



March 24, 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
March 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 February 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 March 20, 2017.

As shown in the attached calculation, Northern's current projected end of period balance varies from the target balance by \$481,366. This projected under-collection of gas costs produces a variance of 2.60% of total projected winter season gas costs.

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

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

These Tariff Pages are issued March 24, 2017, to be effective on April 1, 2017. Red-line versions of these Tariff Pages are also enclosed.

The impact of the April 1 change in the Cost of Gas Adjustment Rate on the typical residential heating customer for the 2016 / 2017 winter season will be \$15.11

George H. Simmons
Manager Regulatory Services

6 Liberty Lane West
Hampton, NH 03842

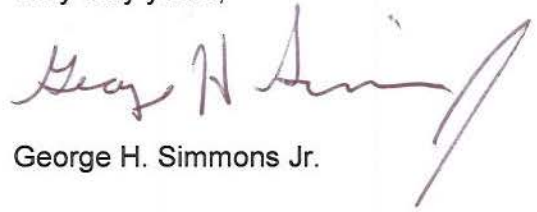
Phone: 603-773-6534
Fax: 603-773-6734

simmons@unitil.com

or 1.4 percent more 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 dark ink, appearing to read "George H. Simmons Jr.", with a long, sweeping flourish extending to the right.

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

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

Nineteenth Revised Page No. 96
Rate Summary

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

| | |
|--|-------------|
| 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) |
| ⁻¹ 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 |
| ⁻² 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) |
| ⁻³ Over-collection w/o rate adjustment as contained in NUI's COG Report dated February 22, 2017 | |
| Period Ending over-collection as determined on 03/24/17 | \$481,366 |
| Projected Sales (04/01/17 - 04/30/17) | 2,913,032 |
| Per unit change in Cost of Gas (04/01/17 - 04/30/17) | \$0.1652 |
| ⁻⁴ Over-collection w/o rate adjustment as contained in NUI's COG Report dated March 24, 2017 | |

| RESIDENTIAL COST OF GAS RATE - 04/01/17 | COGwr | \$0.8286 | 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 | |
| CHANGE IN PER UNIT COST | | \$0.1652 | |
| RESIDENTIAL COST OF GAS RATE - 04/01/17 | | \$0.8286 | |

| COM/IND LOW WINTER USE COST OF GAS RATE - 04/01/17 | COGwl | \$0.7529 | 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 | |
| CHANGE IN PER UNIT COST | | \$0.1652 | |
| COM/IND LOW WINTER USE COST OF GAS RATE - 04/01/17 | | \$0.7529 | |

| COM/IND HIGH WINTER USE COST OF GAS RATE - 04/01/17 | COGwh | \$0.8424 | 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 | |
| CHANGE IN PER UNIT COST | | \$0.1652 | |
| COM/IND HIGH WINTER USE COST OF GAS RATE - 04/01/17 | | \$0.8424 | |

**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 | <u>Tariff Rate R 5:</u> | | | |
| | Monthly Customer Charge | \$21.36 | \$21.36 | \$21.36 |
| | First 50 therms | \$0.6239 | \$0.6728 | \$1.5014 |
| | All usage over 50 therms | \$0.5103 | \$0.5592 | \$1.3878 |
| | LDAC | \$0.0489 | | |
| | <u>Gas Cost Adjustment:</u> Cost of Gas | \$0.8286 | | |
| Residential Heating Low Income | <u>Tariff Rate R 10:</u> | | | |
| | Monthly Customer Charge | \$8.54 | \$8.54 | \$8.54 |
| | First 50 therms | \$0.2496 | \$0.2985 | \$1.1271 |
| | All usage over 50 therms | \$0.2041 | \$0.2530 | \$1.0816 |
| | LDAC | \$0.0489 | | |
| | <u>Gas Cost Adjustment:</u> Cost of Gas | \$0.8286 | | |
| Residential Non-Heating | <u>Tariff Rate R 6:</u> | | | |
| | Monthly Customer Charge | \$21.36 | \$21.36 | \$21.36 |
| | First 10 therms | \$0.4214 | \$0.4703 | \$1.2989 |
| | All usage over 10 therms | \$0.4214 | \$0.4703 | \$1.2989 |
| | LDAC | \$0.0489 | | |
| | <u>Gas Cost Adjustment:</u> Cost of Gas | \$0.8286 | | |
| Residential Non-Heating Low Income | <u>Tariff Rate R 11:</u> | | | |
| | Monthly Customer Charge | \$15.52 | \$15.52 | \$15.52 |
| | First 10 therms | \$0.3196 | \$0.3685 | \$1.1971 |
| | All usage over 10 therms | \$0.3196 | \$0.3685 | \$1.1971 |
| | LDAC | \$0.0489 | | |
| | <u>Gas Cost Adjustment:</u> Cost of Gas | \$0.8286 | | |

Issued: March 24, 2017

Effective: With Service Rendered On and After April 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

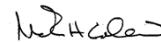
| Winter Season November 2016 - April 2017 | Tariff Rates | Total Delivery Rates (Includes LDAC) | Total Billed Rates Tariff Rates, LDAC Plus Cost of Gas |
|--|--|---|---|
| C&I Low Annual/High Winter <u>Tariff Rate G 40:</u> Monthly Customer Charge First 75 therms All usage over 75 therms LDAC <u>Gas Cost Adjustment:</u> Cost of Gas | \$67.45 \$0.1615 \$0.1615 \$0.0296 \$0.8424 | \$67.45 \$0.1911 \$0.1911 | \$67.45 \$1.0335 \$1.0335 |
| C&I Low Annual/Low Winter <u>Tariff Rate G 50:</u> Monthly Customer Charge First 75 therms All usage over 75 therms LDAC <u>Gas Cost Adjustment:</u> Cost of Gas | \$67.45 \$0.1615 \$0.1615 \$0.0296 \$0.7529 | \$67.45 \$0.1911 \$0.1911 | \$67.45 \$0.9440 \$0.9440 |
| C&I Medium Annual/High Winter <u>Tariff Rate G 41:</u> Monthly Customer Charge All usage LDAC <u>Gas Cost Adjustment:</u> Cost of Gas | \$196.73 \$0.2098 \$0.0296 \$0.8424 | \$196.73 \$0.2394 | \$196.73 \$1.0818 |
| C&I Medium Annual/Low Winter <u>Tariff Rate G 51:</u> Monthly Customer Charge First 1,300 therms All usage over 1,300 therms LDAC <u>Gas Cost Adjustment:</u> Cost of Gas | \$196.73 \$0.1520 \$0.1238 \$0.0296 \$0.7529 | \$196.73 \$0.1816 \$0.1534 | \$196.73 \$0.9345 \$0.9063 |
| C&I High Annual/High Winter <u>Tariff Rate G 42:</u> Monthly Customer Charge All usage LDAC <u>Gas Cost Adjustment:</u> Cost of Gas | \$1,124.19 \$0.1764 \$0.0296 \$0.8424 | \$1,124.19 \$0.2060 | \$1,124.19 \$1.0484 |
| C&I High Annual/Low Winter <u>Tariff Rate G 52:</u> Monthly Customer Charge All usage LDAC <u>Gas Cost Adjustment:</u> Cost of Gas | \$1,124.19 \$0.1541 \$0.0296 \$0.7529 | \$1,124.19 \$0.1837 | \$1,124.19 \$0.9366 |

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Title:

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

| | |
|--|-------------|
| 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) |

¹ 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 |

² 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) |

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

| | |
|--|-----------|
| Period Ending over-collection as determined on 03/24/17 | \$481,366 |
| Projected Sales (04/01/17 - 04/30/17) | 2,913,032 |
| Per unit change in Cost of Gas (04/01/17 - 04/30/17) | \$0.1652 |

³ Over-collection w/o rate adjustment as contained in NUI's COG Report dated March 24, 2017

| RESIDENTIAL COST OF GAS RATE - 03/01/17 <u>04/01/2017</u> | COGwr | \$0.6634 <u>\$0.8286</u> per therm |
|--|-------------------|---|
| | Maximum (COG+25%) | <u>\$0.9448</u> |
| 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 |
| CHANGE IN PER UNIT COST | | <u>\$0.1652</u> |
| RESIDENTIAL COST OF GAS RATE - 04/01/17 | | <u>\$0.8286</u> |

| COM/IND LOW WINTER USE COST OF GAS RATE - 03/01/17 <u>04/01/2017</u> | COGwl | \$0.5877 <u>\$0.7529</u> per therm |
|---|-------------------|---|
| | Maximum (COG+25%) | <u>\$0.8501</u> |
| 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 |
| CHANGE IN PER UNIT COST | | <u>\$0.1652</u> |
| COM/IND LOW WINTER USE COST OF GAS RATE - 04/01/17 | | <u>\$0.7529</u> |

| COM/IND HIGH WINTER USE COST OF GAS RATE - 03/01/17 <u>04/01/2017</u> | COGwh | \$0.6772 <u>\$0.8424</u> per therm |
|--|-------------------|---|
| | Maximum (COG+25%) | <u>\$0.9620</u> |
| 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 |
| CHANGE IN PER UNIT COST | | <u>\$0.1652</u> |
| COM/IND HIGH WINTER USE COST OF GAS RATE - 04/01/17 | | <u>\$0.8424</u> |

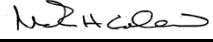
NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION
WINTER SEASON RESIDENTIAL RATES

| 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 <u>Tariff Rate R 5:</u> Monthly Customer Charge First 50 therms All usage over 50 therms LDAC <u>Gas Cost Adjustment:</u> Cost of Gas | \$21.36 \$0.6239 \$0.5103 \$0.0489 \$0.6634 \$0.8286 | \$21.36 \$0.6728 \$0.5592 | \$21.36 \$1.3362 \$1.5014 \$1.2226 \$1.3878 |
| Residential Heating Low income <u>Tariff Rate R 10:</u> Monthly Customer Charge First 50 therms All usage over 50 therms LDAC <u>Gas Cost Adjustment:</u> Cost of Gas | \$8.54 \$0.2496 \$0.2041 \$0.0489 \$0.6634 \$0.8286 | \$8.54 \$0.2985 \$0.2530 | \$8.54 \$0.9619 \$1.1271 \$0.9164 \$1.0816 |
| Residential Non-Heating <u>Tariff Rate R 6:</u> Monthly Customer Charge First 10 therms All usage over 10 therms LDAC <u>Gas Cost Adjustment:</u> Cost of Gas | \$21.36 \$0.4214 \$0.4214 \$0.0489 \$0.6634 \$0.8286 | \$21.36 \$0.4703 \$0.4703 | \$21.36 \$1.1337 \$1.2989 \$1.1337 \$1.2989 |
| Residential Non-Heating Low income <u>Tariff Rate R 11:</u> Monthly Customer Charge First 10 therms All usage over 10 therms LDAC <u>Gas Cost Adjustment:</u> Cost of Gas | \$15.52 \$0.3196 \$0.3196 \$0.0489 \$0.6634 \$0.8286 | \$15.52 \$0.3685 \$0.3685 | \$15.52 \$1.0319 \$1.1971 \$1.0319 \$1.1971 |

Issued: ~~February 22~~ March 24, 2017

Effective: With Service Rendered On and After March April 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 Tariff Rate G 40: Monthly Customer Charge First 75 therms All usage over 75 therms LDAC Gas Cost Adjustment: Cost of Gas | \$67.45 \$0.1615 \$0.1615 \$0.0296 \$0.6772 <u>\$0.8424</u> | \$67.45 \$0.1911 \$0.1911 | \$67.45 \$0.8683 <u>\$1.0335</u> \$0.8683 <u>\$1.0335</u> |
| C&I Low Annual/Low Winter Tariff Rate G 50: Monthly Customer Charge First 75 therms All usage over 75 therms LDAC Gas Cost Adjustment: Cost of Gas | \$67.45 \$0.1615 \$0.1615 \$0.0296 \$0.5877 <u>\$0.7529</u> | \$67.45 \$0.1911 \$0.1911 | \$67.45 \$0.7788 <u>\$0.9440</u> \$0.7788 <u>\$0.9440</u> |
| C&I Medium Annual/High Winter Tariff Rate G 41: Monthly Customer Charge All usage LDAC Gas Cost Adjustment: Cost of Gas | \$196.73 \$0.2098 \$0.0296 \$0.6772 <u>\$0.8424</u> | \$196.73 \$0.2394 | \$196.73 \$0.9166 <u>\$1.0818</u> |
| C&I Medium Annual/Low Winter Tariff Rate G 51: Monthly Customer Charge First 1,300 therms All usage over 1,300 therms LDAC Gas Cost Adjustment: Cost of Gas | \$196.73 \$0.1520 \$0.1238 \$0.0296 \$0.5877 <u>\$0.7529</u> | \$196.73 \$0.1816 \$0.1534 | \$196.73 \$0.7693 <u>\$0.9345</u> \$0.7411 <u>\$0.9063</u> |
| C&I High Annual/High Winter Tariff Rate G 42: Monthly Customer Charge All usage LDAC Gas Cost Adjustment: Cost of Gas | \$1,124.19 \$0.1764 \$0.0296 \$0.6772 <u>\$0.8424</u> | \$1,124.19 \$0.2060 | \$1,124.19 \$0.8832 <u>\$1.0484</u> |
| C&I High Annual/Low Winter Tariff Rate G 52: Monthly Customer Charge All usage LDAC Gas Cost Adjustment: Cost of Gas | \$1,124.19 \$0.1541 \$0.0296 \$0.5877 <u>\$0.7529</u> | \$1,124.19 \$0.1837 | \$1,124.19 \$0.7714 <u>\$0.9366</u> |

Issued: ~~February 22~~ March 24, 2017

Effective: With Service Rendered On and After ~~March~~ April 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
March 2017 Estimated

| | |
|---|-----------------|
| Under/(Over) collection as of 11/01/16 | \$ 1,347,389 |
| Forecasted firm therm sales 03/01/2017 - 04/30/2017 | |
| Residential Heat & Non Heat | 3,815,551 |
| HLF Classes | 663,831 |
| LLF Classes | 3,667,851 |
| Current recovery rate per therm | |
| Residential heat & non heat | \$0.6634 |
| HLF classes | \$0.5877 |
| LLF classes | \$0.6772 |
| Total | \$ (5,405,239) |
| Forecasted recovered costs at current rates 03/01/2017 - 04/30/2017 | \$ (5,405,239) |
| Actual recovered costs 11/01/2016 - 02/28/2017 | \$ (16,095,683) |
| Estimated total recovered costs 11/01/2016 - 04/30/2017 | \$ (21,500,922) |
| Revised projected direct gas costs 11/01/16 - 04/30/17 [1] | \$ 17,631,057 |
| Revised projected indirect gas costs 11/01/16 - 04/30/17 [2] | \$ 917,720 |
| Projected under/(over) collection as of 04/30/17[3] | \$ (1,604,755) |
| <hr/> | |
| April 30, 2017 Target Balance [4] | \$ (2,086,122) |
| Variance from Projected Target Balance | \$ 481,366 |
| Total Projected Gas Costs | \$ 18,548,777 |
| Under/(over) collection as percent of total gas costs | 2.60% |

NOTES

[1] Reflects futures prices as of March 20, 2017

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

[3] Detailed calculations provided on March 24, 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

| | Oct-16 | Winter | | | | | | Summer | | | | | |
|--|--------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | | (Forecast) Nov-16 | (Forecast) Dec-16 | (Forecast) 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 |
| Sales Revenues | | | | | | | | | | | | | |
| Volumes | | | | | | | | | | | | | |
| 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 |
| 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 |
| 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 |
| 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 |
| Rates | | | | | | | | | | | | | |
| 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 |
| 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 |
| 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 |
| Revenues | | | | | | | | | | | | | |
| 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) |
| 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) |
| 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) |
| 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) |
| Gas Costs and Credits | | | | | | | | | | | | | |
| Net Demand Costs (Net of Injection Fees & Cap. Assign.) | | | | | | | | | | | | | |
| Pipeline | | \$ 271,333 | \$ 271,333 | \$ 271,333 | \$ 271,333 | \$ 271,333 | \$ 271,333 | \$ 271,333 | \$ 271,333 | \$ 271,333 | \$ 271,333 | \$ 274,823 | \$ 274,823 |
| 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 |
| Peaking | | \$ 321,648 | \$ 330,376 | \$ 330,376 | \$ 330,376 | \$ 330,376 | \$ 69,585 | \$ 20,807 | \$ 20,807 | \$ 20,807 | \$ 22,055 | \$ 22,055 | \$ 22,055 |
| 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 |
| Asset Management and Capacity Release | | | | | | | | | | | | | |
| 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) |
| 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) |
| 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) |
| 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) |
| 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) |
| 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) |
| 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) |
| 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 |
| NUI Commodity Costs | | | | | | | | | | | | | |
| 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 |
| 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 | \$ 778,497 | \$ 720,034 | \$ 1,679,577 |
| 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 |
| 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 |
| Increase/(Decrease) NYMEX Price | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Increase/(Decrease) in Pipeline Costs | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 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 |
| Interruptible Volumes - NH | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Average Supply Cost (\$/MMBtu) | | \$ 4.29 | \$ 4.48 | \$ 4.87 | \$ 4.86 | \$ 4.67 | \$ 3.05 | \$ 2.66 | \$ 2.41 | \$ 2.45 | \$ 2.38 | \$ 2.29 | \$ 2.69 |
| Interruptible Cost - NH | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 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 |
| 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% |
| 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 |
| Hedging (Gain)/Loss Estimate | | | | | | | | | | | | | |
| NYMEX Options Contracts | | 18 | 31 | 45 | 46 | 37 | | | | | | | |
| Number of Contracts | | 0.08 | 0.09 | 0.10 | 0.10 | 0.08 | | | | | | | |
| Option Contract Price | | \$ 13,860 | \$ 26,350 | \$ 46,350 | \$ 45,540 | \$ 29,600 | | | | | | | |
| Hedging Expenses | | \$ 4.80 | \$ 5.25 | \$ 6.00 | \$ 6.25 | \$ 6.30 | | | | | | | |
| NYMEX Option Strike Price | | \$ 3.03 | \$ 3.23 | \$ 3.34 | \$ 3.34 | \$ 3.30 | | | | | | | |
| NYMEX Price Used for Forecast | | No | No | No | No | No | | | | | | | |
| Strike Price Hit | | \$ - | \$ - | \$ - | \$ - | \$ - | | | | | | | |
| Option Hedging Gain (Credit) | | \$ 13,860 | \$ 26,350 | \$ 46,350 | \$ 45,540 | \$ 29,600 | | | | | | | |
| Tota Northern Hedging Net Cost | | 40.59% | 40.04% | 40.38% | 40.06% | 39.43% | | | | | | | |
| New Hampshire Allocated Percentage | | \$ 5,626 | \$ 10,550 | \$ 18,717 | \$ 18,245 | \$ 11,671 | | | | | | | |
| NH Futures Hedging Net Cost | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| NH Commodity Costs | | | | | | | | | | | | | |
| 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 |
| Hedging (Gain)/Loss Estimate | | \$ 5,626 | \$ 10,550 | \$ 18,717 | \$ 18,245 | \$ 11,671 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Storage | | \$ 37,773 | \$ 403,167 | \$ 649,328 | \$ 794,920 | \$ 385,114 | \$ 13,422 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 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 |
| 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**

| Sales Revenues | | | |
|---|----------------|----------------|-----------------|
| | Winter | Summer | Total |
| 1 Volumes | | | |
| 2 Residential Heat & Non Heat | 14,775,288 | 3,426,772 | 18,202,060 |
| 3 Sales HLF Classes | 2,570,611 | 2,140,549 | 4,711,159 |
| 4 Sales LLF Classes | 14,203,338 | 2,438,282 | 16,641,620 |
| 5 Total | 31,549,237 | 8,005,603 | 39,554,839 |
| 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 | (11,167,163) | (1,389,556) | (12,556,719) |
| 12 Sales HLF Classes | (1,748,272) | (768,243) | (2,516,515) |
| 13 Sales LLF Classes | (10,930,889) | (1,088,693) | (12,019,582) |
| 14 Total Sales | (23,846,324) | (3,246,492) | (27,092,816) |
| 15 | | | |
| 16 | | | |
| Gas Costs and Credits | | | |
| | Winter | Summer | Total |
| 17 Net Demand Costs (Net of Injection Fees & Cap. Ass | | | |
| 18 Pipeline | 1,627,996 | 1,638,468 | 3,266,464 |
| 19 Storage | 6,516,334 | 3,314,090 | 9,830,424 |
| 20 Peaking | 1,704,009 | 128,585 | 1,832,594 |
| 21 Total Demand Costs | 9,848,339 | 5,081,142 | 14,929,481 |
| 22 | | | |
| 23 Asset Management and Capacity Release | | | |
| 24 NUI AMA Revenue | (4,983,737) | (4,983,737) | \$ (9,967,475) |
| 25 NUI Capacity Release | (32,360) | (32,360) | \$ (64,721) |
| 26 NUI AMA Rev & Cap. Release Subtotal | (5,016,098) | (5,016,098) | \$ (10,032,196) |
| 27 NH AMA Revenue | (1,822,368) | (1,822,368) | \$ (3,644,736) |
| 28 NH Capacity Release | (14,060) | (14,060) | \$ (28,121) |
| 29 NH Total Asset Management and Capacity Release | \$ (1,836,428) | \$ (1,836,428) | \$ (3,672,857) |
| 30 | | | |
| 31 PNGTS Refund | \$ (1,990,806) | \$ (99,400) | \$ (2,090,206) |
| 32 | | | |
| 33 | | | |
| 34 | | | |
| 35 Net Demand Costs | \$ 6,021,105 | \$ 3,145,314 | \$ 9,166,419 |
| 36 | | | |
| 37 NUI Commodity Costs | | | |
| 38 NUI Total Pipeline Volumes | | | 7,970,074 |
| 39 Pipeline Costs Modeled in Sendout™ | | | \$ 30,842,990 |
| 40 NYMEX Price Used for Forecast | | | |
| 41 NYMEX Price Used for Update | | | |
| 42 Increase/(Decrease) NYMEX Price | | | |
| 43 Increase/(Decrease) in Pipeline Costs | | | |
| 44 Updated Pipeline Costs | | | |
| 45 Interruptible Volumes - NH | | | |
| 46 Average Supply Cost (\$/MMBtu) | | | |
| 47 Interruptible Cost - NH | | | |
| 48 Total Updated Pipeline Costs | | | |
| 49 New Hampshire Allocated Percentage | | | |
| 50 NH Updated Pipeline Costs | | | \$ 11,996,665 |
| 51 Hedging (Gain)/Loss Estimate | | | |
| 52 NYMEX Options Contracts | | | |
| 53 Number of Contracts | | | |
| 54 Option Contract Price | | | |
| 55 Hedging Expenses | | | |
| 56 NYMEX Option Strike Price | | | |
| 57 NYMEX Price Used for Forecast | | | |
| 58 Strike Price Hit | | | |
| 59 Option Hedging Gain (Credit) | | | |
| 60 Total Northern Hedging Net Cost | | | \$ 161,700 |
| 61 New Hampshire Allocated Percentage | | | |
| 62 NH Futures Hedging Net Cost | \$ 64,809 | \$ - | \$ 64,809 |
| 63 NH Commodity Costs | | | |
| 64 Pipeline Excl Hedging | \$ 9,964,565 | \$ 2,032,100 | \$ 11,996,665 |
| 65 Hedging (Gain)/Loss Estimate | \$ 64,809 | \$ - | \$ 64,809 |
| 66 Storage | \$ 2,283,724 | \$ - | \$ 2,283,724 |
| 67 Peaking | \$ 1,212,483 | \$ 29,565 | \$ 1,242,048 |
| 68 Total Commodity Costs | \$ 13,525,581 | \$ 2,061,665 | \$ 15,587,246 |

Northern Utilities

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

| | | | | |
|-----|---|----------------------|---------------------|----------------------|
| 69 | Inventory Finance Charge | \$ 2,038 | \$ 1,806 | \$ 2,038 |
| 70 | | | | |
| 71 | Total Anticipated Direct Cost of Gas | \$ 19,548,724 | \$ 5,206,979 | \$ 24,755,702 |
| 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 | Total Over/Under Collection Ending Balance | | | |
| 103 | | | | |
| 104 | Total Indirect Cost of Gas | \$ 2,211,478 | \$ 111,349 | \$ 2,322,827 |
| 105 | | | | |
| 106 | Total Cost of Gas | \$ 20,589,903 | \$ 5,318,327 | \$ 27,078,529 |
| 107 | | | | |
| 108 | Total Interest | \$ (901) | \$ (17,900) | \$ (18,801) |

March 24, 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 | 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 | | | | | | 2,451,306 | 1,364,245 | 682,782 | 481,557 | 420,333 | 431,131 | 476,265 | 934,704 |
| 3 | Sales HLF Classes | | | | | | 426,479 | 237,352 | 426,503 | 300,806 | 262,563 | 269,308 | 297,501 | 583,867 |
| 4 | Sales LLF Classes | | | | | | 2,356,416 | 1,311,435 | 485,826 | 342,646 | 299,083 | 306,767 | 338,881 | 665,079 |
| 5 | Total | | | | | | 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 | | | | | | \$ 0.6634 | \$ 0.6634 | \$ 0.4040 | \$ 0.4040 | \$ 0.4040 | \$ 0.4040 | \$ 0.4040 | \$ 0.4040 |
| 8 | Sales HLF Classes CGA | | | | | | \$ 0.5877 | \$ 0.5877 | \$ 0.3574 | \$ 0.3574 | \$ 0.3574 | \$ 0.3574 | \$ 0.3574 | \$ 0.3574 |
| 9 | Sales LLF Classes CGA | | | | | | \$ 0.6772 | \$ 0.6772 | \$ 0.4450 | \$ 0.4450 | \$ 0.4450 | \$ 0.4450 | \$ 0.4450 | \$ 0.4450 |
| 10 | Revenues | | | | | | | | | | | | | |
| 11 | Residential Heat & Non Heat | | | | | | \$ (1,626,196) | \$ (905,040) | \$ (275,844) | \$ (194,549) | \$ (169,815) | \$ (174,177) | \$ (192,411) | \$ (377,621) |
| 12 | Sales HLF Classes | | | | | | \$ (250,642) | \$ (139,492) | \$ (152,432) | \$ (107,508) | \$ (93,840) | \$ (96,251) | \$ (106,327) | \$ (208,674) |
| 13 | Sales LLF Classes | | | | | | \$ (1,595,765) | \$ (888,104) | \$ (216,193) | \$ (152,478) | \$ (133,092) | \$ (136,511) | \$ (150,802) | \$ (295,960) |
| 14 | Total Sales | | \$ (2,703,468) | \$ (4,232,010) | \$ (5,049,884) | \$ (4,110,321) | \$ (3,472,603) | \$ (1,932,636) | \$ (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 | \$ 274,823 | \$ 274,823 | \$ 274,823 |
| 20 | Storage | | | | | | \$ 1,193,141 | \$ 1,193,141 | \$ 550,631 | \$ 550,631 | \$ 550,631 | \$ 554,066 | \$ 554,066 | \$ 554,066 |
| 21 | Peaking | | | | | | \$ 330,376 | \$ 321,648 | \$ 69,585 | \$ 20,807 | \$ 20,807 | \$ 22,055 | \$ 22,055 | \$ 22,055 |
| 22 | Total Demand Costs | | | | | | \$ 1,794,850 | \$ 1,786,121 | \$ 891,548 | \$ 842,770 | \$ 842,770 | \$ 850,944 | \$ 850,944 | \$ 850,944 |
| 23 | Asset Management and Capacity Release | | | | | | | | | | | | | |
| 24 | NUI AMA Revenue | | | | | | \$ (830,623) | \$ (830,623) | \$ (830,623) | \$ (830,623) | \$ (830,623) | \$ (830,623) | \$ (830,623) | \$ (830,623) |
| 25 | NUI Capacity Release | | | | | | \$ (5,393) | \$ (5,393) | \$ (5,393) | \$ (5,393) | \$ (5,393) | \$ (5,393) | \$ (5,393) | \$ (5,393) |
| 26 | NUI AMA Rev & Cap. Release Subtotal | | | | | | \$ (836,016) | \$ (836,016) | \$ (836,016) | \$ (836,016) | \$ (836,016) | \$ (836,016) | \$ (836,016) | \$ (836,016) |
| 27 | NH AMA Revenue | | | | | | \$ (303,728) | \$ (303,728) | \$ (303,728) | \$ (303,728) | \$ (303,728) | \$ (303,728) | \$ (303,728) | \$ (303,728) |
| 28 | NH Capacity Release | | | | | | \$ (2,343) | \$ (2,343) | \$ (2,343) | \$ (2,343) | \$ (2,343) | \$ (2,343) | \$ (2,343) | \$ (2,343) |
| 29 | NH Total Asset Management and Capacity Release | | | | | | \$ (306,071) | \$ (306,071) | \$ (306,071) | \$ (306,071) | \$ (306,071) | \$ (306,071) | \$ (306,071) | \$ (306,071) |
| 30 | | | | | | | | | | | | | | |
| 31 | PNGTS Refund | | | | | | \$ (331,800.99) | \$ (331,800.99) | \$ (331,800.99) | \$ (16,566.71) | \$ (16,566.71) | \$ (16,566.71) | \$ (16,566.71) | \$ (16,566.71) |
| 32 | | | | | | | | | | | | | | |
| 33 | Net Demand Costs | | \$ 1,105,488 | \$ 835,704 | \$ 1,012,794 | \$ 993,820 | \$ 1,148,249 | \$ 253,676 | \$ 520,132 | \$ 520,132 | \$ 520,132 | \$ 528,306 | \$ 528,306 | \$ 528,306 |
| 34 | | | | | | | | | | | | | | |
| 35 | NUI Commodity Costs | | | | | | | | | | | | | |
| 36 | NUI Total Pipeline Volumes | | | | | | 989,654 | 788,877 | 461,983 | 321,009 | 282,542 | 285,644 | 313,975 | 623,892 |
| 37 | Pipeline Costs Modeled in Sendout™ | | | | | | \$ 4,623,752 | \$ 2,406,334 | \$ 1,228,221 | \$ 775,044 | \$ 693,427 | \$ 678,497 | \$ 720,034 | \$ 1,679,577 |
| 38 | NYMEX Price Used for Forecast | | | | | | \$ 3,2960 | \$ 3,0150 | \$ 2,9820 | \$ 3,0080 | \$ 3,0360 | \$ 3,0440 | \$ 3,0280 | \$ 3,0510 |
| 39 | NYMEX Price Used for Update | | | | | | \$ 2,6270 | \$ 3,0410 | \$ 2,9820 | \$ 3,0080 | \$ 3,0360 | \$ 3,0440 | \$ 3,0280 | \$ 3,0510 |
| 40 | Increase/(Decrease) NYMEX Price | | | | | | \$ (0,6690) | \$ 0,0260 | | | | | | |
| 41 | Increase/(Decrease) in Pipeline Costs | | | | | | \$ (662,078) | \$ 20,511 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 42 | Updated Pipeline Costs | | | | | | \$ 3,961,674 | \$ 2,426,845 | \$ 1,228,221 | \$ 775,044 | \$ 693,427 | \$ 678,497 | \$ 720,034 | \$ 1,679,577 |
| 43 | Interruptible Volumes - NH | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 44 | Average Supply Cost (\$/MMBtu) | | | | | | \$ 4.00 | \$ 3.08 | \$ 2.66 | \$ 2.41 | \$ 2.45 | \$ 2.38 | \$ 2.29 | \$ 2.69 |
| 45 | Interruptible Cost - NH | | | | | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 46 | Total Updated Pipeline Costs | | | | | | \$ 3,961,674 | \$ 2,426,845 | \$ 1,228,221 | \$ 775,044 | \$ 693,427 | \$ 678,497 | \$ 720,034 | \$ 1,679,577 |
| 47 | New Hampshire Allocated Percentage | | | | | | 39.43% | 36.54% | 34.78% | 35.24% | 34.91% | 34.42% | 35.63% | 35.30% |
| 48 | NH Updated Pipeline Costs | | | | | | \$ 1,562,018 | \$ 886,735 | \$ 427,199 | \$ 273,112 | \$ 242,042 | \$ 240,299 | \$ 256,522 | \$ 592,926 |
| 49 | Hedging (Gain)/Loss Estimate | | | | | | | | | | | | | |
| 50 | NYMEX Options Contracts | | | | | | | | | | | | | |
| 51 | Hedging Expenses | | | | | | \$ 29,600 | | | | | | | |
| 52 | NYMEX Option Strike Price | | | | | | \$ 6.30 | | | | | | | |
| 53 | NYMEX Price Used for Forecast | | | | | | \$ 2.63 | | | | | | | |
| 54 | Strike Price Hit | | | | | | No | | | | | | | |
| 55 | Option Hedging Gain (Credit) | | | | | | \$ 29,600 | | | | | | | |
| 56 | Tota Northern Hedging Net Cost | | | | | | \$ 29,600 | | | | | | | |
| 57 | New Hampshire Allocated Percentage | | | | | | 39.43% | | | | | | | |
| 58 | NH Futures Hedging Net Cost | | | | | | \$ 11,671 | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 59 | NH Commodity Costs | | | | | | | | | | | | | |
| 60 | Pipeline Excl Hedging | | | | | | \$ 1,562,018 | \$ 886,735 | \$ 427,199 | \$ 273,112 | \$ 242,042 | \$ 240,299 | \$ 256,522 | \$ 592,926 |
| 61 | Hedging (Gain)/Loss Estimate | | | | | | \$ 11,671 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 62 | Storage | | | | | | \$ 385,114 | \$ 13,422 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 63 | Peaking | | | | | | \$ 5,693 | \$ 5,089 | \$ 4,958 | \$ 4,838 | \$ 4,938 | \$ 5,005 | \$ 4,859 | \$ 4,967 |
| 64 | Total Commodity Costs | | \$ 1,282,208 | \$ 2,764,977 | \$ 2,912,586 | \$ 2,451,323 | \$ 1,964,495 | \$ 905,246 | \$ 432,157 | \$ 277,950 | \$ 246,980 | \$ 245,304 | \$ 261,381 | \$ 597,894 |

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

| Sales Revenues | | | | | |
|----------------|---|----------------------|-----------------------|-----------------------|-------|
| Volumes | | Winter | Summer | Total | |
| 1 | Residential Heat & Non Heat | 3,815,551 | 3,426,772 | 7,242,323 | |
| 2 | Sales HLF Classes | 663,831 | 2,140,549 | 2,804,380 | |
| 3 | Sales LLF Classes | 3,667,851 | 2,438,282 | 6,106,134 | |
| 4 | Total | 8,147,233 | 8,005,603 | 16,152,836 | |
| 5 | Rates | | | | |
| 6 | Residential Heat & Non Heat CGA | - | - | - | |
| 7 | Sales HLF Classes CGA | - | - | - | |
| 8 | Sales LLF Classes CGA | - | - | - | |
| 9 | Revenues | | | | |
| 10 | Residential Heat & Non Heat | (2,531,236) | (1,384,416) | (3,915,652) | |
| 11 | Sales HLF Classes | (390,134) | (765,032) | (1,155,166) | |
| 12 | Sales LLF Classes | (2,483,869) | (1,085,036) | (3,568,904) | |
| 13 | Total Sales | (21,500,922) | (3,234,484) | (24,735,405) | |
| 14 | Gas Costs and Credits | | | | |
| 15 | | | Winter | Summer | Total |
| 16 | Net Demand Costs (Net of Injection Fees & Cap. Ass) | | | | |
| 17 | Pipeline | 813,998 | 1,638,468 | 2,452,466 | |
| 18 | Storage | 2,936,912 | 3,314,090 | 6,251,002 | |
| 19 | Peaking | 721,609 | 128,585 | 850,193 | |
| 20 | Total Demand Costs | 4,472,519 | 5,081,142 | 9,553,661 | |
| 21 | Asset Management and Capacity Release | | | | |
| 22 | NUI AMA Revenue | (2,491,869) | (4,983,737) | \$ (7,475,606) | |
| 23 | NUI Capacity Release | (16,180) | (32,360) | \$ (48,540) | |
| 24 | NUI AMA Rev & Cap. Release Subtotal | (2,508,049) | (5,016,098) | \$ (7,524,147) | |
| 25 | NH AMA Revenue | (911,184) | (1,822,368) | \$ (2,733,552) | |
| 26 | NH Capacity Release | (7,030) | (14,060) | \$ (21,091) | |
| 27 | NH Total Asset Management and Capacity Release | \$ (918,214) | \$ (1,836,428) | \$ (2,754,642) | |
| 28 | PNGTS Refund | | | | |
| 29 | | \$ (1,990,806) | \$ (99,400) | \$ (1,094,803) | |
| 30 | Net Demand Costs | \$ 1,563,499 | \$ 3,145,314 | \$ 5,704,215 | |
| 31 | NUI Commodity Costs | | | | |
| 32 | NUI Total Pipeline Volumes | | | 4,067,575 | |
| 33 | Pipeline Costs Modeled in Sendout™ | | | \$ 12,804,885 | |
| 34 | NYMEX Price Used for Forecast | | | | |
| 35 | NYMEX Price Used for Update | | | | |
| 36 | Increase/(Decrease) NYMEX Price | | | | |
| 37 | Increase/(Decrease) in Pipeline Costs | | | | |
| 38 | Updated Pipeline Costs | | | | |
| 39 | Interruptible Volumes - NH | | | | |
| 40 | Average Supply Cost (\$/MMBtu) | | | | |
| 41 | Interruptible Cost - NH | | | | |
| 42 | Total Updated Pipeline Costs | | | \$ 4,480,853 | |
| 43 | New Hampshire Allocated Percentage | | | | |
| 44 | NH Updated Pipeline Costs | | | \$ 4,480,853 | |
| 45 | Hedging (Gain)/Loss Estimate | | | | |
| 46 | NYMEX Options Contracts | | | | |
| 47 | Hedging Expenses | | | | |
| 48 | NYMEX Option Strike Price | | | | |
| 49 | NYMEX Price Used for Forecast | | | | |
| 50 | Strike Price Hit | | | | |
| 51 | Option Hedging Gain (Credit) | | | \$ 29,600 | |
| 52 | Total Northern Hedging Net Cost | | | | |
| 53 | New Hampshire Allocated Percentage | | | | |
| 54 | NH Futures Hedging Net Cost | \$ 11,671 | \$ - | \$ 11,671 | |
| 55 | NH Commodity Costs | | | | |
| 56 | Pipeline Excl Hedging | \$ 2,448,753 | \$ 2,032,100 | \$ 4,480,853 | |
| 57 | Hedging (Gain)/Loss Estimate | \$ 11,671 | \$ - | \$ 11,671 | |
| 58 | Storage | \$ 398,536 | \$ - | \$ 398,536 | |
| 59 | Peaking | \$ 10,782 | \$ 29,565 | \$ 40,346 | |
| 60 | Total Commodity Costs | \$ 12,280,835 | \$ 2,061,665 | \$ 14,342,500 | |

March 24, 2017 - Updated Projected End of Period Balance

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

| | | | | | | | | | | | | | | | |
|-----|--|---------------------|---------------------|-------------------|---------------------|---------------------|---------------------|-----------------------|-----------------------|---------------------|---------------------|---------------------|-------------------|--------------|------|
| 69 | Inventory Finance Charge | | | | | | | \$ 335 | \$ 156 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 70 | | | | | | | | | | | | | | | |
| 71 | Total Anticipated Direct Cost of Gas | \$ 2,387,695 | \$ 3,600,681 | \$ 3,925,381 | \$ 3,445,143 | \$ 3,113,079 | \$ 1,159,079 | \$ 952,289 | \$ 798,082 | \$ 767,112 | \$ 773,609 | \$ 789,686 | \$ 1,126,199 | | |
| 72 | | | | | | | | | | | | | | | |
| 73 | | | | | | | | | | | | | | | |
| 74 | | | | | | | | | | | | | | | |
| 75 | | | | | | | | | | | | | | | |
| 76 | Working Capital | | | | | | | | | | | | | | |
| 77 | Total Anticipated Direct Cost of Gas | \$ 2,525,956 | \$ 3,738,942 | \$ 4,063,642 | \$ 3,583,404 | \$ 3,113,079 | \$ 1,159,079 | \$ 952,289 | \$ 798,082 | \$ 767,112 | \$ 773,609 | \$ 789,686 | \$ 1,126,199 | | |
| 78 | Working Capital Percentage | 0.0887% | 0.0887% | 0.0887% | 0.0887% | 0.0887% | 0.0887% | 0.0887% | 0.0887% | 0.0887% | 0.0887% | 0.0887% | 0.0887% | | |
| 79 | Working Capital Allowance | \$ 2,240 | \$ 3,316 | \$ 3,604 | \$ 3,178 | \$ 2,761 | \$ 1,028 | \$ 845 | \$ 708 | \$ 680 | \$ 686 | \$ 700 | \$ 999 | | |
| 80 | Beginning Period Working Capital Balance | \$ 1,079 | \$ 3,326 | \$ 6,657 | \$ 10,286 | \$ 13,499 | \$ 16,303 | \$ 17,380 | \$ 18,277 | \$ 19,039 | \$ 19,776 | \$ 20,521 | \$ 21,282 | | |
| 81 | End of Period Working Capital Allowance | \$ 3,319 | \$ 6,642 | \$ 10,261 | \$ 13,464 | \$ 16,260 | \$ 17,331 | \$ 18,225 | \$ 18,985 | \$ 19,720 | \$ 20,462 | \$ 21,222 | \$ 22,281 | | |
| 82 | Interest | \$ 6 | \$ 15 | \$ 25 | \$ 35 | \$ 43 | \$ 49 | \$ 52 | \$ 54 | \$ 57 | \$ 59 | \$ 61 | \$ 64 | | |
| 83 | End of period with Interest | \$ 1,079 | \$ 3,326 | \$ 6,657 | \$ 10,286 | \$ 13,499 | \$ 16,303 | \$ 17,380 | \$ 18,277 | \$ 19,039 | \$ 19,776 | \$ 20,521 | \$ 21,282 | \$ 22,345 | |
| 84 | Bad Debt | | | | | | | | | | | | | | |
| 85 | Projected Bad Debt | \$ - | \$ (147) | \$ (52) | \$ 5,903 | \$ 4,964 | \$ 31,200 | \$ 31,141 | \$ 3,141 | \$ 3,141 | \$ 3,141 | \$ 3,141 | \$ 3,141 | \$ 3,141 | |
| 86 | Beginning Period Bad Debt Balance | \$ 135,847 | \$ 136,096 | \$ 136,441 | \$ 142,750 | \$ 147,714 | \$ 179,337 | \$ 211,015 | \$ 214,726 | \$ 218,488 | \$ 222,262 | \$ 226,047 | \$ 229,843 | \$ 233,649 | |
| 87 | End of Period Bad Debt Balance | \$ 135,847 | \$ 136,096 | \$ 136,441 | \$ 142,750 | \$ 148,137 | \$ 179,815 | \$ 215,347 | \$ 219,121 | \$ 222,906 | \$ 226,701 | \$ 230,508 | \$ 234,326 | | |
| 88 | Interest | \$ 396 | \$ 397 | \$ 407 | \$ 424 | \$ 478 | \$ 570 | \$ 622 | \$ 633 | \$ 644 | \$ 655 | \$ 666 | \$ 677 | | |
| 89 | End of Period Bad Debt Balance with Interest | \$ 135,847 | \$ 136,096 | \$ 136,441 | \$ 142,750 | \$ 148,137 | \$ 179,815 | \$ 215,347 | \$ 219,121 | \$ 222,906 | \$ 226,701 | \$ 230,508 | \$ 234,326 | | |
| 90 | Local Production and Storage Capacity | \$ 70,110 | \$ 70,110 | \$ 70,110 | \$ 70,110 | \$ 70,110 | \$ 70,110 | \$ 70,110 | \$ - | \$ - | \$ - | \$ - | \$ - | | |
| 91 | NH PUC Consulting Costs | | | | | | | | | | | | | | |
| 92 | Miscellaneous Overhead | \$ 68,151 | \$ 68,151 | \$ 68,151 | \$ 68,151 | \$ 68,151 | \$ 68,151 | \$ 17,293 | \$ 17,293 | \$ 17,293 | \$ 17,293 | \$ 17,293 | \$ 17,293 | | |
| 93 | Gas Cost Other than Bad Debt and Working Capital Over/Under Collection | | | | | | | | | | | | | | |
| 94 | Beginning Balance Over/Under Collection | \$ 1,210,464 | \$ 1,036,224 | \$ 545,459 | \$ (440,630) | \$ (969,601) | \$ (1,194,015) | \$ (1,833,720) | \$ (1,511,454) | \$ (1,154,495) | \$ (769,638) | \$ (387,360) | \$ (30,528) | | |
| 95 | Net Costs - Revenues | \$ (177,511) | \$ (493,068) | \$ (986,242) | \$ (526,917) | \$ (221,264) | \$ (635,296) | \$ 327,138 | \$ 360,841 | \$ 387,659 | \$ 383,964 | \$ 357,440 | \$ 261,238 | | |
| 96 | Ending Balance before Interest | \$ 1,032,953 | \$ 543,156 | \$ (440,783) | \$ (967,547) | \$ (1,190,865) | \$ (1,829,311) | \$ (1,506,582) | \$ (1,150,613) | \$ (766,836) | \$ (385,675) | \$ (29,920) | \$ 230,710 | | |
| 97 | Average Balance | \$ 1,121,708 | \$ 789,690 | \$ 52,338 | \$ (704,089) | \$ (1,080,233) | \$ (1,511,663) | \$ (1,670,151) | \$ (1,331,033) | \$ (960,666) | \$ (577,657) | \$ (208,640) | \$ 100,091 | | |
| 98 | Interest Rate | 3.50% | 3.50% | 3.50% | 3.50% | 3.50% | 3.50% | 3.50% | 3.50% | 3.50% | 3.50% | 3.50% | 3.50% | | |
| 99 | Interest Expense | \$ 3,272 | \$ 2,303 | \$ 153 | \$ (2,054) | \$ (3,151) | \$ (4,409) | \$ (4,871) | \$ (3,882) | \$ (2,802) | \$ (1,685) | \$ (609) | \$ 292 | | |
| 100 | Ending Balance Incl Interest Expense | \$ 1,210,464 | \$ 1,036,224 | \$ 545,459 | \$ (440,630) | \$ (969,601) | \$ (1,194,015) | \$ (1,833,720) | \$ (1,511,454) | \$ (1,154,495) | \$ (769,638) | \$ (387,360) | \$ (30,528) | \$ 231,002 | |
| 101 | Total Over/Under Collection Ending Balance | \$ 1,347,389 | \$ 1,175,646 | \$ 688,556 | \$ (287,595) | \$ (807,965) | \$ (997,897) | \$ (1,604,755) | \$ (1,277,829) | \$ (916,335) | \$ (526,956) | \$ (140,137) | \$ 487,673 | | |
| 102 | | | | | | | | | | | | | | | |
| 103 | Total Indirect Cost of Gas | \$ 1,347,389 | \$ 144,029 | \$ 144,240 | \$ 148,352 | \$ 144,808 | \$ 169,592 | \$ 166,699 | \$ 19,105 | \$ 17,947 | \$ 19,013 | \$ 20,149 | \$ 21,253 | \$ 22,466 | |
| 104 | | | | | | | | | | | | | | | |
| 105 | Total Cost of Gas | \$ 1,347,389 | \$ 2,531,724 | \$ 3,744,921 | \$ 4,073,733 | \$ 3,589,951 | \$ 3,282,671 | \$ 1,325,777 | \$ 971,395 | \$ 816,029 | \$ 786,125 | \$ 793,758 | \$ 810,939 | \$ 1,148,665 | |
| 106 | | | | | | | | | | | | | | | |
| 107 | Total Interest | \$ - | \$ 3,674 | \$ 2,715 | \$ 584 | \$ (1,595) | \$ (2,630) | \$ (3,790) | \$ (4,198) | \$ (3,195) | \$ (2,102) | \$ (971) | \$ 118 | \$ 1,032 | |
| 108 | | | | | | | | | | | | | | | |
| 109 | | | | | | | | | | | | | | | |
| 110 | | | | | | | | | | | | | | | |
| 111 | | | | | | | | | | | | | | | |
| 112 | | | | | | | | | | | | | | | |
| 113 | | | | | | | | | | | | | | | |
| 114 | | | | | | | | | | | | | | | |

End of Period Balance, All Accounts \$ (1,604,755)

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

Northern Utilities

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

| | | | | |
|-----|---|----------------------|---------------------|----------------------|
| 69 | Inventory Finance Charge | \$ 492 | \$ 492 | \$ 492 |
| 70 | | | | |
| 71 | Total Anticipated Direct Cost of Gas | \$ 17,631,057 | \$ 5,206,979 | \$ 22,838,036 |
| 72 | | | | |
| 73 | | | | |
| 74 | | Winter | Summer | Total |
| 75 | Working Capital | | | |
| 76 | Total Anticipated Direct Cost of Gas | | | \$ 23,391,080 |
| 77 | Working Capital Percentage | | | |
| 78 | Working Capital Allowance | | | \$ 20,748 |
| 79 | Beginning Period Working Capital Balance | | | |
| 80 | End of Period Working Capital Allowance | | | |
| 81 | Interest | | | \$ 519 |
| 82 | End of period with Interest | | | |
| 83 | Bad Debt | | | |
| 84 | Projected Bad Debt | \$ 187,199 | \$ 18,846 | \$ 91,913 |
| 85 | Beginning Period Bad Debt Balance | | | |
| 86 | End of Period Bad Debt Balance | | | |
| 87 | Interest | | | \$ 6,566 |
| 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 |
| 94 | Gas Cost Other than Bad Debt and Working Capital | | | |
| 95 | Beginning Balance Over/Under Collection | | | \$ (5,499,295) |
| 96 | Net Costs - Revenues | | | \$ (962,019) |
| 97 | Ending Balance before Interest | | | \$ (6,461,314) |
| 98 | Average Balance | | | \$ (5,980,305) |
| 99 | Interest Rate | | | |
| 100 | Interest Expense | | | \$ (17,443) |
| 101 | Ending Balance Incl Interest Expense | | | |
| 102 | Total Over/Under Collection Ending Balance | | | |
| 103 | | | | |
| 104 | Total Indirect Cost of Gas | \$ 2,265,109 | \$ 119,933 | \$ 2,385,042 |
| 105 | | | | |
| 106 | Total Cost of Gas | \$ 18,548,777 | \$ 5,326,912 | \$ 25,223,078 |
| 107 | | | | |
| 108 | Total Interest | \$ (1,042) | \$ (9,315) | \$ (10,358) |
| 109 | | | | |
| 110 | | | | |
| 111 | | | | |
| 112 | | | | |
| 113 | | | | |
| 114 | | | | |

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

Account # 53325

Current

| | |
|-----|---------------|
| ACB | (\$84,708.38) |
| TE | \$201,194.00 |
| LV | \$116,485.62 |

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&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 | 02/28/17 Futures Price | Current Open Trade Equity |
|---|-------|-----|-----------------------|----------------------|--------------|------------------------|---------------------------|
| 05/02/16 Nov17 Options | Both | 12 | 0.2300 | \$27,600.00 | \$3.500 | \$3.117 | \$0.00 |
| 05/26/16 Dec17 Options | Both | 20 | 0.2370 | \$47,400.00 | \$4.000 | \$3.239 | \$0.00 |
| 06/28/16 Jan18 Options | Both | 29 | 0.2475 | \$71,775.00 | \$4.300 | \$3.326 | \$0.00 |
| 07/27/16 Feb18 Options | Both | 30 | 0.2470 | \$74,100.00 | \$4.500 | \$3.304 | \$0.00 |
| 08/29/16 Mar18 Options | Both | 25 | 0.2400 | \$60,000.00 | \$4.650 | \$3.225 | \$0.00 |
| <i>Total Expense, Open Trade Equity</i> | | | | \$280,875.00 | | | \$0.00 |

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 | 0.2111 | \$25,332.00 | \$3.500 |
| 05/26/16 Dec17 Options | Both | 20 | 0.1638 | \$32,760.00 | \$4.000 |
| 06/28/16 Jan18 Options | Both | 29 | 0.1708 | \$49,532.00 | \$4.300 |
| 07/27/16 Feb18 Options | Both | 30 | 0.1719 | \$51,570.00 | \$4.500 |
| 08/29/16 Mar18 Options | Both | 25 | 0.1680 | \$42,000.00 | \$4.650 |
| 02/28/17 <i>Total Long Option Value</i> | | | | \$201,194.00 | |

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

| | | | | | | |
|----------|--|--|--|--|-------------|-----------------------|
| 02/01/17 | Beginning Balance-carried forward from last month | | | | | (\$144,708.38) |
| | Interest Credit | | | | \$0.00 | |
| | Net Deposit to Margin Account | | | | \$60,000.00 | |
| | Option Premiums of new activity | | | | \$0.00 | |
| | Monthly Transaction Costs | | | | \$0.00 | |
| | <i>Total Monthly Cash Adjustment</i> | | | | | \$60,000.00 |
| 02/28/17 | Ending Balance (ACB) | | | | | (\$84,708.38) |

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

| | Total Inventory | Average bal beg + end / 2 | Internally Financed | Money Pool Interest Rate | Interest to Defer | NH | ME |
|--------------|------------------------|--------------------------------------|--------------------------------|---|------------------------------|------------|------------|
| 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 | \$3,991,804.55 | \$6,083,998.75 | \$6,083,998.75 | 2.05% | \$10,388.22 | \$4,406.68 | \$5,981.54 |
| February | \$3,991,804.55 | \$3,991,804.55 | \$3,991,804.55 | 2.05% | \$6,815.87 | \$2,891.29 | \$3,924.58 |

| Inventory ACCT # | | MMBTU | AMOUNT |
|-----------------------------|--|--------------|-----------------------|
| | LNG | | |
| 515152 | Inventory - Liquified Natural Gas NATURAL GAS | 11,478 | \$88,893.74 |
| 515114&115 | Natural Gas Underground - SS-1 and FSS-1 | | |
| 515116 | Natural Gas Underground - SSNE | 41,795 | \$72,058.26 |
| 515113 | Natural Gas Underground - MCN | 1,315,428 | \$3,830,852.55 |
| 516525 | Washington 10 prepaid | - | |
| Total Inventory | | | \$3,991,804.55 |