DW 20-117 HAMPSTEAD AREA WATER COMPANY, INC. TEMPORARY RATES REVENUE REQUIREMENT

,		Revenue equirement
Pro-forma Rate Base (Sch 3; Col 6)		\$ 5,327,653
Rate of Return (Sch 2; Col 6)	х	5.78%
Net Operating Income Requirement		\$ 307,739
Less: Pro-forma Net Operating Income (Sch 4; Col 6)	-	\$ 345,728
Pro-forma Net Operating Income Deficiency / (Surplus) before Tax Effect		\$ (37,989)
Divided by Tax Factor (Sch 5)	÷	72.92%
Pro-forma Revenue Deficiency / (Surplus) after Tax Effect		\$ (52,099)
Add: Pro-forma Annual Water Sales Revenue (Sch 4; Col 6)	+	\$ 2,324,022
Proposed Annual Water Sales Revenue after Temporary Rates		\$ 2,271,923
Less: Test Year Annual Water Sales Revenue (Sch 4; Col 1)		\$ 2,022,963
Proposed Increase / (Decrease) in Annual Water Revenue		\$ 248,960
Percentage Increase to Annual Water Sales Revenue		12.31%
Proposed Increase to Net Operating Income		\$ 230,061

DW 20-117 HAMPSTEAD AREA WATER COMPANY, INC. TEMPORARY RATES WEIGHTED AVERAGE COST OF CAPITAL

(1)	(2)	(3)	(4)	(5)	(6)
\ /	\ /	\ - <i>I</i>	\ /	(·)	\ · /

			Weighted				
	Unadjusted @ 12/31/19	Pro-forma Adjustments		Adjusted @ 12/31/19	Percent	Cost Rate	Average Cost
<u>Debt</u>							
Long-Term Debt (Sch 2a)	\$ 4,504,426	\$	-	\$ 4,504,426	59.06%	2.88%	1.70%
Total Debt	4,504,426			4,504,426	59.06%	2.88%	1.70%
Common Equity							
Common Stock	16,767		-	16,767	0.22%		
Additional Paid in Capital	4,054,354		-	4,054,354	53.16%		
Retained Earnings	(949,024)		-	(949,024)	-12.44%		
Total Common Equity	3,122,097		-	3,122,097	40.94%	9.95%	4.07%
Total Capitalization	\$ 7,626,523	\$		\$ 7,626,523	100.00%		5.78%

Most recent Cost of Equity Rate approved was *9.95% in HAWC Rate Case: DW 17-118 dated 11/28/18. * 9.45% + .50% for avoiding litigation.

DW 20-117 HAMPSTEAD AREA WATER COMPANY, INC. TEMPORARY RATES PRO-FORMA LONG-TERM DEBT

												Pro-	forma Loan Ba	lance			Pro-fo	rma Interest Ex	pense			Pro-f	orma Finance Co	osts		Pro-forma Total (Cost of Debt
										Current		Company	Debt Adj	Excess	Adjusted	2019	Company	Interest	Excess	Adjusted	2019	Company	Finance Cost	Excess	Adjusted	Total	2019
GL Acct #	Date of Note	Lender	Original Amount	NHPUC Docket #	Order #	Date of Order	Purpose	Term	Interest Rate	Interest Rate	Balance @ 12/31/19	Adjustment	per Settlement	Capacity Adjustment*	Balance @ 12/31/19	Interest Expense	Interest Adjustment	Adj per Settlement	Capacity Adjustment*	Interest Expense	Amortized Finance Costs	Finance Cost Adjustment	Adj per Settlement	Capacity Adjustment*	Amortized Finance Costs	Annual Debt Cost	Cost Rate
232.02	Note 03/13/19	Pentucket Bank	1,000,000	DW 18-147	26,218	02/01/19	Line of Credit	Demand	Prime	4.75%	450,000	- Adjustment	- Cottlement	- Aujustinent	450,000	11,525	- Aujustinent	- Cottlement	- Aujustinent	11,525	-	- Aujustinent	-	-	-	11,525	2.56%
232.05	TBD	NHDES	up to 1,200,00	00 DW 19-147	26,407	09/28/20	Southern NH	30	3.38%	3.38%	681,000				681,000	-										-	0.00%
232.06	09/06/05	NHDES	1,315,291	DW 04-132	24,437	02/25/05	SRF Loan: Tank	20	3.352%	3.352%	643,586	-	-	-	643,586	22,672	-	-	-	22,672	-	-	-	-	-	22,672	3.52%
232.08	03/31/06	Aquarius Properties	24,000	DW 06-016	24,608	03/24/06	Autumn Hills	20	P+2.25%	5.50%	12,034	-	-	-	12,034	986	-	-	-	986	-	-	-	-	-	986	8.19%
232.11	06/24/09	NH DES	1,058,347	DW 08-088	24,937	02/06/09	Hampstead / Atkinson Core Interconnect	20	2.864%	2.864%	681,790	-	-	-	681,790	20,302	-	-	-	20,302	-	-	-	-	-	20,302	2.98%
232.12	11/18/16	Ford Motor Credit	38,174	DW 16-826	25,968	11/17/16	2016 F-250	5	4.89%	4.89%	15,786	-	-	-	15,786	900	-	-	-	900	-	-	-	-	-	900	5.70%
232.13	06/26/12	Shribco Realty Two, LLC	12,000	DW 07-133	24,831	03/14/08	Coopers Grove	-	0.00%	0.00%	3,000	-	-	-	3,000	-	-	-	-	-	-	-	-	-	-	-	0.00%
232.14	10/08/18	Ford Motor Credit	41,500	DW 18-121	26,173	09/12/18	2016 F-250	5	4.90%	4.90%	32,895	-	-	-	32,895	1,857	-	-	-	1,857	-	-	-	-	-	1,857	5.65%
232.16	08/02/13	NHDES	255,000	DW 11-226	25,526	06/21/13	Service Line Replacements	20	3.10%	3.10%	203,430	-	-	-	203,430	6,494	-	-	-	6,494	-	-	-	-	-	6,494	3.19%
232.18	10/28/14	Hillcrest Estates	34,000	DW 14-319	25,757	01/16/15	Snow's Brook, Plaistow	-	0.00%	0.00%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00%
232.19	09/15/16	Pentucket Bank	2,167,000	DW 16-654	25,930	07/29/16	Refinancing TD Bank loans	15	3.25%	3.25%	1,780,905	-	-	-	1,780,905	60,895	-	-		60,895	-	-	-	-	-	60,895	3.42%
Totals - I	lon-affiliated (Companies	5,945,312	-							4,504,426		-		4,504,426	125,631				125,631	-		-			125,631	2.79%
Roundin	ı															(1)				(1)						(1)	0.00%
Total No	tes to Non-af	ffiliated Companies	5,945,312								4,504,426				4,504,426	125,630				125,630							2.79%
Amortize	financing cos	sts - 3rd Parties														4,249 129,879										4,249 129,879	
TOTAL	IOTES PAYA	ABLE	\$ 5,945,312								\$ 4,504,426	\$ -	\$ -	\$ -	\$ 4,504,426	\$ 129,879	\$ -	\$ -	\$ -	\$ 129,879	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 129,879	2.88%

DW 20-117 HAMPSTEAD AREA WATER COMPANY, INC. TEMPORARY RATES PRO-FORMA RATE BASE

	(1)	(2)	(3)	(4)	(5)	(6)		
	Te	mporary Rate Fi	iling	Temporary Rates				
	13-month Average	Company Pro-forma Adjust's	Pro-forma Rate Base	Staff Adjust's (Sch 3a)	Staff Adj# (Sch 3a)	Pro-forma Rate Base		
Net Utility Plant in Rate Base								
Utility Plant in Service	\$ 17,552,712	\$ -	\$ 17,552,712	\$ 255,085	1	\$ 17,807,797		
Less: Accumulated Depreciation	(7,188,383)		(7,188,383)	(187,331)	2	(7,375,714)		
Net Utility Plant in Service	10,364,329	-	10,364,329	67,754		10,432,083		
Less: Contributions in Aid of Construction (CIAC)	(9,215,542)	-	(9,215,542)	(24,438)	3	(9,239,980)		
Add: Accumulated Amortization - CIAC	3,766,902		3,766,902	106,632	4	3,873,534		
Net Utility Plant in Rate Base	4,915,689		4,915,689	149,948		5,065,637		
Net Working Capital in Rate Base								
Cash Working Capital	215,243	-	215,243	(5,326)	5	209,917		
Materials and Supplies	78,575	-	78,575	(41,338)	6	37,237		
Miscellaneous Deferred Debits	74,055	-	74,055	(2,050)	7	72,005		
Accumulated Deferred Income Taxes - Assets	11,358	-	11,358	(647)	8	10,711		
Accumulated Deferred Income Taxes - Liabilities	(57,445)	-	(57,445)	(10,409)	9	(67,854)		
Rounding								
Net Working Capital in Rate Base	321,786		321,786	(59,770)		262,016		
TOTAL RATE BASE	\$ 5,237,475	\$ -	\$ 5,237,475	\$ 90,178		\$ 5,327,653		

DW 20-117 HAMPSTEAD AREA WATER COMPANY, INC. TEMPORARY RATES PRO-FORMA ADJUSTMENTS TO RATE BASE

<u>Adj #</u>

Pro-forma Adjustments to Net Utilty Plant in Rate Base:

1	To adjust Utility Plant to 2019 year end rather than 13-month average		\$255,085
2	To adjust Accumulated Depreciation Of Utility Plant		(187,331)
3	To adjust CIAC		(24,438)
4	To adjust Accumulated Amortization of CIAC		106,632
	Total Adjustments - Plant in Service		\$149,948
	Pro-forma Adjustments to Cash Working Capital in Rate Base To modify test year Cash Working Capital which will report test-year at 13-month average (Per Sch 3b).	\$	-
5	To adjust Cash Working Capital for pro-forma adj's to O&M Expenses: Net pro-forma adj's to O&M Expenses (Sch 4; Col 6) Cash Working Capital Percentage (Monthly Billing) 12.33	,	(5,326)
	Total Adjustments - Cash Working Capital	\$	(5,326)
	Pro-forma Adjustments to Net Working Capital in Rate Base:		
6	To adjust Materials and Supplies to 2019 year end	\$	(41,338)
7	To adjust Misc. Deferred Debits to only the amounts authorized as of 2019 year end	\$	(2,050)
8	To adjust ADIT - Asset to 2019 year end	\$	(647)
9	To adjust ADIT - Liability to 2019 year end	\$	(10,409)
	Total Adjustments - Net Working Capital	\$	(54,444)

DW 20-117 HAMPSTEAD AREA WATER COMPANY, INC. TEMPORARY RATES CALCULATION OF RATE BASE

	For the Month Ended															
	12/31/18	01/31/19	02/28/19	03/31/19	04/30/19	05/31/19	06/30/19	07/31/19	08/31/19	09/30/19	10/31/19	11/30/19	12/31/19	13-Month Average	Co. Proposed Rate Base	Staff Adjustment
Net Utility Plant in Rate Base																
Total Utility Plant	\$17,409,617	\$17,416,668	\$17,417,968	\$17,421,362	\$17,427,161	\$17,444,336	\$17,447,337	\$17,497,247	\$17,523,671	\$17,789,129	\$17,790,704	\$17,792,253	\$17,807,797	\$ 17,552,712	\$ 17,552,712	\$255,085
Less: Accumulated Depreciation	(6,976,995)	(7,020,896)	(7,065,746)	(7,108,290)	(7,105,789)	(7,189,514)	(7,223,565)	(7,260,575)	(7,293,199)	(7,231,133)	(7,276,258)	(7,321,308)	(7,375,714)	(7,188,383)	(7,188,383)	(187,331)
Net Utility Plant in Service	10,432,622	10,395,772	10,352,222	10,313,072	10,321,372	10,254,822	10,223,772	10,236,672	10,230,472	10,557,996	10,514,446	10,470,945	10,432,083	10,364,329	10,364,328	67,754
Less: Contributions in Aid of Construction	(9,109,850)	(9,109,651)	(9,109,651)	(9,229,976)	(9,229,800)	(9,228,920)	(9,228,653)	(9,228,596)	(9,224,910)	(9,223,980)	(9,222,980)	(9,415,095)	(9,239,980)	(9,215,542)	(9,215,542)	(24,438)
Add: Accumulated Amortization - CIAC	3,659,188	3,677,489	3,695,989	3,714,489	3,732,813	3,750,433	3,768,666	3,787,109	3,801,923	3,818,199	3,835,699	3,854,199	3,873,534	3,766,902	3,766,902	106,632
Net Utility Plant in Rate Base	\$ 4,981,960	\$ 4,963,610	\$ 4,938,560	\$ 4,797,585	\$ 4,824,385	\$ 4,776,335	\$ 4,763,785	\$ 4,795,185	\$ 4,807,485	\$ 5,152,215	\$ 5,127,165	\$ 4,910,049	\$ 5,065,637	\$ 4,915,689	\$ 4,915,688	\$ 149,948
Net Working Capital in Rate Base																
Cash Working Capital: 12-Month O&M Expenses Cash Working Capital % (45 days / 365 days)													\$ 1,745,684 x 12.33%		\$ 1,745,684 x 12.33%	\$ -
Cash Working Capital	-	-	-	-	-	-	-	-	-	-	-	-	215,243		215,243	-
Materials and Supplies	82,237	95,736	99,211	98,951	117,902	115,438	91,442	87,467	66,191	41,028	45,331	43,305	37,237	78,575	78,575	(41,338)
Miscellaneous Deferred Debits	75,603	75,378	75,150	74,925	74,697	74,472	74,244	74,019	73,791	73,213	72,809	72,408	72,005	74,055	74,055	(2,050)
Accumulated Deferred Income Taxes - Assets	12,004	11,896	11,789	11,681	11,573	11,465	11,358	11,250	11,142	11,034	10,927	10,819	10,711	11,358	11,358	(647)
Accumulated Deferred Income Taxes - Liabilities	(56,578)	(56,578)	(56,578)	(56,578)	(56,578)	(56,578)	(56,578)	(56,578)	(56,578)	(56,578)	(56,578)	(56,578)	(67,854)	(57,445)	(57,445)	(10,409)
Net Working Capital in Rate Base	\$ 113,266	\$ 126,432	\$ 129,572	\$ 128,979	\$ 147,594	\$ 144,797	\$ 120,466	\$ 116,158	\$ 94,546	\$ 68,697	\$ 72,489	\$ 69,954	\$ 267,342	\$ 106,543	\$ 321,786	\$ (54,444)
TOTAL RATE BASE	\$ 5,095,226	\$ 5,090,042	\$ 5,068,132	\$ 4,926,564	\$ 4,971,979	\$ 4,921,132	\$ 4,884,251	\$ 4,911,343	\$ 4,902,031	\$ 5,220,912	\$ 5,199,654	\$ 4,980,003	\$ 5,332,979	\$ 5,022,232	\$ 5,237,474	\$ 95,504

DW 20-117 HAMPSTEAD AREA WATER COMPANY, INC. TEMPORARY RATES PRO-FORMA OPERATING INCOME STATEMENT

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)			
	Co. T	emporary Rate	Filing	Staff Proposed Temporary Rates							
Operating Revenue:	Actual Test Year	Company Pro-forma Adjust's	Pro-forma 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)			
5											
Water Sales Revenue* Other Operating Revenue	\$ 2,022,963 302,465	\$ 301,059 	\$ 2,324,022 302,465	\$ - -		\$ 2,324,022 302,465	\$ (52,099)	\$ 2,271,923 302,465			
Total Operating Revenues	2,325,428	301,059	2,626,487			2,626,487	(52,099)	2,574,388			
Operating Expenses:											
Operation & Maintenance Expenses: Source of Supply Pumping Expenses Water Treatment Expenses Transmission & Distribution Expenses Customer Accounts Expenses Administrative & General Expenses Total Operation & Maintenance Expenses Depreciation Expense Amortization Expense - CIAC Amortization Expense - Other Taxes Other Than Income	35,719 390,948 187,684 167,677 150,569 813,087 1,745,684 557,503 (221,541) 3,681 146,846	- - - - - - - -	35,719 390,948 187,684 167,677 150,569 813,087 1,745,684 557,503 (221,541) 3,681 146,846	(43,197) (43,197) - - - - - -	10	35,719 390,948 187,684 167,677 150,569 769,890 1,702,487 557,503 (221,541) 3,681 146,846		35,719 390,948 187,684 167,677 150,569 769,890 1,702,487 557,503 (221,541) 3,681 146,846			
Total Operating Expenses	2,232,173		2,232,173	(43,197)		2,188,976		2,188,976			
Net Operating Income before Income Taxes	93,255	301,059	394,314	43,197		437,511	(52,099)	385,412			
Income Taxes:											
Income Taxes Total Income Taxes	15,577 15,577	76,206 76,206	91,783 91,783	<u>-</u>		91,783 91,783	(14,110) (14,110)	77,673			
NET OPERATING INCOME	\$ 77,678	\$ 224,853	\$ 302,531	\$ 43,197		\$ 345,728	\$ (37,989)	\$ 307,739			

DW 20-117 HAMPSTEAD AREA WATER COMPANY, INC. TEMPORARY RATES PRO-FORMA ADJUSTMENTS TO NET OPERATING INCOME

<u>Adj #</u>

Operating Revenue

	To adjust Operating Revenue	\$ -
	Total Adjustments - Operating Revenue	\$
10	To adjust Legal Expenses for non-recurring expenses per Staff 1-11	\$ - (42.407)
	Total Adjustments - Admin. & General Expenses	\$ (43,197) (43,197)
	Total Pro-forma Adjustments to Net Operating Income before Income Taxes	\$ (43,197)

DW 20-117 HAMPSTEAD AREA WATER COMPANY, INC. TEMPORARY RATES PROFORMA ADJUSTMENTS TO INCOME TAXES

NHBET

Increase / (Decrease) in Wages (See Co Pro Forma #2)	
Increase / (Decrease) in Taxable Enterprise Value Tax Base NHBET rate	\$ - 72.92%
Increase / (Decrease) in NHBET	\$
NHBPT To reflect the income tax effect of proforma adjustments to revenue and expenses:	
Operating Revenues:	
Net Pro-forma Adjustments to Water Sales to Customers Net Pro-forma Adjustments to Other Operating Revenue	\$ -
Operating Expenses:	
Net Pro-forma Adjustments to Source of Supply Expenses	-
Net Pro-forma Adjustments to Pumping Expenses Net Pro-forma Adjustments to Water Treatment Expenses	-
Net Pro-forma Adjustments to Water Treatment Expenses Net Pro-forma Adjustments to Transmission & Distribution Expenses	-
Net Pro-forma Adjustments to Customer Accounts Expenses	-
Net Pro-forma Adjustments to Administrative & General Expenses Net Pro-forma Adjustments to Depreciation Expense	-
Net Pro-forma Adjustments to Amortization Expense - CIAC	_
Net Pro-forma Adjustments to Amortization Expense - Other	-
Net Pro-forma Adjustments to Taxes Other Than Income	
Net Revenue / (Expense) Subject to NHBPT	-
Less: New Hampshire Business Profits Tax @ 8.20%	-
Add: (Increase) / Decrease in NHBET	
Net Pro-forma Adjustments to Operating Revenue / Expenses	\$

DW 20-117 HAMPSTEAD AREA WATER COMPANY, INC. TEMPORARY RATES EFFECTIVE TAX FACTOR

Taxable Income	100.00%
Less: NH Busines Profits Tax	7.70%
Federal Taxable Income	92.30%
Federal Income Tax Rate	21.00%
Effective Federal Income Tax Rate	19.38%
Add: NH Business Profits Tax	7.70%
Effective Tax Rate	27.08%
Percent of Income Available if No Tax	100.00%
Effective Tax Rate	27.08%
Percent Used as a Divisor in Determing the Revenue Requirement	72.92%
Tax Multiplier	0.37142

DW 20-117 HAMPSTEAD AREA WATER COMPANY, INC. TEMPORARY RATES EFFECTIVE RATE OF RETURN

Plant in Rate Base: Net Utility Plant in Service Less: Accumulated Depreciation Net Plant in Service Less: Net Contributions in Aid of Construction Net Plant in Rate Base	\$ 17,807,797 (7,375,714) 10,432,083 (5,366,446) 5,065,637	Adj. #
Working Capital:		
Materials and Supplies	37,237	
Miscellaneous Deferred Debits	72,005	1
Deferred Income Taxes - Net	(57,143)	
Sub-total Sub-total	52,099	
Cash Working Capital (a)	215,243_	
Working Capital in Rate Base	267,342	
Total Rate Base	\$ 5,332,979	
Net Operating Income	\$ 77,678	2
Rate Base	÷ 5,332,979	
Earned Rate of Return	1.46%	
Aufhorized Rate of Return	- 6.35%	
Difference	4.89%	

1- Staff accepted the Company's Misc. Deferred Debit figure of \$72,005 rather than the 2019 Annual Report figure of \$1,162,245.

Miscellaneous Deferred Debits are categorized as such due to the nature of the costs not yet being determined as eligible for recovery, and over what time period.

At this time the Company should not earn a return on Misc. Deferred Debits not previously determined as eligible for recovery by the Commission.

2- This analysis contains no adjustment to the Net Operating Income as this analysis is performed before Staff conducts Temp rate discovery of the test year. After adjusting for the legal expense reduction, Staff estimates the Company's earned RoR is approximately 2.27%.

DW 20-117
Hampstead Area Water Company, Inc.
Temporary Rates
Report of Proposed Rate Changes (including Step Increase)

Rate of Class of Service	_	ffect of Change	Nun	erage nber of tomers	,	Authorized Present Revenue	Proposed Revenue	Proposed Change Amount	Proposed Change Percentage
General Customers.	\$	242,180	\$	3,533	\$	1,967,875	\$ 2,210,055	\$ 242,180	12.31%
Fire Protection Revenues	\$	6,780			\$	55,088	\$ 61,868	\$ 6,780	12.31%
Miscellaneous Service Revenues	\$	-			\$	38,074	\$ 38,074	\$ -	0.00%
Other Water Revenues	\$	-			\$	264,391	\$ 264,391	\$ -	0.00%
Total Water	\$	301,059		3,533	\$	2,325,428	\$ 2,574,388	\$ 248,960	10.71%
Residential, Single-Family, Customer	\$	50.86			\$	470.41	\$ 521.27	\$ 50.86	10.81%

	(Current Rates	Proposed Rates	Monthly Impact
Annual Residential, Single-Family Cust avg consumption, cf		5,735	5,735	
100 cf		100	100	
Consumption Charge		6.11	6.74	
Consumption Revenue	\$	350.41	\$ 386.50	
Annual Customer Charge		120.00	134.77	
Total Residential, Single-Family Cust	\$	470.41	\$ 521.27	\$ 4.24

Note: Annual Residential, Single-Family Cust avg consumption is based on Company response to Staff DRs - Set #1, 1-2 & 1-3