

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

Period Covered: November 1, 2018 - April 30, 2019

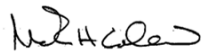
(Col 1)	(Col 2)	(Col 3)
Total Anticipated Direct Cost of Gas	\$27,122,704	
Projected Prorated Sales (11/01/18 - 04/30/19)	34,882,919	
<b>Direct Cost of Gas Rate</b>		\$0.7775 per therm
<b>Demand Cost of Gas Rate</b>	\$11,747,382	\$0.3368 per therm
<b>Commodity Cost of Gas Rate</b>	<u>\$15,382,305</u>	\$0.4410 per therm
<b>Total Direct Cost of Gas Rate</b>	<u>\$27,128,686</u>	<b>\$0.7778 per therm</b>
Total Anticipated Indirect Cost of Gas	\$1,719,515	
Projected Prorated Sales (11/01/18 - 04/30/19)	34,882,919	
<b>Indirect Cost of Gas</b>		\$0.0493 per therm
<b>TOTAL PERIOD AVERAGE COST OF GAS</b>		<b>\$0.8271 per therm</b>
Period endig under-collection to be recovered as determined on 11/20/2018	\$2,089,524	
Projected Sales (12/01/18 - 04/30/2019)	30,651,027	
Per unit change in Cost of Gas (12/01/18 - 04/30/19)	\$0.0682	
Period endig under-collection to be recovered as determined on 12/21/2018	(\$803,174)	
Projected Sales (01/01/19 - 04/30/2019)	24,024,712	
Per unit change in Cost of Gas (01/01/19 - 04/30/19)	(\$0.0334)	

RESIDENTIAL COST OF GAS RATE - 01/01/19	COGwr	\$0.8618 per therm
	<b>Maximum (COG+25%)</b>	<b>\$1.0339</b>
RESIDENTIAL COST OF GAS RATES - 11/01/2018		<b>\$0.8271</b>
CHANGE IN PER UNIT COST		<b>\$0.0682</b>
RESIDENTIAL COST OF GAS RATES - 12/01/2018		<b>\$0.8953</b>
CHANGE IN PER UNIT COST		<b>(\$0.0334)</b>
RESIDENTIAL COST OF GAS RATES - 01/01/2019		<b>\$0.8618</b>

COM/IND LOW WINTER USE COST OF GAS RATE - 01/01/19	COGwl	\$0.7601 per therm
	<b>Maximum (COG+25%)</b>	<b>\$0.9068</b>
COM/IND LOW WINTER USE COST OF GAS RATES - 11/01/2018		<b>\$0.7254</b>
CHANGE IN PER UNIT COST		<b>\$0.0682</b>
COM/IND LOW WINTER USE COST OF GAS RATES - 12/01/2018		<b>\$0.7936</b>
CHANGE IN PER UNIT COST		<b>(\$0.0334)</b>
COM/IND LOW WINTER USE COST OF GAS RATES - 01/01/2019		<b>\$0.7601</b>

COM/IND HIGH WINTER USE COST OF GAS RATE - 01/01/19	COGwh	\$0.8771 per therm
	<b>Maximum (COG+25%)</b>	<b>\$1.0530</b>
COM/IND HIGH WINTER USE COST OF GAS RATES - 11/01/2018		<b>\$0.8424</b>
CHANGE IN PER UNIT COST		<b>\$0.0682</b>
COM/IND HIGH WINTER USE COST OF GAS RATES - 12/01/2018		<b>\$0.9106</b>
CHANGE IN PER UNIT COST		<b>(\$0.0334)</b>
COM/IND HIGH WINTER USE COST OF GAS RATES - 01/01/2019		<b>\$0.8771</b>

Issued: December 21, 2018  
 Effective Date: January 1, 2019  
 Authorized by NHPUC Order No. 26,186 in Docket No. DG 18-143, dated October 31, 2018.

Issued By:   
 Senior Vice President

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

<b>Winter Season November 2018 - April 2019</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 First 50 therms All usage over 50 therms <b>LDAC</b> <b><u>Gas Cost Adjustment:</u></b> Cost of Gas	\$21.36 \$0.6660 \$0.6660 <b>\$0.0691</b> <b>\$0.8618</b>	\$21.36 <b>\$0.7351</b> <b>\$0.7351</b>	\$21.36 <b>\$1.5969</b> <b>\$1.5969</b>
Residential Heating Low Income	<b><u>Tariff Rate R 10:</u></b> Monthly Customer Charge First 50 therms All usage over 50 therms <b>LDAC</b> <b><u>Gas Cost Adjustment:</u></b> Cost of Gas	\$8.54 \$0.2664 \$0.2664 <b>\$0.0691</b> <b>\$0.8618</b>	\$8.54 <b>\$0.3355</b> <b>\$0.3355</b>	\$8.54 <b>\$1.1973</b> <b>\$1.1973</b>
Residential Non-Heating	<b><u>Tariff Rate R 6:</u></b> Monthly Customer Charge First 10 therms All usage over 10 therms <b>LDAC</b> <b><u>Gas Cost Adjustment:</u></b> Cost of Gas	\$21.36 \$0.6227 \$0.6227 <b>\$0.0691</b> <b>\$0.8618</b>	\$21.36 <b>\$0.6918</b> <b>\$0.6918</b>	\$21.36 <b>\$1.5536</b> <b>\$1.5536</b>

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Senior Vice President

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

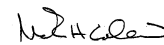
<b>Winter Season November 2018 - April 2019</b>	<b>Tariff Rates</b>	<b>Total Delivery Rates (Includes LDAC)</b>	<b>Total Billed Rates Tariff Rates, LDAC Plus Cost of Gas</b>
<b>C&amp;I Low Annual/High Winter</b> <u><b>Tariff Rate G 40:</b></u> Monthly Customer Charge First 75 therms All usage over 75 therms <b>LDAC</b> <u><b>Gas Cost Adjustment:</b></u> Cost of Gas	\$72.26 \$0.1795 \$0.1795 <b>\$0.0396</b>  <b>\$0.8771</b>	\$72.26 <b>\$0.2191</b> <b>\$0.2191</b>	\$72.26 <b>\$1.0962</b> <b>\$1.0962</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	\$72.26 \$0.1795 \$0.1795 <b>\$0.0396</b>  <b>\$0.7601</b>	\$72.26 <b>\$0.2191</b> <b>\$0.2191</b>	\$72.26 <b>\$0.9792</b> <b>\$0.9792</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	\$214.26 \$0.2334 <b>\$0.0396</b>  <b>\$0.8771</b>	\$214.26 <b>\$0.2730</b>	\$214.26 <b>\$1.1501</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	\$214.26 \$0.1648 \$0.1346 <b>\$0.0396</b>  <b>\$0.7601</b>	\$214.26 <b>\$0.2044</b> <b>\$0.1742</b>	\$214.26 <b>\$0.9645</b> <b>\$0.9343</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	\$1,285.55 \$0.1909 <b>\$0.0396</b>  <b>\$0.8771</b>	\$1,285.55 <b>\$0.2305</b>	\$1,285.55 <b>\$1.1076</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	\$1,285.55 \$0.1655 <b>\$0.0396</b>  <b>\$0.7601</b>	\$1,285.55 <b>\$0.2051</b>	\$1,285.55 <b>\$0.9652</b>

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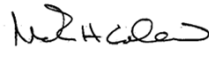
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Projected Sales (12/01/18 - 04/30/2019)	30,651,027	
Per unit change in Cost of Gas (12/01/18 - 04/30/18)	\$0.0682	
<u>Period endig under-collection to be recovered as determined on 12/21/2018</u>	<u>(\$803,174)</u>	
<u>Projected Sales (01/01/19 - 04/30/2019)</u>	<u>24,024,712</u>	
<u>Per unit change in Cost of Gas (01/01/19 - 04/30/19)</u>	<u>(\$0.0334)</u>	

<b>RESIDENTIAL COST OF GAS RATE - <del>12/01/18</del> 01/01/19</b>	<b>COGwr</b>	<b>\$0.8953</b>	<b>\$0.8618</b>	<b>per therm</b>
	<b>Maximum (COG+25%)</b>		<b>\$1.0339</b>	
RESIDENTIAL COST OF GAS RATES - 11/01/2018			<b>\$0.8271</b>	
CHANGE IN PER UNIT COST			<b>\$0.0682</b>	
RESIDENTIAL COST OF GAS RATES - 12/01/2018			<b>\$0.8953</b>	
CHANGE IN PER UNIT COST			<b><u>(\$0.0334)</u></b>	
RESIDENTIAL COST OF GAS RATES - 01/01/2019			<b><u>\$0.8618</u></b>	

<b>COM/IND LOW WINTER USE COST OF GAS RATE - <del>12/01/18</del> 01/01/19</b>	<b>COGwl</b>	<b>\$0.7936</b>	<b>\$0.7601</b>	<b>per therm</b>
	<b>Maximum (COG+25%)</b>		<b>\$0.9068</b>	
COM/IND LOW WINTER USE COST OF GAS RATES - 11/01/2018			<b>\$0.7254</b>	
CHANGE IN PER UNIT COST			<b>\$0.0682</b>	
COM/IND LOW WINTER USE COST OF GAS RATES - 12/01/2018			<b>\$0.7936</b>	
CHANGE IN PER UNIT COST			<b><u>(\$0.0334)</u></b>	
COM/IND LOW WINTER USE COST OF GAS RATES - 01/01/2019			<b><u>\$0.7601</u></b>	

<b>COM/IND HIGH WINTER USE COST OF GAS RATE - <del>12/01/18</del> 01/01/19</b>	<b>COGwh</b>	<b>\$0.9406</b>	<b>\$0.8771</b>	<b>per therm</b>
	<b>Maximum (COG+25%)</b>		<b>\$1.0530</b>	
COM/IND HIGH WINTER USE COST OF GAS RATES - 11/01/2018			<b>\$0.8424</b>	
CHANGE IN PER UNIT COST			<b>\$0.0682</b>	
COM/IND HIGH WINTER USE COST OF GAS RATES - 12/01/2018			<b>\$0.9106</b>	
CHANGE IN PER UNIT COST			<b><u>(\$0.0334)</u></b>	
COM/IND HIGH WINTER USE COST OF GAS RATES - 01/01/2019			<b><u>\$0.8771</u></b>	

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 WINTER SEASON RESIDENTIAL RATES

Winter Season November 2018 - April 2019		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	\$21.36	\$21.36	\$21.36
	First 50 therms	\$0.6660	\$0.7351	\$1.6304 \$1.5969
	All usage over 50 therms	\$0.6660	\$0.7351	\$1.6304 \$1.5969
	<b>LDAC</b>	\$0.0691		
	<b>Gas Cost Adjustment:</b>			
	Cost of Gas	<del>\$0.8953</del> \$0.8618		
Residential Heating Low income	<b>Tariff Rate R 10:</b>			
	Monthly Customer Charge	\$8.54	\$8.54	\$8.54
	First 50 therms	\$0.2664	\$0.3355	\$1.2308 \$1.1973
	All usage over 50 therms	\$0.2664	\$0.3355	\$1.2308 \$1.1973
	<b>LDAC</b>	\$0.0691		
	<b>Gas Cost Adjustment:</b>			
	Cost of Gas	<del>\$0.8953</del> \$0.8618		
Residential Non-Heating	<b>Tariff Rate R 6:</b>			
	Monthly Customer Charge	\$21.36	\$21.36	\$21.36
	First 10 therms	\$0.6227	\$0.6918	\$1.5874 \$1.5536
	All usage over 10 therms	\$0.6227	\$0.6918	\$1.5874 \$1.5536
	<b>LDAC</b>	\$0.0691		
	<b>Gas Cost Adjustment:</b>			
	Cost of Gas	<del>\$0.8953</del> \$0.8618		

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

Winter Season November 2018 - April 2019		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 First 75 therms All usage over 75 therms <b>LDAC</b> <b>Gas Cost Adjustment:</b> Cost of Gas	\$72.26 \$0.1795 \$0.1795 \$0.0396 <del>\$0.9406</del> <u>\$0.8771</u>	\$72.26 \$0.2191 \$0.2191	\$72.26 <del>\$1.4297</del> <u>\$1.0962</u> <del>\$1.4297</del> <u>\$1.0962</u>
C&I Low Annual/Low Winter	<b>Tariff Rate G 50:</b> Monthly Customer Charge First 75 therms All usage over 75 therms <b>LDAC</b> <b>Gas Cost Adjustment:</b> Cost of Gas	\$72.26 \$0.1795 \$0.1795 \$0.0396 <del>\$0.7936</del> <u>\$0.7601</u>	\$72.26 \$0.2191 \$0.2191	\$72.26 <del>\$1.0427</del> <u>\$0.9792</u> <del>\$1.0427</del> <u>\$0.9792</u>
C&I Medium Annual/High Winter	<b>Tariff Rate G 41:</b> Monthly Customer Charge All usage <b>LDAC</b> <b>Gas Cost Adjustment:</b> Cost of Gas	\$214.26 \$0.2334 \$0.0396 <del>\$0.9406</del> <u>\$0.8771</u>	\$214.26 \$0.2730	\$214.26 <del>\$1.1836</del> <u>\$1.1501</u>
C&I Medium Annual/Low Winter	<b>Tariff Rate G 51:</b> Monthly Customer Charge First 1,300 therms All usage over 1,300 therms <b>LDAC</b> <b>Gas Cost Adjustment:</b> Cost of Gas	\$214.26 \$0.1648 \$0.1346 \$0.0396 <del>\$0.7936</del> <u>\$0.7601</u>	\$214.26 \$0.2044 \$0.1742	\$214.26 <del>\$0.9980</del> <u>\$0.9645</u> <del>\$0.9678</del> <u>\$0.9343</u>
C&I High Annual/High Winter	<b>Tariff Rate G 42:</b> Monthly Customer Charge All usage <b>LDAC</b> <b>Gas Cost Adjustment:</b> Cost of Gas	\$1,285.55 \$0.1909 \$0.0396 <del>\$0.9406</del> <u>\$0.8771</u>	\$1,285.55 \$0.2305	\$1,285.55 <del>\$1.1411</del> <u>\$1.1076</u>
C&I High Annual/Low Winter	<b>Tariff Rate G 52:</b> Monthly Customer Charge All usage <b>LDAC</b> <b>Gas Cost Adjustment:</b> Cost of Gas	\$1,285.55 \$0.1655 \$0.0396 <del>\$0.7936</del> <u>\$0.7601</u>	\$1,285.55 \$0.2051	\$1,285.55 <del>\$0.9987</del> <u>\$0.9652</u>

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