: Transmission & Distribution Expenses	\$	486,735			\$	486,735		\$	-	
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			METER	CES	BILLINGS			
		<u>Total</u>	Allocation	<u>Percent</u>		<u>Amount</u>	<u>Percent</u>		<u>Amount</u>
Administrative and General Expenses									
Operation									
Administrative and General Salaries	\$	-	Customer O&M	71.0%	\$	-	29.0%	\$	-
Office Supplies and Other Expenses		1,552	Customer O&M	71.0%		1,102	29.0%		450
Administrative Expenses Transferred		-	Customer O&M	71.0%		-	29.0%		-
Outside Services Employed		3,895	Customer O&M	71.0%		2,765	29.0%		1,130
Property Insurance		16,470	Customer O&M	71.0%		11,690	29.0%		4,779
Injuries and Damages		-	Customer O&M	71.0%		-	29.0%		-
Employee Pension and Benefits		-	Customer O&M	71.0%		-	29.0%		-
Regulatory Commission Expenses		7,479	Customer O&M	71.0%		5,308	29.0%		2,170
Miscellaneous General Expenses		517,719	Customer O&M	71.0%		367,486	29.0%		150,233
Rents		-	Customer O&M	71.0%		-	29.0%		-
Subtotal: Operation	\$	547,114			\$	388,351		\$	158,763
<u>Maintenance</u>									
Maintenance of General Plant	\$	-	Customer O&M	71.0%	\$	-	29.0%	\$	-
Subtotal: Maintenance	\$	-			\$	-		\$	-
Total Administrative and General Expenses	\$	547,114			\$	388,351		\$	158,763
Total Oper. and Maint. Expenses	\$	1,232,833	Customer O&M	71.0%	\$	875,086	29.0%	\$	357,750

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Pennichuck East Utility. Inc. Allocation of Customer Plant Investment

	Customer			METER	ICES	<u>BILLINGS</u>			
		<u>Total</u>	Allocation	Percent		<u>Amount</u>	Percent		<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			METER	<u>CES</u>	BILLINGS			
		<u>Total</u>	Allocation	Percent	4	<u>Amount</u>	Percent		<u>Amount</u>
Depreciation									
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%	\$	-

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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	71.0%	29.0%	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	80.1%	19.9%	100.0% Based on all allocable expenses

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Pennichuck East Utility. Inc. Calculation of Customer Service Charges

BILLING CHARGE

8" and up

	Billing Cost			\$374,645		\$3.766 per billing			
	No. of Billings (inclue	ding Priv. Fire)		99,480					
METER/SERVICE CHARG	i <u>E</u>								
	Meter/Service Cost			\$1,503,476		\$174.153 per equivalent per year			
	= No. of Meter Equivs			= 8,633.1					
READY TO SERVE (PORT	ION OF FIXED COSTS)								
1/3 of Wate	er Related Debt Service	Requirements	\$	632,299		4-0-00			
	= No. of Capacity Equi	vs.		======================================	 \$72.586 per equivalent per year 				
Monthly		Billing Charge	Ν	<u>/leter Charge</u>		Readiness-to-Serve		Total Charge	<u>Revenue</u>
5/8"	\$	3.77	\$	14.51	\$	6.05	\$	24.33 \$	2,227,144
3/4"		3.77		18.63		9.07		31.47	24,927
1"		3.77		36.53		15.12		55.42	93,105
1 1/2"		3.77		72.20		30.24		106.21	57,351
2"		3.77		80.75		48.39		132.91	68,580
3"		3.77		376.72		96.78		477.26	22,909
4"		3.77		876.50		151.22		1,031.49	-
6"		3.77		1,226.45		302.44		1,532.65	-

2,539.73

3.77

2,494,016 \$

3,027.40

483.91

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Pennichuck East Utility. Inc. Calculation of Metered Rates		
Total Cost of Service	\$ 10,135,809	
Less Revenues from Fire Charges	(1,048,275)	
Less Revenues from Customer Service Charges	(2,510,421)	
Equals Required Volumetric Revenue	\$ 6,577,113	
Metered Sales (Ccf/year)	687,005	
Cost Based Metered Rate (per Ccf)	\$ 9.57	

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Pennichuck East Utility. Inc.							
Summary of Cost of Service with Settlement Rates							
<u>Customer Service Charge (\$/month)</u>		<u>Current</u>	<u>Set</u>	<u>tlement Rate</u>	<u>% Change</u>		<u>\$ Change</u>
<u>Meter Size</u>							
5/8"	\$	20.70	\$	22.56	9%	\$	1.86
3/4"		44.03		44.03	0%		-
1"		62.32		62.32	0%		-
1 1/2"		135.68		135.68	0%		-
2"		201.30		201.30	0%		-
3"		427.09		465.53	9%		38.44
4"		670.55		730.90	9%		60.35
6"		1,341.07		1,461.77	9%		120.70
8" and up		1,674.93		1,825.67	9%		150.74
<u>Metered Rate (\$/100 cubic feet)</u>							
<u> </u>	\$	7.51	\$	9.50	26%	\$	1.99

					Docke Exhibi Page	t:	DW 20-156 DF - 6 2
		<u>Pennichuck East</u> Summary of Cos					
Public Fire Protection (per month)		<u>Current</u>	<u>Sett</u>	lement Rate	<u>% Change</u>		<u>\$ Change</u>
\$/hydrant/month (HM)	Ś	16.07	\$	19.65	22%	Ś	3.58
\$/inch-foot/month (IF)	\$ \$	0.01231	\$	0.01062	-14%	\$ \$	(0.00169)
Private Fire Protection		<u>Current</u>	Cos	st of Service	<u>% Change</u>		<u>\$ Change</u>
<u>Service Size</u>							
1 1/2"	\$	9.71	\$	9.71	0%	\$	-
2"		17.25		17.25	0%		-
3"		38.82		38.82	0%		-
4"		69.02		69.02	0%		-
6"		155.33		155.33	0%		-
8"		276.10		276.10	0%		-
10"		455.26		455.26	0%		-
12"		733.22		733.22	0%		-
Hydrants		121.37		121.37	0%		-

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	Pennichuck Ea	<u>st Utility. Inc.</u>	0		
	<u>Revenu</u>	<u>e Proof</u>			
Customer Service Charge:		Number of	Cost of S	ervio	ce Rates
-		<u>Bills</u>	<u>Rate</u>		<u>Revenue</u>
Monthly	5/8"	91,548	\$ 22.56	\$	2,065,598
	3/4"	792	44.03		34,872
	1"	1,680	62.32		104,698
	1 1/2"	540	135.68		73,267
	2"	516	201.30		103,871
	3"	48	465.53		22,345
	4"	-	730.90		-
	6"	-	1,461.77		-
	8" and up	-	1,825.67		-
	Total Customer Service	e Charges		\$	2,404,650
Consumption Charges					
		<u>Use (ccf)</u>			
	Metered Rate	687,005	\$ 9.50	\$	6,526,548

Metered Rate	687,005 Ş	9.50	Ş	6,526,548
Total Consumption Charges			\$	6,526,548

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Pennichuck East Utility. Inc. <u>Revenue Proof</u>

Fire Protection - Monthly Charges

		Cost of Service Rates				
			<u>Rate</u>		<u>Revenue</u>	
	Hydrants	Hy	d.Maint. Chg		HydMaint Rev	
Hydrant Maintenance	562	\$	19.65	\$	132,528	
	Lash East					
	Inch-Feet		In-Ft Cng		In-Ft Rev	
Inch-Foot	5,548,582	Ş	0.01062	\$	707,082	
Total Public Fire Reven	<u>ue</u>			\$	839,610	
Drivata Fira						
Private Fire			0.74	4	40.004	
1 1/2"	111	Ş	9.71	\$	12,934	
2"	83		17.25		17,181	
3"	0		38.82		-	
4"	22		69.02		18,221	
6"	48		155.33		89 <i>,</i> 470	
8"	30		276.10		99,396	
10"	0		455.26		-	
12"	3		733.22		26,396	
Hydrants	66		121.37		96,125	
Total Private Fire				\$	359,723	
Total Private & Public F	ire			\$	1,199,333	
				\$	10,130,531	

Grand Total Revenue

Pennichuck East Utility. Inc. Customer Impacts Schedule

	Existing							
		<u>Volumetric</u>	<u>Monthly Cust.</u>	<u>Monthly</u>	<u>Volumetric</u>			
Cons. (Ccf/Month)	<u>Meter Size</u>	<u>Charge</u>	<u>Charge</u>	<u>Total Bill</u>	<u>Charge</u>			
3	5/8"	\$ 22.53	\$ 20.70	\$ 43.23	\$ 28.50			
5	5/8"	37.55	20.70	58.25	47.50			
10	5/8"	75.10	20.70	95.80	95.00			
25	1"	187.75	62.32	250.07	237.50			
50	1"	375.50	62.32	437.82	475.00			
50	1 1/2"	375.50	135.68	511.18	475.00			
75	2"	563.25	201.30	764.55	712.50			
150	2"	1,126.50	201.30	1,327.80	1,425.00			
250	2"	1,877.50	201.30	2,078.80	2,375.00			
500	2"	3,755.00	201.30	3,956.30	4,750.00			

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Cost of Service

Monthly Cust.		<u>Monthly</u>			<u>Change</u>			
<u>Charge</u>		<u>Total Bill</u>			<u>\$</u>		<u>%</u>	
\$	22.56	\$	51.06	\$	7.83		18.1%	
	22.56		70.06		11.81		20.3%	
	22.56		117.56		21.76		22.7%	
	62.32		299.82		49.75		19.9%	
	62.32		537.32		99.50		22.7%	
	135.68		610.68		99.50		19.5%	
	201.30		913.80	1	L49.25		19.5%	
	201.30	1	,626.30	2	298.50		22.5%	
	201.30	2	,576.30	2	197.50		23.9%	
	201.30	4	,951.30	9	995.00		25.1%	