

Pennichuck East Utilities  
DW17-128  
Calculation of Rate Stabilization Funds

Pennichuck East Utility, Inc.  
Stabilization Fund Calculations  
Settlement Agreement  
Revised Per Staff and Town DR 3 and Tech session adjustments  
8/10/2021, Revised for Settlement 12/1/2021

DLW Exh 1

PEU Proforma Test Year 2019					
Proformed Revenue Requirement <sup>1</sup> - \$ 10,160,719					
	CBFRR	Material Operating Expense Revenue Requirement, inclusive of MOEF and Amortization Expense	Operating Expense Revenue Requirement <sup>6</sup>	1.0 Debt Service Revenue Requirement	0.1 Debt Service Revenue Requirement
Revenue Requirement <sup>2</sup> -	\$ 926,309	\$ 7,313,909	\$ 7,163	\$ 1,739,398	\$ 173,940
Percentage of Revenues -	9.12%	71.98%	0.07%	17.12%	1.71%
3 Years coverage -	\$ 61,187	\$ 1,761,614		\$ 114,896	\$ -
Requested Rate Stabilization Fund by Revenue Category <sup>3,4</sup> -	\$ 60,000	\$ 1,760,000	No Stabilization Fund	\$ 110,000	No Stabilization Fund
DW17-128 Approved RSF fund level -	\$ 31,000	\$ 898,000		\$ 51,000	
Based on largest negative variance from five year ave of -	3.83%				
Revenue Shortfall per year for worst sales year in the past 5 years compared against 5 year average -	\$ 20,396	\$ 159,823		\$ 38,299	

Increase in Material Operating Expenses of 3.00% per year based on average increase of these expenses per year between 2012 and 2017. See Table below for calculation.

Requested MOEF -	4.00%	MOEF @ 6% -	\$ 418,940		
Rate increase @ requested MOEF -	16.79%	Annual MOEF cash lost -	\$ 139,647	@	4.00% MOEF
Annual MOEF Cash -	\$ 279,293	Additional RSF borrowing -	\$ 418,940	@	4.00% MOEF
1,930,000 Requested RSF totals with no MOEF		based on			3 years of cash necessary to keep RSF accounts near their imprest levels at the beginning of the next rate case.
Requested RSF funds with MOEF -	\$ 980,000				
MOERR from 1604.06 Sch A -	\$ 6,982,335				

Revenue Type	2015 PEU Billed Revenue <sup>7</sup>	2016 PEU Billed Revenue <sup>8</sup>	2017 PEU Billed Revenue	2018 PEU Billed Revenue	2019 PEU Billed Revenue
Total Volumetric Charges (less Recoupment from DW13-1xx)	\$ 4,226,401	\$ 4,024,926	\$ 4,141,266	\$ 5,197,607	\$ 5,092,286
Total Capital Recovery Surcharge (fixed)	\$ 297,430	\$ 299,985	\$ 301,710	\$ 232,134	\$ 181,603
Total Meter Charge (less recoupment - fixed from DW13-1xx)	\$ 1,750,470	\$ 2,114,832	\$ 1,739,677	\$ 2,147,407	\$ 2,220,050
Total Fire Protection - Public & Private (fixed)	\$ 912,761	\$ 931,801	\$ 979,863	\$ 1,111,319	\$ 1,294,961
Total Billed Revenue (does not include Misc. Operating Revenues)	\$ 7,187,062	\$ 7,371,544	\$ 7,162,516	\$ 8,688,466	\$ 8,788,900
Misc. Operating Revenues	\$ 42,103	\$ 39,407	\$ 34,791	\$ 35,989	\$ 30,188
Total Annual Revenues inclusive of Misc. operating revenues	\$ 7,229,165	\$ 7,410,951	\$ 7,197,307	\$ 8,724,455	\$ 8,819,088
% of Revenues that are variable	58.5%	54.3%	57.5%	59.6%	57.7%
% of Revenues that are fixed	41.5%	45.7%	42.5%	40.4%	42.3%

Average percentage of revenues that were variable during the previous 5 years - 57.5%

Expense Type	2015 PEU Actual Variable Expenses	2016 PEU Actual Variable Expenses	2017 PEU Actual Variable Expenses	2018 PEU Actual Variable Expenses	2019 PEU Actual Variable Expenses
Purchased Water	\$ 959,966	\$ 1,009,818	\$ 952,865	\$ 1,104,605	\$ 1,018,049
Electric	\$ 302,197	\$ 279,236	\$ 269,019	\$ 313,229	\$ 337,595
Chemicals	\$ 32,816	\$ 66,908	\$ 79,231	\$ 75,072	\$ 87,745
Total Variable Costs	\$ 1,294,979	\$ 1,355,962	\$ 1,301,115	\$ 1,492,906	\$ 1,443,389
Variable Expenses as a Percent of Total Revenues	17.9%	18.3%	18.1%	17.1%	16.4%

	2015 Actual CCF's sold by PEU	2016 Actual CCF's sold by PEU	2017 Actual CCF's sold by PEU	2018 Actual CCF's sold by PEU	2019 Actual CCF's sold by PEU
Annual Metered Sales (CCF)	691,374	728,091	661,679	684,279	669,602
Percentage Variance between Current and High Consumption Year	-5.31%	0.00%	-10.04%	-6.40%	-8.73%
Average Consumption (CCF) over the past five years	687,005				
Variance between current and 5 Yr Ave Consumption	0.63%	5.64%	-3.83%	-0.40%	-2.60%

Largest percentage reduction in volumetric sales at PEU of 3.83% over the past five years from the five year average of volumetric sales  
 Results in a Revenue loss of \$ 194,909  
 Results in an Operating Expense reduction of \$ 55,246  
 Results in an Operating Income reduction of \$ 139,663

Calculation of MOER RSF, based on increase in MOE's over the past 5 years		
	Inflation	Revenue Shortfall
Yr 1 -	\$ 209,470	\$ 159,823
Yr 2 -	\$ 425,224	\$ 159,823
Yr 3 -	\$ 647,451	\$ 159,823
	\$ 1,282,145	\$ 479,469
	Totals -	\$ 1,761,614

Projected MOERR Expenses inclusive of Amortization Expenses				
Projected MOERR Revenues	Amortization Expenses	Transfer into/out of MOER RSF Account	MOER RSF Balance	
			\$ 898,000	
\$ 7,313,909	\$ 7,244,086	\$ 69,823	\$ 967,823	
\$ 7,313,909	\$ 7,459,840	\$ (145,931)	\$ 821,893	
\$ 7,313,909	\$ 7,682,067	\$ (368,158)	\$ 453,735	
			\$ 872,675	

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Calculation of Annual Material Operating Expense Adjustment Percentage

	2016 PEU Material Operating Expenses (DW17-128 TY)	2017 PEU Material Operating Expenses	2018 PEU Material Operating Expenses	2019 PEU Material Operating Expenses	2019 PEU Proforma Material Operating Expenses <sup>9</sup>	2020 Unaudited Material Operating Expenses	Increase in Pro Forma TY Operating Expense since the prior rate case TY	Average annual increase in Operating Expenses between 2016 MOE's and 2019 Proforma MOE's	Increase in Operating Expense between 2018 and 2019 Proforma	Increase in Operating Expense between 2018 and 2020 Actual
Production Expenses	\$ 1,991,779	\$ 1,966,063	2,290,425	2,257,199	2,349,324	2,670,931	17.95%	4.21%	1.28%	7.99%
Transmission & Distribution Expenses	\$ 616,944	\$ 696,492	737,584	1,006,231	676,427	743,929	9.64%	2.33%	-4.24%	0.43%
Customer Acct & Collection Exp	\$ 184,106	\$ 192,789	200,152	204,718	198,984	184,845	8.08%	1.96%	-0.29%	-3.90%
Administrative & General Expense	\$ 155,295	\$ 167,568	184,537	181,461	174,090	177,946	12.10%	2.90%	-2.87%	-1.80%
Inter Div Management Fee (Sum of PWW and PCP fees)	\$ 1,811,426	\$ 2,098,399	2,356,956	2,397,261	2,434,683	2,481,134	34.41%	7.67%	1.64%	2.60%
Amortization Expense	\$ 50,687	\$ 58,618	86,683	127,440	52,281	64,174	3.14%	0.78%	-22.34%	-13.96%
Property Taxes	\$ 1,051,160	\$ 891,416	1,021,406	1,174,044	1,241,441	1,182,385	18.10%	4.25%	10.25%	7.59%
Federal and State Income Taxes	\$ -	\$ -	18,779	3,775	23,882	3,978				
Less NOERR Expenses	\$ 8,305	\$ 20,278	36,869	27,863	7,163	17,518				
Total Annual MOERR Expenses	\$ 5,853,091	\$ 6,051,067	\$ 6,859,654	\$ 7,324,266	\$ 7,143,950	\$ 7,491,804	22.05%	5.11%	2.05%	4.51%
Less variable expenses for the year	\$ 1,355,962	\$ 1,301,115	\$ 1,492,906	\$ 1,443,389	\$ 1,520,218	\$ 1,801,903	12.11%	2.90%	0.91%	9.86%
Total Annual MOERR Expenses less variable expenses	\$ 4,497,129	\$ 4,749,952	\$ 5,366,747	\$ 5,880,877	\$ 5,623,732	\$ 5,689,901	25.05%	5.75%	2.37%	2.97%
Average Annual Increase in Proforma Material Operating Expenses, exclusive of variable expensed since last rate case							5.75%			

Notes:

- Based on Debt Service Multiplier of 1.10 per Sch A of 1604.06 schedules. The 1.1 multiplier is not applied to the North Country Capital Recovery Surcharge P&I. Revenue requirement is inclusive of the \$ 30,188.00 of other revenues
- Revenue requirements per Sch A of 1604.06 schedules
- Requested Rate Stabilization fund for Operating Expense and P & I Coverage each have a contingency of 0% safety factor and are based on year ending 2019 results
- PEU share of the \$5,000,000 RSF for distribution to the RSF, MOERSF and the P&IRSF is<sup>5</sup> 19.56% based on % of PWW revenues (2012 Case) to % of all three regulated utilities revenues (2012 Cases) or \$ 980,000
- Calculation of RSF Percentage based on Revenue requirements from DW13-126, 13-128 and 13-130

PWW Revenue Requirement -	\$ 27,689,214	per DW13-130 Settlement Agreement
PEU Revenue Requirement -	\$ 6,913,261	per DW13-126 Settlement Agreement
PAC Revenue Requirement -	\$ 745,186	per DW13-128 Settlement Agreement
Total Utility Revenue Requirement -	\$ 35,347,661	

- For Calculation of Operating Expense Requirement see Exhibit 1.1
  - 2015 Billed Recoupment from DW13-1xx - \$ 196,261
  - 2016 Billed Recoupment from DW13-1xx- \$ 16,968
- 2019 amortization expense proforma does not include deferred debit to refill depleted RSF accounts
- 2018 Revenues include