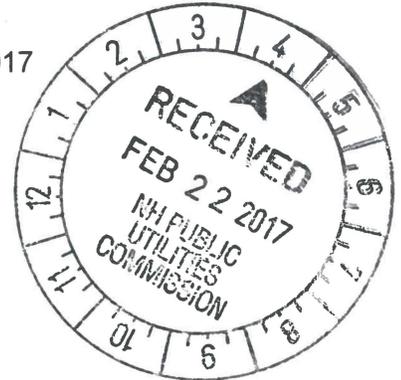




February 22, 2017

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  
February 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 winter season. The Company is also providing a summary of its hedging transactions and monthly inventory interest calculation, both updated through January 2017.

Northern's projected over / under collection calculation compares the current projected April 30, 2017 end of winter season balance to the corresponding balance projected in the Company's September 16, 2016 Cost of Gas Adjustment filing ("target balance"). The current end of period calculation has been updated to reflect the Company's actual November 1, 2016 balance and gas futures prices as of February 17, 2017.

As shown in the attached calculation, Northern's current projected end of period balance varies from the target balance by \$875,279. This projected over-collection of gas costs produces a variance of 4.61% of total projected winter season gas costs.

Accordingly, pursuant to its tariff, the Company has enclosed for filing the following Tariff Pages reflecting a decrease in its Cost of Gas Adjustment Rates:

Seventeenth Revised Page 43,  
Eighteenth Revised Page 96,  
Eighteenth Revised Page 97.

These Tariff Pages are issued February 22, 2017, to be effective on March 1, 2017. Red-line versions of these Tariff Pages are also enclosed.

The impact of the March 1 change in the Cost of Gas Adjustment Rate on the typical residential heating customer for the 2016 / 2017 winter season will be \$24.98

George H. Simmons  
Manager Regulatory Services

6 Liberty Lane West  
Hampton, NH 03842

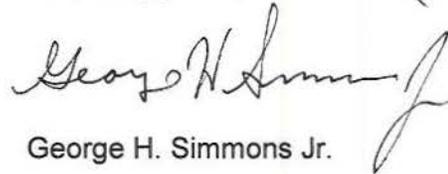
Phone: 603-773-6534  
Fax: 603-773-6734

simmons@unitil.com

or 2.3 percent less than the winter period bill at the Company's current Cost of Gas Adjustment Rate.

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: Alex Speidel, Staff Counsel  
Donald Kreis, Consumer Advocate

**Northern Utilities, Inc.  
New Hampshire Division  
Annual Cost of Gas  
Winter Period Rate Adjustment**

**Tariff Sheets**

Seventeenth Revised Page No. 43  
Calculation of proposed Cost of Gas Adjustment

Eighteenth Revised Page No. 96  
Rate Summary

Eighteenth Revised Page No. 97  
Rate Summary

**CALCULATION OF FIRM SALES COST OF GAS RATE**

Period Covered: November 1, 2016 - April 30, 2017

(Col 1)	(Col 2)	(Col 3)	
Total Anticipated Direct Cost of Gas	\$21,855,615		
Projected Prorated Sales (11/01/16 - 04/30/17)	31,549,237		
<b>Direct Cost of Gas Rate</b>		\$0.6927	per therm
<b>Demand Cost of Gas Rate</b>	\$8,327,997	\$0.2640	per therm
<b>Commodity Cost of Gas Rate</b>	<u>\$13,527,619</u>	<u>\$0.4287</u>	per therm
<b>Total Direct Cost of Gas Rate</b>	<u>\$21,855,615</u>	<b>\$0.6927</b>	per therm
Total Anticipated Indirect Cost of Gas	\$1,989,516		
Projected Prorated Sales (11/01/16 - 04/30/17)	31,549,237		
<b>Indirect Cost of Gas</b>		\$0.0631	per therm
<b>TOTAL PERIOD AVERAGE COST OF GAS</b>		<b>\$0.7558</b>	<b>per therm</b>

Period Ending over-collection as determined on 11/21/16		(\$672,842)	
Projected Sales (12/01/16 - 04/30/17)		27,653,599	
Per unit change in Cost of Gas (12/01/16 - 04/30/17)		(\$0.0243)	
<sup>1</sup> Over-collection w/o rate adjustment as contained in NUI's COG Report dated November 21, 2016			
Period Ending over-collection as determined on 12/16/16		\$870,133	
Projected Sales (01/01/17 - 04/30/17)		22,082,929	
Per unit change in Cost of Gas (01/01/17 - 04/30/17)		\$0.0394	
<sup>2</sup> Over-collection w/o rate adjustment as contained in NUI's COG Report dated December 16, 2016			
Period Ending over-collection as determined on 12/16/16		(\$875,279)	
Projected Sales (03/01/17 - 04/30/17)		8,147,233	
Per unit change in Cost of Gas (03/01/17 - 04/30/17)		(\$0.1074)	
<sup>3</sup> Over-collection w/o rate adjustment as contained in NUI's COG Report dated February 22, 2017			

<b>RESIDENTIAL COST OF GAS RATE - 03/01/17</b>	<b>COGwr</b>	<b>\$0.6634</b>	<b>per therm</b>
	<b>Maximum (COG+25%)</b>	<b>\$0.9448</b>	

RESIDENTIAL COST OF GAS RATE - 11/01/16	\$0.7558
CHANGE IN PER UNIT COST	(\$0.0243)
RESIDENTIAL COST OF GAS RATE - 12/01/16	\$0.7315
CHANGE IN PER UNIT COST	\$0.0394
RESIDENTIAL COST OF GAS RATE - 01/01/17	\$0.7709
CHANGE IN PER UNIT COST	(\$0.1074)
RESIDENTIAL COST OF GAS RATE - 03/01/17	\$0.6634

<b>COM/IND LOW WINTER USE COST OF GAS RATE - 03/01/17</b>	<b>COGwl</b>	<b>\$0.5877</b>	<b>per therm</b>
	<b>Maximum (COG+25%)</b>	<b>\$0.8501</b>	

COM/IND LOW WINTER USE COST OF GAS RATE - 11/01/16	\$0.6801
CHANGE IN PER UNIT COST	(\$0.0243)
COM/IND LOW WINTER USE COST OF GAS RATE - 12/01/16	\$0.6558
CHANGE IN PER UNIT COST	\$0.0394
COM/IND LOW WINTER USE COST OF GAS RATE - 01/01/17	\$0.6952
CHANGE IN PER UNIT COST	(\$0.1074)
COM/IND LOW WINTER USE COST OF GAS RATE - 03/01/17	\$0.5877

<b>COM/IND HIGH WINTER USE COST OF GAS RATE - 03/01/17</b>	<b>COGwh</b>	<b>\$0.6772</b>	<b>per therm</b>
	<b>Maximum (COG+25%)</b>	<b>\$0.9620</b>	

COM/IND HIGH WINTER USE COST OF GAS RATE - 11/01/16	\$0.7696
CHANGE IN PER UNIT COST	(\$0.0243)
COM/IND HIGH WINTER USE COST OF GAS RATE - 12/01/16	\$0.7453
CHANGE IN PER UNIT COST	\$0.0394
COM/IND HIGH WINTER USE COST OF GAS RATE - 01/01/17	\$0.7847
CHANGE IN PER UNIT COST	(\$0.1074)
COM/IND HIGH WINTER USE COST OF GAS RATE - 03/01/17	\$0.6772

**NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION  
 WINTER SEASON RESIDENTIAL RATES**

<b>Winter Season November 2016 - April 2017</b>		<b>Tariff Rates</b>	<b>Total Delivery Rates (Includes LDAC)</b>	<b>Total Billed Rates Tariff Rates, LDAC Plus Cost of Gas</b>
Residential Heating	<b><u>Tariff Rate R 5:</u></b>			
	Monthly Customer Charge	\$21.36	\$21.36	\$21.36
	First 50 therms	\$0.6239	\$0.6728	\$1.3362
	All usage over 50 therms	\$0.5103	\$0.5592	\$1.2226
	<b>LDAC</b>	<b>\$0.0489</b>		
	<b><u>Gas Cost Adjustment:</u></b> Cost of Gas	<b>\$0.6634</b>		
Residential Heating Low Income	<b><u>Tariff Rate R 10:</u></b>			
	Monthly Customer Charge	\$8.54	\$8.54	\$8.54
	First 50 therms	\$0.2496	\$0.2985	\$0.9619
	All usage over 50 therms	\$0.2041	\$0.2530	\$0.9164
	<b>LDAC</b>	<b>\$0.0489</b>		
	<b><u>Gas Cost Adjustment:</u></b> Cost of Gas	<b>\$0.6634</b>		
Residential Non-Heating	<b><u>Tariff Rate R 6:</u></b>			
	Monthly Customer Charge	\$21.36	\$21.36	\$21.36
	First 10 therms	\$0.4214	\$0.4703	\$1.1337
	All usage over 10 therms	\$0.4214	\$0.4703	\$1.1337
	<b>LDAC</b>	<b>\$0.0489</b>		
	<b><u>Gas Cost Adjustment:</u></b> Cost of Gas	<b>\$0.6634</b>		
Residential Non-Heating Low Income	<b><u>Tariff Rate R 11:</u></b>			
	Monthly Customer Charge	\$15.52	\$15.52	\$15.52
	First 10 therms	\$0.3196	\$0.3685	\$1.0319
	All usage over 10 therms	\$0.3196	\$0.3685	\$1.0319
	<b>LDAC</b>	<b>\$0.0489</b>		
	<b><u>Gas Cost Adjustment:</u></b> Cost of Gas	<b>\$0.6634</b>		

Issued: February 22, 2017

Effective: With Service Rendered On and After March 1, 2017

Authorized by NHPUC Order No. 25,959 in Docket No. DG 16-819, dated October 26, 2016

Issued by:

Title:

Senior Vice President



**NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION**  
**WINTER SEASON C&I RATES**

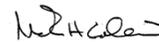
<b>Winter Season November 2016 - April 2017</b>	<b>Tariff Rates</b>	<b>Total Delivery Rates (Includes LDAC)</b>	<b>Total Billed Rates Tariff Rates, LDAC Plus Cost of Gas</b>
<b>C&amp;I Low Annual/High Winter</b> <u><b>Tariff Rate G 40:</b></u> Monthly Customer Charge First 75 therms All usage over 75 therms <b>LDAC</b> <u><b>Gas Cost Adjustment:</b></u> Cost of Gas	\$67.45 \$0.1615 \$0.1615 <b>\$0.0296</b>  <b>\$0.6772</b>	\$67.45 <b>\$0.1911</b> <b>\$0.1911</b>	\$67.45 <b>\$0.8683</b> <b>\$0.8683</b>
<b>C&amp;I Low Annual/Low Winter</b> <u><b>Tariff Rate G 50:</b></u> Monthly Customer Charge First 75 therms All usage over 75 therms <b>LDAC</b> <u><b>Gas Cost Adjustment:</b></u> Cost of Gas	\$67.45 \$0.1615 \$0.1615 <b>\$0.0296</b>  <b>\$0.5877</b>	\$67.45 <b>\$0.1911</b> <b>\$0.1911</b>	\$67.45 <b>\$0.7788</b> <b>\$0.7788</b>
<b>C&amp;I Medium Annual/High Winter</b> <u><b>Tariff Rate G 41:</b></u> Monthly Customer Charge All usage <b>LDAC</b> <u><b>Gas Cost Adjustment:</b></u> Cost of Gas	\$196.73 \$0.2098 <b>\$0.0296</b>  <b>\$0.6772</b>	\$196.73 <b>\$0.2394</b>	\$196.73 <b>\$0.9166</b>
<b>C&amp;I Medium Annual/Low Winter</b> <u><b>Tariff Rate G 51:</b></u> Monthly Customer Charge First 1,300 therms All usage over 1,300 therms <b>LDAC</b> <u><b>Gas Cost Adjustment:</b></u> Cost of Gas	\$196.73 \$0.1520 \$0.1238 <b>\$0.0296</b>  <b>\$0.5877</b>	\$196.73 <b>\$0.1816</b> <b>\$0.1534</b>	\$196.73 <b>\$0.7693</b> <b>\$0.7411</b>
<b>C&amp;I High Annual/High Winter</b> <u><b>Tariff Rate G 42:</b></u> Monthly Customer Charge All usage <b>LDAC</b> <u><b>Gas Cost Adjustment:</b></u> Cost of Gas	\$1,124.19 \$0.1764 <b>\$0.0296</b>  <b>\$0.6772</b>	\$1,124.19 <b>\$0.2060</b>	\$1,124.19 <b>\$0.8832</b>
<b>C&amp;I High Annual/Low Winter</b> <u><b>Tariff Rate G 52:</b></u> Monthly Customer Charge All usage <b>LDAC</b> <u><b>Gas Cost Adjustment:</b></u> Cost of Gas	\$1,124.19 \$0.1541 <b>\$0.0296</b>  <b>\$0.5877</b>	\$1,124.19 <b>\$0.1837</b>	\$1,124.19 <b>\$0.7714</b>

Issued: February 22, 2017

Effective: With Service Rendered On and After March 1, 2017

Authorized by NHPUC Order No. 25,959 in Docket No. DG 16-819, dated October 26, 2016

Issued by:



Title:

Senior Vice President

**CALCULATION OF FIRM SALES COST OF GAS RATE**

Period Covered: November 1, 2016 - April 30, 2017

(Col 1)	(Col 2)	(Col 3)
Total Anticipated Direct Cost of Gas	\$21,855,615	
Projected Prorated Sales (11/01/16 - 04/30/17)	31,549,237	
<b>Direct Cost of Gas Rate</b>		\$0.6927 per therm
<b>Demand Cost of Gas Rate</b>	\$8,327,997	\$0.2640 per therm
<b>Commodity Cost of Gas Rate</b>	\$13,527,619	\$0.4287 per therm
<b>Total Direct Cost of Gas Rate</b>	\$21,855,615	<b>\$0.6927</b> per therm
Total Anticipated Indirect Cost of Gas	\$1,989,516	
Projected Prorated Sales (11/01/16 - 04/30/17)	31,549,237	
<b>Indirect Cost of Gas</b>		\$0.0631 per therm
<b>TOTAL PERIOD AVERAGE COST OF GAS</b>		<b>\$0.7558 per therm</b>

Period ending over-collection as determined on 11/21/16	(\$672,842)
Projected sales (12/01/16 - 04/30/17)	27,653,599
Per unit change in Cost of Gas (12/01/16 - 04/30/17)	(\$0.0243)

<sup>1</sup> Over-collection w/o rate adjustment as contained in NUI's COG Report dated November 21, 2016

Period Ending over-collection as determined on 12/16/16	\$870,133
Projected Sales (01/01/17 - 04/30/17)	22,082,929
Per unit change in Cost of Gas (01/01/17 - 04/30/17)	\$0.0394

<sup>2</sup> Over-collection w/o rate adjustment as contained in NUI's COG Report dated December 16, 2016

Period Ending over-collection as determined on 02/22/17	(\$875,279)
Projected Sales (03/01/17 - 04/30/17)	8,147,233
Per unit change in Cost of Gas (03/01/17 - 04/30/17)	(\$0.1074)

<sup>3</sup> Over-collection w/o rate adjustment as contained in NUI's COG Report dated February 22, 2017

RESIDENTIAL COST OF GAS RATE - <del>01/01/17</del> 03/01/2017	COGwr	\$0.7709	\$0.6634	per therm
	Maximum (COG+25%)		\$0.9448	
RESIDENTIAL COST OF GAS RATE - 11/01/16			\$0.7558	
CHANGE IN PER UNIT COST			(\$0.0243)	
RESIDENTIAL COST OF GAS RATE - 12/01/16			\$0.7315	
CHANGE IN PER UNIT COST			\$0.0394	
RESIDENTIAL COST OF GAS RATE - 01/01/17			\$0.7709	
CHANGE IN PER UNIT COST			(\$0.1074)	
RESIDENTIAL COST OF GAS RATE - 03/01/17			\$0.6634	

COM/IND LOW WINTER USE COST OF GAS RATE - <del>01/01/17</del> 03/01/2017	COGwl	\$0.6952	\$0.5877	per therm
	Maximum (COG+25%)		\$0.8501	
COM/IND LOW WINTER USE COST OF GAS RATE - 11/01/16			\$0.6801	
CHANGE IN PER UNIT COST			(\$0.0243)	
COM/IND LOW WINTER USE COST OF GAS RATE - 12/01/16			\$0.6558	
CHANGE IN PER UNIT COST			\$0.0394	
COM/IND LOW WINTER USE COST OF GAS RATE - 01/01/17			\$0.6952	
CHANGE IN PER UNIT COST			(\$0.1074)	
COM/IND LOW WINTER USE COST OF GAS RATE - 03/01/17			\$0.5877	

COM/IND HIGH WINTER USE COST OF GAS RATE - <del>01/01/17</del> 03/01/2017	COGwh	\$0.7847	\$0.6772	per therm
	Maximum (COG+25%)		\$0.9620	
COM/IND HIGH WINTER USE COST OF GAS RATE - 11/01/16			\$0.7696	
CHANGE IN PER UNIT COST			(\$0.0243)	
COM/IND HIGH WINTER USE COST OF GAS RATE - 12/01/16			\$0.7453	
CHANGE IN PER UNIT COST			\$0.0394	
COM/IND HIGH WINTER USE COST OF GAS RATE - 01/01/17			\$0.7847	
CHANGE IN PER UNIT COST			(\$0.1074)	
COM/IND HIGH WINTER USE COST OF GAS RATE - 03/01/17			\$0.6772	

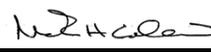
NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION  
 WINTER SEASON RESIDENTIAL RATES

Winter Season November 2016 - April 2017		Tariff Rates	Total Delivery Rates (Includes LDAC)	Total Billed Rates Tariff Rates, LDAC Plus Cost of Gas
Residential Heating	<b>Tariff Rate R 5:</b> Monthly Customer Charge First 50 therms All usage over 50 therms LDAC <b>Gas Cost Adjustment:</b> Cost of Gas	\$21.36 \$0.6239 \$0.5103 \$0.0489  \$0.7709    \$0.6634	 \$21.36 \$0.6728 \$0.5592	 \$21.36 \$1.4437    \$1.3362 \$1.3304    \$1.2226
Residential Heating Low income	<b>Tariff Rate R 10:</b> Monthly Customer Charge First 50 therms All usage over 50 therms LDAC <b>Gas Cost Adjustment:</b> Cost of Gas	\$8.54 \$0.2496 \$0.2041 \$0.0489  \$0.7709    \$0.6634	 \$8.54 \$0.2985 \$0.2530	 \$8.54 \$1.0694    \$0.9619 \$1.0239    \$0.9164
Residential Non-Heating	<b>Tariff Rate R 6:</b> Monthly Customer Charge First 10 therms All usage over 10 therms LDAC <b>Gas Cost Adjustment:</b> Cost of Gas	\$21.36 \$0.4214 \$0.4214 \$0.0489  \$0.7709    \$0.6634	 \$21.36 \$0.4703 \$0.4703	 \$21.36 \$1.2412    \$1.1337 \$1.2412    \$1.1337
Residential Non-Heating Low income	<b>Tariff Rate R 11:</b> Monthly Customer Charge First 10 therms All usage over 10 therms LDAC <b>Gas Cost Adjustment:</b> Cost of Gas	\$15.52 \$0.3196 \$0.3196 \$0.0489  \$0.7709    \$0.6634	 \$15.52 \$0.3685 \$0.3685	 \$15.52 \$1.1394    \$1.0319 \$1.1394    \$1.0319

Issued: ~~December 16, 2016~~ February 22, 2017

Effective: With Service Rendered On and After January March 1, 2017

Authorized by NHPUC Order No. 25,959 in Docket No. DG 16-819, dated October 26, 2016

Issued by:   
 Title: Senior Vice President

NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION  
 WINTER SEASON C&I RATES

Winter Season November 2016 - April 2017		Tariff Rates	Total Delivery Rates (Includes LDAC)	Total Billed Rates Tariff Rates, LDAC Plus Cost of Gas
C&I Low Annual/High Winter	<b>Tariff Rate G 40:</b> Monthly Customer Charge	\$67.45	\$67.45	\$67.45
	First 75 therms All usage over 75 therms <b>LDAC</b> <b>Gas Cost Adjustment:</b> Cost of Gas	\$0.1615 \$0.1615 \$0.0296 <del>\$0.7847</del> <del>\$0.6772</del>	\$0.1911 \$0.1911	<del>\$0.9758</del> <del>\$0.8683</del> <del>\$0.9758</del> <del>\$0.8683</del>
C&I Low Annual/Low Winter	<b>Tariff Rate G 50:</b> Monthly Customer Charge	\$67.45	\$67.45	\$67.45
	First 75 therms All usage over 75 therms <b>LDAC</b> <b>Gas Cost Adjustment:</b> Cost of Gas	\$0.1615 \$0.1615 \$0.0296 <del>\$0.6952</del> <del>\$0.5877</del>	\$0.1911 \$0.1911	<del>\$0.8863</del> <del>\$0.7788</del> <del>\$0.8863</del> <del>\$0.7788</del>
C&I Medium Annual/High Winter	<b>Tariff Rate G 41:</b> Monthly Customer Charge	\$196.73	\$196.73	\$196.73
	All usage <b>LDAC</b> <b>Gas Cost Adjustment:</b> Cost of Gas	\$0.2098 \$0.0296 <del>\$0.7847</del> <del>\$0.6772</del>	\$0.2394	<del>\$1.0241</del> <del>\$0.9166</del>
C&I Medium Annual/Low Winter	<b>Tariff Rate G 51:</b> Monthly Customer Charge	\$196.73	\$196.73	\$196.73
	First 1,300 therms All usage over 1,300 therms <b>LDAC</b> <b>Gas Cost Adjustment:</b> Cost of Gas	\$0.1520 \$0.1238 \$0.0296 <del>\$0.6952</del> <del>\$0.5877</del>	\$0.1816 \$0.1534	<del>\$0.8768</del> <del>\$0.7693</del> <del>\$0.8486</del> <del>\$0.7411</del>
C&I High Annual/High Winter	<b>Tariff Rate G 42:</b> Monthly Customer Charge	\$1,124.19	\$1,124.19	\$1,124.19
	All usage <b>LDAC</b> <b>Gas Cost Adjustment:</b> Cost of Gas	\$0.1764 \$0.0296 <del>\$0.7847</del> <del>\$0.6772</del>	\$0.2060	<del>\$0.9907</del> <del>\$0.8832</del>
C&I High Annual/Low Winter	<b>Tariff Rate G 52:</b> Monthly Customer Charge	\$1,124.19	\$1,124.19	\$1,124.19
	All usage <b>LDAC</b> <b>Gas Cost Adjustment:</b> Cost of Gas	\$0.1541 \$0.0296 <del>\$0.6952</del> <del>\$0.5877</del>	\$0.1837	<del>\$0.8789</del> <del>\$0.7714</del>

Issued: ~~December 16, 2016~~ February 22, 2017

Effective: With Service Rendered On and After ~~January~~ March 1, 2017

Authorized by NHPUC Order No. 25,959 in Docket No. DG 16-819, dated October 26, 2016

Issued by:

Title:



Senior Vice President

**NORTHERN UTILITIES, INC.**  
**NEW HAMPSHIRE DIVISION**  
**Calculation of the Projected Over or Under Collection of the**  
**Winter 2016-2017 Period Cost of Gas**  
**DG 16-819**  
**February 2017 Estimated**

Under/(Over) collection as of 11/01/16	\$ 1,347,389
Forecasted firm therm sales 02/01/2017 - 04/30/2017	
Residential Heat & Non Heat	6,873,331
HLF Classes	1,195,825
LLF Classes	6,607,264
Current recovery rate per therm	
Residential heat & non heat	\$0.7709
HLF classes	\$0.6952
LLF classes	\$0.7847
Total	\$ (11,314,709)
Forecasted recovered costs at current rates 02/01/2017 - 04/30/2017	\$ (11,314,709)
Actual recovered costs 11/01/2016 - 01/31/2017	\$ (11,985,362)
Estimated total recovered costs 11/01/2016 - 04/30/2017	\$ (23,300,070)
Revised projected direct gas costs 11/01/16 - 04/30/17 [1]	\$ 18,053,553
Revised projected indirect gas costs 11/01/16 - 04/30/17 [2]	\$ 937,727
Projected under/(over) collection as of 04/30/17[3]	\$ (2,961,401)
<hr/>	
April 30, 2017 Target Balance [4]	\$ (2,086,122)
Variance from Projected Target Balance	\$ (875,279)
Total Projected Gas Costs	\$ 18,991,280
Under/(over) collection as percent of total gas costs	-4.61%

NOTES

[1] Reflects futures prices as of February 17, 2017

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

[3] Detailed calculations provided on February 22, 2017 Projected End of Period Balance schedule

[4] Detailed calculations provided on September 16, 2016 Projected End of Period Balance schedule

September 16, 2016 - Projected End of Period Balance ("Target Balance")

Northern Utilities

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

		Winter						Summer						
Sales Revenues		(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	
1	Volumes	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
2	Residential Heat & Non Heat		1,824,424	2,608,882	3,468,651	3,057,780	2,451,306	1,364,245	682,782	481,557	420,333	431,131	476,265	934,704
3	Sales HLF Classes		317,414	453,894	603,477	531,994	426,479	237,352	426,503	300,806	262,563	269,308	297,501	583,867
4	Sales LLF Classes		1,753,800	2,507,893	3,334,380	2,939,413	2,356,416	1,311,435	485,826	342,646	299,083	306,767	338,881	665,079
5	Total		3,895,638	5,570,670	7,406,509	6,529,187	5,234,201	2,913,032	1,595,111	1,125,009	981,979	1,007,206	1,112,647	2,183,650
6	Rates													
7	Residential Heat & Non Heat CGA		\$ 0.7558	\$ 0.7558	\$ 0.7558	\$ 0.7558	\$ 0.7558	\$ 0.7558	\$ 0.4055	\$ 0.4055	\$ 0.4055	\$ 0.4055	\$ 0.4055	\$ 0.4055
8	Sales HLF Classes CGA		\$ 0.6801	\$ 0.6801	\$ 0.6801	\$ 0.6801	\$ 0.6801	\$ 0.6801	\$ 0.3589	\$ 0.3589	\$ 0.3589	\$ 0.3589	\$ 0.3589	\$ 0.3589
9	Sales LLF Classes CGA		\$ 0.7696	\$ 0.7696	\$ 0.7696	\$ 0.7696	\$ 0.7696	\$ 0.7696	\$ 0.4465	\$ 0.4465	\$ 0.4465	\$ 0.4465	\$ 0.4465	\$ 0.4465
10	Revenues													
11	Residential Heat & Non Heat		\$ (1,378,899)	\$ (1,971,793)	\$ (2,621,607)	\$ (2,311,070)	\$ (1,852,697)	\$ (1,031,096)	\$ (276,868)	\$ (195,271)	\$ (170,445)	\$ (174,824)	\$ (193,125)	\$ (379,023)
12	Sales HLF Classes		\$ (215,873)	\$ (308,694)	\$ (410,425)	\$ (361,809)	\$ (290,048)	\$ (161,423)	\$ (153,072)	\$ (107,959)	\$ (94,234)	\$ (96,655)	\$ (106,773)	\$ (209,550)
13	Sales LLF Classes		\$ (1,349,725)	\$ (1,930,074)	\$ (2,566,139)	\$ (2,262,173)	\$ (1,813,498)	\$ (1,009,280)	\$ (216,921)	\$ (152,992)	\$ (133,541)	\$ (136,971)	\$ (151,310)	\$ (296,958)
14	Total Sales		\$ (2,944,498)	\$ (4,210,561)	\$ (5,598,171)	\$ (4,935,051)	\$ (3,956,243)	\$ (2,201,800)	\$ (646,861)	\$ (456,222)	\$ (398,220)	\$ (408,450)	\$ (451,209)	\$ (885,530)
15														
16														
17														
18	Gas Costs and Credits		(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)	(Forecast)
19	Net Demand Costs (Net of Injection Fees & Cap. Assign.)	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
20	Pipeline		\$ 271,333	\$ 271,333	\$ 271,333	\$ 271,333	\$ 271,333	\$ 271,333	\$ 271,333	\$ 271,333	\$ 271,333	\$ 274,823	\$ 274,823	\$ 274,823
21	Storage		\$ 1,193,141	\$ 1,193,141	\$ 1,193,141	\$ 1,193,141	\$ 1,193,141	\$ 550,631	\$ 550,631	\$ 550,631	\$ 550,631	\$ 554,066	\$ 554,066	\$ 554,066
22	Peaking		\$ 321,648	\$ 330,376	\$ 330,376	\$ 330,376	\$ 321,648	\$ 69,585	\$ 20,807	\$ 20,807	\$ 20,807	\$ 22,055	\$ 22,055	\$ 22,055
23	Total Demand Costs		\$ 1,786,121	\$ 1,794,850	\$ 1,794,850	\$ 1,794,850	\$ 1,786,121	\$ 891,548	\$ 842,770	\$ 842,770	\$ 842,770	\$ 850,944	\$ 850,944	\$ 850,944
24														
25	Asset Management and Capacity Release													
26	NUI AMA Revenue		\$ (830,623)	\$ (830,623)	\$ (830,623)	\$ (830,623)	\$ (830,623)	\$ (830,623)	\$ (830,623)	\$ (830,623)	\$ (830,623)	\$ (830,623)	\$ (830,623)	\$ (830,623)
27	NUI Capacity Release		\$ (5,393)	\$ (5,393)	\$ (5,393)	\$ (5,393)	\$ (5,393)	\$ (5,393)	\$ (5,393)	\$ (5,393)	\$ (5,393)	\$ (5,393)	\$ (5,393)	\$ (5,393)
28	NUI AMA Rev & Cap. Release Subtotal		\$ (836,016)	\$ (836,016)	\$ (836,016)	\$ (836,016)	\$ (836,016)	\$ (836,016)	\$ (836,016)	\$ (836,016)	\$ (836,016)	\$ (836,016)	\$ (836,016)	\$ (836,016)
29	NH AMA Revenue		\$ (303,728)	\$ (303,728)	\$ (303,728)	\$ (303,728)	\$ (303,728)	\$ (303,728)	\$ (303,728)	\$ (303,728)	\$ (303,728)	\$ (303,728)	\$ (303,728)	\$ (303,728)
30	NH Capacity Release		\$ (2,343)	\$ (2,343)	\$ (2,343)	\$ (2,343)	\$ (2,343)	\$ (2,343)	\$ (2,343)	\$ (2,343)	\$ (2,343)	\$ (2,343)	\$ (2,343)	\$ (2,343)
31	NH Total Asset Management and Capacity Release		\$ (306,071)	\$ (306,071)	\$ (306,071)	\$ (306,071)	\$ (306,071)	\$ (306,071)	\$ (306,071)	\$ (306,071)	\$ (306,071)	\$ (306,071)	\$ (306,071)	\$ (306,071)
32														
33	PNGTS Refund		\$ (331,800.99)	\$ (331,800.99)	\$ (331,800.99)	\$ (331,800.99)	\$ (331,800.99)	\$ (331,800.99)	\$ (16,566.71)	\$ (16,566.71)	\$ (16,566.71)	\$ (16,566.71)	\$ (16,566.71)	\$ (16,566.71)
34														
35	Net Demand Costs		\$ 1,148,249	\$ 1,156,977	\$ 1,156,977	\$ 1,156,977	\$ 1,148,249	\$ 253,676	\$ 520,132	\$ 520,132	\$ 520,132	\$ 528,306	\$ 528,306	\$ 528,306
36														
37	NUI Commodity Costs													
38	NUI Total Pipeline Volumes		938,069	1,062,632	997,144	904,653	989,654	788,877	461,983	321,009	282,542	285,644	313,975	623,892
39	Pipeline Costs Modeled in Sendout™		\$ 4,028,690	\$ 4,760,125	\$ 4,852,452	\$ 4,396,837	\$ 4,623,752	\$ 2,406,334	\$ 1,228,221	\$ 775,044	\$ 693,427	\$ 678,497	\$ 720,034	\$ 1,679,577
40	NYMEX Price Used for Forecast		\$ 3.0300	\$ 3.2280	\$ 3.3440	\$ 3.3420	\$ 3.2960	\$ 3.0150	\$ 2.9820	\$ 3.0080	\$ 3.0360	\$ 3.0440	\$ 3.0280	\$ 3.0510
41	NYMEX Price Used for Update		\$ 3.0300	\$ 3.2280	\$ 3.3440	\$ 3.3420	\$ 3.2960	\$ 3.0150	\$ 2.9820	\$ 3.0080	\$ 3.0360	\$ 3.0440	\$ 3.0280	\$ 3.0510
42	Increase/(Decrease) NYMEX Price		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
43	Increase/(Decrease) in Pipeline Costs		\$ 4,028,690	\$ 4,760,125	\$ 4,852,452	\$ 4,396,837	\$ 4,623,752	\$ 2,406,334	\$ 1,228,221	\$ 775,044	\$ 693,427	\$ 678,497	\$ 720,034	\$ 1,679,577
44	Updated Pipeline Costs		\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
45	Interruptible Volumes - NH		\$ 4.29	\$ 4.48	\$ 4.87	\$ 4.86	\$ 4.67	\$ 3.05	\$ 2.66	\$ 2.41	\$ 2.45	\$ 2.38	\$ 2.29	\$ 2.69
46	Average Supply Cost (\$/MMBtu)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
47	Interruptible Cost - NH		\$ 4,028,690	\$ 4,760,125	\$ 4,852,452	\$ 4,396,837	\$ 4,623,752	\$ 2,406,334	\$ 1,228,221	\$ 775,044	\$ 693,427	\$ 678,497	\$ 720,034	\$ 1,679,577
48	Total Updated Pipeline Costs		\$ 4,028,690	\$ 4,760,125	\$ 4,852,452	\$ 4,396,837	\$ 4,623,752	\$ 2,406,334	\$ 1,228,221	\$ 775,044	\$ 693,427	\$ 678,497	\$ 720,034	\$ 1,679,577
49	New Hampshire Allocated Percentage		40.59%	40.04%	40.38%	40.06%	39.43%	36.54%	34.78%	35.24%	34.91%	35.42%	35.63%	35.30%
50	NH Updated Pipeline Costs		\$ 1,635,371	\$ 1,905,896	\$ 1,959,472	\$ 1,761,522	\$ 1,823,063	\$ 879,241	\$ 427,199	\$ 273,112	\$ 242,042	\$ 240,299	\$ 256,522	\$ 592,926
51	Hedging (Gain)/Loss Estimate													
52	NYMEX Options Contracts													
53	Number of Contracts		18	31	45	46	37							
54	Option Contract Price		\$ 0.08	\$ 0.09	\$ 0.10	\$ 0.10	\$ 0.08							
55	Hedging Expenses		\$ 13,860	\$ 26,350	\$ 46,350	\$ 45,540	\$ 29,600							
56	NYMEX Option Strike Price		\$ 4.80	\$ 5.25	\$ 6.00	\$ 6.25	\$ 6.30							
57	NYMEX Price Used for Forecast		\$ 3.03	\$ 3.23	\$ 3.34	\$ 3.34	\$ 3.30							
58	Strike Price Hit		No	No	No	No	No							
59	Option Hedging Gain (Credit)		\$ -	\$ -	\$ -	\$ -	\$ -							
60	Tota Northern Hedging Net Cost		\$ 13,860	\$ 26,350	\$ 46,350	\$ 45,540	\$ 29,600							
61	New Hampshire Allocated Percentage		40.59%	40.04%	40.38%	40.06%	39.43%							
62	NH Futures Hedging Net Cost		\$ 5,626	\$ 10,550	\$ 18,717	\$ 18,245	\$ 11,671							
63	NH Commodity Costs													
64	Pipeline Excl Hedging		\$ 1,635,371	\$ 1,905,896	\$ 1,959,472	\$ 1,761,522	\$ 1,823,063	\$ 879,241	\$ 427,199	\$ 273,112	\$ 242,042	\$ 240,299	\$ 256,522	\$ 592,926
65	Hedging (Gain)/Loss Estimate		\$ 5,626	\$ 10,550	\$ 18,717	\$ 18,245	\$ 11,671	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
66	Storage		\$ 37,773	\$ 403,167	\$ 649,328	\$ 794,920	\$ 385,114	\$ 13,422	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
67	Peaking		\$ 8,498	\$ 27,010	\$ 1,104,694	\$ 61,499	\$ 5,693	\$ 5,089	\$ 4,958	\$ 4,838	\$ 4,938	\$ 5,005	\$ 4,859	\$ 4,967
68	Total Commodity Costs		\$ 1,687,268	\$ 2,346,624	\$ 3,732,211	\$ 2,636,186	\$ 2,225,540	\$ 897,752	\$ 432,157	\$ 277,950	\$ 246,980	\$ 245,304	\$ 261,381	\$ 597,894

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

<b>Sales Revenues</b>			
Volumes	Winter	Summer	Total
Residential Heat & Non Heat	14,775,288	3,426,772	18,202,060
Sales HLF Classes	2,570,611	2,140,549	4,711,159
Sales LLF Classes	14,203,338	2,438,282	16,641,620
<b>Total</b>	<b>31,549,237</b>	<b>8,005,603</b>	<b>39,554,839</b>
<b>Rates</b>			
Residential Heat & Non Heat CGA			
Sales HLF Classes CGA			
Sales LLF Classes CGA			
<b>Revenues</b>			
Residential Heat & Non Heat	(11,167,163)	(1,389,556)	(12,556,719)
Sales HLF Classes	(1,748,272)	(768,243)	(2,516,515)
Sales LLF Classes	(10,930,889)	(1,088,693)	(12,019,582)
<b>Total Sales</b>	<b>(23,846,324)</b>	<b>(3,246,492)</b>	<b>(27,092,816)</b>
<b>Gas Costs and Credits</b>			
	Winter	Summer	Total
<b>Net Demand Costs (Net of Injection Fees &amp; Cap. Ass</b>			
Pipeline	1,627,996	1,638,468	3,266,464
Storage	6,516,334	3,314,090	9,830,424
Peaking	1,704,009	128,585	1,832,594
<b>Total Demand Costs</b>	<b>9,848,339</b>	<b>5,081,142</b>	<b>14,929,481</b>
<b>Asset Management and Capacity Release</b>			
NUI AMA Revenue	(4,983,737)	(4,983,737)	\$ (9,967,475)
NUI Capacity Release	(32,360)	(32,360)	\$ (64,721)
NUI AMA Rev & Cap. Release Subtotal	(5,016,098)	(5,016,098)	\$ (10,032,196)
NH AMA Revenue	(1,822,368)	(1,822,368)	\$ (3,644,736)
NH Capacity Release	(14,060)	(14,060)	\$ (28,121)
<b>NH Total Asset Management and Capacity Release</b>	<b>\$ (1,836,428)</b>	<b>\$ (1,836,428)</b>	<b>\$ (3,672,857)</b>
<b>PNGTS Refund</b>	<b>\$ (1,990,806)</b>	<b>\$ (99,400)</b>	<b>\$ (2,090,206)</b>
<b>Net Demand Costs</b>	<b>\$ 6,021,105</b>	<b>\$ 3,145,314</b>	<b>\$ 9,166,419</b>
<b>NUI Commodity Costs</b>			
NUI Total Pipeline Volumes			7,970,074
Pipeline Costs Modeled in Sendout™			\$ 30,842,990
NYMEX Price Used for Forecast			
NYMEX Price Used for Update			
Increase/(Decrease) NYMEX Price			
Increase/(Decrease) in Pipeline Costs			
<b>Updated Pipeline Costs</b>			
Interruptible Volumes - NH			
Average Supply Cost (\$/MMBtu)			
Interruptible Cost - NH			
<b>Total Updated Pipeline Costs</b>			
New Hampshire Allocated Percentage			
<b>NH Updated Pipeline Costs</b>			<b>\$ 11,996,665</b>
<b>Hedging (Gain)/Loss Estimate</b>			
NYMEX Options Contracts			
Number of Contracts			
Option Contract Price			
Hedging Expenses			
NYMEX Option Strike Price			
NYMEX Price Used for Forecast			
Strike Price Hit			
Option Hedging Gain (Credit)			
Tota Northern Hedging Net Cost			\$ 161,700
New Hampshire Allocated Percentage			
<b>NH Futures Hedging Net Cost</b>	<b>\$ 64,809</b>	<b>\$ -</b>	<b>\$ 64,809</b>
<b>NH Commodity Costs</b>			
Pipeline Excl Hedging	\$ 9,964,565	\$ 2,032,100	\$ 11,996,665
Hedging (Gain)/Loss Estimate	\$ 64,809	\$ -	\$ 64,809
Storage	\$ 2,283,724	\$ -	\$ 2,283,724
Peaking	\$ 1,212,483	\$ 29,565	\$ 1,242,048
<b>Total Commodity Costs</b>	<b>\$ 13,525,581</b>	<b>\$ 2,061,665</b>	<b>\$ 15,587,246</b>



**Northern Utilities**

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

69	Inventory Finance Charge	\$ 2,038	\$ 1,806	\$ 2,038
70				
71	<b>Total Anticipated Direct Cost of Gas</b>	<b>\$ 19,548,724</b>	<b>\$ 5,206,979</b>	<b>\$ 24,755,702</b>
72				
73				
74		Winter	Summer	Total
75	Working Capital			
76	Total Anticipated Direct Cost of Gas			\$ 24,755,702
77	Working Capital Percentage			
78	Working Capital Allowance			\$ 21,958
79	Beginning Period Working Capital Balance			
80	End of Period Working Capital Allowance			
81	Interest			\$ 542
82	End of period with Interest			
83	Bad Debt			
84	Projected Bad Debt	\$ 187,199	\$ 18,846	\$ 206,045
85	Beginning Period Bad Debt Balance			
86	End of Period Bad Debt Balance			
87	Interest			\$ 8,827
88	End of Period Bad Debt Balance with Interest			
89	Local Production and Storage Capacity	\$ 420,658	\$ -	\$ 420,658
90	NH PUC Consulting Costs	\$ 7,976	\$ 2,024	\$ 10,000
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			\$ (8,961,287)
96	Net Costs - Revenues			\$ (1,393,788)
97	Ending Balance before Interest			\$ (10,355,075)
98	Average Balance			\$ (9,658,181)
99	Interest Rate			
100	Interest Expense			\$ (28,170)
101	Ending Balance Incl Interest Expense			
102	<b>Total Over/Under Collection Ending Balance</b>			
103				
104	<b>Total Indirect Cost of Gas</b>	<b>\$ 2,211,478</b>	<b>\$ 111,349</b>	<b>\$ 2,322,827</b>
105				
106	<b>Total Cost of Gas</b>	<b>\$ 20,589,903</b>	<b>\$ 5,318,327</b>	<b>\$ 27,078,529</b>
107				
108	<b>Total Interest</b>	<b>\$ (901)</b>	<b>\$ (17,900)</b>	<b>\$ (18,801)</b>

February 22, 2017 - Updated Projected End of Period Balance

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

		Winter						Summer						
Sales Revenues		Oct-16	Nov-16	Dec-16	Jan-17	(Forecast) Feb-17	(Forecast) Mar-17	(Forecast) Apr-17	(Forecast) May-17	(Forecast) Jun-17	(Forecast) Jul-17	(Forecast) Aug-17	(Forecast) Sep-17	(Forecast) Oct-17
1	Volumes													
2	Residential Heat & Non Heat					3,057,780	2,451,306	1,364,245	682,782	481,557	420,333	431,131	476,265	934,704
3	Sales HLF Classes					531,994	426,479	237,352	426,503	300,806	262,563	269,308	297,501	583,867
4	Sales LLF Classes					2,939,413	2,356,416	1,311,435	485,826	342,646	299,083	306,767	338,881	665,079
5	Total					6,529,187	5,234,201	2,913,032	1,595,111	1,125,009	981,979	1,007,206	1,112,647	2,183,650
6	Rates													
7	Residential Heat & Non Heat CGA					\$ 0.7709	\$ 0.7709	\$ 0.7709	\$ 0.4040	\$ 0.4040	\$ 0.4040	\$ 0.4040	\$ 0.4040	\$ 0.4040
8	Sales HLF Classes CGA					\$ 0.6952	\$ 0.6952	\$ 0.6952	\$ 0.3574	\$ 0.3574	\$ 0.3574	\$ 0.3574	\$ 0.3574	\$ 0.3574
9	Sales LLF Classes CGA					\$ 0.7847	\$ 0.7847	\$ 0.7847	\$ 0.4450	\$ 0.4450	\$ 0.4450	\$ 0.4450	\$ 0.4450	\$ 0.4450
10	Revenues													
11	Residential Heat & Non Heat					\$ (2,357,242)	\$ (1,889,712)	\$ (1,051,696)	\$ (275,844)	\$ (194,549)	\$ (169,815)	\$ (174,177)	\$ (192,411)	\$ (377,621)
12	Sales HLF Classes					\$ (369,842)	\$ (296,488)	\$ (165,007)	\$ (152,432)	\$ (107,508)	\$ (93,840)	\$ (96,251)	\$ (106,327)	\$ (208,674)
13	Sales LLF Classes					\$ (2,306,558)	\$ (1,849,080)	\$ (1,029,083)	\$ (216,193)	\$ (152,478)	\$ (133,092)	\$ (136,511)	\$ (150,802)	\$ (295,960)
14	Total Sales		\$ (2,703,468)	\$ (4,232,010)	\$ (5,049,884)	\$ (5,033,642)	\$ (4,035,280)	\$ (2,245,787)	\$ (644,469)	\$ (454,535)	\$ (396,747)	\$ (406,939)	\$ (449,540)	\$ (882,255)
16														
17	Gas Costs and Credits													
18	Net Demand Costs (Net of Injection Fees & Cap. Assign.)													
19	Pipeline				\$ 271,333	\$ 271,333	\$ 271,333	\$ 271,333	\$ 271,333	\$ 271,333	\$ 271,333	\$ 274,823	\$ 274,823	\$ 274,823
20	Storage				\$ 1,193,141	\$ 1,193,141	\$ 1,193,141	\$ 550,631	\$ 550,631	\$ 550,631	\$ 550,631	\$ 554,066	\$ 554,066	\$ 554,066
21	Peaking				\$ 330,376	\$ 330,376	\$ 321,648	\$ 69,585	\$ 20,807	\$ 20,807	\$ 20,807	\$ 22,055	\$ 22,055	\$ 22,055
22	Total Demand Costs				\$ 1,794,850	\$ 1,794,850	\$ 1,786,121	\$ 891,548	\$ 842,770	\$ 842,770	\$ 842,770	\$ 850,944	\$ 850,944	\$ 850,944
23														
24	Asset Management and Capacity Release													
25	NUI AMA Revenue				\$ (830,623)	\$ (830,623)	\$ (830,623)	\$ (830,623)	\$ (830,623)	\$ (830,623)	\$ (830,623)	\$ (830,623)	\$ (830,623)	\$ (830,623)
26	NUI Capacity Release				\$ (5,393)	\$ (5,393)	\$ (5,393)	\$ (5,393)	\$ (5,393)	\$ (5,393)	\$ (5,393)	\$ (5,393)	\$ (5,393)	\$ (5,393)
27	NUI AMA Rev & Cap. Release Subtotal				\$ (836,016)	\$ (836,016)	\$ (836,016)	\$ (836,016)	\$ (836,016)	\$ (836,016)	\$ (836,016)	\$ (836,016)	\$ (836,016)	\$ (836,016)
28	NH AMA Revenue				\$ (303,728)	\$ (303,728)	\$ (303,728)	\$ (303,728)	\$ (303,728)	\$ (303,728)	\$ (303,728)	\$ (303,728)	\$ (303,728)	\$ (303,728)
29	NH Capacity Release				\$ (2,343)	\$ (2,343)	\$ (2,343)	\$ (2,343)	\$ (2,343)	\$ (2,343)	\$ (2,343)	\$ (2,343)	\$ (2,343)	\$ (2,343)
30	NH Total Asset Management and Capacity Release				\$ (306,071)	\$ (306,071)	\$ (306,071)	\$ (306,071)	\$ (306,071)	\$ (306,071)	\$ (306,071)	\$ (306,071)	\$ (306,071)	\$ (306,071)
31														
32														
33	PNGTS Refund				\$ (331,800.99)	\$ (331,800.99)	\$ (331,800.99)	\$ (331,800.99)	\$ (16,566.71)	\$ (16,566.71)	\$ (16,566.71)	\$ (16,566.71)	\$ (16,566.71)	\$ (16,566.71)
34														
35	Net Demand Costs		\$ 1,105,488	\$ 835,704	\$ 1,012,794	\$ 1,156,977	\$ 1,148,249	\$ 253,676	\$ 520,132	\$ 520,132	\$ 520,132	\$ 528,306	\$ 528,306	\$ 528,306
36														
37	NUI Commodity Costs													
38	NUI Total Pipeline Volumes					904,653	989,654	788,877	461,983	321,009	282,542	285,644	313,975	623,892
39	Pipeline Costs Modeled in Sendout™					\$ 4,396,837	\$ 4,623,752	\$ 2,406,334	\$ 1,228,221	\$ 775,044	\$ 693,427	\$ 678,497	\$ 720,034	\$ 1,679,577
40	NYMEX Price Used for Forecast					\$ 3.3420	\$ 3.2960	\$ 3.0150	\$ 2.9820	\$ 3.0080	\$ 3.0360	\$ 3.0440	\$ 3.0280	\$ 3.0510
41	NYMEX Price Used for Update					\$ 3.3910	\$ 2.8340	\$ 2.9560	\$ 2.9820	\$ 3.0080	\$ 3.0360	\$ 3.0440	\$ 3.0280	\$ 3.0510
42	Increase/(Decrease) NYMEX Price					\$ 0.0490	\$ (0.4620)	\$ (0.0590)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
43	Increase/(Decrease) in Pipeline Costs					\$ 44,328	\$ (457,220)	\$ (46,544)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
44	Updated Pipeline Costs					\$ 4,441,165	\$ 4,166,532	\$ 2,359,791	\$ 1,228,221	\$ 775,044	\$ 693,427	\$ 678,497	\$ 720,034	\$ 1,679,577
45	Interruptible Volumes - NH					0	0	0	0	0	0	0	0	0
46	Average Supply Cost (\$/MMBtu)					\$ 4.91	\$ 4.21	\$ 2.99	\$ 2.66	\$ 2.41	\$ 2.45	\$ 2.38	\$ 2.29	\$ 2.69
47	Interruptible Cost - NH					\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
48	Total Updated Pipeline Costs					\$ 4,441,165	\$ 4,166,532	\$ 2,359,791	\$ 1,228,221	\$ 775,044	\$ 693,427	\$ 678,497	\$ 720,034	\$ 1,679,577
49	New Hampshire Allocated Percentage					40.06%	39.43%	36.54%	34.78%	35.24%	34.91%	35.42%	35.63%	35.30%
50	NH Updated Pipeline Costs					\$ 1,779,281	\$ 1,642,790	\$ 862,235	\$ 427,199	\$ 273,112	\$ 242,042	\$ 240,299	\$ 256,522	\$ 592,926
51	Hedging (Gain)/Loss Estimate													
52	NYMEX Options Contracts													
53	Hedging Expenses					\$ 45,540	\$ 29,600							
54	NYMEX Option Strike Price					\$ 6.25	\$ 6.30							
55	NYMEX Price Used for Forecast					\$ 3.39	\$ 2.83							
56	Strike Price Hit					No	No							
57	Option Hedging Gain (Credit)													
58	Tota Northern Hedging Net Cost					\$ 45,540	\$ 29,600							
59	New Hampshire Allocated Percentage					40.06%	39.43%							
60	NH Futures Hedging Net Cost					\$ 18,245	\$ 11,671		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
61	NH Commodity Costs					\$ 1,779,281	\$ 1,642,790	\$ 862,235	\$ 427,199	\$ 273,112	\$ 242,042	\$ 240,299	\$ 256,522	\$ 592,926
62	Pipeline Excl Hedging					\$ 18,245	\$ 11,671	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
63	Hedging (Gain)/Loss Estimate					\$ 794,920	\$ 385,114	\$ 13,422	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
64	Storage					\$ 61,499	\$ 5,693	\$ 5,089	\$ 4,958	\$ 4,838	\$ 4,938	\$ 5,005	\$ 4,859	\$ 4,967
65	Peaking													
66	Total Commodity Costs		\$ 1,282,208	\$ 2,764,977	\$ 2,912,586	\$ 2,653,945	\$ 2,045,267	\$ 880,746	\$ 432,157	\$ 277,950	\$ 246,980	\$ 245,304	\$ 261,381	\$ 597,894

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

<b>Sales Revenues</b>			
	Winter	Summer	Total
<b>Volumes</b>			
Residential Heat & Non Heat	6,873,331	3,426,772	10,300,102
Sales HLF Classes	1,195,825	2,140,549	3,336,373
Sales LLF Classes	6,607,264	2,438,282	9,045,547
<b>Total</b>	<b>14,676,420</b>	<b>8,005,603</b>	<b>22,682,023</b>
<b>Rates</b>			
Residential Heat & Non Heat CGA	-	-	-
Sales HLF Classes CGA	-	-	-
Sales LLF Classes CGA	-	-	-
<b>Revenues</b>			
Residential Heat & Non Heat	(5,298,651)	(1,384,416)	(6,683,066)
Sales HLF Classes	(831,337)	(765,032)	(1,596,369)
Sales LLF Classes	(5,184,720)	(1,085,036)	(6,269,756)
<b>Total Sales</b>	<b>(23,300,070)</b>	<b>(3,234,484)</b>	<b>(26,534,554)</b>
<b>Gas Costs and Credits</b>			
	Winter	Summer	Total
<b>Net Demand Costs (Net of Injection Fees &amp; Cap. Ass)</b>			
Pipeline	1,085,331	1,638,468	2,723,799
Storage	4,130,053	3,314,090	7,444,142
Peaking	1,051,985	128,585	1,180,570
<b>Total Demand Costs</b>	<b>6,267,368</b>	<b>5,081,142</b>	<b>11,348,511</b>
<b>Asset Management and Capacity Release</b>			
NUI AMA Revenue	(3,322,492)	(4,983,737)	\$ (8,306,229)
NUI Capacity Release	(21,574)	(32,360)	\$ (53,934)
NUI AMA Rev & Cap. Release Subtotal	(3,344,065)	(5,016,098)	\$ (8,360,163)
NH AMA Revenue	(1,214,912)	(1,822,368)	\$ (3,037,280)
NH Capacity Release	(9,374)	(14,060)	\$ (23,434)
<b>NH Total Asset Management and Capacity Release</b>	<b>\$ (1,224,286)</b>	<b>\$ (1,836,428)</b>	<b>\$ (3,060,714)</b>
<b>PNGTS Refund</b>	<b>\$ (1,990,806)</b>	<b>\$ (99,400)</b>	<b>\$ (1,426,604)</b>
<b>Net Demand Costs</b>	<b>\$ 3,052,277</b>	<b>\$ 3,145,314</b>	<b>\$ 6,861,193</b>
<b>NUI Commodity Costs</b>			
NUI Total Pipeline Volumes			4,972,228
Pipeline Costs Modeled in Sendout™			\$ 17,201,722
NYMEX Price Used for Forecast			
NYMEX Price Used for Update			
Increase/(Decrease) NYMEX Price			
Increase/(Decrease) in Pipeline Costs			
<b>Updated Pipeline Costs</b>			
Interruptible Volumes - NH			
Average Supply Cost (\$/MMBtu)			
Interruptible Cost - NH			
<b>Total Updated Pipeline Costs</b>			
New Hampshire Allocated Percentage			
<b>NH Updated Pipeline Costs</b>			<b>\$ 6,316,405</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			\$ 75,140
New Hampshire Allocated Percentage			
<b>NH Futures Hedging Net Cost</b>	<b>\$ 29,916</b>	<b>\$ -</b>	<b>\$ 29,916</b>
<b>NH Commodity Costs</b>			
Pipeline Excl Hedging	\$ 4,284,305	\$ 2,032,100	\$ 6,316,405
Hedging (Gain)/Loss Estimate	\$ 29,916	\$ -	\$ 29,916
Storage	\$ 1,193,456	\$ -	\$ 1,193,456
Peaking	\$ 72,280	\$ 29,565	\$ 101,845
<b>Total Commodity Costs</b>	<b>\$ 12,539,728</b>	<b>\$ 2,061,665</b>	<b>\$ 14,601,393</b>

February 22, 2017 - Updated Projected End of Period Balance

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

69	Inventory Finance Charge					\$ 445	\$ 335	\$ 156	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
70														
71	<b>Total Anticipated Direct Cost of Gas</b>	\$ 2,387,695	\$ 3,600,681	\$ 3,925,381	\$ 3,811,367	\$ 3,193,851	\$ 1,134,578	\$ 952,289	\$ 798,082	\$ 767,112	\$ 773,609	\$ 789,686	\$ 1,126,199	
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End of Period Balance, All Accounts \$ (2,961,401)

Winter Period	
Target ending Balance	\$ (2,086,122)

**Northern Utilities**

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

69	Inventory Finance Charge	\$ 937	\$ 937	\$ 937
70				
71	<b>Total Anticipated Direct Cost of Gas</b>	<b>\$ 18,053,553</b>	<b>\$ 5,206,979</b>	<b>\$ 23,260,531</b>
72				
73				
74		Winter	Summer	Total
75	Working Capital			
76	Total Anticipated Direct Cost of Gas			\$ 23,675,314
77	Working Capital Percentage			
78	Working Capital Allowance			\$ 21,000
79	Beginning Period Working Capital Balance			
80	End of Period Working Capital Allowance			
81	Interest			\$ 525
82	End of period with Interest			
83	Bad Debt			
84	Projected Bad Debt	\$ 187,199	\$ 18,846	\$ 118,149
85	Beginning Period Bad Debt Balance			
86	End of Period Bad Debt Balance			
87	Interest			\$ 7,224
88	End of Period Bad Debt Balance with Interest			
89	Local Production and Storage Capacity	\$ 420,658	\$ -	\$ 420,658
90	NH PUC Consulting Costs	\$ -	\$ 2,024	\$ 2,024
91	Miscellaneous Overhead	\$ 408,908	\$ 103,760	\$ 512,668
92				
93	Gas Cost Other than Bad Debt and Working Capital			
94	Beginning Balance Over/Under Collection			\$ (15,460,069)
95	Net Costs - Revenues			\$ (2,338,672)
96	Ending Balance before Interest			\$ (17,798,742)
97	Average Balance			\$ (16,629,405)
98	Interest Rate			
99	Interest Expense			\$ (48,502)
100	Ending Balance Incl Interest Expense			
101	<b>Total Over/Under Collection Ending Balance</b>			
102				
103	<b>Total Indirect Cost of Gas</b>	<b>\$ 2,285,116</b>	<b>\$ 96,018</b>	<b>\$ 2,381,135</b>
104				
105				
106	<b>Total Cost of Gas</b>	<b>\$ 18,991,280</b>	<b>\$ 5,302,997</b>	<b>\$ 25,641,666</b>
107				
108	<b>Total Interest</b>	<b>\$ (7,523)</b>	<b>\$ (33,231)</b>	<b>\$ (40,754)</b>
109				
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114				

**NORTHERN UTILITIES, INC.**  
**DETERMINATION OF INVENTORY FINANCING FROM MONEY POOL**  
**January 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	\$5,793,482.71	\$6,984,837.84	\$6,984,837.84	2.05%	\$11,926.37	\$5,059.17	\$6,867.20

<b>Inventory ACCT #</b>		<b>MMBTU</b>	<b>AMOUNT</b>
	LNG		
515152	Inventory - Liquified Natural Gas NATURAL GAS	10,894	\$87,953.86
515114&115	Natural Gas Underground - SS-1 and FSS-1		
515116	Natural Gas Underground - SSNE	103,315	\$178,116.17
515113	Natural Gas Underground - MCN	1,898,307	\$5,527,412.68
516525	Washington 10 prepaid	-	
<b>Total Inventory</b>			<b>\$5,793,482.71</b>

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

Account # 53325

Current

ACB	(\$144,708.38)
TE	\$303,279.00
LV	\$158,570.62

**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	01/31/17 Futures Price	Current Open Trade Equity
08/27/15 Mar17 Options	Both	37	0.0800	\$29,600.00	\$6.300	\$3.117	\$0.00
05/02/16 Nov17 Options	Both	12	0.2300	\$27,600.00	\$3.500	\$3.348	\$0.00
05/26/16 Dec17 Options	Both	20	0.2370	\$47,400.00	\$4.000	\$3.470	\$0.00
06/28/16 Jan18 Options	Both	29	0.2475	\$71,775.00	\$4.300	\$3.553	\$0.00
07/27/16 Feb18 Options	Both	30	0.2470	\$74,100.00	\$4.500	\$3.519	\$0.00
08/29/16 Mar18 Options	Both	25	0.2400	\$60,000.00	\$4.650	\$3.429	\$0.00
<b>Total Expense, Open Trade Equity</b>				<b>\$310,475.00</b>			<b>\$0.00</b>

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

	State	QTY	Current Option Premium	Current Option Value	Strike Price
08/27/15 Mar17 Options	Both	37	0.0001	\$37.00	\$6.300
05/02/16 Nov17 Options	Both	12	0.3323	\$39,876.00	\$3.500
05/26/16 Dec17 Options	Both	20	0.2518	\$50,360.00	\$4.000
06/28/16 Jan18 Options	Both	29	0.2609	\$75,661.00	\$4.300
07/27/16 Feb18 Options	Both	30	0.2554	\$76,620.00	\$4.500
08/29/16 Mar18 Options	Both	25	0.2429	\$60,725.00	\$4.650
01/31/17 <b>Total Long Option Value</b>				<b>\$303,279.00</b>	

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

01/01/17	<b>Beginning Balance-carried forward from last month</b>					<b>(\$144,708.38)</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
01/31/17	<b>Ending Balance (ACB)</b>					<b>(\$144,708.38)</b>