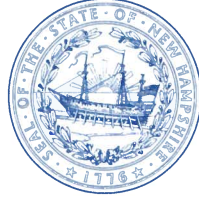


THE STATE OF NEW HAMPSHIRE

CHAIRMAN  
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COMMISSIONERS  
Kathryn M. Bailey  
Michael S. Giarmo

EXECUTIVE DIRECTOR  
Debra A. Howland



PUBLIC UTILITIES COMMISSION  
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December 29, 2017

Ms. Debra A. Howland, Executive Director  
New Hampshire Public Utilities Commission  
21 South Fruit Street, Suite 10  
Concord, NH 03301-2429

NHPUC 29DEC'17AM11:45

**RE: DW 17-103 West Swanzey Water Company, Inc. Rate Filing**

Dear Ms. Howland:

On July 21, 2017, West Swanzey Water Company, Inc. ("West Swanzey") submitted a permanent rate filing including revised tariff pages. The New Hampshire Public Utilities Commission ("the Commission") issued Order No. 26,046 on August 4, 2017 in this docket and suspended West Swanzey's proposed tariff and scheduled a prehearing conference to occur on September 27, 2017 immediately followed by a technical session. The prehearing conference and technical session were held as scheduled. On September 27, 2017 the Staff ("Staff") of the Commission proposed a procedural schedule. On October 3, 2017, the Commission approved the proposed procedural schedule which provided for two rounds of discovery, a technical session and settlement conference. On November 29, 2017, Staff filed a Settlement Agreement amongst Staff and West Swanzey with the intent to resolve issues discussed in the determination of permanent rates. On December 6, 2017, at the Hearing on the Merits, Record Request #3 was assigned to this recommendation letter to update the record for actual costs associated with estimated Step Adjustment invoices.

The Settlement Agreement filed on November 29, 2017 stated that Staff and West Swanzey agreed to a total revenue requirement in the amount of \$96,379. In deriving this revenue requirement, the Settling Parties agreed to a permanent rate increase of \$17,954 or 24.38%, as shown on Attachment A, Schedule 1, and based on proforma test year of 2016. The Settling Parties also agreed to a step increase of \$4,797 or 5.24%, shown on Attachment B, Schedule 1 and based on estimated 2017 plant additions of \$24,500 which will be fully in service and used and useful at the time rates are implemented.

Staff's review of the final invoice costs for the step adjustment reduce plant additions by \$1,600 from \$24,500 to \$22,900. Accumulated depreciation then changes by \$80 from (\$1,225) to (\$1,145). Net plant in service (net 2017 plant in rate base) reduces from \$23,275 to \$21,755.

The rate of return reduces from 6.02% to 5.87% as a reflection of lower debt costs. The annual depreciation expense reduces from \$2,450 to \$2,290. The property tax expense reduces from \$946 to \$884. The step increase revenue requirement reduces by \$345, from \$4,797 to \$4,452. The percent of increase in revenue requirement from water sales reduces from 5.24% to 4.86%.

Staff recommends the following replacements to the Settlement Agreement:

A. Revenue Requirement: Permanent Rates and Step Adjustment

The Settling Parties agree to a total revenue requirement in the amount of \$91,582. In deriving this revenue requirement, the Settling Parties agree to a permanent rate increase of \$17,954 or 24.38%, Attachment A, Schedule 1, based on proforma test year 2016, as well as a step increase of \$4,452 or 4.86%, Attachment B-Revised, Schedule 1, based on 2017 plant additions which will be fully in service and used and useful at the time rates are implemented.

B. Effective Date for Permanent Rates and Step Adjustment

The Settling Parties agree that the total rate increase of \$22,406, or 29.24%, comprised of the permanent rate increase of \$17,954, or 24.38%, Attachment A, Schedule 1 and the step increase of \$4,452 or 4.86%, Attachment B-Revised, Schedule 1, shall be effective as of the date of the Commission order approving this Agreement.

West Swanzeay has reviewed Staff's recommendation and has informed Staff that they concur with Staff's recommendation. If you have any questions regarding the above, please do not hesitate to contact me.

Sincerely,



Robyn J. Descoteau  
Utility Analyst, Gas & Water Division

Attachment: Original calculation of Permanent Revenue Requirement, Attachment A  
Revised calculation of Step Increase Revenue Requirement, Attachment B-Revised

cc: Service List

**DW 17-103  
WEST SWANZEY WATER COMPANY, INC.  
REVENUE REQUIREMENT**

Average Rate Base (Schedule 2)	\$ 186,171
Rate of Return (Schedule 1a)	x <u>5.06%</u>
Operating Income Requirement	9,420
Adjusted Net Operating Income (Schedule 3, Column 6)	<u>26,523</u>
Revenue Deficiency / (Surplus) Before Income Taxes (Schedule 3, Column 7)	(17,103)
Divided by Tax Factor (Schedule 1b)	÷ <u>78.03%</u>
Revenue Deficiency / (Surplus) after Tax Effect (Schedule 3, Column 7)	(21,918)
Add: Pro-forma Test Year Water Revenue per Company (Schedule 3, Column 6)	<u>113,500</u>
Revenue Requirement from Water Sales per Staff	91,582
Less: Adjusted Test Year Water Sales (See Note below*)	<u>(73,628)</u>
Increase / (Decrease) in Revenue Requirement from Water Sales	<u><b>\$ 17,954</b></u>
Percent Increase / (Decrease) in Revenue Requirement from Water Sales	<u><b>24.38%</b></u>

\* Adjusted Test Year Water Sales:  
Test Year Water Sales plus Staff Adjustment #7

**DW 17-103  
WEST SWANZEY WATER COMPANY, INC.  
WEIGHTED AVERAGE COST OF CAPITAL**

	Capital Structure		Cost of Debt				Cost Rate	Weighted Average Cost
	Per Test Year	Percent	Interest Rate @ 12/31/16 (a)	Annual Interest	Annual Amortization	Total Annual Cost of Debt		
<b>Long-term Debt:</b>								
Ocean Bank: 04/28/99	\$ 7,051	4.50%	4.00%	\$ 367	\$ 20	\$ 387	5.49%	0.25%
Ocean Bank: 09/23/03	92,831	59.29%	4.25%	4,826	256	5,082	5.47%	3.24%
NHDES SRF: 10/1/13	35,982	22.98%	2.72%	243	218	461	1.28%	0.29%
Total Long-term Debt	135,864	86.77%		\$ 5,436	\$ 494	\$ 5,930	4.36%	3.79%
<b>Common Equity:</b>								
Common Stock	30,471	19.46%						
Retained Earnings	(9,760)	-6.23%						
Total Common Equity	20,711	13.23%					9.60%	1.27%
<b>Total Capitalization</b>	<b>\$ 156,575</b>	<b>100.00%</b>						<b>5.06%</b>

(a) Per review of Loan Statements from response to Staff 1-3

Cost of Equity Rate of 9.60% as approved in Lakes Region Rate Case: DW15-209, Order #25,969, dated 11/28/16.

**DW 17-103**  
**WEST SWANZEY WATER COMPANY, INC.**  
**EFFECTIVE TAX FACTOR**

Taxable Income	100.00%
Less: NH Business Profits Tax	<u>8.20%</u>
Federal Taxable Income	91.80%
Federal Income Tax Rate	<u>15.00%</u>
Effective Federal Income Tax Rate	13.77%
Add: NH Business Profits Tax	<u>8.20%</u>
Effective Tax Rate	<u><u>21.97%</u></u>
Percent of Income Available if No Tax	100.00%
Effective Tax Rate	<u>21.97%</u>
Percent Used as a Divisor in Determining the Revenue Requirement	<u><u>78.03%</u></u>

**DW 17-103  
WEST SWANZEY WATER COMPANY, INC.  
AVERAGE RATE BASE**

	<b>5-Quarter Average Per Company</b>	<b>Company Pro-Forma Adjustments</b>	<b>Company Pro-Forma Test Year</b>	<b>Staff Adjustments (Sch 2a)</b>	<b>Adj #</b>	<b>Test Year Average Per Staff</b>
<b><u>Plant in Service</u></b>						
Plant in Service (Schedule 2b)	\$ 476,121		\$ 476,121	\$ 108	1	\$ 476,229
Less: Accumulated Depreciation (Schedule 2b)	<u>(220,097)</u>	<u>(206)</u>	<u>(220,303)</u>	<u>(108)</u>	2	<u>(220,411)</u>
Net Plant in Service	<u>256,024</u>	<u>(206)</u>	<u>255,818</u>	<u>-</u>		<u>255,818</u>
Contributions in Aid of Construction (CIAC) (Schedule 2b)	(151,157)	-	(151,157)	-		(151,157)
Accumulated Amortization of CIAC (Schedule 2b)	<u>60,038</u>	<u>-</u>	<u>60,038</u>	<u>-</u>		<u>60,038</u>
Net Contributions in Aid of Construction	<u>(91,119)</u>	<u>-</u>	<u>(91,119)</u>	<u>-</u>		<u>(91,119)</u>
Net Plant in Rate Base	<u>164,905</u>	<u>(206)</u>	<u>164,699</u>	<u>-</u>		<u>164,699</u>
Materials & Supplies (Schedule 2b)	696	-	696	-		696
Prepaid Expenses (Schedule 2b)	4,635	-	4,635	(1,024)	3	3,611
Cash Working Capital (Schedule 2b)	13,328	1,208	14,536	(895)	4-5	13,641
Deferred Assets	<u>-</u>	<u>-</u>	<u>-</u>	<u>3,524</u>	6-7	<u>3,524</u>
<b>Total Average Rate Base</b>	<u><u>\$ 183,564</u></u>	<u><u>\$ 1,002</u></u>	<u><u>\$ 184,566</u></u>	<u><u>\$ 1,605</u></u>		<u><u>\$ 186,171</u></u>

**DW 17-103  
WEST SWANZEY WATER COMPANY, INC.  
STAFF PRO-FORMA ADJUSTMENTS TO RATE BASE**

**Adj#**

**Plant in Service**

1	To adjust Plant for Audit Issue #3, misposted depreciation entry.	\$	108
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**Accumulated Depreciation**

2	To adjust Accumulated Depreciation for Audit Issue #3, misposted depreciation entry.	\$	(108)
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**Prepaid Expenses**

3	To adjust Prepaid expenses: include only those prepaids not included in Cash Working Capital: 5-Quarter Average per Staff	\$	3,611
	Less: Year-end average per Company	(4,635)	\$ (1,024)

**Cash Working Capital**

4	To reverse Company Pro-forma for working capital.	\$	(1,208)
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5	To adjust cash working capital. See Schedule 2b. Amount per Staff	\$	13,641
	Less: Amount per Company	(13,328)	\$ 313

Total Adjustments - Working Capital	\$	(895)
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**Deferred Assets**

6	To set up Deferred Asset for costs associated with NHDES mandate to replace System Operator, improve reporting requirements, comply with Sampling Schedule and Sanitary Survey. Account #626-Testing/Misc Pumping Operating Expenses	\$	2,484
	Account #642-Treatment Labor	2,802	\$ 5,286

7	To record first year's expense for Deferred Asset (NHDES) Three year amortization:		
	5,286 / 3 years	\$	(1,762)

Total Adjustments - Deferred Assets	\$	3,524
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**DW 17-103  
WEST SWANZEY WATER COMPANY, INC.  
CALCULATION OF AVERAGE RATE BASE**

	<u>12/31/15</u>	<u>03/31/16</u>	<u>06/30/16</u>	<u>09/30/16</u>	<u>12/31/16</u>	<u>5-Quarter Average Per Staff</u>	<u>5-Quarter Average Per Company</u>	<u>Staff Adjustments</u>	<u>Adjustment #</u>
<b>Plant in Service</b>	\$ 473,699	\$ 473,802	\$ 477,702	\$ 477,702	\$ 477,702	\$ 476,121	476,121	\$ -	
<b>Accumulated Depreciation</b>	(212,504)	(216,102)	(220,031)	(223,960)	(227,887)	(220,097)	(220,097)	-	
<b>Contributions in Aid of Construction (CIAC)</b>	(151,157)	(151,157)	(151,157)	(151,157)	(151,157)	(151,157)	(151,157)	-	
<b>Accumulated Amortization - CIAC</b>	57,013	58,526	60,038	61,551	63,063	60,038	60,038	-	
<b>Materials &amp; Supplies</b>	696	696	696	696	696	696	696	-	
<b>Prepaid Expenses (a)</b>	2,129	-	7,962	5,308	2,654	3,611	4,635	(1,024)	3
<b>Cash Working Capital</b>						(b) 13,641	13,328	313	5
<b>Total Average Rate Base</b>						<u><u>\$ 182,853</u></u>	<u><u>\$ 183,564</u></u>	<u><u>\$ (711)</u></u>	

**(a) Staff's Calculation of Prepaid Expenses:**

	<u>2015 Local Tax</u>	<u>2015 State Tax</u>	<u>2016 Local Tax</u>	<u>2016 State Tax</u>	<u>Total Prepays</u>
12/31/15	\$ 1,732	\$ 397	\$ -	\$ -	<b>\$ 2,129</b>
01/31/16	1,155	265	-	-	1,420
02/28/16	577	132	-	-	709
03/31/16	-	-	-	-	-
04/30/16	-	-	8,218	1,513	9,731
05/31/16	-	-	7,471	1,375	8,846
06/30/16	-	-	6,724	1,238	<b>7,962</b>
07/31/16	-	-	5,977	1,100	7,077
08/31/16	-	-	5,230	963	6,193
09/30/16	-	-	4,483	825	<b>5,308</b>
10/31/16	-	-	3,735	688	4,423
11/30/16	-	-	2,988	550	3,538
12/31/16	-	-	2,241	413	<b>2,654</b>

**(b) Staff's Calculation of Cash Working Capital:**

Adjusted Total O & M Expenses (Sch 3)	\$ 66,379
Cash Working Capital % (75 days / 365 days)	x 20.55%
Cash Working Capital	<u><u>\$ 13,641</u></u>



**DW 17-103  
WEST SWANZEY WATER COMPANY, INC.  
OPERATING INCOME STATEMENT**

	(1) Per Test Year	(2) Pro-forma Adjustments Per Company	(3) Adjusted Test Year Per Company	(4) Staff Adjustments (Sch 3a)	(5)  Adj #	(6) Adjusted Test Year Per Staff	(7) Revenue Deficiency / (Surplus)	(8) Revenue Requirement
<b>Operating Revenues</b>								
Water Sales	\$ 69,906	\$ 39,872	\$ 109,778	\$ 3,722	8	\$ 113,500	\$ (21,918)	\$ 91,582
Other Operating Revenues	-	-	-	-		-		-
Total Operating Revenues	<u>69,906</u>	<u>39,872</u>	<u>109,778</u>	<u>3,722</u>		<u>113,500</u>	<u>(21,918)</u>	<u>91,582</u>
<b>Operating Expenses</b>								
Operation & Maintenance Expenses:								
Source of Supply Expenses	3,260	-	3,260	-		3,260		3,260
Pumping Expenses	17,243	-	17,243	(5,112)	9-12	12,131		12,131
Water Treatment Expenses	10,128	-	10,128	4,301	13-15	14,429		14,429
Transmission & Distribution Expenses	3,476	-	3,476	-		3,476		3,476
Customer Accounts Expenses	5,228	800	6,028	-		6,028		6,028
Administrative & General Expenses	<u>25,523</u>	<u>5,877</u>	<u>31,400</u>	<u>(4,345)</u>	16-20	<u>27,055</u>		<u>27,055</u>
Total Operation & Maintenance Expenses	64,858	6,677	71,535	(5,156)		66,379	-	66,379
Depreciation Expense	15,507	206	15,713	-		15,713		15,713
Amortization Expense - CIAC	(6,050)	-	(6,050)	-		(6,050)		(6,050)
Amortization Expense - Other	207	-	207	-		207		207
Taxes other than Income	<u>9,694</u>	<u>-</u>	<u>9,694</u>	<u>921</u>	21	<u>10,615</u>		<u>10,615</u>
Total Operating Expenses	<u>84,216</u>	<u>6,883</u>	<u>91,099</u>	<u>(4,235)</u>		<u>86,864</u>	<u>-</u>	<u>86,864</u>
Net Operating Income / (Loss) Before Income Taxes	(14,310)	32,989	18,679	7,957		26,636	(21,918)	4,718
Income Taxes	<u>-</u>	<u>1,251</u>	<u>1,251</u>	<u>(1,138)</u>	<b>Sch 3b</b>	<u>113</u>	<u>(4,815)</u>	<u>(4,702)</u>
<b>Net Operating Income (Loss)</b>	<u><u>\$ (14,310)</u></u>	<u><u>\$ 31,738</u></u>	<u><u>\$ 17,428</u></u>	<u><u>\$ 9,095</u></u>		<u><u>\$ 26,523</u></u>	<u><u>\$ (17,103)</u></u>	<u><u>\$ 9,420</u></u>

**DW 17-103  
WEST SWANZEY WATER COMPANY, INC.  
STAFF PRO-FORMA ADJUSTMENTS TO OPERATING REVENUES AND EXPENSES**

**Adj #**

**Pro-forma Adjustments to Operating Revenues:**

8	To increase test year water revenues due to a commercial meter that had been tampered with and as a result did not read properly for two billing periods.	\$ 3,722
Total Adjustments - Operating Revenues		\$ 3,722

**Pro-forma Adjustments to Operating Expenses:**

**Pumping Expenses**

9	To adjust test year purchased power expense to actual test year expenses (Audit Issue #4). Actual test year billings for electricity costs Less: Purchased power expense per Company filing	\$ 6,545 (6,996) \$ (451)
10	To remove 2015 testing costs from Account 626-Testing/Misc Pumping Operating Expenses.	\$ (40)
11	To adjust Account 626-Testing/Misc Pumping Operating expenses to reflect first two quarters of 2017 and last two quarters of 2016 which more accurately measures expense going forward. Total expense calculation of Q1, Q2 2017 and Q3, Q4 2016 General Ledger balance at 12/31/16	\$ 5,334 (7,471) \$ (2,137)
12	To set up Deferred Asset for costs associated with NHDES mandate to bring system's Lead & Copper and Alkalinity balances into compliance. (Aggressive sampling schedule) Account #626-Testing/Misc Pumping Operating Expenses	\$ (2,484)
Total Adjustments - Pumping Expenses		\$ (5,112)

**Water Treatment Expenses**

13	To adjust Account 642-Treatment Labor expenses to reflect first two quarters of 2017 and last two quarters of 2016 which more accurately measures expense going forward. Total expense calculation of Q1, Q2 2017 and Q3, Q4 2016 General Ledger balance at 12/31/16	\$ 13,515 (8,174) \$ 5,341
14	To set up Deferred Asset for costs associated with NHDES mandate to replace System Operator, improve reporting requirements, comply with Sampling Schedule and Sanitary Survey. Account #642-Treatment Labor	\$ (2,802)
15	To record first year's expense for Deferred Asset (NHDES) Account #626; See Adjustment above: Account #642; See Adjustment above: Three year amortization:	\$ 2,484 2,802 5,286 / 3 years \$ 1,762
Total Adjustments - Water Treatment Expenses		\$ 4,301

**DW 17-103**  
**WEST SWANZEY WATER COMPANY, INC.**  
**STAFF PRO-FORMA ADJUSTMENTS TO OPERATING REVENUES AND EXPENSES**

**Adj #**

**Administrative & General Expenses**

<b>16</b>	To adjust insurance expense to 2016 premium amount.				
	2016 commercial package premium		\$	1,810	
	Less: Insurance expense recorded by Co during the test year			<u>(1,784)</u>	\$ 26
<b>17</b>	To adjust Company pro-forma related to PUC Audit.				
	Original Company pro-forma:	\$ 2,400 / 3 years	800		
	Adjusted Company pro-forma:	<u>(1,219) / 3 years</u>	<u>(406)</u>		\$ (394)
<b>18</b>	To reverse Company pro-forma related to EE Houghton Co, Inc. Jan - March 2017 costs.				\$ (4,177)
<b>19</b>	To reverse Company pro-forma related to Supervision.				\$ (1,500)
<b>20</b>	To correct Company pro-forma related to Supervision:				
	Total annual management / rental fees indicated per revised agreements		\$	13,100	
	Less: Management / rental fees charged to Company during the test year			<u>(11,400)</u>	<u>1,700</u>
	Total Adjustments - Administrative & General Expenses				<u>\$ (4,345)</u>

**Pro-forma Adjustments to Taxes:**

**Taxes Other than Income**

<b>21</b>	To adjust test year property tax expense:				
	2016 Municipal Property Tax (See Staff DR# 1-10)		\$	8,965	
	2016 State Utility Property Tax (See Staff DR# 1-10)			<u>1,650</u>	
	Total pro-forma property taxes per Staff			10,615	
	Less: Pro-forma property taxes per Company (Schedule 3)			<u>(9,694)</u>	<u>\$ 921</u>

**Income Taxes**

<b>22</b>	To reverse Company's Income Tax adjustment. (See Staff Schedule 3b)				\$ (1,251)
<b>23</b>	To record income tax effect of pro-forma adjustments to revenue and expenses. (See Staff Schedule 3b)				<u>\$ 113</u>
	Total Adjustments - Income Tax Expenses				<u>\$ (1,138)</u>

**DW 17-103**  
**WEST SWANZEY WATER COMPANY, INC.**  
**STAFF PRO-FORMA ADJUSTMENTS TO INCOME TAXES**

**INCOME TAXES**

To reflect the income tax effect of proforma adjustments to revenue and expenses:

**Operating Revenues:**

Total Proforma Adjustments to Water Revenues	\$ (3,722)
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**Operating Expenses:**

Total Proforma Adjustments to Source of Supply Expenses	-
Total Proforma Adjustments to Pumping Expenses	5,112
Total Proforma Adjustments to Water Treatment Expenses	(4,301)
Total Proforma Adjustments to Transmission & Distribution Expenses	-
Total Proforma Adjustments to Customer Accounts Expenses	-
Total Proforma Adjustments to Administrative & General Expenses	4,345
Total Proforma Adjustments to Depreciation Expense	-
Total Proforma Adjustments to Amortization Expense - CIAC	-
Total Proforma Adjustments to Amortization Expense - Other	-
Total Proforma Adjustments to Taxes other than Income	<u>(921)</u>

Marginal Revenue (Expense) Subject to Income Taxes	513
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Less: New Hampshire Business Profits Tax @ 8.2%	<u>(42)</u>
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Amount Subject to Federal Income Tax	471
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Less: Federal Income Tax @ 15.0%	<u>(71)</u>
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Proforma Adjustments net of Income Taxes	<u><u>\$ 400</u></u>
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**DW 17-103  
WEST SWANZEY WATER COMPANY, INC.  
CALCULATION OF CUSTOMER RATES**

	<u>Present Rates</u>	<u>% Increase</u>	<u>Proposed Increase</u>	<u>Proposed Rates</u>	<u>Quantity</u>	<u>Total Revenue</u>
<b>Fixed Charge:</b>						
5/8" Meter	\$ 18.87	24.38%	\$ 4.60	\$ 23.47	66 a	\$ 1,549
3/4" Meter *	\$ 20.76	24.37%	\$ 5.06	\$ 25.82	-	-
1" Meter *	\$ 26.42	24.38%	\$ 6.44	\$ 32.86	10 a	329
1 1/2" Meter *	\$ 33.97	24.37%	\$ 8.28	\$ 42.25	-	-
2" Meter *	\$ 54.72	24.38%	\$ 13.34	\$ 68.06	5 a	340
3" Meter *	\$ 207.57	24.38%	\$ 50.60	\$ 258.17	-	-
4" Meter *	\$ 264.18	24.38%	\$ 64.40	\$ 328.58	-	-
6" Meter *	\$ 396.27	24.38%	\$ 96.60	\$ 492.87	-	-
8" Meter *	\$ 547.24	24.38%	\$ 133.39	\$ 680.63	-	-
					<u>81</u> a	<u>\$ 2,218</u>
					x	4 Quarters
<b>Total Annual Fixed Charge Revenue</b>						<b><u>\$ 8,872</u></b>
<b>Consumption Charge (per 100 Gallons):</b>	\$ 0.629	36.29%	\$ 0.23	\$ 0.857	78,516 b	<b><u>\$ 67,308</u></b>
<b>Private Fire Protection:</b>						
1" Service	\$ 29.76	24.38%	\$ 7.26	\$ 37.02	-	\$ -
2" Service	\$ 59.54	24.38%	\$ 14.52	\$ 74.06	-	-
4" Service	\$ 178.60	24.38%	\$ 43.55	\$ 222.15	-	-
6" Service	\$ 357.19	24.38%	\$ 87.10	\$ 444.29	2 a	889
8" Service	\$ 595.32	24.38%	\$ 145.17	\$ 740.49	4 a	2,962
					<u>6</u> a	<u>\$ 3,851</u>
					x	4 Quarters
<b>Total Annual Private Fire Protection Revenue</b>						<b><u>\$ 15,402</u></b>
<b>Total Proposed Annual Revenues (Sch 1)</b>						<b><u>\$ 91,582</u></b>

\* Meter rate based on AWWA M1 ratio which uses 5/8" meter rate as a base.

a = Number of Customers per NHPUC Annual Report S-8

b = 100 Gallons Sold per Billing Summaries

**DW 17-103  
WEST SWANZEY WATER COMPANY, INC.  
STEP INCREASE  
REVENUE REQUIREMENT**

**Increase in Net Income Requirement:**

2017 Plant Additions (Att B; Sch 2)	\$ 22,900
Less: Accumulated Depreciation (Att B; Sch 2)	<u>(1,145)</u>
Net 2017 Plant in Service	<u>21,755</u>
 Net 2017 Plant in Rate Base	 \$ 21,755
 Rate of Return (Att B; Sch 1a)	 x <u>5.87%</u>
 Increase in Operating Income Requirement	 <u>\$ 1,278</u>

**Net Increase in Operating Expenses:**

Annual Depreciation Expense: 2017 Plant Additions less Retirements (Att B; Sch 2)	\$ 2,290
Property Tax Expense for 2017 Plant Additions (Att B; Sch 3)	<u>884</u>

<b>Step Increase in Revenue Requirement</b>	<b>\$ 4,452</b>
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<b>Adjusted Test Year Water Sales (Att A; Sch 1)</b>	<b><u>\$ 91,582</u></b>
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<b>Percent Increase / (Decrease) in Revenue Requirement from Water Sales</b>	<b><u><u>4.86%</u></u></b>
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**DW 17-103  
WEST SWANZEY WATER COMPANY, INC.  
STEP ADJUSTMENT  
WEIGHTED AVERAGE COST OF CAPITAL**

	Capital Structure			Cost of Debt				
	Staff	Adjusted	Interest	Annual				
	Adjustments	Per Staff	Rate	Annual	Amortization	Total Annual	Cost	
	Per Filing	(a)	(a)	(b)	Interest	(c)	Cost of Debt	Rate
Long-term Debt:								
S Brown Loan: 2017	26,400	3,500	22,900	5.00%	1,145	200	1,345	5.87%
Total Long-term Debt	26,400	3,500	22,900		\$ 1,145	\$ 200	\$ 1,345	5.87%

(a) Adjusted to actual cost of Plant Additions.

**DW 17-103  
WEST SWANZEY WATER COMPANY, INC.  
STEP INCREASE  
COST ADDITIONS AND RETIREMENTS**

**2017 Plant Additions:**

<u>Account</u>	<u>Amount *</u>	<u>Depreciation Rate</u>	<u>Annual Depreciation</u>	<u>Accumulated Depreciation @ 12/31/17</u>	<u>Net Plant in Service</u>
311: Pumping Equipment	\$ 22,900	10.00%	\$ 2,290	\$ (1,145)	\$ 21,755
	<u>\$ 22,900</u>		<u>\$ 2,290</u>	<u>\$ (1,145)</u>	<u>\$ 21,755</u>

\* Estimate: Final invoices pending as of 11/27/17

Audited costs:

Everett E. Houghton, 8/29/17                      \$ 8,858  
(2) Danfoss VF Drives, Model FC102

Everett E. Houghton, 12/1/17                      9,121

Remove old well pump controllers, install  
VFDs, check system. Tap main exiting bldg,  
install ball valves on existing taps. Build &  
install EOS ProControl system. Finish  
ProControl installation, swap all pumps &  
equipment to ProContro, program system &  
test operations

Everett E. Houghton, 12/10/17                      4,921

Complete SCADA install and associated  
programing. Install tank pressure transducer  
and system end pressure transducer. Install  
Eemax 480 Vot, 3 phase 32KW 2.5 gpm on  
demand water heater for soda ash mixing

\$ 22,900



**DW 17-103  
WEST SWANZEY WATER COMPANY, INC.  
STEP INCREASE  
PROPERTY TAX CALCULATION**

**Municipal Taxes - Town of Swanze**

**Town of Swanze Property Taxes**

Assesed Valuation	338,800		
Net Plant in Service, 12/31/15	<u>261,195</u>		
Assessment Adjustment Percentage	129.71%		
2017 Net Plant Additions (Att B; Sch 2)	\$ 21,755		
Net Book Value after application of assessment adjustment percentage		28,219	
2017 Municipal Tax Rate (per \$1,000 of Valuation) (Staff DR# 1-10)		x \$ <u>26.46</u>	
Estimated Municipal Taxes on 2017 Net Additions to Plant			<u>\$ 747</u>

**State Utility Property Taxes:**

Assesed Valuation (See Staff DR#1-10)	250,000		
Net Plant in Service, 12/31/15	<u>261,195</u>		
Assessment Adjustment Percentage	95.71%		
2017 Net Plant Additions (Att B; Sch 2)	\$ 21,755		
Net Book Value after application of assessment adjustment percentage		20,823	
2017 State Tax Rate (per \$1,000 of Valuation) (Staff DR# 1-10)		x \$ <u>6.60</u>	
Estimated State Taxes on 2017 Net Additions to Plant			<u>\$ 137</u>

<b>Net Increase in Property Tax Expense for 2017 changes to Plant</b>	<b><u><u>\$ 884</u></u></b>
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**DW 17-103  
WEST SWANZEY WATER COMPANY, INC.  
CALCULATION OF CUSTOMER RATES**

	<u>Proposed New Rates</u>	<u>% Increase</u>	<u>Proposed STEP Increase</u>	<u>Proposed Rates</u>	<u>Quantity</u>	<u>Total Revenue</u>
<b>Fixed Charge:</b>						
5/8" Meter	\$ 23.47	4.86%	\$ 1.14	\$ 24.61	66 a	\$ 1,624
3/4" Meter *	\$ 25.82	4.84%	\$ 1.25	\$ 27.07	-	-
1" Meter *	\$ 32.86	4.84%	\$ 1.59	\$ 34.45	12 a	413
1 1/2" Meter *	\$ 42.25	4.85%	\$ 2.05	\$ 44.30	-	-
2" Meter *	\$ 68.06	4.86%	\$ 3.31	\$ 71.37	5 a	357
3" Meter *	\$ 258.17	4.86%	\$ 12.54	\$ 270.71	-	-
4" Meter *	\$ 328.58	4.86%	\$ 15.96	\$ 344.54	-	-
6" Meter *	\$ 492.87	4.86%	\$ 23.94	\$ 516.81	-	-
8" Meter *	\$ 680.63	4.86%	\$ 33.06	\$ 713.69	-	-
					<u>83</u> a	<u>\$ 2,395</u>
					x 4	Quarters
<b>Total Annual Fixed Charge Revenue</b>						<b><u>\$ 9,578</u></b>
<b>Consumption Charge (per 100 Gallons):</b>	\$ 0.857	4.45%	\$ 0.04	\$ 0.895	78,516 b	<b><u>\$ 70,305</u></b>
<b>Private Fire Protection:</b>						
1" Service	\$ 37.02	4.86%	\$ 1.80	\$ 38.82	-	\$ -
2" Service	\$ 74.06	4.86%	\$ 3.60	\$ 77.66	-	-
4" Service	\$ 222.15	4.86%	\$ 10.80	\$ 232.95	-	-
6" Service	\$ 444.29	4.86%	\$ 21.60	\$ 465.89	2 a	932
8" Service	\$ 740.49	4.86%	\$ 36.00	\$ 776.49	4 a	3,106
					<u>6</u> a	<u>\$ 4,038</u>
					x 4	Quarters
<b>Total Annual Private Fire Protection Revenue</b>						<b><u>\$ 16,151</u></b>
<b>Total Proposed Annual Revenues</b> (Attachment A; Sch 1 + Attachment B; Sch 1)						<b><u>\$ 96,034</u></b>

\* Meter rate based on AWWA M1 ratio which use 5/8" meter rate as a base.

a = Number of Customers per NHPUC Annual Report S-8

b = 100 Gallons Sold per Billing Summaries

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**SERVICE LIST - EMAIL ADDRESSES - DOCKET RELATED**

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**Pursuant to N.H. Admin Rule Puc 203.11 (a) (1): Serve an electronic copy on each person identified on the service list.**

Executive.Director@puc.nh.gov  
alexander.speidel@puc.nh.gov  
amanda.noonan@puc.nh.gov  
dbrown1@ne.rr.com  
jayson.laflamme@puc.nh.gov  
mark.naylor@puc.nh.gov  
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stephenpstcyr@yahoo.com  
steve.frink@puc.nh.gov

Docket #: 17-103-1      Printed: December 29, 2017

**FILING INSTRUCTIONS:**

- a) Pursuant to N.H. Admin Rule Puc 203.02 (a), with the exception of Discovery, file 7 copies, as well as an electronic copy, of all documents including cover letter with:**

DEBRA A HOWLAND  
EXECUTIVE DIRECTOR  
NHPUC  
21 S. FRUIT ST, SUITE 10  
CONCORD NH 03301-2429

- b) Serve an electronic copy with each person identified on the Commission's service list and with the Office of Consumer Advocate.**
- c) Serve a written copy on each person on the service list not able to receive electronic mail.**