

New Hampshire Monthly Cost of Gas Report

Winter Period

November 2018 Summary

The objective of the Winter Period Monthly Cost of Gas (“COG”) analysis is to determine if COG rates need to be adjusted in order to minimize differences between the April 30, 2018 target balance and the corresponding estimated end of Winter Period balance. An adjustment is made to COG rates if the difference between the estimated and target end of Winter Period balances exceeds 2% of total projected gas costs.

As shown on Table 1, Line 23, the estimated end of Winter Period balance is an over-collection of (\$704,063) and, Line 25, the target end of Winter Period balance¹ is an over-collection of (\$2,793,587). Thus, the variance between the estimated and target balances is an under-collection of \$2,089,524, Line 27. This under-collection represents a variance in 7.93% of total gas costs, Line 32. Therefore, Northern will increase its COG rates by \$0.0682 per Dth.

The variance and increase is attributable to two factors. First, NYMEX prices have increased over the thoses used in the Company’s initial Cost of Gas filing submitted on September 17, 2018. The change in NYMEX prices accounts for about 6% of the 7.93% variance in total gas costs. Second, the actual November 1 balance is a larger under-collection than what was projected in the initial Cost of Gas filing.

Support for the estimated end of Winter Period balance is provided in Table 2. Support for the target end of Winter Period balance is provided in Table 3.

¹ The Target end of Winter Period balance has been updated to reflect actual costs and revenues through October 2018.

NORTHERN UTILITIES, INC.
NEW HAMPSHIRE DIVISION
Calculation of the Projected Over or Under Collection of the
Winter 2019-2019 Period Cost of Gas
DG 18-143
November 2018 Estimated

1	Under/(Over) collection as of 11/01/178	\$ 1,296,222	Table 2, PG. 3, Line 94. October
2			
3	Forecasted firm therm sales 11/01/17 - 4/30/18		
4	Residential Heat & Non Heat	16,191,282	Table 2, PG. 2, Line 2
5	HLF Classes	2,480,220	Table 2, PG. 2, Line 3
6	LLF Classes	16,211,416	Table 2, PG. 2, Line 4
7			
8	Current recovery rate per therm		
9	Residential heat & non heat	\$ 0.8271	Table 2, PG. 1, Line 7
10	HLF classes	\$ 0.7254	Table 2, PG. 1, Line 8
11	LLF classes	\$ 0.8424	Table 2, PG. 1, Line 9
12			
13	Total	\$ (28,847,459)	(LN 4 * Ln 9) + (LN 5 * LN 10) + (LN 6 * LN 11)
14			
15	Forecasted recovered costs at current rates 11/01/2018 - 04/30/2019	\$ (28,847,459)	LN 13
16	Actual Recovered Costs	\$ -	
17	Estimated total recovered costs 11/01/18 - 04/30/19	\$ (28,847,459)	LN 15 + LN 16
18			
19	Revised projected direct gas costs 11/01/18 - 04/30/19[1]	\$ 25,280,030	Table 2, PG. 2, Line 64, Winter
20	Revised projected indirect gas costs 11/01/18 - 04/30/19 [2]	\$ 1,059,600	Table 2, PG. 4, Line 96, Winter
21	Reconciliation Adjustment	\$ 507,543	LN 42
22			
23	Projected April 30, 2019 End of Winter Period Balance	\$ (704,063)	LN 1 + Ln 17 + LN 19 + LN 20 + LN 21
24			
25	April 30, 2019 Target Balance[3]	\$ (2,793,587)	Table 2, PG. 3, Line 104
26			
27	Variance from Projected Target Balance	\$ 2,089,524	LN 23 - LN 25
28			
29	Total Projected Gas Costs	\$ 26,339,630	LN 19 + LN 20 +LN 21
30			
31			
32	Under/(over) collection as percent of total gas costs	7.93%	LN 27 / LN 29
33			
34	Calculation of Reconciliation Adjustment		
35	Projected November 1, 2018 Balance	\$ 670,784	Schedule 15 - Intial COG Filing[4]
36			
37	Actual November 1, 2018 Balance	\$ 1,296,222	LN 1
38			
39	Reconciliation Difference	\$ 625,438	LN 37 - LN 35
40			
41	Reconciliation % Assgined to Winter Period	81.15%	Schedule 15 - Intial COG Filing, Schedule 1
42			
43	Additional Winter Period Costs to Recover	\$ 507,543	LN 39 * LN 41

NOTES

[1] Reflects futures prices as of November 15, 2018

[2] Includes: Working Capital Allowance, Bad Debt Allowance, Production and Storage Capacity.

[3] Adjusted to reflect actual account balance as of November 1, 2018

[4] Reflects sum of Demand and Commodity (Schedule 1), Working Capital (Attachment A) and Bad Debt (Attachment B)

**Northern Utilities
 NEW HAMPSHIRE (Over) / Undercollection Analysis, Balances and Interest Calculation**

	Oct-18	Winter						Summer						
		(Forecast) Nov-18	(Forecast) Dec-18	(Forecast) Jan-19	(Forecast) Feb-19	(Forecast) Mar-19	(Forecast) Apr-19	(Forecast) May-19	(Forecast) Jun-19	(Forecast) Jul-19	(Forecast) Aug-19	(Forecast) Sep-19	(Forecast) Oct-19	
Sales Revenues														
Volumes														
Residential Heat & Non Heat		1,964,278	3,075,676	3,722,352	3,139,733	2,774,255	1,514,988	766,943	521,912	436,849	441,905	461,965	921,830	
Sales HLF Classes		300,893	471,139	570,199	480,952	424,967	232,070	411,201	279,826	234,219	236,930	247,685	494,245	
Sales LLF Classes		1,966,721	3,079,500	3,726,981	3,143,637	2,777,705	1,516,872	571,448	388,876	325,496	329,262	344,210	686,854	
Total		4,231,892	6,626,315	8,019,532	6,764,323	5,976,928	3,263,930	1,749,592	1,190,614	996,564	1,008,097	1,053,861	2,102,929	
Rates														
Residential Heat & Non Heat CGA		\$0.8271	\$0.8271	\$0.8271	\$0.8271	\$0.8271	\$0.8271	\$0.3670	\$0.3670	\$0.3670	\$0.3670	\$0.3670	\$0.3670	
Sales HLF Classes CGA		\$0.7254	\$0.7254	\$0.7254	\$0.7254	\$0.7254	\$0.7254	\$0.3269	\$0.3269	\$0.3269	\$0.3269	\$0.3269	\$0.3269	
Sales LLF Classes CGA		\$0.8424	\$0.8424	\$0.8424	\$0.8424	\$0.8424	\$0.8424	\$0.3958	\$0.3958	\$0.3958	\$0.3958	\$0.3958	\$0.3958	
Revenues														
Residential Heat & Non Heat		\$ (1,624,654)	\$ (2,543,891)	\$ (3,078,757)	\$ (2,596,873)	\$ (2,294,587)	\$ (1,253,047)	\$ (281,468)	\$ (191,542)	\$ (160,324)	\$ (162,179)	\$ (169,541)	\$ (338,312)	
Sales HLF Classes		\$ (218,268)	\$ (341,765)	\$ (413,622)	\$ (348,883)	\$ (308,271)	\$ (168,343)	\$ (134,422)	\$ (91,475)	\$ (76,566)	\$ (77,452)	\$ (80,968)	\$ (161,569)	
Sales LLF Classes		\$ (1,656,765)	\$ (2,594,171)	\$ (3,139,609)	\$ (2,648,200)	\$ (2,339,939)	\$ (1,277,813)	\$ (226,179)	\$ (153,917)	\$ (128,831)	\$ (130,322)	\$ (136,238)	\$ (271,857)	
Total Sales		\$ (3,499,688)	\$ (5,479,827)	\$ (6,631,988)	\$ (5,593,956)	\$ (4,942,797)	\$ (2,699,203)	\$ (642,069)	\$ (436,934)	\$ (365,721)	\$ (369,953)	\$ (386,748)	\$ (771,737)	
Gas Costs and Credits														
Demand Costs (net of Capacity Assignment)														
Pipeline		\$ 172,482	\$ 172,482	\$ 172,482	\$ 172,482	\$ 172,482	\$ 172,482	\$ 172,482	\$ 172,482	\$ 172,482	\$ 172,482	\$ 172,482	\$ 172,482	
Storage		\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	
On-system Peaking		\$ 112,545	\$ 159,501	\$ 159,501	\$ 159,501	\$ 159,501	\$ 87,989	\$ 87,989	\$ 41,033	\$ 41,033	\$ 41,033	\$ 41,033	\$ 41,033	
Off-System Peaking		\$ 730,049	\$ 730,049	\$ 730,049	\$ 730,049	\$ 730,049	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Demand Costs		\$ 1,746,561	\$ 1,793,517	\$ 1,793,517	\$ 1,793,517	\$ 1,793,517	\$ 991,956	\$ 991,956	\$ 945,000	\$ 945,000	\$ 945,000	\$ 945,000	\$ 945,000	
Asset Management and Capacity Release														
NUI AMA Revenue		\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)	
NUI Capacity Release		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
NUI AMA Rev & Cap. Release Subtotal		\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	
NH AMA Revenue		\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	
NH Capacity Release		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
NH Total Asset Management and Capacity Release		\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	
Re-entry Rate & Conversion Rate Revenue		\$ (1,666.67)	\$ (1,666.67)	\$ (1,666.67)	\$ (1,666.67)	\$ (1,666.67)	\$ (1,666.67)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Net Demand Costs		\$ 1,484,388	\$ 1,531,344	\$ 1,531,344	\$ 1,531,344	\$ 1,531,344	\$ 729,783	\$ 731,449	\$ 684,493	\$ 684,493	\$ 684,493	\$ 684,493	\$ 684,493	
NUI Commodity Costs														
NUI Total Pipeline Volumes		570,060	556,881	406,460	367,544	541,084	912,309	494,604	334,214	288,763	290,326	302,280	572,717	
Pipeline Costs Modeled in Sendout™		\$ 1,713,896	\$ 1,952,159	\$ 1,910,102	\$ 1,710,242	\$ 1,814,531	\$ 2,281,006	\$ 1,202,907	\$ 821,440	\$ 713,823	\$ 712,207	\$ 706,238	\$ 1,357,630	
NYMEX Price Used for Forecast		\$ 2,890	\$ 2,979	\$ 3,066	\$ 3,030	\$ 2,926	\$ 2,635	\$ 2,603	\$ 2,630	\$ 2,667	\$ 2,670	\$ 2,653	\$ 2,669	
NYMEX Price Used for Update		\$ 3,185	\$ 4,038	\$ 4,043	\$ 3,897	\$ 3,596	\$ 2,794	\$ 2,603	\$ 2,630	\$ 2,667	\$ 2,670	\$ 2,653	\$ 2,669	
Increase/(Decrease) NYMEX Price		\$ 0.30	\$ 1.06	\$ 0.98	\$ 0.87	\$ 0.67	\$ 0.16	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Increase/(Decrease) in Pipeline Costs		\$ 168,168	\$ 589,737	\$ 397,111	\$ 318,660	\$ 362,526	\$ 145,057	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Updated Pipeline Costs		\$ 1,882,063	\$ 2,541,895	\$ 2,307,213	\$ 2,028,902	\$ 2,177,057	\$ 2,426,063	\$ 1,202,907	\$ 821,440	\$ 713,823	\$ 712,207	\$ 706,238	\$ 1,357,630	
New Hampshire Allocated Percentage		39.44%	39.81%	40.15%	39.77%	39.26%	36.25%	35.89%	36.05%	34.96%	35.18%	34.48%	36.96%	
NH Updated Pipeline Costs		\$ 742,246	\$ 1,011,956	\$ 926,339	\$ 806,889	\$ 854,756	\$ 879,442	\$ 431,688	\$ 296,109	\$ 249,562	\$ 250,525	\$ 243,514	\$ 501,818	
Peaking Volumes		227,145	510,384	743,233	477,763	284,994	2,145	2,170	2,100	2,170	2,170	2,100	2,170	
Peaking Costs Modeled in Sendout		\$ 1,835,577	\$ 4,526,660	\$ 5,420,325	\$ 4,161,751	\$ 2,045,340	\$ 15,195	\$ 15,129	\$ 14,540	\$ 14,949	\$ 14,918	\$ 14,342	\$ 14,778	
Increase/(Decrease) NYMEX Price		\$ 0.30	\$ 1.06	\$ 0.98	\$ 0.87	\$ 0.67	\$ 0.16	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Increase in Peaking Costs		\$ 67,008	\$ 540,497	\$ 726,139	\$ 414,220	\$ 190,946	\$ 341	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Updated Peaking Costs		\$ 1,902,585	\$ 5,067,157	\$ 6,146,464	\$ 4,575,972	\$ 2,236,286	\$ 15,536	\$ 15,129	\$ 14,540	\$ 14,949	\$ 14,918	\$ 14,342	\$ 14,778	
New Hampshire Allocated Percentage		39.44%	39.81%	40.15%	39.77%	39.26%	36.25%	35.89%	36.05%	34.96%	35.18%	34.48%	36.96%	
NH Updated Peaking Costs		\$ 750,339	\$ 2,017,291	\$ 2,467,787	\$ 1,819,853	\$ 878,010	\$ 5,632	\$ 5,429	\$ 5,241	\$ 5,226	\$ 5,248	\$ 4,945	\$ 5,462	
NH Commodity Costs														
Pipeline		\$ 742,246	\$ 1,011,956	\$ 926,339	\$ 806,889	\$ 854,756	\$ 879,442	\$ 431,688	\$ 296,109	\$ 249,562	\$ 250,525	\$ 243,514	\$ 501,818	
Storage		\$ 321,985	\$ 683,543	\$ 983,407	\$ 981,943	\$ 806,050	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Peaking		\$ 750,339	\$ 2,017,291	\$ 2,467,787	\$ 1,819,853	\$ 878,010	\$ 5,632	\$ 5,429	\$ 5,241	\$ 5,226	\$ 5,248	\$ 4,945	\$ 5,462	
Total Commodity Costs		\$ 1,814,570	\$ 3,712,790	\$ 4,377,534	\$ 3,608,685	\$ 2,538,816	\$ 885,074	\$ 437,117	\$ 301,351	\$ 254,789	\$ 255,773	\$ 248,459	\$ 507,280	
Inventory Finance Charge		\$ 339	\$ 584	\$ 729	\$ 609	\$ 517	\$ 239	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Anticipated Direct Cost of Gas		\$ 3,299,297	\$ 5,244,718	\$ 5,909,607	\$ 5,140,637	\$ 4,070,676	\$ 1,615,095	\$ 1,168,567	\$ 985,844	\$ 939,282	\$ 940,266	\$ 932,952	\$ 1,191,773	

**Northern Utilities
 NEW HAMPSHIRE (Over) / Undercollection**

Sales Revenues				Prior	
		Winter	Summer	Period	Total
1	Volumes				
2	Residential Heat & Non Heat	16,191,282	3,551,405		19,742,687
3	Sales HLF Classes	2,480,220	1,904,106		4,384,327
4	Sales LLF Classes	16,211,416	2,646,145		18,857,561
5	Total	34,882,919	8,101,656		85,969,151
6	Rates				
7	Residential Heat & Non Heat CGA				
8	Sales HLF Classes CGA				
9	Sales LLF Classes CGA				
10	Revenues				
11	Residential Heat & Non Heat	\$ (13,391,810)	\$ (1,303,366)		\$ (14,695,175)
12	Sales HLF Classes	\$ (1,799,152)	\$ (622,452)		\$ (2,421,604)
13	Sales LLF Classes	\$ (13,656,497)	\$ (1,047,344)		\$ (14,703,841)
14	Total Sales	\$ (28,847,459)	\$ (2,973,162)		\$ (31,820,621)
15					
16					
17	Gas Costs and Credits				
18		Winter	Summer	Prior	Total
19	Demand Costs (net of Capacity Assignment)				
20	Pipeline	\$ 1,034,894	\$ 1,034,894		\$ 2,069,788
21	Storage	\$ 4,388,908	\$ 4,388,908		\$ 8,777,817
22	On-system Peaking	\$ 838,540	\$ 293,155		\$ 1,131,695
23	Off-System Peaking	\$ 3,650,243	\$ -		\$ 3,650,243
24	Total Demand Costs	\$ 9,912,586	\$ 5,716,958		\$ 15,629,544
25					
26	Asset Management and Capacity Release				
27	NUI AMA Revenue				\$ (7,021,600)
28	NUI Capacity Release				\$ -
29	NUI AMA Rev & Cap. Release Subtotal				\$ -
30	NH AMA Revenue				\$ (3,126,083)
31	NH Capacity Release				\$ -
32	NH Total Asset Management and Capacity Release	\$ (1,563,042)	\$ 1,563,042	\$ -	\$ (3,126,083)
33					
34	Re-entry Rate & Conversion Rate Revenue	\$ (10,000)	\$ -		\$ (10,000)
35					
36	Net Demand Costs	\$ 8,339,544	\$ 4,153,916		\$ 12,493,460
37					
38	NUI Commodity Costs				
39	NUI Total Pipeline Volumes				5,637,242
40	Pipeline Costs Modeled in Sendout™				\$ 16,896,179
41	NYMEX Price Used for Forecast				
42	NYMEX Price Used for Update				
43	Increase/(Decrease) NYMEX Price				
44	Increase/(Decrease) in Pipeline Costs	\$ 1,981,259			
45	Updated Pipeline Costs				
46	New Hampshire Allocated Percentage				
47	NH Updated Pipeline Costs	\$ 5,221,629			\$ 7,194,846
48					
49	Peaking Volumes				
50	Peaking Costs Modeled in Sendout				
51	Increase/(Decrease) NYMEX Price				
52	Increase in Peaking Costs	\$ 1,939,151			
53	Updated Peaking Costs				
54	New Hampshire Allocated Percentage				
55	NH Updated Peaking Costs	\$ 7,938,912			
56					
57	NH Commodity Costs				
58	Pipeline				\$ 7,194,846
59	Storage				\$ 3,776,928
60	Peaking				\$ 7,970,464
61	Total Commodity Costs	\$ 16,937,469	\$ 2,004,769		\$ 18,942,237
62	Inventory Finance Charge				\$ 3,017
63					
64	Total Anticipated Direct Cost of Gas	\$ 25,280,030	\$ 6,158,685		\$ 31,438,715

**Northern Utilities
 NEW HAMPSHIRE (Over) / Undercollection Analysis, Balances and Interest Calculation**

		Winter						Summer					
	Oct-18	(Forecast) Nov-18	(Forecast) Dec-18	(Forecast) Jan-19	(Forecast) Feb-19	(Forecast) Mar-19	(Forecast) Apr-19	(Forecast) May-19	(Forecast) Jun-19	(Forecast) Jul-19	(Forecast) Aug-19	(Forecast) Sep-19	(Forecast) Oct-19
65													
66													
67													
68	Working Capital												
69	Total Anticipated Direct Cost of Gas	\$ 3,299,297	\$ 5,244,718	\$ 5,909,607	\$ 5,140,637	\$ 4,070,676	\$ 1,615,095	\$ 1,168,567	\$ 985,844	\$ 939,282	\$ 940,266	\$ 932,952	\$ 1,191,773
70	Working Capital Percentage	0.2742%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%
71	Working Capital Allowance	\$ 9,048	\$ 14,383	\$ 16,207	\$ 14,098	\$ 11,164	\$ 4,429	\$ 3,205	\$ 2,704	\$ 2,576	\$ 2,579	\$ 2,559	\$ 3,268
72	Beginning Period Working Capital Balance	\$ 9,505	\$ 18,615	\$ 33,111	\$ 49,499	\$ 63,844	\$ 75,311	\$ 80,080	\$ 83,642	\$ 86,717	\$ 89,678	\$ 92,655	\$ 95,625
73	End of Period Working Capital Allowance	\$ 18,554	\$ 32,998	\$ 49,318	\$ 63,597	\$ 75,008	\$ 79,741	\$ 83,285	\$ 86,346	\$ 89,293	\$ 92,257	\$ 95,214	\$ 98,893
74	Interest	\$ 61	\$ 113	\$ 180	\$ 247	\$ 304	\$ 339	\$ 357	\$ 372	\$ 385	\$ 398	\$ 411	\$ 426
75	End of period with Interest	\$ 9,505	\$ 18,615	\$ 33,111	\$ 49,499	\$ 63,844	\$ 75,311	\$ 80,080	\$ 83,642	\$ 86,717	\$ 89,678	\$ 92,655	\$ 99,319
76	Bad Debt												
77	Projected Bad Debt	\$ -	\$ 18,865	\$ 9,432	\$ -	\$ -	\$ -	\$ 9,432	\$ 28,297	\$ 28,297	\$ 37,729	\$ 28,297	\$ 28,297
78	Beginning Period Bad Debt Balance	\$ (5,841)	\$ 13,039	\$ 22,549	\$ 22,648	\$ 22,747	\$ 22,846	\$ 22,946	\$ 32,499	\$ 61,001	\$ 89,626	\$ 127,830	\$ 156,748
79	End of Period Bad Debt Balance	\$ 13,023	\$ 22,471	\$ 22,549	\$ 22,648	\$ 22,747	\$ 22,846	\$ 32,378	\$ 60,796	\$ 89,297	\$ 127,356	\$ 156,127	\$ 185,045
80	Interest	\$ 16	\$ 78	\$ 99	\$ 99	\$ 100	\$ 100	\$ 121	\$ 204	\$ 329	\$ 475	\$ 621	\$ 748
81	End of Period Bad Debt Balance with Interest	\$ (5,841)	\$ 13,039	\$ 22,549	\$ 22,648	\$ 22,747	\$ 22,846	\$ 32,499	\$ 61,001	\$ 89,626	\$ 127,830	\$ 156,748	\$ 185,793
82	Local Production and Storage Capacity		\$ 79,351	\$ 79,351	\$ 79,351	\$ 79,351	\$ 79,351	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
83			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
84	Miscellaneous Overhead		\$ 78,509	\$ 78,509	\$ 78,509	\$ 78,509	\$ 78,509	\$ 18,234	\$ 18,234	\$ 18,234	\$ 18,234	\$ 18,234	\$ 18,234
86	Gas Cost Other than Bad Debt and Working Capital Over/Under Collection												
87	Beginning Balance Over/Under Collection	\$ 1,292,558	\$ 1,255,589	\$ 1,183,663	\$ 623,085	\$ 329,705	\$ (384,675)	\$ (1,314,632)	\$ (774,460)	\$ (209,464)	\$ 382,709	\$ 974,217	\$ 1,544,153
88	Net Costs - Revenues	\$ (42,531)	\$ (77,250)	\$ (564,522)	\$ (295,459)	\$ (714,260)	\$ (926,248)	\$ 544,732	\$ 567,144	\$ 591,795	\$ 588,547	\$ 564,438	\$ 438,270
89	Ending Balance before Interest	\$ 1,250,027	\$ 1,178,339	\$ 619,141	\$ 327,626	\$ (384,555)	\$ (1,310,923)	\$ (769,900)	\$ (207,316)	\$ 382,331	\$ 971,256	\$ 1,538,656	\$ 1,982,423
90	Average Balance	\$ 1,271,292	\$ 1,216,964	\$ 901,402	\$ 475,355	\$ (27,425)	\$ (847,799)	\$ (1,042,266)	\$ (490,888)	\$ 86,433	\$ 676,982	\$ 1,256,437	\$ 1,763,288
91	Interest Rate	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%
92	Interest Expense	\$ 5,562	\$ 5,324	\$ 3,944	\$ 2,080	\$ (120)	\$ (3,709)	\$ (4,560)	\$ (2,148)	\$ 378	\$ 2,962	\$ 5,497	\$ 7,714
93	Ending Balance Incl Interest Expense	\$ 1,292,558	\$ 1,255,589	\$ 1,183,663	\$ 623,085	\$ 329,705	\$ (384,675)	\$ (1,314,632)	\$ (774,460)	\$ (209,464)	\$ 382,709	\$ 974,217	\$ 1,544,153
94	Total Over/Under Collection Ending Balance	\$ 1,296,222	\$ 1,287,243	\$ 1,239,323	\$ 695,231	\$ 416,296	\$ (286,517)	\$ (1,211,606)	\$ (658,319)	\$ (61,746)	\$ 562,014	\$ 1,194,703	\$ 2,275,249
95													
96	Total Indirect Cost of Gas	\$ 1,296,222	\$ 191,411	\$ 187,190	\$ 178,289	\$ 174,384	\$ 169,307	\$ 159,019	\$ 26,789	\$ 47,663	\$ 50,199	\$ 62,376	\$ 58,687
97													
98	Total Cost of Gas	\$ 1,296,222	\$ 3,490,708	\$ 5,431,908	\$ 6,087,896	\$ 5,315,021	\$ 4,239,983	\$ 1,774,114	\$ 1,195,356	\$ 1,033,507	\$ 989,481	\$ 1,002,643	\$ 988,571
99													
100	Total Interest	\$ -	\$ 5,639	\$ 5,515	\$ 4,223	\$ 2,426	\$ 283	\$ (3,270)	\$ (4,082)	\$ (1,572)	\$ 1,092	\$ 3,834	\$ 8,888

Variance due to changes in NYMEX	
April 30, 2019 Target Balance	\$ (2,793,587)
April 30, 2018 Projected Balance	\$ (1,211,606)
Variance	\$ 1,581,981

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection

	Winter	Summer	Prior Period	Total
Working Capital				
Total Anticipated Direct Cost of Gas				\$ 31,438,715
Working Capital Percentage				
Working Capital Allowance	\$ 69,330	\$ 16,890	\$ 9,505	\$ 95,725
Beginning Period Working Capital Balance				
End of Period Working Capital Allowance				
Interest	\$ 1,245	\$ 2,349		\$ 3,594
End of period with Interest				
Bad Debt				
Projected Bad Debt	\$ 28,297	\$ 160,349	\$ (5,841)	\$ 182,805
Beginning Period Bad Debt Balance				
End of Period Bad Debt Balance				
Interest	\$ 491	\$ 2,497		\$ 2,988
End of Period Bad Debt Balance with Interest				
Local Production and Storage Capacity				\$ 476,106
				\$ -
Miscellaneous Overhead	\$ 471,052	\$ 109,403		\$ 580,455
Gas Cost Other than Bad Debt and Working Capital				
Beginning Balance Over/Under Collection				\$ 4,902,448
Net Costs - Revenues				\$ 674,655
Ending Balance before Interest				\$ 5,577,103
Average Balance				\$ 5,239,775
Interest Rate				
Interest Expense				\$ 22,924
Ending Balance Incl Interest Expense				
Total Over/Under Collection Ending Balance				
Total Indirect Cost of Gas	\$ 1,059,600	\$ 301,332	\$ 1,296,222	\$ 2,657,155
Total Cost of Gas	\$ 26,339,630	\$ 6,460,017	\$ 1,296,222	\$ 34,095,869
Total Interest	\$ 14,816	\$ 14,690		\$ 29,506

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Initial Projected End of Period Balance ("Target Balance")

Northern Utilities
 NEW HAMPSHIRE (Over) / Undercollection Analysis, Balances and Interest Calculation

Sales Revenues		Winter						Summer				
		Oct-18	(Forecast) Nov-18	(Forecast) Dec-18	(Forecast) Jan-19	(Forecast) Feb-19	(Forecast) Mar-19	(Forecast) Apr-19	(Forecast) May-19	(Forecast) Jun-19	(Forecast) Jul-19	(Forecast) Aug-19
1	Volumes											
2	Residential Heat & Non Heat		1,964,278	3,075,676	3,722,352	3,139,733	2,774,255	1,514,988	766,943	521,912	436,849	441,905
3	Sales HLF Classes		300,893	471,139	570,199	480,952	424,967	232,070	411,201	279,826	234,219	236,930
4	Sales LLF Classes		1,966,721	3,079,500	3,726,981	3,143,637	2,777,705	1,516,872	571,448	388,876	325,496	329,262
5	Total		4,231,892	6,626,315	8,019,532	6,764,323	5,976,928	3,263,930	1,749,592	1,190,614	996,564	1,008,097
6	Rates											
7	Residential Heat & Non Heat CGA		\$0.8271	\$0.8271	\$0.8271	\$0.8271	\$0.8271	\$0.8271	\$0.3670	\$0.3670	\$0.3670	\$0.3670
8	Sales HLF Classes CGA		\$0.7254	\$0.7254	\$0.7254	\$0.7254	\$0.7254	\$0.7254	\$0.3269	\$0.3269	\$0.3269	\$0.3269
9	Sales LLF Classes CGA		\$0.8424	\$0.8424	\$0.8424	\$0.8424	\$0.8424	\$0.8424	\$0.3958	\$0.3958	\$0.3958	\$0.3958
10	Revenues											
11	Residential Heat & Non Heat		\$ (1,624,654)	\$ (2,543,891)	\$ (3,078,757)	\$ (2,596,873)	\$ (2,294,587)	\$ (1,253,047)	\$ (281,468)	\$ (191,542)	\$ (160,324)	\$ (162,179)
12	Sales HLF Classes		\$ (218,268)	\$ (341,765)	\$ (413,622)	\$ (348,883)	\$ (308,271)	\$ (168,343)	\$ (134,422)	\$ (91,475)	\$ (76,566)	\$ (77,452)
13	Sales LLF Classes		\$ (1,656,765)	\$ (2,594,171)	\$ (3,139,609)	\$ (2,648,200)	\$ (2,339,939)	\$ (1,277,813)	\$ (226,179)	\$ (153,917)	\$ (128,831)	\$ (130,322)
14	Total Sales		\$ (3,499,688)	\$ (5,479,827)	\$ (6,631,988)	\$ (5,593,956)	\$ (4,942,797)	\$ (2,699,203)	\$ (642,069)	\$ (436,934)	\$ (365,721)	\$ (369,953)
15												
16												
17	Gas Costs and Credits											
18												
19	Demand Costs (net of Capacity Assignment)											
20	Pipeline		\$ 172,482	\$ 172,482	\$ 172,482	\$ 172,482	\$ 172,482	\$ 172,482	\$ 172,482	\$ 172,482	\$ 172,482	\$ 172,482
21	Storage		\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485
22	On-system Peaking		\$ 112,545	\$ 159,501	\$ 159,501	\$ 159,501	\$ 159,501	\$ 87,989	\$ 87,989	\$ 41,033	\$ 41,033	\$ 41,033
23	Off-System Peaking		\$ 730,049	\$ 730,049	\$ 730,049	\$ 730,049	\$ 730,049	\$ -	\$ -	\$ -	\$ -	\$ -
24	Total Demand Costs		\$ 1,746,561	\$ 1,793,517	\$ 1,793,517	\$ 1,793,517	\$ 1,793,517	\$ 991,956	\$ 991,956	\$ 945,000	\$ 945,000	\$ 945,000
25												
26	Asset Management and Capacity Release											
27	NUI AMA Revenue		\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)	\$ (585,133)
28	NUI Capacity Release		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
29	NUI AMA Rev & Cap. Release Subtotal		\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)
30	NH AMA Revenue		\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)
31	NH Capacity Release		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
32	NH Total Asset Management and Capacity Release		\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)	\$ (260,507)
33												
34	Re-entry Rate & Conversion Rate Revenue		\$ (1,666.67)	\$ (1,666.67)	\$ (1,666.67)	\$ (1,666.67)	\$ (1,666.67)	\$ (1,666.67)	\$ -	\$ -	\$ -	\$ -
35												
36	Net Demand Costs		\$ 1,484,388	\$ 1,531,344	\$ 1,531,344	\$ 1,531,344	\$ 1,531,344	\$ 729,783	\$ 731,449	\$ 684,493	\$ 684,493	\$ 684,493
37												
38	NUI Commodity Costs											
39	NUI Total Pipeline Volumes		570,060	556,881	406,460	367,544	541,084	912,309	494,604	334,214	288,763	290,326
40	Pipeline Costs Modeled in Sendout™		\$ 1,713,896	\$ 1,952,159	\$ 1,910,102	\$ 1,710,242	\$ 1,814,531	\$ 2,281,006	\$ 1,202,907	\$ 821,440	\$ 713,823	\$ 712,207
41	NYMEX Price Used for Forecast		\$ 2,890	\$ 2,979	\$ 3,066	\$ 3,030	\$ 2,926	\$ 2,635	\$ 2,603	\$ 2,634	\$ 2,667	\$ 2,671
42	NYMEX Price Used for Update		\$ 2,890	\$ 2,979	\$ 3,066	\$ 3,030	\$ 2,926	\$ 2,635	\$ 2,603	\$ 2,634	\$ 2,667	\$ 2,671
43	Increase/(Decrease) NYMEX Price		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
44	Increase/(Decrease) in Pipeline Costs		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
45	Updated Pipeline Costs		\$ 1,713,896	\$ 1,952,159	\$ 1,910,102	\$ 1,710,242	\$ 1,814,531	\$ 2,281,006	\$ 1,202,907	\$ 821,440	\$ 713,823	\$ 712,207
46	New Hampshire Allocated Percentage		39.44%	39.81%	40.15%	39.77%	39.26%	36.25%	35.89%	36.05%	34.96%	35.18%
47	NH Updated Pipeline Costs		\$ 675,924	\$ 777,176	\$ 766,900	\$ 680,159	\$ 712,421	\$ 826,859	\$ 431,688	\$ 296,109	\$ 249,562	\$ 250,525
48												
49	Peaking Volumes		227,145	510,384	743,233	477,763	284,994	2,145	2,170	2,100	2,170	2,170
50	Peaking Costs Modeled in Sendout		\$ 1,835,577	\$ 4,526,660	\$ 5,420,325	\$ 4,161,751	\$ 2,045,340	\$ 15,195	\$ 15,129	\$ 14,540	\$ 14,949	\$ 14,918
51	Increase Due to NYMEX		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
52	Increase in Peaking Costs		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
53	Updated Peaking Costs		\$ 1,835,577	\$ 4,526,660	\$ 5,420,325	\$ 4,161,751	\$ 2,045,340	\$ 15,195	\$ 15,129	\$ 14,540	\$ 14,949	\$ 14,918
54	New Hampshire Allocated Percentage		39.44%	39.81%	40.15%	39.77%	39.26%	36.25%	35.89%	36.05%	34.96%	35.18%
55	NH Updated Peaking Costs		\$ 723,913	\$ 1,802,113	\$ 2,176,245	\$ 1,655,118	\$ 803,041	\$ 5,508	\$ 5,429	\$ 5,241	\$ 5,226	\$ 5,248
56												
57	NH Commodity Costs											
58	Pipeline		\$ 675,924	\$ 777,176	\$ 766,900	\$ 680,159	\$ 712,421	\$ 826,859	\$ 431,688	\$ 296,109	\$ 249,562	\$ 250,525
59	Storage		\$ 321,985	\$ 683,543	\$ 983,407	\$ 981,943	\$ 806,050	\$ -	\$ -	\$ -	\$ -	\$ -
60	Peaking		\$ 723,913	\$ 1,802,113	\$ 2,176,245	\$ 1,655,118	\$ 803,041	\$ 5,508	\$ 5,429	\$ 5,241	\$ 5,226	\$ 5,248
61	Total Commodity Costs		\$ 1,721,822	\$ 3,262,831	\$ 3,926,553	\$ 3,317,220	\$ 2,321,512	\$ 832,367	\$ 437,117	\$ 301,351	\$ 254,789	\$ 255,773

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection

Sales Revenues		(Forecast)	(Forecast)			Prior	
Volumes		Sep-19	Oct-19	Winter	Summer	Period	Total
1	Residential Heat & Non Heat	461,965	921,830	16,191,282	3,551,405		19,742,687
2	Sales HLF Classes	247,685	494,245	2,480,220	2,590,528		4,384,327
3	Sales LLF Classes	344,210	686,854	16,211,416	14,816,144		18,857,561
4	Total	1,053,861	2,102,929	34,882,919	20,958,077		77,867,494
5	Rates						
6	Residential Heat & Non Heat CGA	\$0.3670	\$0.3670				
7	Sales HLF Classes CGA	\$0.3269	\$0.3269				
8	Sales LLF Classes CGA	\$0.3958	\$0.3958				
9	Revenues						
10	Residential Heat & Non Heat	\$ (169,541)	\$ (338,312)				\$ (14,695,175)
11	Sales HLF Classes	\$ (80,968)	\$ (161,569)				\$ (2,421,604)
12	Sales LLF Classes	\$ (136,238)	\$ (271,857)				\$ (14,703,841)
13	Total Sales	\$ (386,748)	\$ (771,737)	\$ (28,847,459)	\$ (2,973,162)		\$ (31,820,621)
14							
15							
16							
17	Gas Costs and Credits	(Forecast)	(Forecast)				Total
18		Sep-19	Oct-19				
19	Demand Costs (net of Capacity Assignment)						
20	Pipeline	\$ 172,482	\$ 172,482	\$ 1,034,894	\$ 1,034,894		\$ 2,069,788
21	Storage	\$ 731,485	\$ 731,485	\$ 4,388,908	\$ 4,388,908		\$ 8,777,817
22	On-system Peaking	\$ 41,033	\$ 41,033	\$ 838,540	\$ 293,155		\$ 1,131,695
23	Off-System Peaking	\$ -	\$ -	\$ 3,650,243	\$ -		\$ 3,650,243
24	Total Demand Costs	\$ 945,000	\$ 945,000	\$ 9,912,586	\$ 5,716,958		\$ 15,629,544
25							
26	Asset Management and Capacity Release						
27	NUI AMA Revenue	\$ (585,133)	\$ (585,133)				\$ (7,021,600)
28	NUI Capacity Release	\$ -	\$ -				\$ -
29	NUI AMA Rev & Cap. Release Subtotal						\$ -
30	NH AMA Revenue	\$ (260,507)	\$ (260,507)				\$ (3,126,083)
31	NH Capacity Release	\$ -	\$ -				\$ -
32	NH Total Asset Management and Capacity Release	\$ (260,507)	\$ (260,507)	\$ (1,563,042)	\$ -	\$ (1,563,042)	\$ (3,126,083)
33							
34	Re-entry Rate & Conversion Rate Revenue	\$ -	\$ -	\$ (10,000)	\$ -		\$ (10,000)
35							
36	Net Demand Costs	\$ 684,493	\$ 684,493	\$ 8,339,544	\$ 4,153,916		\$ 12,493,460
37							
38	NUI Commodity Costs						
39	NUI Total Pipeline Volumes	302,280	572,717				5,637,242
40	Pipeline Costs Modeled in Sendout™	\$ 706,238	\$ 1,357,630				\$ 16,896,179
41	NYMEX Price Used for Forecast	\$ 2.6530	\$ 2.6690				
42	NYMEX Price Used for Update	\$ 2.6530	\$ 2.6690				
43	Increase/(Decrease) NYMEX Price	\$ -	\$ -				
44	Increase/(Decrease) in Pipeline Costs	\$ -	\$ -				
45	Updated Pipeline Costs	\$ 706,238	\$ 1,357,630				
46	New Hampshire Allocated Percentage	34.48%	36.96%				
47	NH Updated Pipeline Costs	\$ 243,514	\$ 501,818				\$ 6,412,656
48							
49	Peaking Volumes	2,100	2,170				
50	Peaking Costs Modeled in Sendout	\$ 14,342	\$ 14,778				
51	Increase Due to NYMEX	\$ -	\$ -				
52	Increase in Peaking Costs	\$ -	\$ -				
53	Updated Peaking Costs	\$ 14,342	\$ 14,778				
54	New Hampshire Allocated Percentage	34.48%	36.96%				
55	NH Updated Peaking Costs	\$ 4,945	\$ 5,462				
56							
57	NH Commodity Costs						
58	Pipeline	\$ 243,514	\$ 501,818				\$ 6,412,656
59	Storage	\$ -	\$ -				\$ 3,776,928
60	Peaking	\$ 4,945	\$ 5,462				\$ 7,197,490
61	Total Commodity Costs	\$ 248,459	\$ 507,280	\$ 15,382,305	\$ 2,004,769		\$ 17,387,074

Initial Projected End of Period Balance ("Target Balance")

Northern Utilities

NEW HAMPSHIRE (Over) / Undercollection Analysis, Balances and Interest Calculation

62	Inventory Finance Charge		\$ 339	\$ 584	\$ 729	\$ 609	\$ 517	\$ 239	\$ -	\$ -	\$ -	\$ -
63												
64	Total Anticipated Direct Cost of Gas		\$ 3,206,548	\$ 4,794,759	\$ 5,458,625	\$ 4,849,172	\$ 3,853,372	\$ 1,562,389	\$ 1,168,567	\$ 985,844	\$ 939,282	\$ 940,266
65												
66			Winter						Summer			
67		Oct-18	(Forecast) Nov-18	(Forecast) Dec-18	(Forecast) Jan-19	(Forecast) Feb-19	(Forecast) Mar-19	(Forecast) Apr-19	(Forecast) May-19	(Forecast) Jun-19	(Forecast) Jul-19	(Forecast) Aug-19
68	Working Capital											
69	Total Anticipated Direct Cost of Gas		\$ 3,206,548	\$ 4,794,759	\$ 5,458,625	\$ 4,849,172	\$ 3,853,372	\$ 1,562,389	\$ 1,168,567	\$ 985,844	\$ 939,282	\$ 940,266
70	Working Capital Percentage		0.2742%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%
71	Working Capital Allowance		\$ 8,794	\$ 13,149	\$ 14,970	\$ 13,299	\$ 10,568	\$ 4,285	\$ 3,205	\$ 2,704	\$ 2,576	\$ 2,579
72	Beginning Period Working Capital Balance		\$ 9,505	\$ 18,357	\$ 31,610	\$ 46,743	\$ 60,265	\$ 71,105	\$ 75,695	\$ 79,222	\$ 82,262	\$ 85,186
73	End of Period Working Capital Allowance		\$ 18,299	\$ 31,507	\$ 46,581	\$ 60,042	\$ 70,832	\$ 75,390	\$ 78,900	\$ 81,926	\$ 84,838	\$ 87,764
74	Interest		\$ 58	\$ 104	\$ 163	\$ 222	\$ 273	\$ 305	\$ 322	\$ 336	\$ 348	\$ 360
75	End of period with Interest	\$ 9,505	\$ 18,357	\$ 31,610	\$ 46,743	\$ 60,265	\$ 71,105	\$ 75,695	\$ 79,222	\$ 82,262	\$ 85,186	\$ 88,125
76	Bad Debt											
77	Projected Bad Debt	\$ -	\$ 18,865	\$ 9,432	\$ -	\$ -	\$ -	\$ -	\$ 9,432	\$ 28,297	\$ 28,297	\$ 37,729
78	Beginning Period Bad Debt Balance		\$ (5,841)	\$ 13,038	\$ 22,544	\$ 22,638	\$ 22,733	\$ 22,827	\$ 22,923	\$ 32,470	\$ 60,961	\$ 89,571
79	End of Period Bad Debt Balance		\$ 13,023	\$ 22,471	\$ 22,544	\$ 22,638	\$ 22,733	\$ 22,827	\$ 32,355	\$ 60,767	\$ 89,258	\$ 127,300
80	Interest		\$ 15	\$ 74	\$ 94	\$ 94	\$ 95	\$ 95	\$ 115	\$ 194	\$ 313	\$ 452
81	End of Period Bad Debt Balance with Interest	\$ (5,841)	\$ 13,038	\$ 22,544	\$ 22,638	\$ 22,733	\$ 22,827	\$ 22,923	\$ 32,470	\$ 60,961	\$ 89,571	\$ 127,752
82	Local Production and Storage Capacity		\$ 79,351	\$ 79,351	\$ 79,351	\$ 79,351	\$ 79,351	\$ 79,351	\$ -	\$ -	\$ -	\$ -
84	Miscellaneous Overhead		\$ 78,509	\$ 78,509	\$ 78,509	\$ 78,509	\$ 78,509	\$ 78,509	\$ 18,234	\$ 18,234	\$ 18,234	\$ 18,234
86	Gas Cost Other than Bad Debt and Working Capital Over/Under Collection											
87	Beginning Balance Over/Under Collection		\$ 1,292,558	\$ 1,162,382	\$ 638,919	\$ (376,038)	\$ (965,751)	\$ (1,903,281)	\$ (2,892,205)	\$ (2,358,389)	\$ (1,799,890)	\$ (1,214,362)
88	Net Costs - Revenues		\$ (135,280)	\$ (527,208)	\$ (1,015,503)	\$ (586,924)	\$ (931,565)	\$ (978,955)	\$ 544,732	\$ 567,144	\$ 591,795	\$ 588,547
89	Ending Balance before Interest		\$ 1,157,279	\$ 635,174	\$ (376,584)	\$ (962,962)	\$ (1,897,316)	\$ (2,882,235)	\$ (2,347,473)	\$ (1,791,245)	\$ (1,208,096)	\$ (625,816)
90	Average Balance		\$ 1,224,918	\$ 898,778	\$ 131,168	\$ (669,500)	\$ (1,431,534)	\$ (2,392,758)	\$ (2,619,839)	\$ (2,074,817)	\$ (1,503,993)	\$ (920,089)
91	Interest Rate		5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
92	Interest Expense		\$ 5,104	\$ 3,745	\$ 547	\$ (2,790)	\$ (5,965)	\$ (9,970)	\$ (10,916)	\$ (8,645)	\$ (6,267)	\$ (3,834)
93	Ending Balance Incl Interest Expense	\$ 1,292,558	\$ 1,162,382	\$ 638,919	\$ (376,038)	\$ (965,751)	\$ (1,903,281)	\$ (2,892,205)	\$ (2,358,389)	\$ (1,799,890)	\$ (1,214,362)	\$ (629,649)
94	Total Over/Under Collection Ending Balance	\$ 1,296,222	\$ 1,193,778	\$ 693,074	\$ (306,656)	\$ (882,754)	\$ (1,809,348)	\$ (2,793,587)	\$ (2,246,697)	\$ (1,656,667)	\$ (1,039,606)	\$ (413,772)
95												
96	Total Indirect Cost of Gas	\$ 1,296,222	\$ 190,695	\$ 184,364	\$ 173,633	\$ 168,686	\$ 162,831	\$ 152,575	\$ 20,392	\$ 41,119	\$ 43,501	\$ 55,520
97												
98	Total Cost of Gas	\$ 1,296,222	\$ 3,397,243	\$ 4,979,124	\$ 5,632,258	\$ 5,017,858	\$ 4,016,203	\$ 1,714,964	\$ 1,188,959	\$ 1,026,963	\$ 982,783	\$ 995,787
99												
100	Total Interest	\$ -	\$ 5,177	\$ 3,923	\$ 803	\$ (2,473)	\$ (5,597)	\$ (9,570)	\$ (10,479)	\$ (8,115)	\$ (5,606)	\$ (3,022)

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection

62	Inventory Finance Charge	\$ -	\$ -				\$ 3,017
63							
64	Total Anticipated Direct Cost of Gas	\$ 932,952	\$ 1,191,773	\$ 23,724,866	\$ 6,158,685		\$ 29,883,551
65							
66		(Forecast)	(Forecast)				Total
67		Sep-19	Oct-19				
68	Working Capital						
69	Total Anticipated Direct Cost of Gas	\$ 932,952	\$ 1,191,773				\$ 29,883,551
70	Working Capital Percentage	0.27%	0.27%				
71	Working Capital Allowance	\$ 2,559	\$ 3,268	\$ 65,065	\$ 16,890	\$ 9,505	\$ 91,460
72	Beginning Period Working Capital Balance	\$ 88,125	\$ 91,056				
73	End of Period Working Capital Allowance	\$ 90,683	\$ 94,324				
74	Interest	\$ 373	\$ 386	\$ 1,125	\$ 2,125		\$ 3,250
75	End of period with Interest	\$ 91,056	\$ 94,710				
76	Bad Debt						
77	Projected Bad Debt	\$ 28,297	\$ 28,297	\$ 28,297	\$ 160,349	\$ (5,841)	\$ 182,805
78	Beginning Period Bad Debt Balance	\$ 127,752	\$ 156,640				
79	End of Period Bad Debt Balance	\$ 156,049	\$ 184,937				
80	Interest	\$ 591	\$ 712	\$ 467	\$ 2,377		\$ 2,844
81	End of Period Bad Debt Balance with Interest	\$ 156,640	\$ 185,649				
82	Local Production and Storage Capacity	\$ -	\$ -				\$ 476,106
84	Miscellaneous Overhead	\$ 18,234	\$ 18,234				\$ 580,455
86	Gas Cost Other than Bad Debt and Working Capital						
87	Beginning Balance Over/Under Collection	\$ (629,649)	\$ (66,659)				\$ (9,112,365)
88	Net Costs - Revenues	\$ 564,438	\$ 438,270				\$ (880,509)
89	Ending Balance before Interest	\$ (65,211)	\$ 371,612				\$ (9,992,874)
90	Average Balance	\$ (347,430)	\$ 152,476				\$ (9,552,619)
91	Interest Rate	5.00%	5.00%				
92	Interest Expense	\$ (1,448)	\$ 635				\$ (39,803)
93	Ending Balance Incl Interest Expense	\$ (66,659)	\$ 372,247				
94	Total Over/Under Collection Ending Balance	\$ 181,038	\$ 652,606				
95							
96	Total Indirect Cost of Gas	\$ 48,606	\$ 51,532	\$ 1,032,783	\$ 260,671	\$ 1,296,222	\$ 2,589,676
97							
98	Total Cost of Gas	\$ 981,558	\$ 1,243,306	\$ 24,757,649	\$ 6,419,356	\$ 1,296,222	\$ 32,473,227
99							
100	Total Interest	\$ (484)	\$ 1,733	\$ (7,736)	\$ (25,972)		\$ (33,708)