



NHPUC 22JAN19PM4:05

January 22, 2019

Debra Howland
Executive Director and Secretary
New Hampshire Public Utilities Commission
21 S. Fruit St., Suite 10
Concord, NH 03301-2429

Re: Northern Utilities, Inc., New Hampshire Division - Docket DG 18-143
January 2019 Monthly Cost of Gas Report

Dear Director Howland:

Pursuant to the Commission's Order No. 26,186 in Docket DG 18-143, enclosed is Northern Utilities - New Hampshire Division's ("Northern") current calculation of its projected over or under collection of gas costs for the 2018 / 2019 Winter Period.

Northern's current calculation of costs has been updated to reflect the actual November 1, 2018 balance, actual costs and revenues for November through December 2018, and NYMEX futures prices as of January 18, 2019. The updated calculations indicate that a rate change is not required at this time. Support for this decision is provided in the attached summary and tables.

If you have any questions regarding this filing, please do not hesitate to contact me or Chris Kahl at (603)773-6425.

Very truly yours,

A handwritten signature in black ink, appearing to read "George H. Simmons Jr." with a stylized flourish at the end.

George H. Simmons Jr.

Enclosures

cc: Lynn Fabrizio, Esq.
D. Maurice Kreis, Consumer Advocate

George H. Simmons
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New Hampshire Monthly Cost of Gas Report

Winter Period

January 2019 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 22, the estimated end of Winter Period balance is an over-collection of (\$2,832,826). This is higher than the target end of Winter Period balance¹ of (\$2,793,597), Line 24. The variance between the estimated and target balances is an over-collection of (\$39,239), Line 26. This over-collection represents a variance in 0.15% of total gas costs, Line 31. Therefore, no rate change is proposed at this time.

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 Target end of Winter Period balance has been updated to reflect actual costs and revenues through October 2018, as provided in the November Monthly Cost of Gas Report, filed on November 20, 2018.

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

1	Under/(Over) collection as of 10/31/18	\$ 1,296,222	Table 2, PG. 3, Line 94, October
2			
3	Forecasted firm therm sales 01/01/2019 - 04/30/2019		
4	Residential Heat & Non Heat	11,151,329	Table 2, PG. 2, Line 2
5	HLF Classes	1,708,188	Table 2, PG. 2, Line 3
6	LLF Classes	11,165,195	Table 2, PG. 2, Line 4
7			
8	Current recovery rate per therm		
9	Residential heat & non heat	\$ 0.8618	Table 2, PG. 1, Line 7
10	HLF classes	\$ 0.7601	Table 2, PG. 1, Line 8
11	LLF classes	\$ 0.8771	Table 2, PG. 1, Line 9
12			
13	Total	\$ (20,701,602)	(LN 4 * Ln 9) + (LN 5 * LN 10) + (LN 6 * LN 11)
14			
15	Forecasted recovered costs at current rates 01/01/2019 - 04/30/2019	\$ (20,701,602)	LN 13
16	Actual recovered costs at rates for 11/01/2018 - 12/31/2018	\$ (10,090,053)	
17	Estimated total recovered costs at above rates 11/01/18 - 04/30/19	\$ (30,791,654)	LN 15 + LN 16
18			
19	Revised projected direct gas costs 11/01/18 - 04/30/19[1]	\$ 25,638,443	Table 2, PG. 2, Line 64
20	Revised projected indirect gas costs 11/01/18 - 04/30/19 [2]	\$ 1,024,163	Table 2, PG. 4, Line 96
21			
22	Revised projected April 30, 2019 End of Winter Period Balance	\$ (2,832,826)	LN 1 + Ln 17 + LN 19 + LN 20
23			
24	April 30, 2019 Target Balance[3]	\$ (2,793,587)	Table 2, PG. 3, Line 103
25			
26	Variance from Projected Target Balance	\$ (39,239)	LN 24 - LN 22
27			
28	Total Projected Gas Costs	\$ 26,662,606	LN 19 + LN 20
29			
30			
31	Under/(over) collection as percent of total gas costs	-0.15%	LN 26 / LN 28

NOTES

[1] Reflects futures prices as of January 18, 2019

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

(3) Adjusted to reflect actual account balance as of October 31, 2018

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

	Oct-18	Nov-18	Dec-18	Winter				Summer						
				(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				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				570,199	480,952	424,967	232,070	411,201	279,826	234,219	236,930	247,685	494,245	
Sales LLF Classes				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				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				\$0.8618	\$0.8618	\$0.8618	\$0.8618	\$0.3670	\$0.3670	\$0.3670	\$0.3670	\$0.3670	\$0.3670	
Sales HLF Classes CGA				\$0.7601	\$0.7601	\$0.7601	\$0.7601	\$0.3269	\$0.3269	\$0.3269	\$0.3269	\$0.3269	\$0.3269	
Sales LLF Classes CGA				\$0.8771	\$0.8771	\$0.8771	\$0.8771	\$0.3958	\$0.3958	\$0.3958	\$0.3958	\$0.3958	\$0.3958	
Revenues														
Residential Heat & Non Heat				\$(3,207,923)	\$(2,705,822)	\$(2,390,853)	\$(1,305,617)	\$(281,468)	\$(191,542)	\$(160,324)	\$(162,179)	\$(169,541)	\$(338,312)	
Sales HLF Classes				\$(433,408)	\$(365,572)	\$(323,018)	\$(176,396)	\$(134,422)	\$(91,475)	\$(76,566)	\$(77,452)	\$(80,968)	\$(161,569)	
Sales LLF Classes				\$(3,268,935)	\$(2,757,284)	\$(2,436,325)	\$(1,330,449)	\$(226,179)	\$(153,917)	\$(128,831)	\$(130,322)	\$(136,238)	\$(271,857)	
Total Sales		\$ (4,156,882)	\$ (5,933,170)	\$(6,910,266)	\$(5,828,678)	\$(5,150,196)	\$(2,812,462)	\$(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	
Storage				\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	\$ 731,485	
On-system Peaking				\$ 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	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Demand Costs				\$ 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)	
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)	
NH AMA Revenue				\$ (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)	
Re-entry Rate & Conversion Rate Revenue				\$(1,666.67)	\$(1,666.67)	\$(1,666.67)	\$(1,666.67)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Net Demand Costs		\$ 1,540,534	\$ 1,528,964	\$ 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				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™				\$ 1,910,102	\$ 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				\$ 3,0660	\$ 3,0300	\$ 2,9260	\$ 2,6350	\$ 2,6030	\$ 2,6340	\$ 2,6670	\$ 2,6710	\$ 2,6530	\$ 2,6690	
NYMEX Price Used for Update				\$ 3,6420	\$ 3,4820	\$ 3,2390	\$ 2,8830	\$ 2,6030	\$ 2,6340	\$ 2,6670	\$ 2,6710	\$ 2,6530	\$ 2,6690	
Increase/(Decrease) NYMEX Price				\$ 0.58	\$ 0.45	\$ 0.31	\$ 0.25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Increase/(Decrease) in Pipeline Costs				\$ 234,121	\$ 166,130	\$ 169,359	\$ 226,253	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Updated Pipeline Costs				\$ 2,144,223	\$ 1,876,372	\$ 1,983,890	\$ 2,507,258	\$ 1,202,907	\$ 821,440	\$ 713,823	\$ 712,207	\$ 706,238	\$ 1,357,630	
New Hampshire Allocated Percentage				40.15%	39.77%	39.26%	36.25%	35.89%	36.05%	34.96%	35.18%	34.48%	36.96%	
NH Updated Pipeline Costs				\$ 860,899	\$ 746,228	\$ 778,915	\$ 908,875	\$ 431,688	\$ 296,109	\$ 249,562	\$ 250,525	\$ 243,514	\$ 501,818	
Peaking Volumes				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				\$ 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				\$ 0.58	\$ 0.45	\$ 0.31	\$ 0.25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Increase in Peaking Costs				\$ 428,102	\$ 215,949	\$ 89,203	\$ 532	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Updated Peaking Costs				\$ 5,848,428	\$ 4,377,700	\$ 2,134,543	\$ 15,726	\$ 15,129	\$ 14,540	\$ 14,949	\$ 14,918	\$ 14,342	\$ 14,778	
New Hampshire Allocated Percentage				40.15%	39.77%	39.26%	36.25%	35.89%	36.05%	34.96%	35.18%	34.48%	36.96%	
NH Updated Peaking Costs				\$ 2,348,127	\$ 1,741,001	\$ 838,064	\$ 5,701	\$ 5,429	\$ 5,241	\$ 5,226	\$ 5,248	\$ 4,945	\$ 5,462	
NH Commodity Costs														
Pipeline				\$ 860,899	\$ 746,228	\$ 778,915	\$ 908,875	\$ 431,688	\$ 296,109	\$ 249,562	\$ 250,525	\$ 243,514	\$ 501,818	
Storage				\$ 983,407	\$ 981,943	\$ 806,050	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Peaking				\$ 2,348,127	\$ 1,741,001	\$ 838,064	\$ 5,701	\$ 5,429	\$ 5,241	\$ 5,226	\$ 5,248	\$ 4,945	\$ 5,462	
Total Commodity Costs		\$ 2,159,358	\$ 4,084,471	\$ 4,192,433	\$ 3,469,172	\$ 2,423,029	\$ 914,576	\$ 437,117	\$ 301,351	\$ 254,789	\$ 255,773	\$ 248,459	\$ 507,280	
Inventory Finance Charge				\$ 729	\$ 609	\$ 517	\$ 239	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Anticipated Direct Cost of Gas		\$ 3,699,891	\$ 5,613,436	\$ 5,724,506	\$ 5,001,124	\$ 3,954,889	\$ 1,644,598	\$ 1,168,567	\$ 985,844	\$ 939,282	\$ 940,266	\$ 932,952	\$ 1,191,773	

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

Sales Revenues		Winter	Summer	Prior	Total
Volumes		Remaining		Period	
1	Residential Heat & Non Heat	11,151,329	3,551,405		14,702,734
2	Sales HLF Classes	1,708,188	1,904,106		3,612,294
3	Sales LLF Classes	11,165,195	2,646,145		13,811,340
4	Total	24,024,712	8,101,656		64,252,737
5	Rates				
6	Residential Heat & Non Heat CGA				
7	Sales HLF Classes CGA				
8	Sales LLF Classes CGA				
9	Revenues				
10	Residential Heat & Non Heat	\$ (9,610,215)	\$ (1,303,366)		\$ (10,913,581)
11	Sales HLF Classes	\$ (1,298,393)	\$ (622,452)		\$ (1,920,846)
12	Sales LLF Classes	\$ (9,792,993)	\$ (1,047,344)		\$ (10,840,337)
13	Total Sales	\$ (30,791,654)	\$ (2,973,162)		\$ (33,764,816)
14	Gas Costs and Credits				
15		Winter	Summer	Prior	Total
16				Period	
17	Demand Costs (net of Capacity Assignment)				
18	Pipeline	\$ 689,929	\$ 1,034,894		\$ 1,724,823
19	Storage	\$ 2,925,939	\$ 4,388,908		\$ 7,314,847
20	On-system Peaking	\$ 566,493	\$ 293,155		\$ 859,648
21	Off-System Peaking	\$ 2,190,146	\$ -		\$ 2,190,146
22	Total Demand Costs	\$ 6,372,508	\$ 5,716,958		\$ 12,089,465
23	Asset Management and Capacity Release				
24	NUI AMA Revenue				\$ (5,851,333)
25	NUI Capacity Release				\$ -
26	NUI AMA Rev & Cap. Release Subtotal				\$ -
27	NH AMA Revenue				\$ (2,605,069)
28	NH Capacity Release				\$ -
29	NH Total Asset Management and Capacity Release	\$ (1,042,028)	\$ 1,563,042	\$ -	\$ (2,605,069)
30	Re-entry Rate & Conversion Rate Revenue	\$ (10,000)	\$ -		\$ (10,000)
31	Net Demand Costs	\$ 8,393,311	\$ 4,153,916		\$ 12,547,227
32	NUI Commodity Costs				
33	NUI Total Pipeline Volumes				4,510,301
34	Pipeline Costs Modeled in Sendout™				\$ 13,230,125
35	NYMEX Price Used for Forecast				
36	NYMEX Price Used for Update				
37	Increase/(Decrease) NYMEX Price				
38	Increase/(Decrease) in Pipeline Costs	\$ 795,863			
39	Updated Pipeline Costs				
40	New Hampshire Allocated Percentage				
41	NH Updated Pipeline Costs	\$ 3,294,918			\$ 5,268,135
42	Peaking Volumes				
43	Peaking Costs Modeled in Sendout				
44	Increase/(Decrease) NYMEX Price				
45	Increase in Peaking Costs	\$ 733,786			
46	Updated Peaking Costs				
47	New Hampshire Allocated Percentage				
48	NH Updated Peaking Costs	\$ 4,932,892			
49	NH Commodity Costs				
50	Pipeline				\$ 5,268,135
51	Storage				\$ 2,771,400
52	Peaking				\$ 4,964,444
53	Total Commodity Costs	\$ 17,243,038	\$ 2,004,769		\$ 19,247,807
54	Inventory Finance Charge				\$ 2,094
55	Total Anticipated Direct Cost of Gas	\$ 25,638,443	\$ 6,158,685		\$ 31,797,128

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

	Winter												Summer			
	Oct-18	Nov-18	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			
Working Capital																
Total Anticipated Direct Cost of Gas		\$ 3,857,751	\$ 5,771,295	\$ 5,724,506	\$ 5,001,124	\$ 3,954,889	\$ 1,644,598	\$ 1,168,567	\$ 985,844	\$ 939,282	\$ 940,266	\$ 932,952	\$ 1,191,773			
Working Capital Percentage		0.1373%	0.14%	0.14%	0.14%	0.14%	0.14%	0.14%	0.14%	0.14%	0.14%	0.14%	0.14%			
Working Capital Allowance		\$ 5,297	\$ 7,924	\$ 7,860	\$ 6,867	\$ 5,430	\$ 2,258	\$ 1,604	\$ 1,354	\$ 1,290	\$ 1,291	\$ 1,281	\$ 1,636			
Beginning Period Working Capital Balance		\$ 9,505	\$ 14,853	\$ 22,855	\$ 30,826	\$ 37,836	\$ 43,435	\$ 45,878	\$ 47,677	\$ 49,232	\$ 50,730	\$ 52,235	\$ 53,736			
End of Period Working Capital Allowance		\$ 14,802	\$ 22,777	\$ 30,715	\$ 37,693	\$ 43,266	\$ 45,693	\$ 47,483	\$ 49,031	\$ 50,522	\$ 52,021	\$ 53,516	\$ 55,372			
Interest		\$ 51	\$ 78	\$ 112	\$ 143	\$ 169	\$ 186	\$ 195	\$ 201	\$ 208	\$ 214	\$ 220	\$ 227			
End of period with Interest	\$ 9,505	\$ 14,853	\$ 22,855	\$ 30,826	\$ 37,836	\$ 43,435	\$ 45,878	\$ 47,677	\$ 49,232	\$ 50,730	\$ 52,235	\$ 53,736	\$ 55,600			
Bad Debt																
Projected Bad Debt	\$ -	\$ 7,281	\$ 40,557	\$ -	\$ -	\$ -	\$ -	\$ 9,432	\$ 28,297	\$ 28,297	\$ 37,729	\$ 28,297	\$ 28,297			
Beginning Period Bad Debt Balance	\$ (5,841)	\$ 1,430	\$ 42,078	\$ 42,253	\$ 42,429	\$ 42,606	\$ 42,783	\$ 42,959	\$ 43,136	\$ 43,313	\$ 43,490	\$ 43,667	\$ 43,844			
End of Period Bad Debt Balance	\$ 1,439	\$ 41,987	\$ 42,078	\$ 42,253	\$ 42,429	\$ 42,606	\$ 42,783	\$ 42,959	\$ 43,136	\$ 43,313	\$ 43,490	\$ 43,667	\$ 43,844			
Interest	\$ (9)	\$ 90	\$ 175	\$ 176	\$ 177	\$ 178	\$ 179	\$ 180	\$ 181	\$ 182	\$ 183	\$ 184	\$ 185			
End of Period Bad Debt Balance with Interest	\$ (5,841)	\$ 1,430	\$ 42,078	\$ 42,253	\$ 42,429	\$ 42,606	\$ 42,783	\$ 42,959	\$ 43,136	\$ 43,313	\$ 43,490	\$ 43,667	\$ 43,844			
Local Production and Storage Capacity		\$ 79,351	\$ 79,351	\$ 79,351	\$ 79,351	\$ 79,351	\$ 79,351	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Miscellaneous Overhead		\$ 78,509	\$ 78,509	\$ 78,509	\$ 78,509	\$ 78,509	\$ 78,509	\$ 18,234	\$ 18,234	\$ 18,234	\$ 18,234	\$ 18,234	\$ 18,234			
Gas Cost Other than Bad Debt and Working Capital Over/Under Collection																
Beginning Balance Over/Under Collection		\$ 1,292,558	\$ 998,189	\$ 840,136	\$ (186,406)	\$ (858,272)	\$ (1,901,457)	\$ (2,921,488)	\$ (2,387,794)	\$ (1,829,417)	\$ (1,244,013)	\$ (659,423)	\$ (96,556)			
Net Costs - Revenues		\$ (299,132)	\$ (161,875)	\$ (1,027,900)	\$ (669,694)	\$ (1,037,447)	\$ (1,010,004)	\$ 544,732	\$ 567,144	\$ 591,795	\$ 588,547	\$ 564,438	\$ 438,270			
Ending Balance before Interest		\$ 993,427	\$ 836,314	\$ (187,765)	\$ (856,100)	\$ (1,895,719)	\$ (2,911,461)	\$ (2,376,756)	\$ (1,820,650)	\$ (1,237,623)	\$ (655,466)	\$ (94,985)	\$ 341,714			
Average Balance		\$ 1,142,992	\$ 917,251	\$ 326,186	\$ (521,253)	\$ (1,376,996)	\$ (2,406,459)	\$ (2,649,122)	\$ (2,104,222)	\$ (1,533,520)	\$ (949,739)	\$ (377,204)	\$ 122,579			
Interest Rate		5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%			
Interest Expense		\$ 4,762	\$ 3,822	\$ 1,359	\$ (2,172)	\$ (5,737)	\$ (10,027)	\$ (11,038)	\$ (8,768)	\$ (6,390)	\$ (3,957)	\$ (1,572)	\$ 511			
Ending Balance Incl Interest Expense	\$ 1,292,558	\$ 998,189	\$ 840,136	\$ (186,406)	\$ (858,272)	\$ (1,901,457)	\$ (2,921,488)	\$ (2,387,794)	\$ (1,829,417)	\$ (1,244,013)	\$ (659,423)	\$ (96,556)	\$ 342,225			
Total Over/Under Collection Ending Balance	\$ 1,296,222	\$ 1,014,472	\$ 905,069	\$ (113,326)	\$ (778,007)	\$ (1,815,416)	\$ (2,832,826)	\$ (2,287,703)	\$ (1,699,197)	\$ (1,083,601)	\$ (459,242)	\$ 134,098	\$ 603,836			
Total Indirect Cost of Gas	\$ 1,296,222	\$ 175,241	\$ 210,331	\$ 167,365	\$ 162,873	\$ 157,898	\$ 150,454	\$ 18,625	\$ 39,596	\$ 42,035	\$ 54,047	\$ 47,136	\$ 49,701			
Total Cost of Gas	\$ 1,296,222	\$ 3,875,132	\$ 5,823,767	\$ 5,891,871	\$ 5,163,997	\$ 4,112,787	\$ 1,795,052	\$ 1,187,192	\$ 1,025,440	\$ 981,317	\$ 994,313	\$ 980,088	\$ 1,241,475			
Total Interest	\$ -	\$ 4,804	\$ 3,991	\$ 1,646	\$ (1,853)	\$ (5,392)	\$ (9,664)	\$ (10,646)	\$ (8,289)	\$ (5,785)	\$ (3,208)	\$ (676)	\$ 1,534			

Variance due to changes in NYMEX	
April 30, 2019 Target Balance	\$ (2,793,587)
April 30, 2018 Projected Balance	\$ (2,832,826)
Variance	\$ (39,239)

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Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Ana

	Winter	Summer	Prior Period	Total
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**Northern Utilities
 NEW HAMPSHIRE (Over) / Undercollection**

Sales Revenues		(Forecast) Sep-19	(Forecast) Oct-19	Winter	Summer	Prior Period	Total
1	Volumes						
2	Residential Heat & Non Heat	461,965	921,830	16,191,282	3,551,405		19,742,687
3	Sales HLF Classes	247,685	494,245	2,480,220	2,590,528		4,384,327
4	Sales LLF Classes	344,210	686,854	16,211,416	14,816,144		18,857,561
5	Total	1,053,861	2,102,929	34,882,919	20,958,077		77,867,494
6	Rates						
7	Residential Heat & Non Heat CGA	\$0.3670	\$0.3670				
8	Sales HLF Classes CGA	\$0.3269	\$0.3269				
9	Sales LLF Classes CGA	\$0.3958	\$0.3958				
10	Revenues						
11	Residential Heat & Non Heat	\$ (169,541)	\$ (338,312)				\$ (14,695,175)
12	Sales HLF Classes	\$ (80,968)	\$ (161,569)				\$ (2,421,604)
13	Sales LLF Classes	\$ (136,238)	\$ (271,857)				\$ (14,703,841)
14	Total Sales	\$ (386,748)	\$ (771,737)	\$ (28,847,459)	\$ (2,973,162)		\$ (31,820,621)
15							
16							
17	Gas Costs and Credits	(Forecast) Sep-19	(Forecast) Oct-19				Total
18	Demand Costs (net of Capacity Assignment)						
19	Pipeline	\$ 172,482	\$ 172,482	\$ 1,034,894	\$ 1,034,894		\$ 2,069,788
20	Storage	\$ 731,485	\$ 731,485	\$ 4,388,908	\$ 4,388,908		\$ 8,777,817
21	On-system Peaking	\$ 41,033	\$ 41,033	\$ 838,540	\$ 293,155		\$ 1,131,695
22	Off-System Peaking	\$ -	\$ -	\$ 3,650,243	\$ -		\$ 3,650,243
23	Total Demand Costs	\$ 945,000	\$ 945,000	\$ 9,912,586	\$ 5,716,958		\$ 15,629,544
24	Asset Management and Capacity Release						
25	NUI AMA Revenue	\$ (585,133)	\$ (585,133)				\$ (7,021,600)
26	NUI Capacity Release	\$ -	\$ -				\$ -
27	NUI AMA Rev & Cap. Release Subtotal						\$ -
28	NH AMA Revenue	\$ (260,507)	\$ (260,507)				\$ (3,126,083)
29	NH Capacity Release						\$ -
30	NH Total Asset Management and Capacity Release	\$ (260,507)	\$ (260,507)	\$ (1,563,042)	\$ -	\$ (1,563,042)	\$ (3,126,083)
31	Re-entry Rate & Conversion Rate Revenue	\$ -	\$ -	\$ (10,000)	\$ -		\$ (10,000)
32							
33	Net Demand Costs	\$ 684,493	\$ 684,493	\$ 8,339,544	\$ 4,153,916		\$ 12,493,460
34	NUI Commodity Costs						
35	NUI Total Pipeline Volumes	302,280	572,717				5,637,242
36	Pipeline Costs Modeled in Sendout™	\$ 706,238	\$ 1,357,630				\$ 16,896,179
37	NYMEX Price Used for Forecast	\$ 2,6530	\$ 2,6690				
38	NYMEX Price Used for Update	\$ 2,6530	\$ 2,6690				
39	Increase/(Decrease) NYMEX Price	\$ -	\$ -				
40	Increase/(Decrease) in Pipeline Costs	\$ -	\$ -				
41	Updated Pipeline Costs	\$ 706,238	\$ 1,357,630				
42	New Hampshire Allocated Percentage	34.48%	36.96%				
43	NH Updated Pipeline Costs	\$ 243,514	\$ 501,818				\$ 6,412,656
44	Peaking Volumes	2,100	2,170				
45	Peaking Costs Modeled in Sendout	\$ 14,342	\$ 14,778				
46	Increase Due to NYMEX	\$ -	\$ -				
47	Increase in Peaking Costs	\$ -	\$ -				
48	Updated Peaking Costs	\$ 14,342	\$ 14,778				
49	New Hampshire Allocated Percentage	34.48%	36.96%				
50	NH Updated Peaking Costs	\$ 4,945	\$ 5,462				
51	NH Commodity Costs						
52	Pipeline	\$ 243,514	\$ 501,818				\$ 6,412,656
53	Storage	\$ -	\$ -				\$ 3,776,928
54	Peaking	\$ 4,945	\$ 5,462				\$ 7,197,490
55	Total Commodity Costs	\$ 248,459	\$ 507,280	\$ 15,382,305	\$ 2,004,769		\$ 17,387,074

Projected End of Period Balance ("Target Balance") per January Summary
 (\$2,793,587)
 Line 94 - April

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			Winter						Summer			
66		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
67												
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)					
67		Sep-19	Oct-19					Total
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)