DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
TEMPORARY RATES
REVENUE REQUIREMENT

Pro-forma Rate Base (Sch 3; Col 12)		$ 436,827
Rate of Return (Sch 2)	x	6.74%
Operating Income Requirement		29,442
Less: Pro-forma Operating Income (Sch 4; Col 7)		882
Revenue Deficiency / (Surplus) Before Income Tax Effect		28,560
Divided by Income Tax Divisor (Sch 5)	÷	60.59%
Tax Effected Revenue Deficiency / (Surplus)		47,138
Tax Rate Change Revenue Adjustment		(5,993)
Adjusted Revenue Deficiency / (Surplus)		41,145
Add: Pro-forma Annual Water Revenues (Sch 4; Col 7)	+	276,335
Total Proposed Operating Revenue Requirement after Temporary Rates		$ 317,480
Percentage Increase/Decrease in Annual Water Revenues after Temporary Rates		14.89%

Attachment A
Schedule 2

DW 17-165
ABENAKI WATER COMPANY, INC.
ALL DIVISIONS INCLUDED
TEMPORARY RATES
WEIGHTED AVERAGE COST OF CAPITAL

	Capital Structure		Cost of Debt					
	Per Test Year	Percent	Interest Rate @ 09/30/17	Annual Interest	Annual Amortization	Total Annual Cost of Debt	Cost Rate	Weighted Average Cost
Debt								
2014 CoBank Loan, $300,000	$ 205,080	16.69%	3.68%	$ 8,262	$ -	$ 8,262	4.03%	0.67%
2016 CoBank Loan, $400,000	387,201	31.50%	3.55%	13,500	-	13,500	3.49%	1.10%
Total Debt	592,281	48.19%		$ 21,762	$ -	$ 21,762	3.67%	1.77%
Common Equity								
Common Stock	-	0.00%						
Additional Paid in Capital	589,521	47.97%						
Retained Earnings	47,234	3.84%						
Total Common Equity	636,755	51.81%					9.60%	4.97%
								6.74%
Total Capitalization	$ 1,229,036	100.00%						

DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
TEMPORARY RATES
PRO-FORMA RATE BASE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Original Temporary Rate Filing			Revised Temporary Rate Filing (4/23/18)			Revised Temporary Rate Filing (4/27/18)			Temporary Rates		
	4-Qtr Average	Company Pro-forma Adjust's	Pro-forma Rate Base	5-Qtr Average	Company Pro-forma Adjust's	Pro-forma Rate Base	5-Qtr Average	Company Pro-forma Adjust's	Pro-forma Rate Base	Staff Pro-forma Adjust's (Sch 3a)	Staff Adj # (Sch 3a)	Pro-forma Rate Base
Net Utility Plant in Rate Base												
Utility Plant in Service	$ 1,446,627	$ -	$ 1,446,627	$ 1,429,842	$ -	$ 1,429,842	$ 1,432,497	$ -	$ 1,432,497	$ -		$ 1,432,497
Less: Accumulated Depreciation	(663,712)	-	(663,712)	(661,288)	-	(661,288)	(661,288)	-	(661,288)	-		(661,288)
Net Utility Plant in Service	782,915	-	782,915	768,554	-	768,554	771,209	-	771,209	-		771,209
Utility Plant Acquisition Adjustment	36,234	-	36,234	36,234	-	36,234	36,234	-	36,234	(36,234)	1	-
Less: Accum Amortization of Utility Plant Acq Adj	-	-	-	-	-	-	-	-	-	-		-
Less: Contributions in Aid of Construction (CIAC)	(448,114)	-	(448,114)	(448,233)	-	(448,233)	(448,233)	-	(448,233)	-		(448,233)
Add: Accumulated Amortization - CIAC	172,080	-	172,080	170,251	-	170,251	170,251	-	170,251	-		170,251
Net Utility Plant in Rate Base	543,115	-	543,115	526,806	-	526,806	529,461	-	529,461	(36,234)		493,227
Net Working Capital in Rate Base												
Cash Working Capital	26,210	-	26,210	26,210	-	26,210	26,210	-	26,210	548	2	26,758
Materials and Supplies	4,952	-	4,952	5,043	-	5,043	5,043	-	5,043	-		5,043
Prepayments - Other	3,651	-	3,651	4,453	-	4,453	4,453	-	4,453	(4,453)	3	-
Prepayments - Taxes	-	-	-	-	-	-	-	-	-	-		-
Accumulated Deferred Income Taxes - Assets	(89,814)	-	(89,814)	(88,201)	-	(88,201)	(88,201)	-	(88,201)	-		(88,201)
Miscellaneous Deferred Debits	-	-	-	-	-	-	-	-	-	-		-
Accumulated Deferred Income Taxes - Liabilities	-	-	-	-	-	-	-	-	-	-		-
Rounding	-	-		-	-		-	-		-		-
Net Working Capital in Rate Base	(55,001)	-	(55,001)	(52,495)	-	(52,495)	(52,495)	-	(52,495)	(3,905)		(56,400)
TOTAL RATE BASE	$ 488,114	$ -	$ 488,114	$ 474,311	$ -	$ 474,311	$ 476,966	$ -	$ 476,966	$ (40,139)		$ 436,827

DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
TEMPORARY RATES
PRO-FORMA ADJUSTMENTS TO RATE BASE

Adj #			
	Pro-forma Adjustments to Utility Plant Acquisition Adjustment:		
1	To remove Utility Plant Acquisition Adjustment from Plant as an unallowable recovery amount.		(36,234)
	Working Capital:		
	Cash Working Capital		
2	To modify test year Cash Working Capital which will report test-year at 13-month average (Per Sch 3b).	$	548
	Total Adjustments - Cash Working Capital	$	548
	Prepayments - Other		
3	To adjust Prepaid expenses: include only those prepaids not included in Cash Working Capital:	$	(4,453)
	Total Adjustments - Prepayments - Other	$	(4,453)
	Total Pro Forma Adjustments to Rate Base		(40,139)

DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
TEMPORARY RATES
CALCULATION OF 5-QUARTER AVERAGE RATE BASE

	For the Quarter Ended					Staff 5-Quarter Average	Test Year Average (Per Company)	Staff Adjustment
	09/30/16	12/31/16	03/31/17	06/30/17	09/30/17			
Net Utility Plant in Rate Base								
Total Utility Plant	$ 1,362,703	$ 1,382,473	$ 1,403,009	$ 1,456,106	$ 1,558,195	$ 1,432,497	$ 1,432,497	$ -
Less: Accumulated Depreciation	(651,590)	(651,169)	(660,169)	(665,005)	(678,505)	(661,288)	(661,288)	-
Net Utility Plant in Service	711,113	731,304	742,840	791,101	879,690	771,209	771,209	-
Utility Plant Acquisition Adjustment	36,234	36,234	36,234	36,234	36,234	36,234	36,234	(36,234)
Less: Accum Amortization of Utility Plant Acq Adj	-	-	-	-	-	-	-	-
Less: Contributions in Aid of Construction	(448,708)	(448,708)	(448,708)	(448,708)	(446,331)	(448,233)	(448,233)	-
Add: Accumulated Amortization - CIAC	162,938	168,217	168,217	175,348	176,537	170,251	170,251	-
Net Utility Plant in Rate Base	$ 461,577	$ 487,047	$ 498,583	$ 553,975	$ 646,130	$ 529,461	$ 529,461	$ (36,234)
Net Working Capital in Rate Base								
Cash Working Capital:								
12-Month O&M Expenses *New Company 9/30/17 or	$ -	$ -	$ -	$ -	$ 217,034			
Cash Working Capital % (45 days / 365 days)	x 12.33%	x 12.33%	x 12.33%	x 12.33%	x 12.33%			
Cash Working Capital	-	-	-	-	26,758	26,758	26,210	548
Materials and Supplies	5,408	5,408	4,800	4,800	4,800	5,043	5,043	-
Prepayments - Other	7,660	851	4,788	4,811	4,154	4,453	4,453	(4,453)
Prepayments - Taxes	-	-	-	-	-	-	-	-
Accumulated Deferred Income Taxes - Assets	(81,751)	(81,751)	(81,751)	(97,877)	(97,877)	(88,201)	(88,201)	-
Miscellaneous Deferred Debits	-	-	-	-	-	-	-	-
Accumulated Deferred Income Taxes - Liabilities	-	-	-	-	-	-	-	-
Net Working Capital in Rate Base	$ (68,683)	$ (75,492)	$ (72,163)	$ (88,266)	$ (62,165)	$ (51,947)	$ (52,495)	$ (3,905)
TOTAL RATE BASE	$ 392,894	$ 411,555	$ 426,420	$ 465,709	$ 583,965	$ 477,514	$ 476,966	$ (40,139)

DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
TEMPORARY RATES
PRO-FORMA OPERATING INCOME STATEMENT

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Original Temporary Rate Filing			Revised Temporary Rate Filing (4/23/18)	Temporary Rates				
	Actual Test Year	Company Pro-forma Adjust's	Pro-forma Test Year	Revised Test Year	Staff Pro-forma Adjust's (Sch 4a)	Adj # (Sch 4a)	Pro-forma Operating Income	Revenue Deficiency (Surplus) (Sch 1)	Operating Income Requirement (Sch 1)
Operating Revenue:									
Sales of Water	$ 270,092	$ 65,452	$ 335,544	$ 276,335	$ -		$ 276,335	$ 47,138	$ 323,473
Other Operating Revenue	-	-	-	-	-		-		-
Total Operating Revenues	270,092	65,452	335,544	276,335	-		276,335	47,138	323,473
Operating Expenses:									
Operation & Maintenance Expenses:									
Source of Supply	212,574	-	212,574	-	-		-		-
Pumping Expenses	-	-	-	69,265	-		69,265		69,265
Water Treatment Expenses	-	-	-	34,871	-		34,871		34,871
Transmission & Distribution Expenses	-	-	-	18,287	-		18,287		18,287
Customer Accounts Expenses	-	-	-	11,255	-		11,255		11,255
Administrative & General Expenses	-	-	-	83,356	-		83,356		83,356
Total Operation & Maintenance Expenses	212,574	-	212,574	217,034	-		217,034	-	217,034
Depreciation Expense	57,272	-	57,272	57,272	-		57,272		57,272
Amortization Expense - CIAC	(15,975)	-	(15,975)	(15,975)	-		(15,975)		(15,975)
Amortization Expense - Other	(1,124)	-	(1,124)	(1,124)	-		(1,124)		(1,124)
Taxes Other Than Income	22,704	-	22,704	22,704	-		22,704		22,704
Total Operating Expenses	275,451	-	275,451	279,911	-		279,911	-	279,911
Net Operating Income before Income Taxes	(5,359)	65,452	60,093	(3,576)	-		(3,576)	47,138	43,562
Less: Income Taxes	10,626	16,547	27,173	10,626	(15,084)	4	(4,458)	18,578	14,120
NET OPERATING INCOME	$ (15,985)	$ 48,905	$ 32,920	$ (14,202)	$ 15,084		$ 882	$ 28,560	$ 29,442

DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
TEMPORARY RATES
PRO-FORMA ADJUSTMENTS TO NET OPERATING INCOME

Adj #		
	Income Tax	
4	To adjust Income Tax Expense per Schedule 4b	$ (15,084)
	Total Adjustments - Income Taxes	$ (15,084)
	Total Pro-forma Adjustments to Net Operating Income before Income Taxes	**$ (15,084)**

DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
TEMPORARY RATES
INCOME TAX COMPUTATION

Interest Expense Synchronization and Income Tax Expense Normalization:

Net Operating Income before Adjustments (Schedule 4; column 4)	$ (14,202)
Add Back: Income Tax Expense (Schedule 4; column 4)	10,626
Pre-tax Net Operating Income	$ (3,576)
Rate Base (Schedule 3; column 12)	$ 436,827
Debt Portion (Schedule 2)	48.19%
Debt Component	$ 210,507
Debt Cost (Schedule 2)	3.67%
Syncronized Interest Expense	$ 7,735
Pre-tax Net Income (Loss)	$ (11,311)
Composite Income Tax Rate (Schedule 5)	39.41%
Income Tax Expense - Normalized	$ (4,458)

Tax Change Effect - FERC Methodology:

Income Tax Expense prior to Gross-up		$ (4,458)
Income Tax Gross-up		18,578
Composite Income Tax Expense		14,120
2018 Tax Rate Factor		0.37440
2017 Tax Rate Factor	÷	0.65049
2018 Tax Rate Factor ÷ 2017 Tax Rate Factor		0.57557
Adjusted Composite Income Tax Expense		8,127
Revenue Adjustment		$ (5,993)

Attachment A
Schedule 5

DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
TEMPORARY RATES
EFFECTIVE TAX FACTOR

	Effective 2017	**Effective 2018**
Taxable Income	100.00%	100.00%
Less: NH Busines Profits Tax	-8.20%	-7.90%
Federal Taxable Income	91.80%	92.10%
Federal Income Tax Rate	34.00%	21.00%
Effective Federal Income Tax Rate	31.21%	19.34%
Add: NH Business Profits Tax	8.20%	7.90%
Effective Tax Rate	39.41%	27.24%
Percent of Income Available if No Tax	100.00%	100.00%
Effective Tax Rate	-39.41%	-27.24%
Percent Used as a Divisor to Determine Revenue Requirement	60.59%	72.76%
Tax Multiplier (Effective Tax Rate ÷ Percent Used as a Divisor)	0.65049	0.37440

DW 17-165
ABENAKI WATER COMPANY, INC.
ROSEBROOK DIVISION
TEMPORARY RATES
CALCULATION OF RATES - CHANGING CONSUMPTION ONLY

Total Annual Water Revenues Proposed per Settlement (Sch 1)							$ 317,480	
Less: Fire Protection Revenues								
Municipal						$ -		
Private						-	-	
Revenues from General Metered Customers							$ 317,480	
Customer Charge Revenues:								
	Meter Size	Present Rate	Percent Increase	Proposed Rate	Pro-forma # of Meters	Annual Revenues		
	5/8" Meter	$ 9.91	14.89%	**$ 11.39**	107	$ 14,625		
	5/8"X3/4" Meter	9.91	14.89%	**11.39**	254	34,717		
	1" Meter	32.69	14.89%	**37.56**	46	20,733		
	2" Meter	106.00	14.89%	**121.78**	2	2,923		
	3" Meter	230.83	14.89%	**265.20**	3	9,547		
	6" Meter	924.29	14.89%	**1,061.91**	1	12,743		
				(a)	413	$ 95,287	(95,287)	30.01%
Consumption Charge Revenues:							$ 222,193	69.99%

Consumption Charge Revenues			$ 222,193	
Total Pro-forma Annual Consumption (1,000 ga	(b)	÷	35,244	
Consumption Rate per Customer (per 1,000 gals)			**$ 6.30**	
Total Pro-forma Annual Consumption (ccf)		x	35,244	(222,193)

Unallocated Water Revenues $ -

(b) Pro-forma Consumption:	**2017 Actual Water Sales:**			
	Gallons		35,243,804	
	Conversion to Cubic Feet	÷	7.48	
	Cubic Feet		4,711,411	
	Conversion to CCF	÷	100	47,114

NEW RATE:						
Average usage for a Residential Customer per month:	1.31	x	6.30	=		8.26
Meter charge						11.39
					$	19.65
OLD RATE:						
Average usage for a Residential Customer per month:	1.31	x	5.33	=		6.98
Meter charge						9.91
					$	16.89
AVERAGE MONTHLY INCREASE PER RESIDENTIAL CUSTOMER:					$	2.76
AVERAGE YEARLY INCREASE PER RESIDENTIAL CUSTOMER:					$	33.08