NORTHERN UTILITIES, INC.
NEW HAMPSHIRE DIVISION
Calculation of the Projected Over or Under Collection of the
Winter 2020-2021 Period Cost of Gas
DG 20-154
November 2020 Estimated

1	Under/(Over) collection as of 11/01/20			$ 1,104,232	Table 2, PG. 3, Line 93, October
2					
3	Forecasted firm therm sales 11/01/20 - 4/30/21				
4	Residential heat & non heat		16,686,215		Table 2, PG. 2, Line 2
5	HLF Classes		2,277,711		Table 2, PG. 2, Line 3
6	LLF Classes		15,933,486		Table 2, PG. 2, Line 4
7					
8	Current recovery rate per therm				
9	Residential heat & non heat		$0.7315		Table 2, PG. 1, Line 7
10	HLF classes		$0.6465		Table 2, PG. 1, Line 8
11	LLF classes		$0.7437		Table 2, PG. 1, Line 9
12					
13	Total	$	(25,528,240)		(LN 4 * Ln 9) + (LN 5 * LN 10) + (LN 6 * LN 11)
14					
15	Forecasted recovered costs at current rates 11/01/20 - 04/30/21			$ (25,528,240)	LN 13
16	Actual recovered costs			$ -	Table 2, PG. 1, Line 14,
17	Estimated total recovered costs 11/01/20 - 04/30/21			$ (25,528,240)	LN 15 + LN 16
18					
19	Revised projected direct gas costs [1]			$ 17,664,745	Table 2, PG. 2, Line 62, Winter
20	Revised projected indirect gas costs [2]			$ 1,078,371	Table 2, PG. 4, Line 94, Winter
21	Revised total projected gas costs 11/01/2020 - 04/30/2021			$ 18,743,116	LN 19 + LN 20
22					
23	Projected April 30, 2021 Winter Period Balance			$ (5,680,892)	LN 1 + LN 17 + LN 21
24					
25	April 30, 2021 Target Balance [3]			$ (5,447,209)	Table 3, PG. 3, Line 92, April
26					
27	Variance from Target Balance			$ (233,683)	LN 23 - LN 25
28					
29	Total Projected Gas Costs			$ 18,743,116	LN 21
30					
31	Under/(over) collection as percent of total gas costs			-1.25%	LN 27 / LN 29

NOTES
[1] Reflects futures prices as of November 18, 2020
[2] Includes: Working Capital Allowance, Bad Debt Allowance, Production and Storage Capacity, Miscellaneous Overhead and Interest
[3] Updated in November 2020 to reflect actual account balance as of October 31, 2020 and latest NYMEX prices

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

Line			Winter						Summer					
	Sales Revenues		(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)
1	Volumes	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21
2	Residential Heat & Non Heat		2,176,725	3,165,337	3,770,878	3,205,911	2,774,319	1,593,044	730,922	489,258	412,466	418,643	455,783	939,948
3	Sales HLF Classes		297,129	432,077	514,735	437,615	378,702	217,455	405,473	271,412	228,812	232,239	252,842	521,430
4	Sales LLF Classes		2,078,532	3,022,546	3,600,771	3,061,290	2,649,167	1,521,181	572,940	383,510	323,315	328,157	357,270	736,788
5	Total		4,552,386	6,619,959	7,886,383	6,704,817	5,802,188	3,331,679	1,709,335	1,144,180	964,593	979,040	1,065,895	2,198,166
6	Rates													
7	Residential Heat & Non Heat CGA		$0.7315	$0.7315	$0.7315	$0.7315	$0.7315	$0.7315	$0.4412	$0.4412	$0.4412	$0.4412	$0.4412	$0.4412
8	Sales HLF Classes CGA		$0.6465	$0.6465	$0.6465	$0.6465	$0.6465	$0.6465	$0.3943	$0.3943	$0.3943	$0.3943	$0.3943	$0.3943
9	Sales LLF Classes CGA		$0.7437	$0.7437	$0.7437	$0.7437	$0.7437	$0.7437	$0.4733	$0.4733	$0.4733	$0.4733	$0.4733	$0.4733
10	Revenues													
11	Residential Heat & Non Heat		$ (1,592,275)	$ (2,315,444)	$ (2,758,397)	$ (2,345,124)	$ (2,029,414)	$ (1,165,312)	$ (322,483)	$ (215,861)	$ (181,980)	$ (184,705)	$ (201,091)	$ (414,705)
12	Sales HLF Classes		$ (192,094)	$ (279,338)	$ (332,776)	$ (282,918)	$ (244,831)	$ (140,584)	$ (159,878)	$ (107,018)	$ (90,221)	$ (91,572)	$ (99,696)	$ (205,600)
13	Sales LLF Classes		$ (1,545,804)	$ (2,247,867)	$ (2,677,893)	$ (2,276,681)	$ (1,970,186)	$ (1,131,302)	$ (271,173)	$ (181,515)	$ (153,025)	$ (155,317)	$ (169,096)	$ (348,722)
14	Total Sales		$ (3,330,172)	$ (4,842,649)	$ (5,769,066)	$ (4,904,724)	$ (4,244,431)	$ (2,437,198)	$ (753,533)	$ (504,394)	$ (425,226)	$ (431,594)	$ (469,883)	$ (969,027)
15														

Line			Winter						Summer					
16														
17	**Gas Costs and Credits**		(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)
18		Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21
19	Demand Costs (net of Capacity Assignment)													
20	Pipeline		$ 446,263	$ 446,263	$ 457,604	$ 457,604	$ 457,604	$ 457,604	$ 457,604	$ 457,604	$ 457,604	$ 457,604	$ 457,604	$ 457,604
21	Storage		$ 584,955	$ 584,955	$ 630,827	$ 630,827	$ 630,827	$ 630,827	$ 630,827	$ 630,827	$ 630,827	$ 630,827	$ 630,827	$ 630,827
22	On-system Peaking		$ 187,424	$ 187,424	$ 187,424	$ 187,424	$ 187,424	$ 94,049	$ 16,338	$ 16,338	$ 16,338	$ 16,338	$ 16,338	$ 16,338
23	Off-System Peaking		$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658
24	Total Demand Costs		$ 1,536,300	$ 1,536,300	$ 1,593,513	$ 1,593,513	$ 1,593,513	$ 1,500,139	$ 1,422,428	$ 1,422,428	$ 1,422,428	$ 1,422,428	$ 1,422,428	$ 1,422,428
25														
26	Asset Management and Capacity Release													
27	NUI PXP AMA Revenue							$ -	$ -	$ -	$ -	$ -	$ -	$ -
28	NUI AMA Revenue		$ (712,459)	$ (712,459)	$ (712,459)	$ (712,459)	$ (712,459)	$ (712,459)	$ (712,459)	$ (712,459)	$ (712,459)	$ (712,459)	$ (712,459)	$ (712,459)
29	NUI Capacity Release								$ -	$ -	$ -	$ -	$ -	$ -
30	NUI AMA Rev & Cap. Release Subtotal													
31	NH PXP AMA Revenue		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
32	NH AMA Revenue		$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)
33	NH Capacity Release													
34	NH Total Asset Management and Capacity Release		$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)
35														
36	CNG Expenses		$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972
37														
38	Re-entry Rate & Conversion Rate Revenue		$ (1,000)	$ (1,000)	$ (1,000)	$ (1,000)	$ (1,000)		$ -	$ -	$ -	$ -	$ -	$ -
39														
40	Net Demand Costs		$ 1,256,485	$ 1,256,485	$ 1,313,698	$ 1,313,698	$ 1,313,698	$ 1,221,323	$ 1,143,612	$ 1,143,612	$ 1,143,612	$ 1,143,612	$ 1,143,612	$ 1,143,612
41														
42	NUI Commodity Costs													
43	NUI Total Pipeline Volumes		930,912	987,962	987,962	893,407	1,057,807	918,117	499,328	337,173	291,023	294,102	320,183	619,360
44	Pipeline Costs Modeled in Sendout™		$ 2,810,541	$ 3,690,647	$ 4,304,570	$ 3,827,533	$ 3,717,010	$ 2,576,253	$ 1,322,251	$ 886,662	$ 774,801	$ 782,079	$ 832,473	$ 1,619,126
45	NYMEX Price Used for Forecast		$ 2.9010	$ 3.2660	$ 3.3750	$ 3.3270	$ 3.1850	$ 2.8230	$ 2.2610	$ 2.2970	$ 2.3360	$ 2.3450	$ 2.3290	$ 2.3540
46	NYMEX Price Used for Update		$ 2.9960	$ 2.7120	$ 2.8380	$ 2.8180	$ 2.7670	$ 2.6800	$ 2.2610	$ 2.2970	$ 2.3360	$ 2.3450	$ 2.3290	$ 2.3540
47	Increase/(Decrease) NYMEX Price		$ 0.10	$ (0.55)	$ (0.54)	$ (0.51)	$ (0.42)	$ (0.14)	$ -	$ -	$ -	$ -	$ -	$ -
48	Increase/(Decrease) in Pipeline Costs		$ 88,437	$ (547,331)	$ (530,536)	$ (454,744)	$ (442,163)	$ (131,291)	$ -	$ -	$ -	$ -	$ -	$ -
49	Updated Pipeline Costs		$ 2,898,978	$ 3,143,317	$ 3,774,034	$ 3,372,789	$ 3,274,847	$ 2,444,962	$ 1,322,251	$ 886,662	$ 774,801	$ 782,079	$ 832,473	$ 1,619,126
50	New Hampshire Allocated Percentage		39.54%	39.84%	40.15%	39.76%	39.18%	36.70%	34.56%	34.20%	33.37%	33.52%	33.54%	35.85%
51	NH Updated Pipeline Costs		$ 1,146,155	$ 1,252,260	$ 1,515,278	$ 1,341,021	$ 1,283,025	$ 897,181	$ 456,911	$ 303,234	$ 258,542	$ 262,123	$ 279,217	$ 580,479
52														
53	NH Peaking Volumes		709	10,058	96,948	14,113	726	658	643	616	621	623	604	667
54	NH Peaking Costs Modeled in Sendout		$ 2,949	$ 46,198	$ 330,954	$ 78,771	$ 4,732	$ 4,422	$ 4,341	$ 4,130	$ 4,141	$ 4,153	$ 3,992	$ 4,396
55	Change in NYMEX Price %								$ -	$ -	$ -	$ -	$ -	$ -
56	Change in Peaking Costs		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
57	NH Updated Peaking Costs		$ 2,949	$ 46,198	$ 330,954	$ 78,771	$ 4,732	$ 4,422	$ 4,341	$ 4,130	$ 4,141	$ 4,153	$ 3,992	$ 4,396
58														
59	NH Commodity Costs													
60	Pipeline		$ 1,146,155	$ 1,252,260	$ 1,515,278	$ 1,341,021	$ 1,283,025	$ 897,181	$ 456,911	$ 303,234	$ 258,542	$ 262,123	$ 279,217	$ 580,479
61	Storage		$ 169,346	$ 483,784	$ 553,959	$ 562,914	$ 315,143	$ -	$ -	$ -	$ -	$ -	$ -	$ -
62	Peaking		$ 2,949	$ 46,198	$ 330,954	$ 78,771	$ 4,732	$ 4,422	$ 4,341	$ 4,130	$ 4,141	$ 4,153	$ 3,992	$ 4,396
63	Total Commodity Costs		$ 1,318,451	$ 1,782,241	$ 2,400,191	$ 1,982,706	$ 1,602,900	$ 901,603	$ 461,252	$ 307,364	$ 262,684	$ 266,275	$ 283,209	$ 584,875
64	Inventory Finance Charge		$ 156	$ 245	$ 299	$ 252	$ 209	$ 104	$ -	$ -	$ -	$ -	$ -	$ -
65														
66	**Total Anticipated Direct Cost of Gas**		$ 2,575,092	$ 3,038,971	$ 3,714,189	$ 3,296,657	$ 2,916,807	$ 2,123,030	$ 1,604,864	$ 1,450,976	$ 1,406,296	$ 1,409,888	$ 1,426,822	$ 1,728,487

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Anal

Line	Sales Revenues	Winter	Summer	Prior Period	Total
1	Volumes				
2	Residential Heat & Non Heat				20,133,234
3	Sales HLF Classes				4,189,921
4	Sales LLF Classes				18,635,467
5	Total	34,897,412	8,061,210		42,958,621
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				$ (13,726,791)
12	Sales HLF Classes				$ (2,226,524)
13	Sales LLF Classes				$ (13,128,581)
14	Total Sales	$ (25,528,240)	$ (3,553,657)		$ (29,081,896)
15					
16					
17	**Gas Costs and Credits**				
18					Total
19	Demand Costs (net of Capacity Assignment)				
20	Pipeline	$ 2,722,942	$ 2,745,625		$ 5,468,568
21	Storage	$ 3,693,216	$ 3,784,960		$ 7,478,176
22	On-system Peaking	$ 1,031,170	$ 98,030		$ 1,129,200
23	Off-System Peaking	$ 1,905,950	$ 1,905,950		$ 3,811,900
24	Total Demand Costs	$ 9,353,279	$ 8,534,565		$ 17,887,844
25					
26	Asset Management and Capacity Release				
27	NUI PXP AMA Revenue				$ -
28	NUI AMA Revenue				$ (8,549,509)
29	NUI Capacity Release				$ -
30	NUI AMA Rev & Cap. Release Subtotal				$ -
31	NH PXP AMA Revenue				$ -
32	NH AMA Revenue				$ (3,465,449)
33	NH Capacity Release				$ -
34	NH Total Asset Management and Capacity Release	$ (1,732,724)	$ (1,732,724)		$ (3,465,449)
35					
36	CNG Expenses	$ 59,833	$ 59,833		$ 119,666
37					
38	Re-entry Rate & Conversion Rate Revenue	$ (5,000)	$ -		$ (5,000)
39					
40	Net Demand Costs	$ 7,675,387	$ 6,861,674		$ 14,537,061
41					
42	NUI Commodity Costs				
43	NUI Total Pipeline Volumes				8,137,336
44	Pipeline Costs Modeled in Sendout™				$ 27,143,945
45	NYMEX Price Used for Forecast				
46	NYMEX Price Used for Update				
47	Increase/(Decrease) NYMEX Price				
48	Increase/(Decrease) in Pipeline Costs				
49	Updated Pipeline Costs				
50	New Hampshire Allocated Percentage				
51	NH Updated Pipeline Costs				$ 9,575,425
52					
53	NH Peaking Volumes				
54	NH Peaking Costs Modeled in Sendout				
55	Change in NYMEX Price %				
56	Change in Peaking Costs				
57	NH Updated Peaking Costs				$ 490,229
58					
59	NH Commodity Costs				
60	Pipeline				$ 9,575,425
61	Storage				$ 2,085,147
62	Peaking				$ 493,178
63	Total Commodity Costs	$ 9,988,092	$ 2,165,659		$ 12,153,750
64	Inventory Finance Charge				$ 1,266
65					
66	**Total Anticipated Direct Cost of Gas**	$ 17,664,745	$ 9,027,333		$ 26,692,077

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

		Winter						Summer					
	Oct-20	(Forecast) Nov-20	(Forecast) Dec-20	(Forecast) Jan-21	(Forecast) Feb-21	(Forecast) Mar-21	(Forecast) Apr-21	(Forecast) May-21	(Forecast) Jun-21	(Forecast) Jul-21	(Forecast) Aug-21	(Forecast) Sep-21	(Forecast) Oct-21
Working Capital													
Total Anticipated Direct Cost of Gas		$ 2,733,032	$ 3,196,910	$ 3,872,128	$ 3,454,596	$ 3,074,747	$ 2,280,970	$ 1,623,018	$ 1,469,130	$ 1,424,450	$ 1,428,041	$ 1,444,975	$ 1,746,641
Working Capital Percentage		0.0892%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%
Working Capital Allowance		$ 2,438	$ 2,852	$ 3,454	$ 3,081	$ 2,743	$ 2,035	$ 1,448	$ 1,310	$ 1,271	$ 1,274	$ 1,289	$ 1,558
Beginning Period Working Capital Balance		$ (44,205)	$ (41,884)	$ (39,141)	$ (35,789)	$ (32,800)	$ (30,143)	$ (28,187)	$ (26,813)	$ (25,574)	$ (24,371)	$ (23,161)	$ (21,933)
End of Period Working Capital Allowance		$ (41,767)	$ (39,032)	$ (35,688)	$ (32,707)	$ (30,057)	$ (28,108)	$ (26,739)	$ (25,503)	$ (24,303)	$ (23,097)	$ (21,872)	$ (20,375)
Interest		$ (116)	$ (110)	$ (101)	$ (93)	$ (85)	$ (79)	$ (74)	$ (71)	$ (68)	$ (64)	$ (61)	$ (57)
End of period with Interest	$ (44,205)	$ (41,884)	$ (39,141)	$ (35,789)	$ (32,800)	$ (30,143)	$ (28,187)	$ (26,813)	$ (25,574)	$ (24,371)	$ (23,161)	$ (21,933)	$ (20,433)
Bad Debt													
Projected Bad Debt	$ -	$ 26,101	$ 26,101	$ 26,101	$ 26,101	$ 26,101	$ 26,101	$ 2,371	$ 2,371	$ 2,371	$ 2,371	$ 2,371	$ 2,371
Beginning Period Bad Debt Balance		$ (7,408)	$ 18,708	$ 44,894	$ 71,152	$ 97,481	$ 123,881	$ 150,352	$ 153,134	$ 155,923	$ 158,720	$ 161,524	$ 164,336
End of Period Bad Debt Balance		*$ 18,693*	*$ 44,808*	*$ 70,995*	*$ 97,253*	*$ 123,581*	*$ 149,981*	*$ 152,723*	*$ 155,505*	*$ 158,294*	*$ 161,091*	*$ 163,895*	*$ 166,707*
Interest		$ 15	$ 86	$ 157	$ 228	$ 299	$ 371	$ 410	$ 418	$ 426	$ 433	$ 441	$ 448
End of Period Bad Debt Balance with Interest	$ (7,408)	$ 18,708	$ 44,894	$ 71,152	$ 97,481	$ 123,881	$ 150,352	$ 153,134	$ 155,923	$ 158,720	$ 161,524	$ 164,336	$ 167,155
Local Production and Storage Capacity		$ 79,351	$ 79,351	$ 79,351	$ 79,351	$ 79,351	$ 79,351	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -									
Miscellaneous Overhead		$ 78,589	$ 78,589	$ 78,589	$ 78,589	$ 78,589	$ 78,589	$ 18,154	$ 18,154	$ 18,154	$ 18,154	$ 18,154	$ 18,154
Gas Cost Other than Bad Debt and Working Capital Over/Under Collection													
Beginning Balance Over/Under Collection	$ 1,155,846	$ 1,155,846	$ 561,027	$ (1,085,421)	$ (2,987,867)	$ (4,448,051)	$ (5,631,365)	$ (5,803,057)	$ (4,948,112)	$ (3,995,471)	$ (3,005,714)	$ (2,016,058)	$ (1,045,106)
Net Costs - Revenues		$ (597,141)	$ (1,645,738)	$ (1,896,938)	$ (1,450,127)	$ (1,169,684)	$ (156,229)	$ 869,484	$ 964,736	$ 999,224	$ 996,447	$ 975,092	$ 777,615
Ending Balance before Interest		$ 558,705	$ (1,084,712)	$ (2,982,359)	$ (4,437,995)	$ (5,617,734)	$ (5,787,594)	$ (4,933,573)	$ (3,983,376)	$ (2,996,246)	$ (2,009,267)	$ (1,040,966)	$ (267,491)
Average Balance		$ 857,275	$ (261,842)	$ (2,033,890)	$ (3,712,931)	$ (5,032,892)	$ (5,709,479)	$ (5,368,315)	$ (4,465,744)	$ (3,495,859)	$ (2,507,491)	$ (1,528,512)	$ (656,298)
Interest Rate		3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%
Interest Expense		$ 2,322	$ (709)	$ (5,508)	$ (10,056)	$ (13,631)	$ (15,463)	$ (14,539)	$ (12,095)	$ (9,468)	$ (6,791)	$ (4,140)	$ (1,777)
Ending Balance Incl Interest Expense	$ 1,155,846	$ 561,027	$ (1,085,421)	$ (2,987,867)	$ (4,448,051)	$ (5,631,365)	$ (5,803,057)	$ (4,948,112)	$ (3,995,471)	$ (3,005,714)	$ (2,016,058)	$ (1,045,106)	$ (269,269)
Total Over/Under Collection Ending Balance	$ 1,104,232	$ 537,851	$ (1,079,668)	$ (2,952,504)	$ (4,383,370)	$ (5,537,627)	**$ (5,680,892)**	$ (4,821,792)	$ (3,865,122)	$ (2,871,365)	$ (1,877,696)	$ (902,703)	$ (122,546)
Total Indirect Cost of Gas	$ 1,104,232	$ 188,699	$ 186,159	$ 182,041	$ 177,201	$ 173,367	$ 170,904	$ 7,770	$ 10,088	$ 12,686	$ 15,376	$ 18,054	$ 20,696
Total Cost of Gas	$ 1,104,232	$ 2,763,791	$ 3,225,130	$ 3,896,230	$ 3,473,858	$ 3,090,174	$ 2,293,934	$ 1,612,633	$ 1,461,064	$ 1,418,982	$ 1,425,264	$ 1,444,875	$ 1,749,184
Total Interest	$ -	$ 2,221	$ (733)	$ (5,453)	$ (9,921)	$ (13,417)	$ (15,171)	$ (14,203)	$ (11,748)	$ (9,110)	$ (6,422)	$ (3,760)	$ (1,386)

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Anal

	Winter	Summer	Prior Period	Total
Working Capital				
Total Anticipated Direct Cost of Gas				$ 27,748,638
Working Capital Percentage				
Working Capital Allowance	$ 16,602	$ 8,150	$ (44,205)	$ (19,453)
Beginning Period Working Capital Balance				
End of Period Working Capital Allowance				
Interest	$ (584)	$ (395)		$ (979)
End of period with Interest				
Bad Debt				
Projected Bad Debt	$ 156,604	$ 14,227	$ (7,408)	$ 163,423
Beginning Period Bad Debt Balance				
End of Period Bad Debt Balance				
Interest	$ 1,156	$ 2,576		$ 3,732
End of Period Bad Debt Balance with Interest				
Local Production and Storage Capacity				$ 476,106
				$ -
Miscellaneous Overhead				$ 580,455
Gas Cost Other than Bad Debt and Working Capital Over/U				
Beginning Balance Over/Under Collection				$ (33,249,349)
Net Costs - Revenues				$ (1,333,258)
Ending Balance before Interest				$ (34,582,607)
Average Balance				$ (33,915,978)
Interest Rate				
Interest Expense				$ (91,856)
Ending Balance Incl Interest Expense			$ 1,155,846	
Total Over/Under Collection Ending Balance				
Total Indirect Cost of Gas	$ 1,078,371	$ 84,670	$ 1,104,232	$ 2,267,273
Total Cost of Gas	$ 18,743,116	$ 9,112,002	$ 1,104,232	$ 28,959,350
Total Interest	$ (42,473)	$ (46,630)		$ (89,103)

Updated End of Period Balance ("Target Balance")
($5,447,209)
Line 98 - April

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

Line			Winter						Summer					
	Sales Revenues		(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)
1	Volumes	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21
2	Residential Heat & Non Heat		2,176,725	3,165,337	3,770,878	3,205,911	2,774,319	1,593,044	730,922	489,258	412,466	418,643	455,783	939,948
3	Sales HLF Classes		297,129	432,077	514,735	437,615	378,702	217,455	405,473	271,412	228,812	232,239	252,842	521,430
4	Sales LLF Classes		2,078,532	3,022,546	3,600,771	3,061,290	2,649,167	1,521,181	572,940	383,510	323,315	328,157	357,270	736,788
5	Total		4,552,386	6,619,959	7,886,383	6,704,817	5,802,188	3,331,679	1,709,335	1,144,180	964,593	979,040	1,065,895	2,198,166
6	Rates													
7	Residential Heat & Non Heat CGA		$0.7249	$0.7249	$0.7249	$0.7249	$0.7249	$0.7249	$0.4545	$0.4545	$0.4545	$0.4545	$0.4545	$0.4545
8	Sales HLF Classes CGA		$0.6316	$0.6316	$0.6316	$0.6316	$0.6316	$0.6316	$0.4056	$0.4056	$0.4056	$0.4056	$0.4056	$0.4056
9	Sales LLF Classes CGA		$0.7382	$0.7382	$0.7382	$0.7382	$0.7382	$0.7382	$0.4879	$0.4879	$0.4879	$0.4879	$0.4879	$0.4879
10	Revenues													
11	Residential Heat & Non Heat		$ (1,577,908)	$ (2,294,553)	$ (2,733,509)	$ (2,323,965)	$ (2,011,104)	$ (1,154,798)	$ (332,204)	$ (222,368)	$ (187,466)	$ (190,273)	$ (207,153)	$ (427,207)
12	Sales HLF Classes		$ (187,666)	$ (272,900)	$ (325,106)	$ (276,398)	$ (239,188)	$ (137,344)	$ (164,460)	$ (110,085)	$ (92,806)	$ (94,196)	$ (102,553)	$ (211,492)
13	Sales LLF Classes		$ (1,534,372)	$ (2,231,243)	$ (2,658,089)	$ (2,259,844)	$ (1,955,615)	$ (1,122,936)	$ (279,538)	$ (187,114)	$ (157,746)	$ (160,108)	$ (174,312)	$ (359,479)
14	Total Sales		$ (3,299,947)	$ (4,798,695)	$ (5,716,705)	$ (4,860,207)	$ (4,205,907)	$ (2,415,078)	$ (776,201)	$ (519,567)	$ (438,017)	$ (444,577)	$ (484,018)	$ (998,177)
15														
16			Winter						Summer					
17	**Gas Costs and Credits**		(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)
18		Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21
19	Demand Costs (net of Capacity Assignment)													
20	Pipeline		$ 446,263	$ 446,263	$ 457,604	$ 457,604	$ 457,604	$ 457,604	$ 457,604	$ 457,604	$ 457,604	$ 457,604	$ 457,604	$ 457,604
21	Storage		$ 584,955	$ 584,955	$ 630,827	$ 630,827	$ 630,827	$ 630,827	$ 630,827	$ 630,827	$ 630,827	$ 630,827	$ 630,827	$ 630,827
22	On-system Peaking		$ 187,424	$ 187,424	$ 187,424	$ 187,424	$ 187,424	$ 94,049	$ 16,338	$ 16,338	$ 16,338	$ 16,338	$ 16,338	$ 16,338
23	Off-System Peaking		$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658	$ 317,658
24	Total Demand Costs		$ 1,536,300	$ 1,536,300	$ 1,593,513	$ 1,593,513	$ 1,593,513	$ 1,500,139	$ 1,422,428	$ 1,422,428	$ 1,422,428	$ 1,422,428	$ 1,422,428	$ 1,422,428
25														
26	Asset Management and Capacity Release													
27	NUI AMA Revenue		$ (712,459)	$ (712,459)	$ (712,459)	$ (712,459)	$ (712,459)	$ (712,459)	$ (712,459)	$ (712,459)	$ (712,459)	$ (712,459)	$ (712,459)	$ (712,459)
28	NUI Capacity Release		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
29	NUI AMA Rev & Cap. Release Subtotal													
30	NH AMA Revenue		$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)
31	NH Capacity Release													
32	NH Total Asset Management and Capacity Release		$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)	$ (288,787)
33														
34	CNG Expenses		$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972	$ 9,972
35														
36	Re-entry Rate & Conversion Rate Revenue		$ (1,000)	$ (1,000)	$ (1,000)	$ (1,000)	$ (1,000)		$ -	$ -	$ -	$ -	$ -	$ -
37														
38	Net Demand Costs		$ 1,256,485	$ 1,256,485	$ 1,313,698	$ 1,313,698	$ 1,313,698	$ 1,221,323	$ 1,143,612	$ 1,143,612	$ 1,143,612	$ 1,143,612	$ 1,143,612	$ 1,143,612
39														
40	NUI Commodity Costs													
41	NUI Total Pipeline Volumes		930,912	987,962	987,962	893,407	1,057,807	918,117	499,328	337,173	291,023	294,102	320,183	619,360
42	Pipeline Costs Modeled in Sendout™		$ 2,810,541	$ 3,690,647	$ 4,304,570	$ 3,827,533	$ 3,717,010	$ 2,576,253	$ 1,322,251	$ 886,662	$ 774,801	$ 782,079	$ 832,473	$ 1,619,126
43	NYMEX Price Used for Forecast		$ 2.9010	$ 3.2660	$ 3.3750	$ 3.3270	$ 3.1850	$ 2.8230	$ 2.2610	$ 2.2970	$ 2.3360	$ 2.3450	$ 2.3290	$ 2.3540
44	NYMEX Price Used for Update		$ 2.9960	$ 2.7120	$ 2.8380	$ 2.8180	$ 2.7670	$ 2.6800	$ 2.2610	$ 2.2970	$ 2.3360	$ 2.3450	$ 2.3290	$ 2.3540
45	Increase/(Decrease) NYMEX Price		$ 0.10	$ (0.55)	$ (0.54)	$ (0.51)	$ (0.42)	$ (0.14)	$ -	$ -	$ -	$ -	$ -	$ -
46	Increase/(Decrease) in Pipeline Costs		$ 88,437	$ (547,331)	$ (530,536)	$ (454,744)	$ (442,163)	$ (131,291)	$ -	$ -	$ -	$ -	$ -	$ -
47	Updated Pipeline Costs		$ 2,898,978	$ 3,143,317	$ 3,774,034	$ 3,372,789	$ 3,274,847	$ 2,444,962	$ 1,322,251	$ 886,662	$ 774,801	$ 782,079	$ 832,473	$ 1,619,126
48	New Hampshire Allocated Percentage		39.54%	39.84%	40.15%	39.76%	39.18%	36.70%	34.56%	34.20%	33.37%	33.52%	33.54%	35.85%
49	NH Updated Pipeline Costs		$ 1,146,155	$ 1,252,260	$ 1,515,278	$ 1,341,021	$ 1,283,025	$ 897,181	$ 456,911	$ 303,234	$ 258,542	$ 262,123	$ 279,217	$ 580,479
50														
51	NH Peaking Volumes		709	10,058	96,948	14,113	726	658	643	616	621	623	604	667
52	NH Peaking Costs Modeled in Sendout		$ 2,949	$ 46,198	$ 330,954	$ 78,771	$ 4,732	$ 4,422	$ 4,341	$ 4,130	$ 4,141	$ 4,153	$ 3,992	$ 4,396
53	Change in NYMEX Price								$ -	$ -	$ -	$ -	$ -	$ -
54	Change in Peaking Costs		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
55	NH Updated Peaking Costs		$ 2,949	$ 46,198	$ 330,954	$ 78,771	$ 4,732	$ 4,422	$ 4,341	$ 4,130	$ 4,141	$ 4,153	$ 3,992	$ 4,396
56														
57	NH Commodity Costs													
58	Pipeline		$ 1,146,155	$ 1,252,260	$ 1,515,278	$ 1,341,021	$ 1,283,025	$ 897,181	$ 456,911	$ 303,234	$ 258,542	$ 262,123	$ 279,217	$ 580,479
59	Storage		$ 169,346	$ 483,784	$ 553,959	$ 562,914	$ 315,143	$ -	$ -	$ -	$ -	$ -	$ -	$ -
60	Peaking		$ 2,949	$ 46,198	$ 330,954	$ 78,771	$ 4,732	$ 4,422	$ 4,341	$ 4,130	$ 4,141	$ 4,153	$ 3,992	$ 4,396
61	Total Commodity Costs		$ 1,318,451	$ 1,782,241	$ 2,400,191	$ 1,982,706	$ 1,602,900	$ 901,603	$ 461,252	$ 307,364	$ 262,684	$ 266,275	$ 283,209	$ 584,875
62	Inventory Finance Charge		$ 156	$ 245	$ 299	$ 252	$ 209	$ 104	$ -	$ -	$ -	$ -	$ -	$ -
63														
64	**Total Anticipated Direct Cost of Gas**		$ 2,575,092	$ 3,038,971	$ 3,714,189	$ 3,296,657	$ 2,916,807	$ 2,123,030	$ 1,604,864	$ 1,450,976	$ 1,406,296	$ 1,409,888	$ 1,426,822	$ 1,728,487

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Ana

Line	Sales Revenues	Winter	Summer	Prior Period	Total
1	Volumes				
2	Residential Heat & Non Heat				20,133,234
3	Sales HLF Classes				4,189,921
4	Sales LLF Classes				18,635,467
5	Total	34,897,412	8,061,210		42,958,621
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				$ (13,662,507)
12	Sales HLF Classes				$ (2,214,195)
13	Sales LLF Classes				$ (13,080,396)
14	Total Sales	$ (25,296,539)	$ (3,660,559)		$ (28,957,098)
15					
16					
17	**Gas Costs and Credits**			Prior	
18		Winter	Summer	Period	Total
19	Demand Costs (net of Capacity Assignment)				
20	Pipeline	$ 2,722,942	$ 2,745,625		$ 5,468,568
21	Storage	$ 3,693,216	$ 3,784,960		$ 7,478,176
22	On-system Peaking	$ 1,031,170	$ 98,030		$ 1,129,200
23	Off-System Peaking	$ 1,905,950	$ 1,905,950		$ 3,811,900
24	Total Demand Costs	$ 9,353,279	$ 8,534,565		$ 17,887,844
25					
26	Asset Management and Capacity Release				
27	NUI AMA Revenue	$ (4,274,754)	$ (4,274,754)		$ (8,549,509)
28	NUI Capacity Release				$ -
29	NUI AMA Rev & Cap. Release Subtotal				$ -
30	NH AMA Revenue	$ (1,732,724)	$ (1,732,724)		$ (3,465,449)
31	NH Capacity Release				$ -
32	NH Total Asset Management and Capacity Release	$ (1,732,724)	$ (1,732,724)		$ (3,465,449)
33					
34	CNG Expenses	$ 59,833	$ 59,833		$ 119,666
35					
36	Re-entry Rate & Conversion Rate Revenue	$ (5,000)	$ -		$ (5,000)
37					
38	Net Demand Costs	$ 7,675,387	$ 6,861,674		$ 14,537,061
39					
40	NUI Commodity Costs				
41	NUI Total Pipeline Volumes				8,137,336
42	Pipeline Costs Modeled in Sendout™				$ 27,143,945
43	NYMEX Price Used for Forecast				
44	NYMEX Price Used for Update				
45	Increase/(Decrease) NYMEX Price				
46	Increase/(Decrease) in Pipeline Costs				
47	Updated Pipeline Costs				
48	New Hampshire Allocated Percentage				
49	NH Updated Pipeline Costs				$ 9,575,425
50					
51	NH Peaking Volumes				
52	NH Peaking Costs Modeled in Sendout				
53	Change in NYMEX Price				
54	Change in Peaking Costs				
55	NH Updated Peaking Costs				
56					
57	NH Commodity Costs				
58	Pipeline				$ 9,575,425
59	Storage				$ 2,085,147
60	Peaking				$ 493,178
61	Total Commodity Costs	$ 9,988,092	$ 2,165,659		$ 12,153,750
62	Inventory Finance Charge				$ 1,266
63					
64	**Total Anticipated Direct Cost of Gas**	$ 17,664,745	$ 9,027,333		$ 26,692,077

Updated End of Period Balance ("Target Balance")
($5,447,209)
Line 98 - April

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

Line			Winter						Summer					
66			(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)
67		Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21
68	Working Capital													
69	Total Anticipated Direct Cost of Gas		$ 2,733,032	$ 3,196,910	$ 3,872,128	$ 3,454,596	$ 3,074,747	$ 2,280,970	$ 1,623,018	$ 1,469,130	$ 1,424,450	$ 1,428,041	$ 1,444,975	$ 1,746,641
70	Working Capital Percentage		0.0892%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%	0.09%
71	Working Capital Allowance		$ 2,438	$ 2,852	$ 3,455	$ 3,082	$ 2,743	$ 2,035	$ 1,448	$ 1,311	$ 1,271	$ 1,274	$ 1,289	$ 1,558
72	Beginning Period Working Capital Balance		$ (44,205)	$ (41,883)	$ (39,140)	$ (35,787)	$ (32,798)	$ (30,139)	$ (28,183)	$ (26,810)	$ (25,570)	$ (24,366)	$ (23,156)	$ (21,928)
73	End of Period Working Capital Allowance		$ (41,767)	$ (39,031)	$ (35,686)	$ (32,705)	$ (30,054)	$ (28,104)	$ (26,735)	$ (25,499)	$ (24,299)	$ (23,092)	$ (21,867)	$ (20,370)
74	Interest		$ (116)	$ (110)	$ (101)	$ (93)	$ (85)	$ (79)	$ (74)	$ (71)	$ (68)	$ (64)	$ (61)	$ (57)
75	End of period with Interest	$ (44,205)	$ (41,883)	$ (39,140)	$ (35,787)	$ (32,798)	$ (30,139)	$ (28,183)	$ (26,810)	$ (25,570)	$ (24,366)	$ (23,156)	$ (21,928)	$ (20,427)
76	Bad Debt													
77	Projected Bad Debt	$ -	$ 26,101	$ 26,101	$ 26,101	$ 26,101	$ 26,101	$ 26,101	$ 2,371	$ 2,371	$ 2,371	$ 2,371	$ 2,371	$ 2,371
78	Beginning Period Bad Debt Balance		$ (7,408)	$ 18,708	$ 44,894	$ 71,152	$ 97,481	$ 123,881	$ 150,352	$ 153,134	$ 155,923	$ 158,720	$ 161,524	$ 164,336
79	End of Period Bad Debt Balance		$ 18,693	$ 44,808	$ 70,995	$ 97,253	$ 123,581	$ 149,981	$ 152,723	$ 155,505	$ 158,294	$ 161,091	$ 163,895	$ 166,707
80	Interest		$ 15	$ 86	$ 157	$ 228	$ 299	$ 371	$ 410	$ 418	$ 426	$ 433	$ 441	$ 448
81	End of Period Bad Debt Balance with Interest	$ (7,408)	$ 18,708	$ 44,894	$ 71,152	$ 97,481	$ 123,881	$ 150,352	$ 153,134	$ 155,923	$ 158,720	$ 161,524	$ 164,336	$ 167,155
82	Local Production and Storage Capacity		$ 79,351	$ 79,351	$ 79,351	$ 79,351	$ 79,351	$ 79,351	$ -	$ -	$ -	$ -	$ -	$ -
83			$ -	$ -	$ -									
84	Miscellaneous Overhead		$ 78,589	$ 78,589	$ 78,589	$ 78,589	$ 78,589	$ 78,589	$ 18,154	$ 18,154	$ 18,154	$ 18,154	$ 18,154	$ 18,154
85														
86	Gas Cost Other than Bad Debt and Working Capital Over/Under Collection													
87	Beginning Balance Over/Under Collection		$ 1,155,846	$ 591,293	$ (1,011,060)	$ (2,860,872)	$ (4,276,135)	$ (5,420,408)	$ (5,569,378)	$ (4,736,499)	$ (3,798,478)	$ (2,820,997)	$ (1,843,842)	$ (886,577)
88	Net Costs - Revenues		$ (566,915)	$ (1,601,785)	$ (1,844,576)	$ (1,405,611)	$ (1,131,160)	$ (134,108)	$ 846,816	$ 949,563	$ 986,433	$ 983,464	$ 960,957	$ 748,464
89	Ending Balance before Interest		$ 588,930	$ (1,010,492)	$ (2,855,636)	$ (4,266,483)	$ (5,407,295)	$ (5,554,516)	$ (4,722,562)	$ (3,786,936)	$ (2,812,046)	$ (1,837,533)	$ (882,885)	$ (138,113)
90	Average Balance		$ 872,388	$ (209,599)	$ (1,933,348)	$ (3,563,678)	$ (4,841,715)	$ (5,487,462)	$ (5,145,970)	$ (4,261,717)	$ (3,305,262)	$ (2,329,265)	$ (1,363,363)	$ (512,345)
91	Interest Rate		3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%
92	Interest Expense		$ 2,363	$ (568)	$ (5,236)	$ (9,652)	$ (13,113)	$ (14,862)	$ (13,937)	$ (11,542)	$ (8,952)	$ (6,308)	$ (3,692)	$ (1,388)
93	Ending Balance Incl Interest Expense	$ 1,155,846	$ 591,293	$ (1,011,060)	$ (2,860,872)	$ (4,276,135)	$ (5,420,408)	$ (5,569,378)	$ (4,736,499)	$ (3,798,478)	$ (2,820,997)	$ (1,843,842)	$ (886,577)	$ (139,501)
94	**Total Over/Under Collection Ending Balance**	$ 1,104,232	$ 568,118	$ (1,005,306)	$ (2,825,507)	$ (4,211,452)	$ (5,326,667)	**$ (5,447,209)**	$ (4,610,174)	$ (3,668,125)	$ (2,686,644)	$ (1,705,474)	$ (744,170)	$ 7,227
95														
96	**Total Indirect Cost of Gas**	$ 1,104,232	$ 188,740	$ 186,301	$ 182,314	$ 177,606	$ 173,885	$ 171,506	$ 8,372	$ 10,641	$ 13,202	$ 15,859	$ 18,501	$ 21,087
97														
98	**Total Cost of Gas**	$ 1,104,232	$ 2,763,832	$ 3,225,272	$ 3,896,503	$ 3,474,263	$ 3,090,692	$ 2,294,535	$ 1,613,236	$ 1,461,617	$ 1,419,498	$ 1,425,747	$ 1,445,323	$ 1,749,574
99														
100	**Total Interest**	$ -	$ 2,262	$ (591)	$ (5,181)	$ (9,516)	$ (12,899)	$ (14,570)	$ (13,601)	$ (11,195)	$ (8,594)	$ (5,940)	$ (3,313)	$ (997)

Northern Utilities
NEW HAMPSHIRE (Over) / Undercollection Ana

		Winter	Summer	Prior Period	Total
65					
66					
67					
68	Working Capital				
69	Total Anticipated Direct Cost of Gas				$ 27,748,638
70	Working Capital Percentage				
71	Working Capital Allowance	$ 16,606	$ 8,151	$ (44,205)	$ (19,448)
72	Beginning Period Working Capital Balance				
73	End of Period Working Capital Allowance				
74	Interest	$ (584)	$ (395)		$ (979)
75	End of period with Interest				
76	Bad Debt				
77	Projected Bad Debt	$ 156,604	$ 14,227	$ (7,408)	$ 163,423
78	Beginning Period Bad Debt Balance				
79	End of Period Bad Debt Balance				
80	Interest	$ 1,156	$ 2,576		$ 3,732
81	End of Period Bad Debt Balance with Interest				
82	Local Production and Storage Capacity				$ 476,106
83					$ -
84	Miscellaneous Overhead				$ 580,455
85					
86	Gas Cost Other than Bad Debt and Working Capital Over/U				
87	Beginning Balance Over/Under Collection				$ (31,477,107)
88	Net Costs - Revenues				$ (1,208,459)
89	Ending Balance before Interest				$ (32,685,567)
90	Average Balance				$ (32,081,337)
91	Interest Rate				
92	Interest Expense				$ (86,887)
93	Ending Balance Incl Interest Expense			$ 1,155,846	
94	**Total Over/Under Collection Ending Balance**				
95					
96	**Total Indirect Cost of Gas**	$ 1,080,353	$ 87,662	$ 1,104,232	$ 2,272,248
97					
98	**Total Cost of Gas**	$ 18,745,097	$ 9,114,995	$ 1,104,232	$ 28,964,325
99					
100	**Total Interest**	$ (40,495)	$ (43,639)		$ (84,134)