



June 21, 2017



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 16-819  
June 2017 Monthly Cost of Gas Report

Dear Director Howland:

Pursuant to the Commission's Order No. 25,959 in Docket DG 16-819, enclosed is Northern Utilities - New Hampshire Division's ("Northern" or the "Company") current calculation of its projected over or under collection of gas costs for the 2016 / 2017 summer season as well as for the 2016 /2017 annual period. The Company is also providing a summary of its hedging transactions and monthly inventory interest calculation, both updated through May 2017.

Northern's current calculation of costs has been updated to reflect the actual May 1, 2017 balance, actual costs and revenues for May 2017, and NYMEX futures prices as of June 20, 2017. 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 large, sweeping flourish at the end.

George H. Simmons Jr.

Enclosures

cc: Alex Speidel, Staff Counsel  
D Maurice Kreis, Consumer Advocate

George H. Simmons  
Manager Regulatory Services

6 Liberty Lane West  
Hampton, NH 03842

Phone: 603-773-6534  
Fax: 603-773-6734

simmons@unitil.com

## New Hampshire Monthly Cost of Gas Report

### June 2017 Summary

The objective of the Summer Period Monthly Cost of Gas (“COG”) analysis is to determine if COG rates need to be adjusted in order to minimize the October 31, 2017 end of year balance. This is done by first determining the October 31, 2017 Summer Season balance and comparing it to the corresponding end of year balance.

As shown on Table 1, Line 27, the projected Summer Season end of period balance is an under-collection of \$625,151. When combined with the Winter Season’s projected end of period over-collection, Line 29, of \$(1,510,556), the projected end of year balance, Line 31, is an over-collection of \$(885,273).

Although the projected summer season under-collection is greater the 4% of the total projected gas costs, any adjustment / increase in rates will increase the end of year balance. Therefore, no rate change is proposed at this time.

An increase in COG rates will only occur when the projected under-collection exceeds the 4% threshold and offsets the Winter Season over-collection balance. This amount, \$1,729,279, is shown on Line 36 of Table 1.

**NORTHERN UTILITIES, INC.**  
**NEW HAMPSHIRE DIVISION**  
**Calculation of the Projected Over or Under Collection of the**  
**Summer 2017 Period Cost of Gas**  
**DG 16-819**  
**June 2017 Estimated**

1	Under/(Over) collection as of 05/01/17 [1]	\$ (2,086,122)	Table 2, PG 3, APRIL, LN 114
2			
3	Forecasted firm therm sales 06/01/2017 - 10/31/2017 (Summer)		
4	Residential Heat & Non Heat	2,743,990	Table 2, PG. 2 Line 2
5	HLF Classes	1,714,046	Table 2, PG. 2 Line 3
6	LLF Classes	1,952,456	Table 2, PG. 2 Line 4
7			
8	Current recovery rate per therm		
9	Residential heat & non heat	\$0.4055	Table 2, PG. 1 Line 7
10	HLF classes	\$0.3589	Table 2, PG. 1 Line 8
11	LLF classes	\$0.4465	Table 2, PG. 1 Line 9
12			
13	Total	\$ (2,599,631)	(Ln4*Ln 9) + (Ln5*Ln10) +(LN6*Ln 11)
14			
15	Forecasted recovered costs at current rates 06/01/2017 - 10/31/2017	\$ (2,599,631)	LN 13
16	Actual recovered costs	\$ (160,478)	
17	Estimated total recovered costs 05/01/2017 - 10/31/2017	\$ (2,760,109)	Ln 15 + Ln 16
18			
19	Revised projected direct gas costs 05/01/17 - 10/31/17 [2] (Summer)	\$ 5,262,048	Table 2, PG 4, LN 71
20	Revised projected indirect gas costs 05/01/17 - 10/31/17 [3] (Summer)	\$ 209,334	Table 2, PG 4, LN 104
21			
22	Total Projected Summer Gas Costs	\$ 5,471,382	LN 19 + LN 20
23			
26			
27	Projected under/(over) collection as of 10/31/17	\$ 625,151	LN 1 + LN 17+LN 22
28			
29	Winter Season Variance (Over-collection)	\$ (1,510,424)	Table 2, PG 3, APRIL, LN 110 - LN 114
30			
31	Projected October 31, 2017 End of Year Balance (over-collection)	\$ (885,273)	LN 27 + LN 29
32			
34	Summer Season Under-collection Threshold (4% of Projected Summer Cost)	\$ 218,855	LN 22 * 4%
35			
36	Total Under-Collection Threshold	\$ 1,729,279	(LN 29*-1)+LN 34
37			
38	Over-collection Threshold (4% of Projected Summer Cost)	\$ (218,855)	LN 22 * 4% *-1
39			
40	Projected Summer Period Variance	\$ 625,151	Ln 27
41			
42	Type of Variance	Under-collection	
43			
44	Rate Adjustment Required	No	If Ln 40 < Ln 36, No, else Yes

## NOTES

[1] Target balance used for determining Summer Period COG rates

[2] Reflects futures prices as of June 19, 2017

[3] Includes: Working Capital Allowance, Bad Debt Allowance, Production and Storage Capacity, Miscellaneous Overhead, Refunds and Interest

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

	Winter								Summer				
	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	(Forecast) Jun-17	(Forecast) Jul-17	(Forecast) Aug-17	(Forecast) Sep-17	(Forecast) Oct-17
<b>Sales Revenues</b>													
Volumes													
Residential Heat & Non Heat									481,557	420,333	431,131	476,265	934,704
Sales HLF Classes									300,806	262,563	269,308	297,501	583,867
Sales LLF Classes									342,646	299,083	306,767	338,881	665,079
Total									1,125,009	981,979	1,007,206	1,112,647	2,183,650
Rates													
Residential Heat & Non Heat CGA									\$0.4055	\$0.4055	\$0.4055	\$0.4055	\$0.4055
Sales HLF Classes CGA									\$0.3589	\$0.3589	\$0.3589	\$0.3589	\$0.3589
Sales LLF Classes CGA									\$0.4465	\$0.4465	\$0.4465	\$0.4465	\$0.4465
Revenues													
Residential Heat & Non Heat									\$ (195,271)	\$ (170,445)	\$ (174,824)	\$ (193,125)	\$ (379,023)
Sales HLF Classes									\$ (107,959)	\$ (94,234)	\$ (96,655)	\$ (106,773)	\$ (209,550)
Sales LLF Classes									\$ (152,992)	\$ (133,541)	\$ (136,971)	\$ (151,310)	\$ (296,958)
Total Sales		\$ (2,703,468)	\$ (4,232,010)	\$ (5,049,884)	\$ (4,110,321)	\$ (4,109,899)	\$ (3,327,640)	\$ (160,478)	\$ (456,222)	\$ (398,220)	\$ (408,450)	\$ (451,209)	\$ (885,530)
<b>Gas Costs and Credits</b>													
Net Demand Costs (Net of Injection Fees & Cap. Assign.)													
Pipeline									\$ 271,333	\$ 271,333	\$ 274,823	\$ 274,823	\$ 274,823
Storage									\$ 550,631	\$ 550,631	\$ 554,066	\$ 554,066	\$ 554,066
Peaking									\$ 20,807	\$ 20,807	\$ 22,055	\$ 22,055	\$ 22,055
Total Demand Costs									\$ 842,770	\$ 842,770	\$ 850,944	\$ 850,944	\$ 850,944
Asset Management and Capacity Release													
NUI AMA Revenue									\$ (830,623)	\$ (830,623)	\$ (830,623)	\$ (830,623)	\$ (830,623)
NUI Capacity Release									\$ (5,393)	\$ (5,393)	\$ (5,393)	\$ (5,393)	\$ (5,393)
NUI AMA Rev & Cap. Release Subtotal									\$ (836,016)	\$ (836,016)	\$ (836,016)	\$ (836,016)	\$ (836,016)
NH AMA Revenue									\$ (303,728)	\$ (303,728)	\$ (303,728)	\$ (303,728)	\$ (303,728)
NH Capacity Release									\$ (2,343)	\$ (2,343)	\$ (2,343)	\$ (2,343)	\$ (2,343)
NH Total Asset Management and Capacity Release									\$ (306,071)	\$ (306,071)	\$ (306,071)	\$ (306,071)	\$ (306,071)
PNGTS Refund									\$ (16,566.71)	\$ (16,566.71)	\$ (16,566.71)	\$ (16,566.71)	\$ (16,566.71)
Net Demand Costs		\$ 1,105,488	\$ 835,704	\$ 1,012,794	\$ 993,820	\$ 997,079	\$ 275,747	\$ 587,761	\$ 520,132	\$ 520,132	\$ 528,306	\$ 528,306	\$ 528,306
NUI Commodity Costs													
NUI Total Pipeline Volumes									321,009	282,542	285,644	313,975	623,892
Pipeline Costs Modeled in Sendout™									\$ 775,044	\$ 693,427	\$ 678,497	\$ 720,034	\$ 1,679,577
NYMEX Price Used for Forecast									\$ 3,0080	\$ 3,0360	\$ 3,0440	\$ 3,0280	\$ 3,0510
NYMEX Price Used for Update									\$ 3,2360	\$ 2,8940	\$ 2,9170	\$ 2,9100	\$ 2,9350
Increase/(Decrease) NYMEX Price									\$ 0,2280	\$ (0,1420)	\$ (0,1270)	\$ (0,1180)	\$ (0,1160)
Increase/(Decrease) in Pipeline Costs									\$ 73,190	\$ (40,121)	\$ (36,277)	\$ (37,049)	\$ (72,371)
Updated Pipeline Costs									\$ 848,234	\$ 653,306	\$ 642,221	\$ 682,985	\$ 1,607,205
Interruptible Volumes - NH									0	0	0	0	0
Average Supply Cost (\$/MMBtu)									\$ 2.64	\$ 2.31	\$ 2.25	\$ 2.18	\$ 2.58
Interruptible Cost - NH									\$ -	\$ -	\$ -	\$ -	\$ -
Total Updated Pipeline Costs									\$ 848,234	\$ 653,306	\$ 642,221	\$ 682,985	\$ 1,607,205
New Hampshire Allocated Percentage									35.24%	34.91%	35.42%	35.63%	35.30%
NH Updated Pipeline Costs									\$ 298,902	\$ 228,038	\$ 227,451	\$ 243,323	\$ 567,378
Hedging (Gain)/Loss Estimate													
NYMEX Options Contracts													
Hedging Expenses													
NYMEX Option Strike Price													
NYMEX Price Used for Forecast													
Strike Price Hit													
Option Hedging Gain (Credit)													
Total Northern Hedging Net Cost									\$ -	\$ -	\$ -	\$ -	\$ -
New Hampshire Allocated Percentage													
NH Futures Hedging Net Cost									\$ -	\$ -	\$ -	\$ -	\$ -
NH Commodity Costs													
Pipeline Excl Hedging									\$ 298,902	\$ 228,038	\$ 227,451	\$ 243,323	\$ 567,378
Hedging (Gain)/Loss Estimate									\$ -	\$ -	\$ -	\$ -	\$ -
Storage									\$ -	\$ -	\$ -	\$ -	\$ -
Peaking									\$ 4,838	\$ 4,938	\$ 5,005	\$ 4,859	\$ 4,967
Total Commodity Costs		\$ 1,282,208	\$ 2,764,977	\$ 2,907,268	\$ 2,451,323	\$ 1,965,562	\$ 1,119,196	\$ 459,407	\$ 303,741	\$ 232,975	\$ 232,456	\$ 248,182	\$ 572,345

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

<b>Sales Revenues</b>			
Volumes	Winter	Summer	Total
Residential Heat & Non Heat	-	2,743,990	2,743,990
Sales HLF Classes	-	1,714,046	1,714,046
Sales LLF Classes	-	1,952,456	1,952,456
<b>Total</b>	-	<b>6,410,492</b>	<b>6,410,492</b>
<b>Rates</b>			
Residential Heat & Non Heat CGA	-	-	-
Sales HLF Classes CGA	-	-	-
Sales LLF Classes CGA	-	-	-
<b>Revenues</b>			
Residential Heat & Non Heat	-	(1,112,688)	(1,112,688)
Sales HLF Classes	-	(615,171)	(615,171)
Sales LLF Classes	-	(871,772)	(871,772)
<b>Total Sales</b>	<b>(23,533,223)</b>	<b>(2,760,109)</b>	<b>(26,293,332)</b>
<b>Gas Costs and Credits</b>			
	Winter	Summer	Total
<b>Net Demand Costs (Net of Injection Fees &amp; Cap. Ass</b>			
Pipeline	-	1,367,135	1,367,135
Storage	-	2,763,459	2,763,459
Peaking	-	107,778	107,778
<b>Total Demand Costs</b>	-	<b>4,238,372</b>	<b>4,238,372</b>
<b>Asset Management and Capacity Release</b>			
NUI AMA Revenue	-	(4,153,115)	\$(4,153,115)
NUI Capacity Release	-	(26,967)	\$(26,967)
NUI AMA Rev & Cap. Release Subtotal	-	(4,180,081)	\$(4,180,081)
NH AMA Revenue	-	(1,518,640)	\$(1,518,640)
NH Capacity Release	-	(11,717)	\$(11,717)
<b>NH Total Asset Management and Capacity Release</b>	<b>\$ -</b>	<b>\$(1,530,357)</b>	<b>\$(1,530,357)</b>
<b>PNGTS Refund</b>	<b>\$ (1,990,806)</b>	<b>\$ (99,400)</b>	<b>\$(82,834)</b>
<b>Net Demand Costs</b>	<b>\$ (1,990,806)</b>	<b>\$ 2,608,615</b>	<b>\$ 2,625,182</b>
<b>NUI Commodity Costs</b>			
NUI Total Pipeline Volumes			1,827,062
Pipeline Costs Modeled in Sendout™			\$ 4,546,578
NYMEX Price Used for Forecast			
NYMEX Price Used for Update			
Increase/(Decrease) NYMEX Price			
Increase/(Decrease) in Pipeline Costs			
Updated Pipeline Costs			
Interruptible Volumes - NH			
Average Supply Cost (\$/MMBtu)			
Interruptible Cost - NH			
Total Updated Pipeline Costs			
New Hampshire Allocated Percentage			
<b>NH Updated Pipeline Costs</b>			<b>\$ 1,565,092</b>
<b>Hedging (Gain)/Loss Estimate</b>			
NYMEX Options Contracts			
Hedging Expenses			
NYMEX Option Strike Price			
NYMEX Price Used for Forecast			
Strike Price Hit			
Option Hedging Gain (Credit)			\$ -
Total Northern Hedging Net Cost			\$ -
<b>New Hampshire Allocated Percentage</b>			
<b>NH Futures Hedging Net Cost</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>NH Commodity Costs</b>			
Pipeline Excl Hedging	\$ -	\$ 1,565,092	\$ 1,565,092
Hedging (Gain)/Loss Estimate	\$ -	\$ -	\$ -
Storage	\$ -	\$ -	\$ -
Peaking	\$ -	\$ 24,607	\$ 24,607
<b>Total Commodity Costs</b>	<b>\$ 12,490,534</b>	<b>\$ 2,049,106</b>	<b>\$ 14,539,639</b>

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

69	Inventory Finance Charge									\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
70																	
71	<b>Total Anticipated Direct Cost of Gas</b>	\$ 2,387,695	\$ 3,600,681	\$ 3,920,062	\$ 3,445,143	\$ 2,962,641	\$ 1,394,943	\$ 1,047,168	\$ 823,873	\$ 753,108	\$ 760,761	\$ 776,487	\$ 1,100,651				
72		Winter							Summer								
73									(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)				
74		Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17			
75	Working Capital																
76	Total Anticipated Direct Cost of Gas	\$ 2,525,956	\$ 3,738,942	\$ 4,058,323	\$ 3,583,404	\$ 3,100,901	\$ 1,533,204	\$ 1,064,461	\$ 823,873	\$ 753,108	\$ 760,761	\$ 776,487	\$ 1,100,651				
77	Working Capital Percentage	0.0887%	0.0887%	0.0887%	0.0887%	0.0887%	0.0950%	0.0950%	0.0950%	0.0950%	0.0950%	0.0950%	0.0950%				
78	Working Capital Allowance	\$ 2,240	\$ 3,316	\$ 3,600	\$ 3,178	\$ 2,750	\$ 1,457	\$ 1,011	\$ 783	\$ 715	\$ 723	\$ 738	\$ 1,046				
79	Beginning Period Working Capital Balance	\$ 1,079	\$ 3,326	\$ 6,657	\$ 10,281	\$ 13,494	\$ 16,288	\$ 17,798	\$ 18,866	\$ 19,709	\$ 20,487	\$ 21,275	\$ 22,080				
80	End of Period Working Capital Allowance	\$ 3,319	\$ 6,642	\$ 10,256	\$ 13,459	\$ 16,244	\$ 17,744	\$ 18,809	\$ 19,649	\$ 20,424	\$ 21,210	\$ 22,012	\$ 23,126				
81	Interest	\$ 6	\$ 15	\$ 25	\$ 35	\$ 43	\$ 53	\$ 57	\$ 60	\$ 63	\$ 65	\$ 68	\$ 71				
82	End of period with Interest	\$ 1,079	\$ 3,326	\$ 6,657	\$ 10,281	\$ 13,494	\$ 16,288	\$ 17,798	\$ 18,866	\$ 19,709	\$ 20,487	\$ 21,275	\$ 22,080				
83	Bad Debt																
84	Projected Bad Debt	\$ -	\$ (147)	\$ (52)	\$ 5,903	\$ 4,964	\$ 4,869	\$ 18,007	\$ 31,930	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000				
85	Beginning Period Bad Debt Balance	\$ 135,847	\$ 136,096	\$ 136,441	\$ 136,441	\$ 142,750	\$ 148,137	\$ 153,446	\$ 171,960	\$ 204,478	\$ 230,156	\$ 255,914	\$ 281,753				
86	End of Period Bad Debt Balance	\$ 135,700	\$ 136,044	\$ 142,344	\$ 147,714	\$ 153,007	\$ 171,453	\$ 203,890	\$ 229,478	\$ 255,156	\$ 280,914	\$ 306,753	\$ 312,672				
87	Interest	\$ 396	\$ 397	\$ 407	\$ 424	\$ 439	\$ 508	\$ 587	\$ 678	\$ 758	\$ 839	\$ 920	\$ 969				
88	End of Period Bad Debt Balance with Interest	\$ 135,847	\$ 136,096	\$ 136,441	\$ 142,750	\$ 148,137	\$ 153,446	\$ 171,960	\$ 204,478	\$ 230,156	\$ 255,914	\$ 281,753	\$ 307,672				
89	Local Production and Storage Capacity	\$ 70,110	\$ 70,110	\$ 70,110	\$ 70,110	\$ 70,110	\$ 70,110	\$ 70,110	\$ -	\$ -	\$ -	\$ -	\$ -				
90	NH PUC Consulting Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
91	Miscellaneous Overhead	\$ 68,151	\$ 68,151	\$ 68,151	\$ 68,151	\$ 68,151	\$ 68,151	\$ 68,151	\$ 17,293	\$ 17,293	\$ 17,293	\$ 17,293	\$ 17,293				
94	Gas Cost Other than Bad Debt and Working Capital Over/Under Collection																
95	Beginning Balance Over/Under Collection	\$ 1,215,774	\$ 1,041,550	\$ 550,801	\$ (440,599)	\$ (969,570)	\$ (1,982,867)	\$ (3,786,304)	\$ (2,892,741)	\$ (2,516,235)	\$ (2,151,335)	\$ (1,787,875)	\$ (1,450,356)				
96	Net Costs - Revenues	\$ (177,511)	\$ (493,068)	\$ (991,560)	\$ (526,917)	\$ (1,008,998)	\$ (1,794,436)	\$ 903,983	\$ 384,944	\$ 372,181	\$ 369,605	\$ 342,572	\$ 232,414				
97	Ending Balance before Interest	\$ 1,038,263	\$ 548,482	\$ (440,760)	\$ (967,516)	\$ (1,978,568)	\$ (3,777,304)	\$ (2,882,321)	\$ (2,507,796)	\$ (2,144,053)	\$ (1,781,730)	\$ (1,445,304)	\$ (1,217,942)				
98	Average Balance	\$ 1,127,019	\$ 795,016	\$ 55,020	\$ (704,058)	\$ (1,474,069)	\$ (2,880,085)	\$ (3,334,312)	\$ (2,700,268)	\$ (2,330,144)	\$ (1,966,533)	\$ (1,616,590)	\$ (1,334,149)				
99	Interest Rate	3.50%	3.50%	3.50%	3.50%	3.50%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%				
100	Interest Expense	\$ 3,287	\$ 2,319	\$ 160	\$ (2,054)	\$ (4,299)	\$ (9,000)	\$ (10,420)	\$ (8,438)	\$ (7,282)	\$ (6,145)	\$ (5,052)	\$ (4,169)				
101	Ending Balance Incl Interest Expense	\$ 1,215,774	\$ 1,041,550	\$ 550,801	\$ (440,599)	\$ (969,570)	\$ (1,982,867)	\$ (3,786,304)	\$ (2,892,741)	\$ (2,516,235)	\$ (2,151,335)	\$ (1,787,875)	\$ (1,450,356)				
102	<b>Total Over/Under Collection Ending Balance</b>	<b>\$ 1,352,700</b>	<b>\$ 1,180,972</b>	<b>\$ 693,898</b>	<b>\$ (287,568)</b>	<b>\$ (807,938)</b>	<b>\$ (1,813,133)</b>	<b>\$ (3,596,546)</b>	<b>\$ (2,669,397)</b>	<b>\$ (2,266,370)</b>	<b>\$ (1,874,934)</b>	<b>\$ (1,484,848)</b>	<b>\$ (885,273)</b>				
103																	
104	<b>Total Indirect Cost of Gas</b>	<b>\$ 1,352,700</b>	<b>\$ 144,044</b>	<b>\$ 144,255</b>	<b>\$ 148,355</b>	<b>\$ 144,808</b>	<b>\$ 142,064</b>	<b>\$ 149,285</b>	<b>\$ 40,459</b>	<b>\$ 35,376</b>	<b>\$ 36,548</b>	<b>\$ 37,775</b>	<b>\$ 38,966</b>				
105																	
106	<b>Total Cost of Gas</b>	<b>\$ 1,352,700</b>	<b>\$ 2,531,739</b>	<b>\$ 3,744,936</b>	<b>\$ 4,068,418</b>	<b>\$ 3,589,951</b>	<b>\$ 3,104,704</b>	<b>\$ 1,544,228</b>	<b>\$ 1,087,627</b>	<b>\$ 859,249</b>	<b>\$ 789,656</b>	<b>\$ 798,536</b>	<b>\$ 815,454</b>				
107																	
108	<b>Total Interest</b>	<b>\$ -</b>	<b>\$ 3,690</b>	<b>\$ 2,730</b>	<b>\$ 592</b>	<b>\$ (1,595)</b>	<b>\$ (3,817)</b>	<b>\$ (8,439)</b>	<b>\$ (9,775)</b>	<b>\$ (7,700)</b>	<b>\$ (6,461)</b>	<b>\$ (5,241)</b>	<b>\$ (4,065)</b>				
109																	
110		5310.53															
111																	
112																	
113																	
114																	
115																	
116																	

End of Period Balance, All Accounts \$ **(3,596,546)**

Winter Period Target ending Balance*	\$ <b>(2,086,122)</b>
---	-----------------------

\* See Annual COG filing, Schedule 3, Page 3 of 4, APR-17, LN 109

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

69	Inventory Finance Charge	\$	-	\$	-	\$	-
70							
71	<b>Total Anticipated Direct Cost of Gas</b>	\$	17,711,166	\$	5,262,048	\$	22,973,213
72							
73							
74			Winter		Summer		Total
75	Working Capital						
76	Total Anticipated Direct Cost of Gas					\$	23,820,073
77	Working Capital Percentage						
78	Working Capital Allowance					\$	21,557
79	Beginning Period Working Capital Balance						
80	End of Period Working Capital Allowance						
81	Interest					\$	560
82	End of period with Interest						
83	Bad Debt						
84	Projected Bad Debt	\$	33,544	\$	136,930	\$	170,474
85	Beginning Period Bad Debt Balance						
86	End of Period Bad Debt Balance						
87	Interest					\$	7,321
88	End of Period Bad Debt Balance with Interest						
89	Local Production and Storage Capacity	\$	420,658	\$	-	\$	420,658
90	NH PUC Consulting Costs	\$	-	\$	-	\$	-
91	Miscellaneous Overhead	\$	408,908	\$	103,760	\$	512,668
94	Gas Cost Other than Bad Debt and Working Capital						
95	Beginning Balance Over/Under Collection					\$	(15,169,756)
96	Net Costs - Revenues					\$	(2,386,792)
97	Ending Balance before Interest					\$	(17,556,548)
98	Average Balance					\$	(16,363,152)
99	Interest Rate						
100	Interest Expense					\$	(51,093)
101	Ending Balance Incl Interest Expense						
102	<b>Total Over/Under Collection Ending Balance</b>						
103							
104	<b>Total Indirect Cost of Gas</b>	\$	2,225,511	\$	209,334	\$	2,434,845
105							
106	<b>Total Cost of Gas</b>	\$	18,583,977	\$	5,471,382	\$	25,408,059
107							
108	<b>Total Interest</b>	\$	(6,840)	\$	(36,371)	\$	(43,212)
109							
110							
111							
112							
113							
114							
115							
116							

Northern Utilities, Inc.  
Price Risk Management  
Profit and Loss Statement  
May 2017

Account # 53325

Current

ACB	(\$84,708.38)
TE	\$179,362.00
LV	\$94,653.62

**ACTIVITY - Purchase Cost and Profit and Loss** **Expense** **Profit and Loss**

Date	Description	State	Contracts	Option Premium	Strike Price	Option Purchase Cost	
	<i>Net P&amp;L</i>						\$0.00

**TRANSACTION COSTS** **Subtotal** **Total**

Transaction Cost-Enter Options	Both	0	\$7.36	\$0.00		
Transaction Cost-Exit Options		0		\$0.00		
<i>Total New Transaction Costs</i>						\$0.00

**OPEN CALL OPTION POSITIONS-Expense and Open Trade Equity** **Total** **Total**

	State	QTY	Actual Option Premium	Option Purchase Cost	Strike Price	05/31/17 Futures Price	Current Open Trade Equity
05/02/16 Nov17 Options	Both	12	0.2300	\$27,600.00	\$3.500	\$3.184	\$0.00
05/26/16 Dec17 Options	Both	20	0.2370	\$47,400.00	\$4.000	\$3.317	\$0.00
06/28/16 Jan18 Options	Both	29	0.2475	\$71,775.00	\$4.300	\$3.400	\$0.00
07/27/16 Feb18 Options	Both	30	0.2470	\$74,100.00	\$4.500	\$3.381	\$0.00
08/29/16 Mar18 Options	Both	25	0.2400	\$60,000.00	\$4.650	\$3.313	\$0.00
<i>Total Expense, Open Trade Equity</i>				<b>\$280,875.00</b>			<b>\$0.00</b>

**OPEN CALL OPTION POSITIONS- Long Option Value** **Total**

	State	QTY	Current Option Premium	Current Option Value	Strike Price
05/02/16 Nov17 Options	Both	12	0.1554	\$18,648.00	\$3.500
05/26/16 Dec17 Options	Both	20	0.1182	\$23,640.00	\$4.000
06/28/16 Jan18 Options	Both	29	0.1481	\$42,949.00	\$4.300
07/27/16 Feb18 Options	Both	30	0.1670	\$50,100.00	\$4.500
08/29/16 Mar18 Options	Both	25	0.1761	\$44,025.00	\$4.650
05/31/17 <i>Total Long Option Value</i>				<b>\$179,362.00</b>	

**MARGIN CASH BALANCE** **Subtotal** **Total**

05/01/17	<b>Beginning Balance-carried forward from last month</b>					<b>(\$84,708.38)</b>
	Interest Credit				\$0.00	
	Net Deposit to Margin Account				\$0.00	
	Option Premiums of new activity				\$0.00	
	Monthly Transaction Costs				\$0.00	
	<i>Total Monthly Cash Adjustment</i>					\$0.00
05/31/17	<b>Ending Balance (ACB)</b>					<b>(\$84,708.38)</b>



**NORTHERN UTILITIES, INC.**  
**DETERMINATION OF INVENTORY FINANCING FROM MONEY POOL**  
**May 2017**

	<b>Total Inventory</b>	<b>Average bal beg + end / 2</b>	<b>Internally Financed</b>	<b>Money Pool Interest Rate</b>	<b>Interest to Defer</b>	<b>NH</b>	<b>ME</b>
January 2016	\$8,349,188.69	\$9,797,354.69	\$9,797,354.69	1.70%	\$13,879.59	\$5,887.72	\$7,991.87
February	\$6,881,382.39	\$7,615,285.54	\$7,615,285.54	1.71%	\$10,851.78	\$4,603.33	\$6,248.46
March	\$6,466,038.05	\$6,673,710.22	\$6,673,710.22	1.71%	\$9,510.04	\$4,034.16	\$5,475.88
April	\$6,932,113.54	\$6,699,075.80	\$6,699,075.80	1.71%	\$9,546.18	\$4,049.49	\$5,496.69
May	\$7,347,477.88	\$7,139,795.71	\$7,139,795.71	1.72%	\$10,233.71	\$4,341.14	\$5,892.57
June	\$7,775,720.99	\$7,561,599.44	\$7,561,599.44	1.73%	\$10,901.31	\$4,624.33	\$6,276.97
July	\$8,390,100.35	\$8,082,910.67	\$8,082,910.67	1.76%	\$11,852.12	\$5,027.67	\$6,824.45
August	\$9,003,112.57	\$8,696,606.46	\$8,696,606.46	1.79%	\$12,953.71	\$5,494.96	\$7,458.74
September	\$9,643,843.60	\$9,323,478.09	\$9,323,478.09	1.81%	\$14,040.27	\$5,955.88	\$8,084.39
October	\$10,336,838.18	\$9,990,340.89	\$9,990,340.89	1.81%	\$15,044.50	\$6,381.88	\$8,662.62
November	\$10,177,266.05	\$10,257,052.11	\$10,257,052.11	1.84%	\$15,692.96	\$6,656.95	\$9,036.01
December	\$8,176,192.96	\$9,176,729.50	\$9,176,729.50	1.98%	\$15,151.98	\$6,427.47	\$8,724.51
January 2017	\$4,492,308.93	\$6,334,250.95	\$6,334,250.95	2.05%	\$10,815.52	\$4,587.94	\$6,227.57
February	\$3,991,804.55	\$4,242,056.74	\$4,242,056.74	2.05%	\$7,243.17	\$3,072.55	\$4,170.61
March	\$1,988,672.70	\$2,990,238.62	\$2,990,238.62	2.19%	\$5,445.13	\$2,309.82	\$3,135.31
April	\$3,252,033.76	\$2,620,353.23	\$2,620,353.23	2.27%	\$4,956.51	\$2,102.55	\$2,853.96
May	\$4,492,308.93	\$3,872,171.35	\$3,872,171.35	2.29%	\$7,378.40	\$3,129.92	\$4,248.48

**Inventory**

<b>ACCT #</b>		<b>MMBTU</b>	<b>AMOUNT</b>
	LNG		
515152	Inventory - Liquefied Natural Gas		
	NATURAL GAS	9,520	\$64,021.99
515114&115	Natural Gas Underground - SS-1 and FSS-1		
515116	Natural Gas Underground - SSNE	72,472	\$159,398.42
515113	Natural Gas Underground - MCN	1,432,312	\$4,268,888.52
516525	Washington 10 prepaid	-	
<b>Total Inventory</b>			<b>\$4,492,308.93</b>