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

Tariff Sheets

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

> Seventeenth Revised Page No. 96 Rate Summary

Seventeenth Revised Page No. 97 Rate Summary

N.H.P.U.C No. 11 NORTHERN UTILITIES, INC.

Sixteenth Revised Page 43 Superseding Fifteenth Page 43

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 Projected Prorated Sales (11/01/16 - 04/30/17)	\$21,855,615 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	\$ <u>13,527,619</u>	\$ <u>0.4287</u>	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	
		\$0.000	

⁻¹ Over-collection w/o rate adjustment as contained in NUI's COG Report dated December 16, 2016

RESIDENTIAL COST OF GAS RATE - 01/01/17	COGwr	\$0.7709 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

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

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

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Senior Vice President

Issued By:

NHPUC No. 11 - Gas NORTHERN UTILITIES, INC.

Seventeenth Revised Page 96 Superseding Sixteenth Revised Page 96

NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION WINTER SEASON RESIDENTIAL RATES

	Winter Season		Total	Total Bille	d Rates
	November 2016 - April 2017	Tariff	Delivery Rates	Tariff Rate	s, LDAC
		Rates	(Includes LDAC)	Plus Cost	of Gas
Residential Heating	Tariff Rate R 5:				
	Monthly Customer Charge	\$21.36	\$21.36		\$21.36
	First 50 therms	\$0.6239	\$0.6728	\$1.4437	
	All usage over 50 therms	\$0.5103	\$0.5592	\$1.3301	
	LDAC	\$0.0489			
	Gas Cost Adjustment:				
	Cost of Gas	\$0.7709			
Residential Heating	Tariff Rate R 10:				
Low Income	Monthly Customer Charge	\$8.54	\$8.54		\$8.54
	First 50 therms	\$0.2496	\$0.2985	\$1.0694	
	All usage over 50 therms	\$0.2041	\$0.2530	\$1.0239	
	LDAC	\$0.0489	• • • • •	•	
	Gas Cost Adjustment:				
	Cost of Gas	\$0.7709			
Residential Non-Heating	Tariff Rate R 6:				
5	Monthly Customer Charge	\$21.36	\$21.36		\$21.36
	First 10 therms	\$0.4214	\$0.4703	\$1.2412	
	All usage over 10 therms	\$0.4214	\$0.4703	\$1.2412	
	LDAC	\$0.0489			
	Gas Cost Adjustment:				
	Cost of Gas	\$0.7709			
	T (KD / D //	1			
Residential Non-Heating	Tariff Rate R 11:	• • - - •	• • • • • •		
Low Income	Monthly Customer Charge	\$15.52	\$15.52		\$15.52
	First 10 therms	\$0.3196	\$0.3685	\$1.1394	
	All usage over 10 therms	\$0.3196	\$0.3685	\$1.1394	
	LDAC	\$0.0489			
	Gas Cost Adjustment:	¢0.7700			
	Cost of Gas	\$0.7709			

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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 \$0.7847	\$67.45 \$0.1911 \$0.1911	\$67.45 \$0.9758 \$0.9758
C&I Low Annual/Low Winter	Tariff Rate G 50:Monthly Customer ChargeFirst 75 thermsAll usage over 75 thermsLDACGas Cost Adjustment:Cost of Gas	\$67.45 \$0.1615 \$0.1615 \$0.0296 \$0.6952	\$67.45 \$0.1911 \$0.1911	\$67.45 \$0.8863 \$0.8863
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 \$0.7847	\$196.73 \$0.2394	\$196.73 \$1.0241
C&I Medium Annual/Low Winter	Tariff Rate G 51:Monthly Customer ChargeFirst 1,300 thermsAll usage over 1,300 thermsLDACGas Cost Adjustment:Cost of Gas	\$196.73 \$0.1520 \$0.1238 \$0.0296 \$0.6952	\$196.73 \$0.1816 \$0.1534	\$196.73 \$0.8768 \$0.8486
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 \$0.7847	\$1,124.19 \$0.2060	\$1,124.19 \$0.9907
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 \$0.6952	\$1,124.19 \$0.1837	\$1,124.19 \$0.8789

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N.H.P.U.C No. 11 NORTHERN UTILITIES, INC.

Fifteenth Sixteenth Revised Page 43 Superseding Fourteenth Fifteenth Revised Page 43

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 Projected Prorated Sales (11/01/16 - 04/30/17) Direct Cost of Gas Rate	\$21,855,615 31,549,237	\$0.6927	per therm
Demand Cost of Gas Rate Commodity Cost of Gas Rate Total Direct Cost of Gas Rate	\$8,327,997 \$ <u>13,527,619</u> \$21,855,615	\$0.2640 \$ <u>0.4287</u> \$0.6927	per therm per therm per therm
Total Anticipated Indirect Cost of Gas Projected Prorated Sales (11/01/16 - 04/30/17) Indirect Cost of Gas	\$1,989,516 31,549,237	\$0.0631	per therm
TOTAL PERIOD AVERAGE COST OF GAS		\$0.7558	per therm
Period ending over-collection as determined on 11/21/16 Projected sales (12/01/16 - 04/30/17) Per unit change in Cost of Gas (12/01/16 - 04/30/17) ⁻¹ Over-collection w/o rate adjustment as contained in NUI's COG Report dated November 21, 2016	(\$672,842) 27,653,599 (\$0.0243)		
Period Ending over-collection as determined on 12/16/16 Projected Sales (01/01/17 - 04/30/17) Per unit change in Cost of Gas (01/01/17 - 04/30/17)	<u>\$870.133</u> 22.082.929 <u>\$0.0394</u>		

⁻¹ Over-collection w/o rate adjustment as contained in NUI's COG Report dated December 16, 2016

ESIDENTIAL COST OF GAS RATE - 12/01/16 _01/01/2017_	COGwr	\$0.7315 \$0.7709 per therm
	Maximum (COG+25%)	\$0.9448
		* 0.7550
RESIDENTIAL COST OF GAS RATE - 11/01/16 CHANGE IN PER UNIT COST		\$0.7558 (\$0.0243)
		(, ,
RESIDENTIAL COST OF GAS RATE - 12/01/16		\$0.7315
CHANGE IN PER UNIT COST		<u>\$0.0394</u>
RESIDENTIAL COST OF GAS RATE - 01/01/17		<u>\$0.7709</u>

COGwl	\$0.6558 <u>\$0.6952</u>	per therm
Maximum (COG+25%)	\$0.8501	
	\$0.6801	
	(\$0.0243)	
	\$0.6558	
	<u>\$0.0394</u>	
	<u>\$0.6952</u>	
		Maximum (COG+25%) \$0.8501 \$0.6801 (\$0.0243) \$0.6558 \$0.0394

OM/IND HIGH WINTER USE COST OF GAS RATE - 12/01/16 01/01/2017	COGwh	\$0.7453_<u>\$0.7847</u> per therm
	Maximum (COG+25%)	\$0.9620
COM/IND HIGH WINTER USE COST OF GAS RATE - 11/01/16 CHANGE IN PER UNIT COST COM/IND HIGH WINTER USE COST OF GAS RATE - 12/01/16 <u>CHANGE IN PER UNIT COST</u> <u>COM/IND HIGH WINTER USE COST OF GAS RATE - 01/01/17</u>		\$0.7696 (\$0.0243) \$0.7453 <u>\$0.0394</u> <u>\$0.7847</u>
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Sixteenth Seventeenth Revised Page 96 Superseding Fifteenth Sixteenth Revised Page 96

NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION

WINTER SEASON RESIDENTIAL RATES

	Winter Season November 2016 - April 2017	Tariff Rates	Total Delivery Rates (Includes LDAC)	<u>Total Billed Rates</u> Tariff Rates, LDAC Plus Cost of Gas
Residential Heating	Tariff Rate R 5: Monthly Customer Charge First 50 therms All usage over 50 therms LDAC Gas Cost Adjustment: Cost of Gas	\$21.36 \$0.6239 \$0.5103 \$0.0483 \$0.0489 \$0.7315 <u>\$0.7709</u>	\$21.36 \$ 0.6722 \$0.6728 \$ 0.5586 \$0.5592	5 \$21.36 \$1.4037 <u>\$1.4437</u> \$1.2901 <u>\$1.3301</u>
Residential Heating Low income	Tariff Rate R 10: Monthly Customer Charge First 50 therms All usage over 50 therms LDAC Gas Cost Adjustment: Cost of Gas	\$8.54 \$0.2496 \$0.2041 \$0.0483 \$0.0489 \$0.7315 \$0.7709	\$8.54 \$0.2979 <u>\$0.2985</u> \$0.2524 <u>\$0.2530</u>	k \$8.54 \$1.0294 \$1.0694 \$0.9839 \$1.0239
Residential Non-Heating	Tariff Rate R 6: Monthly Customer Charge First 10 therms All usage over 10 therms LDAC Gas Cost Adjustment: Cost of Gas	\$21.36 \$0.4214 \$0.4214 \$0.0483 \$0.0489 \$0.7315 \$0.7709	\$21.36 \$ 0.4697 <u>\$0.4703</u> \$ 0.4697 <u>\$0.4703</u>	5 \$21.36 \$1.2012 <u>\$1.2412</u> \$1.2012 <u>\$1.2412</u>
Residential Non-Heating Low income	Tariff Rate R 11: Monthly Customer Charge First 10 therms All usage over 10 therms LDAC Gas Cost Adjustment: Cost of Gas	\$15.52 \$0.3196 \$0.3196 \$0.0483 \$0.0489 \$0.7315 \$0.7709	\$15.52 \$ 0.3679 <u>\$0.3685</u> \$0.3679 <u>\$0.3685</u>	2 \$15.52 \$1.0994 <u>\$1.1394</u> \$1.0994 <u>\$1.1394</u>

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NHPUC No. 11 - Gas NORTHERN UTILITIES, INC.

Sixteenth Seventeenth Revised Page 97 Superseding Fifteenth Sixteenth Revised Page 97

NORTHERN UTILITIES - NEW HAMPSHIRE DIVISION

WINTER SEASON C&I RATES

	Winter Season November 2016 - April 2017	Tariff Rates	Total Delivery Rates (Includes LDAC)	<u>Total Billed Rates</u> 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 \$0.0294 <u>\$0.0296</u> \$0.7453 \$0.7847	\$0.1909 \$0.1911 \$0.1909 \$0.1911 \$0.1909 \$0.1911	7.45 \$67.45 \$0.9362 \$0.9758 \$0.9362 \$0.9758
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 \$0.0294 <u>\$0.0296</u> \$0.6558 \$0.6952	\$0.1909 \$0.1911 \$0.1909 \$0.1911 \$0.1909 \$0.1911	7.45 \$67.45 \$0.8467 \$0.8863 \$0.8467 \$0.8863
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 \$0.0294 <u>\$0.0296</u> \$0.7453 <u>\$0.7847</u>	-	5.73 \$196.73 \$0.9845 <u>\$1.0241</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 \$0.0294 \$0.0296 \$0.6558 \$0.6952		5.73 \$196.73 \$0.8372 \$0.8768 \$0.8090 \$0.8486
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 \$0.0294 <u>\$0.0296</u> \$0.7453 \$0.7847	-	1.19 \$1,124.19 \$0.9511 <u>\$0.9907</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 \$0.0294 <u>\$0.0296</u> \$0.6558 <u>\$0.6952</u>		.19 \$1,124.19 \$0.8393 <u>\$0.8789</u>

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