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

Tariff Sheets

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

> Sixteenth Revised Page No. 96 Rate Summary

Sixteenth Revised Page No. 97 Rate Summary

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

Fifteenth Revised Page 43 Superseding Fourteenth 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 Commodity Cost of Gas Rate	\$8,327,997 \$ <u>13,527,619</u>	\$0.2640 \$ <u>0.4287</u>	per therm per therm
Total Direct Cost of Gas Rate	\$21,855,615	\$0.6927	per therm
Total Anticipated Indirect Cost of Gas Projected Prorated Sales (11/01/16 - 04/30/17)	\$1,989,516 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 (11/01/16 - 04/30/17)		27,653,599	
Per unit change in Cost of Gas (11/01/16 - 04/30/17)		(\$0.0243)	
⁻¹ Over-collection w/o rate adjustment as contained in NUI's COG Report dated November 21, 2016			

lection w/o rate adjustment as contained in NUI's COG Report dated November 21, 2016

RESIDENTIAL COST OF GAS RATE -12/01/16	COGwr	\$0.7315 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

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

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

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Issued By:

Senior Vice President

NHPUC No. 11 - Gas NORTHERN UTILITIES, INC.

Sixteenth Revised Page 96 Superseding Fifteenth 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	\$0.6722	\$1.4037	
	All usage over 50 therms	\$0.5103	\$0.5586	\$1.2901	
	LDAC	\$0.0483			
	Gas Cost Adjustment:				
	Cost of Gas	\$0.7315			
Residential Heating	Tariff Rate R 10:				
Low Income	Monthly Customer Charge	\$8.54	\$8.54		\$8.54
	First 50 therms	\$0.2496	\$0.2979	\$1.0294	
	All usage over 50 therms	\$0.2041	\$0.2524	\$0.9839	
	LDAC	\$0.0483	+•	<i>↓010000000000000</i>	
	Gas Cost Adjustment:				
	Cost of Gas	\$0.7315			
Residential Non-Heating	Tariff Rate R 6:				
	Monthly Customer Charge	\$21.36	\$21.36		\$21.36
	First 10 therms	\$0.4214	\$0.4697	\$1.2012	+
	All usage over 10 therms	\$0.4214	\$0.4697	\$1.2012	
	LDAC	\$0.0483		•••••	
	Gas Cost Adjustment:				
	Cost of Gas	\$0.7315			
Residential Non-Heating	Tariff Rate R 11:	• • • • • •			•
Low Income	Monthly Customer Charge	\$15.52	\$15.52	•	\$15.52
	First 10 therms	\$0.3196	\$0.3679	\$1.0994	
	All usage over 10 therms	\$0.3196	\$0.3679	\$1.0994	
	LDAC	\$0.0483			
	Gas Cost Adjustment:				
	Cost of Gas	\$0.7315			

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Effective: With Service Rendered On and After December 1, 2016 Authorized by NHPUC Order No. 25,959 in Docket No. DG 16-819, dat	Title:	Senior Vice President
Autorized by Nin Co Cruci No. 23,333 in Docket No. DG 10-013, dat		

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 \$0.0294 \$0.7453	\$67.45 \$0.1909 \$0.1909	\$67.45 \$0.9362 \$0.9362
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 \$0.6558	\$67.45 \$0.1909 \$0.1909	\$67.45 \$0.8467 \$0.8467
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 \$0.7453	\$196.73 \$0.2392	\$196.73 \$0.9845
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 \$0.0294 \$0.6558	\$196.73 \$0.1814 \$0.1532	\$196.73 \$0.8372 \$0.8090
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 \$0.7453	\$1,124.19 \$0.2058	\$1,124.19 \$0.9511
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 \$0.6558	\$1,124.19 \$0.1835	\$1,124.19 \$0.8393

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Issued by:

Senior Vice President

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

Fourteenth <u>Fifteenth</u> Revised Page 43 Superseding <u>Thirteenth</u> <u>Fourteenth</u> 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	\$21,855,615			
Projected Prorated Sales (11/01/16 - 04/30/17) Direct Cost of Gas Rate	31,549,237	\$0.6927	per therm	
		φ0.002 <i>1</i>	per menn	
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	
TOTAL PERIOD AVERAGE COST OF GAS		\$0.7556	permenn	
Period ending over-collection as determined on 11/21/16				
	<u>(\$672,842)</u>			
Projected sales (12/01/16 - 04/30/17)	27,653,599			
Per unit change in Cost of Gas (12/01/16 - 04/30/17)	<u>(\$0.0243)</u>			
⁻¹ Over-collection w/o rate adjustment as contained in NUI's COG Report dated. November 21, 20	16			

November 21, 2016 Ove

RESIDENTIAL COST OF GAS RATE -11/01/16-12/01/2016	COGwr	\$0.7558 <u>\$0.7315</u>	per therm
	Maximum (COG+25%)	\$0.9448	
RESIDENTIAL COST OF GAS RATE - 11/01/16		<u>\$0.7558</u>	
CHANGE IN PER UNIT COST		(\$0.0243)	
RESIDENTIAL COST OF GAS RATE - 12/01/16		<u>\$0.7315</u>	

COM/IND LOW WINTER USE COST OF GAS RATE - 11/01/16 <u>12/01/2016</u>	COGwl	\$0.6801 <u>\$0.6558</u>	per therm
	Maximum (COG+25%)	\$0.8501	
C&I HLF DEMAND COSTS ALLOCATED PER SMBA	\$382,221		
PLUS: RESIDENTIAL DEMAND RELOCATION TO C71 HLF	\$66,032		
C&I HLF TOTAL ADJUSTED DEMAND COSTS	\$448,25 4		
C&I HLF PROJECTED PRORATED SALES (11/01/16 - 04/30/17)	2,570,611		
DEMAND COST OF GAS RATE	\$0.1744		
C&I HLF COMMODITY COSTS ALLOCATED PER SMBA	\$1,139,040		
PLUS: RESIDENTIAL COMMODITY COSTS	(\$1,261)		
C&I HLF TOTAL ADJUSTED COMMODITY COSTS	\$1,137,779		
C&I HLF PROJECTED PRORATED SALES (11/01/16 - 04/30/17)	2,570,611		
COMMODITY COST OF GAS RATE	\$0.4426		
INDIRECT COST OF GAS	\$0.0631		
TOTAL C&I HLF COST OF GAS RATE	\$0.6801		
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	
		\[\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	

I/IND HIGH WINTER USE COST OF GAS RATE - 11/01/16 12/01/2016	COGwh	\$0.7696	per therm
	Maximum (COG+25%)	\$0.9620	
C&ILLF COMMODITY COSTS ALLOCATED PER SMBA	\$3,393,311		
PLUS RESIDENTIAL DEMAND REALLOCATION TO C&I LLF	\$586,225		
C&I LLF TOTAL ADJUSTED DEMAND COSTS	\$3,979,536		
C&I LLF PROJECTED PRORATED SALES (11/01/16 - 04/30/17)	14,203,338		
DEMAND COST OF GAS RATE	\$0.2802		
C&I LLF COMMODITY COSTS ALLOCATED PER SMBA	\$6,061,232		
PLUS: RESIDENTIAL COMMODITY REALLOCATION TO C&I LLF	(\$6,710)		
C&ILLF TOTAL ADJUSTED COMMODITY COSTS	\$6,054,521		
C&I LLF PROJECTED PRORATED SALES (11/01/16 - 04/30/17)			
COMMODITY COST OF GAS RATE	\$0.4263		
INDIRECT COST OF CAS	\$0.0631		
TOTAL C&I LLF COST OF GAS RATE	\$0.7696		
COM/IND HIGH WINTER USE COST OF GAS RATE - 11/01/16		<u>\$0.7696</u>	
CHANGE IN PER UNIT COST		(\$0.0243)	
COM/IND HIGH WINTER USE COST OF GAS RATE - 12/01/16		<u>\$0.7453</u>	
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ed: November 4 <u>23,</u> 2016	Issued By:		

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Fifteenth Sixteenth Revised Page 96 Superseding Fourteenth Fifteenth 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 \$0.7558 <u>\$0.7315</u>	\$21.36 \$0.6722 \$0.5586	\$21.36 \$1.4280
Residential Heating Low income	Tariff Rate R 10:Monthly Customer ChargeFirst 50 thermsAll usage over 50 thermsLDACGas Cost Adjustment:Cost of Gas	\$8.54 \$0.2496 \$0.2041 \$0.0483 \$0.7558 <u>\$0.7315</u>	\$8.54 \$0.2979 \$0.2524	\$8.54 \$1.0537 <u>\$1.0294</u> \$1.0082 <u>\$0.9839</u>
Residential Non-Heating	Tariff Rate R 6: 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 \$0.0483 \$0.7558 \$0.7315	\$21.36 \$0.4697 \$0.4697	\$21.36 \$ 1.2255 <u>\$1.2012</u> \$ 1.2255 <u>\$1.2012</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 \$0.7558 <u>\$0.7315</u>	\$15.52 \$0.3679 \$0.3679	\$15.52 \$1.1237 <u>\$1.0994</u> \$1.1237 <u>\$1.0994</u>

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Senior Vice President

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

	Winter Season			Total		Total Billed Rates		
	November 2016 - April 2017		Tariff Rates		Delivery Rates (Includes LDAC)		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:	\$67.45 \$0.1615 \$0.1615 \$0.0294		\$67.45 \$0.1909 \$0.1909			\$67.45 <u>\$0.9362</u> <u>\$0.9362</u>	
	Cost of Gas	\$0.7696	<u>\$0.7453</u>					
C&I Low Annual/Low Winter	Tariff Rate G 50: Monthly Customer Charge First 75 therms All usage over 75 therms LDAC	\$67.45 \$0.1615 \$0.1615 \$0.0294		\$0.1909 \$0.1909	\$67.45	<mark>\$0.8710</mark> \$ <mark>0.8710</mark>	\$67.45 <u>\$0.8467</u> <u>\$0.8467</u>	
	Gas Cost Adjustment: Cost of Gas	\$0.6801	<u>\$0.6558</u>					
C&I Medium Annual/High Winter	Tariff Rate G 41: Monthly Customer Charge	\$196.73			\$196.73		\$196.73	
	All usage LDAC <u>Gas Cost Adjustment:</u> Cost of Gas	\$0.2098 \$0.0294 \$0.7696	\$0.7453	\$0.2392		\$ 1.0088	<u>\$0.9845</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 \$0.6801		\$0.1814 \$0.1532	\$196.73	\$ 0.8615 \$ 0.8333	\$196.73 <u>\$0.8372</u> <u>\$0.8090</u>	
C&I High Annual/High Winter	Tariff Rate G 42: Monthly Customer Charge	\$1,124.19			\$1,124.19		\$1,124.19	
	All usage LDAC <u>Gas Cost Adjustment:</u> Cost of Gas	\$0.1764 \$0.0294 <mark>\$0.7696</mark>	<u>\$0.7453</u>	\$0.2058		\$ 0.975 4	<u>\$0.9511</u>	
C&I High Annual/Low Winter	Tariff Rate G 52: Monthly Customer Charge	\$1,124.19			\$1,124.19		\$1,124.19	
	All usage LDAC Gas Cost Adjustment:	\$0.1541 \$0.0294		\$0.1835		\$0.8636	<u>\$0.8393</u>	
	Cost of Gas	\$0.6801	<u>\$0.6558</u>					

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WZHERED Senior Vice President

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