



**STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION**

Docket No. DG 20-XXX

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities  
Winter 2020/2021 Cost of Gas Filing for EnergyNorth's Keene Division

**DIRECT TESTIMONY**

**OF**

**DEBORAH M. GILBERTSON,  
CATHERINE A. McNAMARA,**

**AND**

**DAVID B. SIMEK**

September 17, 2020

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1 **I. INTRODUCTION**

2 **Q. Please state your full name, business address, and positions.**

3 A. (DG) My name is Deborah M. Gilbertson. My business address is 15 Buttrick Road,  
4 Londonderry, New Hampshire. My title is Senior Manager, Energy Procurement.

5 (CM) My name is Catherine A. McNamara. My business address is 15 Buttrick Road,  
6 Londonderry, New Hampshire. My title is Rates Analyst II, Rates and Regulatory  
7 Affairs.

8 (DS) My name is David B. Simek. My business address is 15 Buttrick Road,  
9 Londonderry, New Hampshire. My title is Manager, Rates and Regulatory Affairs.

10 **Q. By whom are you employed?**

11 A. We are employed by Liberty Utilities Service Corp. (“Liberty”), which provides services  
12 to Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities  
13 (“EnergyNorth” or “the Company”) and Liberty Utilities (Granite State Electric) Corp.  
14 d/b/a Liberty Utilities.

15 **Q. On whose behalf are you testifying?**

16 A. We are testifying on behalf of EnergyNorth’s Keene Division.

17 **Q. Ms. Gilbertson, please describe your educational background, and your business  
18 and professional experience.**

19 A. I graduated from Bentley College in Waltham, Massachusetts, in 1996 with a Bachelor of  
20 Science in Management. In 1997, I was hired by Texas Ohio Gas where I was employed

1 as a Transportation Analyst. In 1999, I joined Reliant Energy, located in Burlington,  
2 Massachusetts, as an Operations Analyst. From 2000 to 2003, I was employed by Smart  
3 Energy as a Senior Energy Analyst. I joined Keyspan Energy Trading Services in 2004  
4 as a Senior Resource Management Analyst following which I was employed by National  
5 Grid from 2008 through 2011 as a Lead Analyst in the Project Management Office. In  
6 2011, I was hired by Liberty as a Natural Gas Scheduler and was promoted to Manager of  
7 Retail Choice in 2012. In October 2016, I was promoted to Senior Manager of Energy  
8 Procurement. In this capacity, I provide gas procurement services to EnergyNorth.

9 **Q. Ms. McNamara, please describe your educational background, and your business**  
10 **and professional experience.**

11 A. I graduated from the University of Massachusetts, Boston, in 1993 with a Bachelor of  
12 Science in Management with a concentration in Accounting. In November 2017, I joined  
13 Liberty as an Analyst in Rates and Regulatory Affairs. Prior to my employment at  
14 Liberty, I was employed by Eversource as a Senior Analyst in the Investment Planning  
15 group from 2015 to 2017. From 2008 to 2015, I was a Supervisor in the Plant  
16 Accounting department. Prior to my position in Plant Accounting, I was a Financial  
17 Analyst/General Ledger System Administrator within the Accounting group from 2000 to  
18 2008.

1 **Q. Mr. Simek, please describe your educational background, and your business and**  
2 **professional experience.**

3 A. I graduated from Ferris State University in 1993 with a Bachelor of Science in Finance. I  
4 received a Master's of Science in Finance from Walsh College in 2000. I also received a  
5 Master's of Business Administration from Walsh College in 2001. In 2006, earned a  
6 Graduate Certificate in Power Systems Management from Worcester Polytechnic  
7 Institute. In August 2013, I joined Liberty as a Utility Analyst and I was promoted to  
8 Manager, Rates and Regulatory Affairs in August 2017. Prior to my employment at  
9 Liberty, I was employed by NSTAR Electric & Gas ("NSTAR") as a Senior Analyst in  
10 Energy Supply from 2008 to 2012. Prior to my position in Energy Supply at NSTAR, I  
11 was a Senior Financial Analyst with the NSTAR Investment Planning group from 2004  
12 to 2008.

13 **Q. Ms. Gilbertson, Ms. McNamara, and Mr. Simek, have you previously testified in**  
14 **regulatory proceedings before the New Hampshire Public Utilities Commission (the**  
15 **"Commission")?**

16 A. Yes, we have.

17 **Q. What is the purpose of your testimony?**

18 A. The purpose of our testimony is to explain the Company's proposed cost of gas rates for  
19 its Keene Division for the 2020/2021 winter (peak) period to be effective beginning  
20 November 1, 2020. Our testimony will also address bill comparisons and other items  
21 related to the winter period.

1 **II. WINTER 2020/2021 COST OF GAS FACTOR**

2 **Q. What is the proposed firm winter cost of gas rate?**

3 A. The Company proposes a firm cost of gas rate of \$1.2100 per therm for the Keene  
4 Division as shown on proposed Twelfth Revised Page 93.

5 **Q. Please explain the calculation of the Cost of Gas rate on tariff page Proposed**  
6 **Twelfth Revised Page 93.**

7 A. Proposed Twelfth Revised Page 93 contains the calculation of the 2020/2021 Winter  
8 Period Cost of Gas Rate (“COG”) and summarizes the Company's forecast of propane  
9 and compressed natural gas (“CNG”) sales and propane and CNG costs. The total  
10 anticipated cost of the gas sendout from November 1, 2020, through April 30, 2021, is  
11 \$1,310,953. The information presented on the tariff page is supported by Schedules A  
12 through J that are described later in this testimony.

13 To derive the Total Anticipated Cost of Gas, the following adjustments have been made:

- 14 1. The prior period under-collection of \$30,171 is added from the anticipated cost of  
15 gas sendout; and
- 16 2. Interest of \$55 is added to the anticipated cost of gas sendout. Schedule H shows  
17 this forecasted interest calculation for the period May 2020 through April 2021.  
18 Interest is accrued using the monthly prime lending rate as reported by the Federal  
19 Reserve Statistical Release of Selected Interest Rates.

1 The Non-Fixed Price Option (“Non-FPO”) cost of gas rate of \$1.2100 per therm was  
2 calculated by dividing the Total Anticipated Cost of Gas of \$1,341,179 by the Projected  
3 Gas Sales of 1,108,419 therms. The Fixed Price Option (“FPO”) rate of \$1.2300 per  
4 therm was established by adding a \$0.02 per therm premium to the Non-FPO rate.

5 **Q. Please describe Schedule A.**

6 A. Schedule A converts the gas volumes and unit costs from gallons to therms. The  
7 1,185,353 therms represent gas propane sendout as detailed on Schedule B, line 3, plus  
8 the CNG Sendout as detailed on line 8. The unit cost of \$1.0367 per therm represents the  
9 weighted average cost per therm for the winter period gas sendout as detailed on  
10 Schedule F, line 55.

11 **Q. What is Schedule B?**

12 A. Schedule B presents the (over)/under collection calculation for the Winter 2020/2021  
13 period based on the forecasted volumes, the cost of gas, and applicable interest amounts.  
14 The forecasted total propane sendout on line 3, plus total CNG sendout on line 8, is the  
15 sum of the weather normalized 2020/2021 winter period firm sendout and company use.  
16 The forecasted Firm Sales on line 26 represent weather normalized 2020/2021 winter  
17 period firm sales. The weather normalization calculations for sendout and sales are found  
18 in Schedules I and J, respectively.

19 **Q. Are CNG demand charges included in this filing?**

20 A. Yes, CNG demand charges are included in Schedule B on lines 10 and 11.

1 Schedule B, line 11 includes 80% of the 2020/2021 demand charges. These charges are  
2 [REDACTED] per month or [REDACTED] for the season and represent the portion attributable to the  
3 winter period.

4 Schedule B, line 12 contains 80% of one third of the total CNG demand charges for the  
5 period August 2017 through September 2019. These charges are [REDACTED] for the season  
6 or [REDACTED] per month.

7 **Q. How were the demand charges for the August 2017 through September 2019**  
8 **calculated?**

9 A. The demand charges for the 26 months are [REDACTED] per month for a total of  
10 [REDACTED]. The [REDACTED] was then divided by three (the Company is proposing to  
11 amortize the cost over three years) to get an annual total of [REDACTED]. The current  
12 annual charges are split 80/20 between winter and summer. [REDACTED] x 80% total  
13 [REDACTED]. The resulting winter period charge is [REDACTED] which divided by six  
14 results in a monthly charge of [REDACTED].

15 **Q. What is the basis for including the demand charges from August 2017 through**  
16 **September 2019 in this filing?**

17 A. The Company was expecting to put the CNG facility online in 2017 and, therefore, it was  
18 prudent to have a contract in place. See Order No. 26,065 (Oct. 20, 2017) (confirming  
19 that Liberty had the right to distribute natural gas in Keene), and Order No. 26,067 (Oct.  
20 31, 2017) (acknowledging Liberty's plans to provide CNG service during the 2017–2018  
21 winter). This was the first time that Liberty or the Staff had been involved with

1 connecting CNG to the Company's distribution system and there were unknown  
2 obstacles and delays involved with getting the installation finalized to the satisfaction of  
3 all parties. However, the Company needed to be ready at any point during the period  
4 from August 2017 through September 2019, as we could have received the go-ahead to  
5 put the CNG system online at any time. Indeed, the Commission recognized that the  
6 Company planned to begin providing CNG in the fall of 2017, and left open the  
7 possibility that CNG could flow during the 2017–2018 winter:

8 “We recognize that while Liberty-Keene is forecasting the use of CNG this winter, the  
9 introduction of CNG into the Keene system will not occur by the proposed effective date  
10 of these rates (November 1) due to the safety requirements laid out in our order in DG  
11 17-064. Thus, we will not approve the proposed 2017–2018 winter COG rates as filed  
12 and will require Liberty-Keene to refile COG rates that remove any costs of CNG.”

13 Order No. 26,067 at 5-6 (Oct. 31, 2017). The Commission approved the inclusion of  
14 CNG in the summer 2018 Keene cost of gas rate, Order No. 26,126 (May 1, 2018). Since  
15 we had to be ready to serve customers when that took place, it was reasonable to incur the  
16 demand charges beginning in the fall of 2017.

17 **Q. Are unaccounted-for gas volumes included in the filing?**

18 A. Unaccounted-for gas is included in the firm sendout on Schedule B, lines 1 and 8. The  
19 Company actively monitors its level of unaccounted-for volumes, which amounted to  
20 0.56% for the twelve months ended June 30, 2020.

1 **Q. Please describe Schedules C, D, and E.**

2 A. Schedule C presents the calculation of the total forecasted cost of gas purchases in the  
3 2020/2021 winter period, segregated by Propane Purchasing Stabilization Plan (“PPSP”)  
4 purchases, available storage deliveries from EnergyNorth’s Amherst facility, CNG  
5 deliveries, and spot purchases. In prior filings, Schedule C was presented in gallons;  
6 however, in order to attain consistency with the other schedules in this filing, the unit of  
7 measure on Schedule C has been changed to therms.

8 Schedule D presents the structure of PPSP pre-purchases for the winter period, monthly  
9 average rates for the pre-purchases, and the resulting weighted average contract price for  
10 the winter period as used in Schedule C, line 5.

11 Schedule E presents the forecasted market spot prices of propane. Column 1 of the  
12 schedule represents the Mont Belvieu propane futures quotations as of September 11,  
13 2020, followed by projected broker fees, pipeline fees, PERC fees, supplier charges, and  
14 trucking charges. Together, the pricing and fees make up the expected cost of spot  
15 propane purchases as represented in Schedule C, line 31.

16 **Q. Please describe the Propane Purchasing Stabilization Plan (PPSP).**

17 A. The PPSP, as approved in Order No. 24,617 in Docket DG 06-037, was again  
18 implemented for the winter 2020/2021. As shown on Schedule D, the Company pre-  
19 purchased 700,000 gallons of propane between April and September at a weighted  
20 average price of \$0.8288 per gallon (\$0.9058 per therm), inclusive of broker, pipeline,

1 Propane Education & Research Council (“PERC”), and trucking charges in effect at the  
2 time of the supplier’s bid.

3 **Q. Has the pre-purchased volumes in the PPSP changed since 2019-20?**

4 A. No. The volume remains at 700,000 gallons or 640,500 therms. The Keene Division  
5 maintains a pre-purchase hedge of approximately 63%, which is consistent with prior  
6 years.

7 **Q. How was the cost of CNG purchases determined?**

8 A. The CNG costs are shown in Schedule C, lines 19 through 26. These costs reflect the  
9 contractual agreement between the Company and its supplier, Xpress Natural Gas, LLC.

10 **Q. Please describe Schedule F.**

11 A. Schedule F contains the calculation of the weighted average cost of inventory for each  
12 month through April 2021. The unit cost of projected gas to be sent out each month  
13 utilizes this weighted average inventory cost, which is inclusive of all PPSP purchases,  
14 spot purchases, Amherst storage withdrawals, and CNG deliveries. Note that the CNG  
15 deliveries are shown in separate columns from the propane-weighted cost but are  
16 included in the average winter rate, which is established on line 55 of Schedule F. This  
17 mix of supply purchases is also itemized on Schedule C.

18 **Q. What is shown on Schedule G?**

19 A. Schedule G shows the over-collected balance for the prior winter 2019/2020 period,  
20 including interest calculated in a manner consistent with prior years. The over-collected  
21 balance of \$26,354 (line 31) is shown on Schedule H, line 1, Column 1.

1 **Q. How is the information in Schedule H represented in the cost of gas calculation?**

2 A. Schedule H presents the interest calculation and adjustments on (over)/under-collected  
3 balances through April 2021. The prior period over-collection of (\$26,354) plus  
4 adjustments of \$56,197 plus interest of \$328 on that balance through October 31, 2020,  
5 are included on Schedule B, line 32, in the “Prior” column for a total of \$30,171. The  
6 adjustments of \$56,197 are primarily due to the reversal of the prior period unbilled  
7 revenue accrual for \$40,599 and the remainder is due to the timing of customer cancel  
8 and rebills related to a faulty meter for a large customer that had to be replaced. The  
9 forecasted monthly interest of \$52 for the winter 2020/2021 period in Column 8 is  
10 included on Schedule B, line 31. The adjusted prior period under-collection plus the  
11 interest amount is also included on the tariff page.

12 **III. FIXED PRICE OPTION PROGRAM**

13 **Q. Please describe the FPO program that will be in place for the winter period.**

14 A. The Company will offer the FPO program for the upcoming winter period to provide  
15 customers the opportunity to lock in their cost of gas rate. Enrollment in the program is  
16 limited to 50% of forecasted winter sales, with allotments made available to both  
17 residential and commercial customers on a first-come, first-served basis. The Company  
18 is forecasting that 19% of total sales volumes will enroll in the FPO program. The 19%  
19 is the five-year average FPO participation rate from winter 2015/2016 through the winter  
20 of 2019/2020.

1 **Q. Will a premium be applied to the FPO rate?**

2 A. Yes. As approved in Order No. 24,516 in Docket DG 05-144, the Company has added a  
3 \$0.02 per therm premium to the Non-FPO cost of gas rate to derive the FPO rate of  
4 \$1.2300 per therm. The Company is not seeking an increase in the premium because  
5 participation, based on prior customer behavior, is expected to remain well below the  
6 50% threshold.

7 **Q. How will customers be notified of the availability of the FPO program?**

8 A. A letter will be mailed to all customers by October 1 advising them of the program, the  
9 FPO rate, and the procedure to enroll.

10 **IV. COST OF GAS RATE AND BILL COMPARISONS**

11 **Q. How does the proposed Winter 2020/2021 cost of gas rate compare with the previous  
12 winter's rate?**

13 A. The proposed Non-FPO COG rate of \$1.2100 per therm is an increase of \$0.2608 or  
14 27.5% from the winter 2019/2020 beginning rate of \$0.9492 per therm. The proposed  
15 FPO rate is \$1.2300 per therm, representing an increase of \$0.2608 per therm or 26.9%  
16 from last winter's fixed rate of \$0.9692.

17 **Q. What is the primary reasons for the change in rates?**

18 A. There are three main reasons for the increase in rates. Approximately \$0.19 of the \$0.26  
19 increase is due to the change from over-collection from the prior period to an under-  
20 collection for the current period. Approximately \$0.07 of the increase is due to the  
21 annual \$72,222 of CNG demand charges from August 2017 through September 2019.

1 Finally, approximately \$0.05 of the increase in rates is due to a billing adjustment made  
2 in May 2020 due to the faulty meter that had to be replaced for a large customer. The  
3 remaining \$0.05 decrease is other.

4 **Q. What is the impact of the Winter 2020/2021 COG rate on the typical residential heat  
5 and hot water customer participating in the FPO program?**

6 A. As shown on Schedule K-1, Column 7, lines 30 and 31, the typical residential heat and  
7 hot water FPO customer would experience an increase of \$116.57 or 26.9% in the gas  
8 component of their bills compared to the prior winter period. When the monthly  
9 customer charge, therm delivery charge and LDAC are factored into the analysis, the  
10 typical customer would see a total bill increase of \$136.31 or 17.3%, as shown on lines  
11 37 and 38. The LDAC rate used in Schedule K-1, line 32 is the LDAC rate proposed in  
12 the currently pending EnergyNorth COG Filing, Docket No. DG 20-141.

13 **Q. What is the impact of the Winter 2020/2021 COG rate on the typical residential heat  
14 and hot water customer choosing the Non-FPO program?**

15 A. As shown on Schedule K-2, Column 7, lines 30 and 31, the typical residential heat and  
16 hot water Non-FPO customer is projected to see an increase of \$173.02 or 47.0% in the  
17 gas component of their bills compared to the prior winter period. When the monthly  
18 customer charge, therm delivery charge and LDAC are factored into the analysis, the  
19 typical customer would see a total bill increase of \$192.76 or 26.7% as shown on lines 37

1 and 38. The LDAC rate used in Schedule K-2, line 32 is the LDAC rate proposed in the  
2 currently pending EnergyNorth COG Filing, Docket No. DG 20-141.

3 **Q. Please describe the impact of the Winter 2020/2021 COG rate on the typical**  
4 **commercial customer compared to the prior winter period.**

5 A. Schedule L-1 illustrates that the typical commercial FPO customer would see a \$448.84  
6 or 26.9% increase in the gas component of their bill and a 17.7% increase in their total  
7 bill. Schedule L-2 shows that the typical commercial Non-FPO customer would see  
8 increases of \$676.63 (48.1%) in the gas component of their bill and a 28.9% increase in  
9 their total bill.

10 **V. OTHER ITEMS**

11 **Q. What is the status of the CNG conversion?**

12 A. The Company began serving customers with CNG in October 2019. Customers  
13 experienced a smooth transition from propane service to CNG service. The service  
14 territory for CNG is exclusive to the Monadnock Marketplace at this time. The current  
15 contract with Xpress Natural Gas (XNG) will expire in June 2021. In order to ensure a  
16 seamless transition from one CNG supplier to the next, if necessary, the Company has  
17 sent out a solicitation for CNG bids for the time period commencing on July 2021. The  
18 Company received several bids and is in the process of analyzing the results.

19 **Q. Please describe how the Company will meet its 7-day on-site storage requirement.**

20 A. The Company has net storage capacity at its plant in Keene for approximately 75,000  
21 gallons of propane. Additionally, EnergyNorth has approximately 129,800 gallons of

1 propane (net of heel) at the Amherst storage facility located approximately 50 miles from  
2 the Keene plant. This storage facility is partially shared between the Keene Division and  
3 EnergyNorth. In addition, the Company will arrange its standard trucking commitment  
4 with Northern Gas Transport, Inc. for transportation from this storage facility to the  
5 Keene plant. Further, the Company has contracted for CNG deliveries to provide service  
6 to a small section of its system. The firm trucking arrangement coupled with onsite CNG  
7 trailers are more than sufficient to meet the 7-day demand requirement for those  
8 customers being served exclusively by CNG for the 2020/2021 peak period.

9 **Q. Can you please discuss the impacts, if any, of COVID-19 and the current economic**  
10 **uncertainties on the demand forecast for 2020/21?**

11 A. Although there is little definitive first-hand information pertaining to the impact of  
12 COVID-19 on this upcoming winter forecast, the Company has been gathering and  
13 assessing the impact as it unfolds. Early indicators suggest that the overall impact from  
14 April through August has been a five percent decline in demand from actual to expected  
15 demand. The Company will continue to monitor and assess the actual impact of COVID-  
16 19 on sales and demand as more information becomes available and the efforts to reopen  
17 the economy continue to evolve.

18 **Q. Does this conclude your testimony?**

19 A. Yes, it does.

LIBERTY UTILITIES - KEENE DIVISION  
COST OF GAS RATE FILING - DG 20-\_\_\_\_  
WINTER PERIOD 2020 - 2021  
ORIGINAL FILING (with CNG removed)

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**31. CALCULATION OF FIRM SALES AND FIXED WINTER PERIOD COST OF GAS RATE KEENE CUSTOMERS**

Calculation of the Cost of Gas Rate

Period Covered:	Winter Period November 1, 2020 through April 30, 2021		
Projected Gas Sales - therms			1,108,419
Total Anticipated Cost of Gas Sendout			\$1,310,953
Add:	Prior Period Deficiency Uncollected Interest	\$30,171 \$55	
Deduct:	Prior Period Excess Collected Interest	\$0 \$0	
	Prior Period Adjustments and Interest		\$30,226
Total Anticipated Cost			<u>\$1,341,179</u>

Cost of Gas Rate

Non-Fixed Price Option Cost of Gas Rate - Beginning Period (per therm)	<u>\$1.2100</u>
Fixed Price Option Premium	\$0.0200
Fixed Price Option Cost of Gas Rate (per therm)	<u>\$1.2300</u>

Pursuant to tariff section 17(d), the Company may adjust the approved cost of gas rate upward on a monthly basis to the following rate:

Maximum Cost of Gas Rate - Non-Fixed Price Option (per therm)	<u>\$1.5125</u>
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DATED: October 31, 2020

ISSUED BY: /s/Susan L. Fleck  
 Susan L. Fleck

EFFECTIVE: November 01, 2020

TITLE: President

Authorized by NHPUC Order No. xx,xxx dated October xx, 2020 in Docket No. DG 20-xxx

NHPUC No.10 GAS  
LIBERTY UTILITIES

Eleventh Revised Page 93  
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**31. CALCULATION OF FIRM SALES AND FIXED WINTER PERIOD COST OF GAS RATE KEENE CUSTOMERS**

Calculation of the Cost of Gas Rate

Period Covered: Winter Period April 1, 2020 through April 30, 2020  
Winter Period November 1, 2020 through April 30, 2021

Projected Gas Sales - therms		1,125,331	1,108,419
Total Anticipated Cost of Gas Sendout		\$ 1,246,677	\$ 1,310,953
Add: Prior Period Deficiency Uncollected Interest	\$	30,171	55
Deduct: Prior Period Excess Collected Adjusting Entries Interest	\$	(164,410)	(9,686)
	\$	(4,407)	-
Prior Period Adjustments and Interest	\$	(178,503)	\$ 30,226
Total Anticipated Cost	\$	1,068,174	\$ 1,341,179

Cost of Gas Rate

Non-Fixed Price Option Cost of Gas Rate - Beginning Period (per therm)	\$	0.9492	\$ 1.2100
Fixed Price Option Premium	\$	0.0200	\$ 0.0200
Fixed Price Option Cost of Gas Rate (per therm)	\$	0.9692	\$ 1.2300
<del>Non-Fixed Price Option Cost of Gas Rate - Beginning Period (per therm)</del>	\$	<del>0.9492</del>	
<del>Mid-Period Adjustment - January 01, 2020</del>	\$	<del>0.0194</del>	
<del>Mid-Period Adjustment - February 1, 2020</del>	\$	<del>(0.0334)</del>	
<del>Mid-Period Adjustment - March 1, 2020</del>	\$	<del>(0.2446)</del>	
<del>Mid-Period Adjustment - April 01, 2020</del>	\$	<del>(0.2498)</del>	
<del>Revised Non-Fixed Price Option Cost of Gas Rate - Effective April 1, 2020 (per therm)</del>	\$	<del>0.4408</del>	
Maximum Cost of Gas Rate - Non-Fixed Price Option (per therm) cost of gas rate upward on a monthly basis to the following rate:			
Maximum Cost of Gas Rate - Non-Fixed Price Option (per therm)	\$	1.1865	\$ 1.5125

DATED: October 31, 2020  
DATED: March 24, 2020  
EFFECTIVE: November 01, 2020  
EFFECTIVE: April 01, 2020

ISSUED BY: /s/Susan L. Fleck  
Susan L. Fleck  
TITLE: President

Authorized by NHPUC Order No. xx,xxx dated October xx, 2020 in Docket No. DG 20-xxx  
Authorized by NHPUC Order No. 26,305 dated October 31, 2019, in Docket No. DG 19-153

NHPUC No.10 GAS  
LIBERTY UTILITIES

Proposed Twenty-seventh Revised Page 85  
Superseding Twenty-Sixth Page 85

	Rates Effective November 1, 2020 - April 30, 2021 Winter Period				Rates Effective September 1, 2020 - October 31, 2020 Summer Period [1]			
	Delivery Charge	Cost of Gas Rate Page 93	LDAC Page 97	Total Rate	Delivery Charge	Cost of Gas Rate Page 90	LDAC Page 97	Total Rate
<b>Residential Non Heating - R-1</b>								
Customer Charge per Month per Meter	\$ 15.50			\$ 15.50	\$ 15.50			\$ 15.20
All therms	\$ 0.3860	\$ 1.2100	\$ 0.0603	\$ 1.6563	\$ 0.3860	\$ 0.7908	\$ 0.0310	\$ 0.9289
<b>Residential Heating - R-3</b>								
Customer Charge per Month per Meter	\$ 15.50			\$ 15.50	\$ 15.50			\$ 15.20
All therms over the first block per month at	\$ 0.5678	\$ 1.2100	\$ 0.0603	\$ 1.8381	\$ 0.5678	\$ 0.7908	\$ 0.0310	\$ 1.1072
<b>Residential Heating - R-4</b>								
Customer Charge per Month per Meter	\$ 8.53			\$ 8.53	\$ 6.20			\$ 6.08
All therms over the first block per month at	\$ 0.3123	\$ 0.6655	\$ 0.0603	\$ 1.0381	\$ 0.2272	\$ 0.7908	\$ 0.0310	\$ 0.7731
<b>Commercial/Industrial - G-41</b>								
Customer Charge per Month per Meter	\$ 57.46			\$ 57.46	\$ 57.46			\$ 56.36
Size of the first block	20 therms				20 therms			
Therms in the first block per month at	\$ 0.4711	\$ 1.2100	\$ 0.0549	\$ 1.7360	\$ 0.4711	\$ 0.7908	\$ 0.0478	\$ 1.0221
All therms over the first block per month at	\$ 0.3165	\$ 1.2100	\$ 0.0549	\$ 1.5814	\$ 0.3165	\$ 0.7908	\$ 0.0478	\$ 0.8704
<b>Commercial/Industrial - G-42</b>								
Customer Charge per Month per Meter	\$ 172.39			\$ 172.39	\$ 172.39			\$ 169.09
Size of the first block	1000 therms				400 therms			
Therms in the first block per month at	\$ 0.4284	\$ 1.2100	\$ 0.0549	\$ 1.6933	\$ 0.4284	\$ 0.7908	\$ 0.0478	\$ 0.9802
All therms over the first block per month at	\$ 0.2855	\$ 1.2100	\$ 0.0549	\$ 1.5504	\$ 0.2855	\$ 0.7908	\$ 0.0478	\$ 0.8400
<b>Commercial/Industrial - G-43</b>								
Customer Charge per Month per Meter	\$ 739.83			\$ 739.83	\$ 739.83			\$ 725.66
All therms over the first block per month at	\$ 0.1204	\$ 1.2100	\$ 0.0549	\$ 1.3853	\$ 0.1204	\$ 0.7908	\$ 0.0478	\$ 0.6781
<b>Commercial/Industrial - G-51</b>								
Customer Charge per Month per Meter	\$ 57.46			\$ 57.46	\$ 57.46			\$ 56.36
Size of the first block	100 therms				100 therms			
Therms in the first block per month at	\$ 0.2839	\$ 1.2100	\$ 0.0549	\$ 1.5488	\$ 0.2839	\$ 0.7908	\$ 0.0478	\$ 0.8385
All therms over the first block per month at	\$ 0.1846	\$ 1.2100	\$ 0.0549	\$ 1.4495	\$ 0.1846	\$ 0.7908	\$ 0.0478	\$ 0.7411
<b>Commercial/Industrial - G-52</b>								
Customer Charge per Month per Meter	\$ 172.39			\$ 172.39	\$ 172.39			\$ 169.09
Size of the first block	1000 therms				1000 therms			
Therms in the first block per month at	\$ 0.1767	\$ 1.2100	\$ 0.0549	\$ 1.4416	\$ 0.1767	\$ 0.7908	\$ 0.0478	\$ 0.7333
All therms over the first block per month at	\$ 0.1004	\$ 1.2100	\$ 0.0549	\$ 1.3653	\$ 0.1004	\$ 0.7908	\$ 0.0478	\$ 0.6585
<b>Commercial/Industrial - G-53</b>								
Customer Charge per Month per Meter	\$ 761.39			\$ 761.39	\$ 761.39			\$ 746.81
All therms over the first block per month at	\$ 0.0818	\$ 1.2100	\$ 0.0549	\$ 1.3467	\$ 0.0818	\$ 0.7908	\$ 0.0478	\$ 0.6402
<b>Commercial/Industrial - G-54</b>								
Customer Charge per Month per Meter	\$ 761.39			\$ 761.39	\$ 761.39			\$ 746.81
All therms over the first block per month at	\$ 0.0353	\$ 1.2100	\$ 0.0549	\$ 1.3002	\$ 0.0353	\$ 0.7908	\$ 0.0478	\$ 0.5946

DATED: October 31, 2020

EFFECTIVE: November 01, 2020

ISSUED BY: /s/Susan L. Fleck  
Susan L. Fleck  
TITLE: President

Authorized by NHPUC Order No. xx,xxx dated October xx, 2020 in Docket No. DG 20-xxx

NHPUC No.10 GAS  
LIBERTY UTILITIES

Proposed Twenty-seventh Revised Page 85  
~~Twenty-sixth Revised Page 85~~  
Superseding Twenty-Sixth Page 85  
~~Twenty-fifth Revised Page 85~~

Rates Effective April 1, 2020 - April 30, 2020  
Rates Effective November 1, 2020 - April 30, 2021  
Winter Period Period

Rates Effective July 1, 2019 - October 31, 2019  
Rates Effective September 1, 2020 - October 31, 2020  
Summer Period [1]

	Delivery Charge	Cost of Gas Rate Page 93	LDAC Page 97	Total Rate	Delivery Charge	Cost of Gas Rate Page 90	LDAC Page 97	Total Rate
<b>Residential Non Heating - R-1</b>	\$ 15.20			\$ 15.20	\$ 15.20			\$ 15.20
Customer Charge per Month per Meter	\$ 15.50			\$ 15.50	\$ 15.50			\$ 15.50
All therms	\$ 0.3860	\$ 1.2100	\$ 0.0603	\$ 1.6563	\$ 0.3860	\$ 0.7908	\$ 0.0310	\$ 1.2078
	\$ 0.3786	\$ 0.4408	\$ 0.0310	\$ 0.8504	\$ 0.3786	\$ 0.7908	\$ 0.0310	\$ 1.2004
<b>Residential Heating - R-3</b>	\$ 15.20			\$ 15.20	\$ 15.20			\$ 15.20
Customer Charge per Month per Meter	\$ 15.50			\$ 15.50	\$ 15.50			\$ 15.50
All therms over the first block per month at	\$ 0.5678	\$ 1.2100	\$ 0.0603	\$ 1.8381	\$ 0.5678	\$ 0.7908	\$ 0.0660	\$ 1.4246
	\$ 0.5569	\$ 0.4408	\$ 0.0310	\$ 1.0287	\$ 0.5569	\$ 0.7908	\$ 0.0310	\$ 1.3787
<b>Residential Heating - R-4</b>	\$ 6.08			\$ 6.08	\$ 6.08			\$ 6.08
Customer Charge per Month per Meter	\$ 8.53			\$ 8.53	\$ 6.20			\$ 6.20
All therms over the first block per month at	\$ 0.3123	\$ 1.2100	\$ 0.0603	\$ 1.5826	\$ 0.2272	\$ 0.7908	\$ 0.0310	\$ 1.0490
	\$ 0.2228	\$ 0.4408	\$ 0.0310	\$ 0.6946	\$ 0.2228	\$ 0.7908	\$ 0.0310	\$ 1.0446
<b>Commercial/Industrial - G-41</b>	\$ 56.36			\$ 56.36	\$ 56.36			\$ 56.36
Customer Charge per Month per Meter	\$ 57.46			\$ 57.46	\$ 56.36			\$ 56.36
Size of the first block	20 therms			20 therms	20 therms			20 therms
Therms in the first block per month at	\$ 0.4711	\$ 1.2100	\$ 0.0549	\$ 1.7360	\$ 0.4711	\$ 0.7908	\$ 0.0478	\$ 1.3097
	\$ 0.4621	\$ 0.4408	\$ 0.0478	\$ 0.9507	\$ 0.4621	\$ 0.7908	\$ 0.0478	\$ 1.3007
All therms over the first block per month at	\$ 0.3165	\$ 1.2100	\$ 0.0549	\$ 1.5814	\$ 0.3165	\$ 0.7908	\$ 0.0478	\$ 1.1551
	\$ 0.3104	\$ 0.4408	\$ 0.0478	\$ 0.7990	\$ 0.3104	\$ 0.7908	\$ 0.0478	\$ 1.1490
<b>Commercial/Industrial - G-42</b>	\$ 169.09			\$ 169.09	\$ 169.09			\$ 169.09
Customer Charge per Month per Meter	\$ 172.39			\$ 172.39	\$ 172.39			\$ 172.39
Size of the first block	1000 therms			1000 therms	400 therms			400 therms
Therms in the first block per month at	\$ 0.4284	\$ 1.2100	\$ 0.0549	\$ 1.6933	\$ 0.4284	\$ 0.7908	\$ 0.0478	\$ 1.2670
	\$ 0.4202	\$ 0.4408	\$ 0.0478	\$ 0.9088	\$ 0.4202	\$ 0.7908	\$ 0.0478	\$ 1.2588
All therms over the first block per month at	\$ 0.2855	\$ 1.2100	\$ 0.0549	\$ 1.5504	\$ 0.2855	\$ 0.7908	\$ 0.0478	\$ 1.1241
	\$ 0.2800	\$ 0.4408	\$ 0.0478	\$ 0.7686	\$ 0.2800	\$ 0.7908	\$ 0.0478	\$ 1.1186
<b>Commercial/Industrial - G-43</b>	\$ 725.66			\$ 725.66	\$ 725.66			\$ 725.66
Customer Charge per Month per Meter	\$ 739.83			\$ 739.83	\$ 739.83			\$ 739.83
All therms over the first block per month at	\$ 0.1204	\$ 1.2100	\$ 0.0549	\$ 1.3853	\$ 0.1204	\$ 0.7908	\$ 0.0478	\$ 0.9590
	\$ 0.1184	\$ 0.4408	\$ 0.0757	\$ 0.6346	\$ 0.1184	\$ 0.7908	\$ 0.0478	\$ 0.9567
<b>Commercial/Industrial - G-51</b>	\$ 56.36			\$ 56.36	\$ 56.36			\$ 56.36
Customer Charge per Month per Meter	\$ 57.46			\$ 57.46	\$ 57.46			\$ 57.46
Size of the first block	100 therms			100 therms	100 therms			100 therms
Therms in the first block per month at	\$ 0.2839	\$ 1.2100	\$ 0.0549	\$ 1.5488	\$ 0.2839	\$ 0.7908	\$ 0.0478	\$ 1.1225
	\$ 0.2785	\$ 0.4408	\$ 0.0757	\$ 0.7950	\$ 0.2785	\$ 0.7908	\$ 0.0478	\$ 1.1171
All therms over the first block per month at	\$ 0.1846	\$ 1.2100	\$ 0.0549	\$ 1.4495	\$ 0.1846	\$ 0.7908	\$ 0.0478	\$ 1.0232
	\$ 0.1814	\$ 0.4408	\$ 0.0757	\$ 0.6976	\$ 0.1814	\$ 0.7908	\$ 0.0478	\$ 1.0197
<b>Commercial/Industrial - G-52</b>	\$ 169.09			\$ 169.09	\$ 169.09			\$ 169.09
Customer Charge per Month per Meter	\$ 172.39			\$ 172.39	\$ 172.39			\$ 172.39
Size of the first block	1000 therms			1000 therms	1000 therms			1000 therms
Therms in the first block per month at	\$ 0.1767	\$ 1.2100	\$ 0.0549	\$ 1.4416	\$ 0.1767	\$ 0.7908	\$ 0.0478	\$ 1.0153
	\$ 0.1733	\$ 1.2654	\$ 0.0757	\$ 1.5141	\$ 0.1733	\$ 0.7908	\$ 0.0478	\$ 1.0119
All therms over the first block per month at	\$ 0.1004	\$ 1.2100	\$ 0.0549	\$ 1.3653	\$ 0.1004	\$ 0.7908	\$ 0.0478	\$ 0.9390
	\$ 0.0985	\$ 1.2654	\$ 0.0757	\$ 1.4393	\$ 0.0985	\$ 0.7908	\$ 0.0478	\$ 0.9374
<b>Commercial/Industrial - G-53</b>	\$ 746.84			\$ 746.84	\$ 746.84			\$ 746.84
Customer Charge per Month per Meter	\$ 761.39			\$ 761.39	\$ 761.39			\$ 761.39
All therms over the first block per month at	\$ 0.0818	\$ 1.2100	\$ 0.0549	\$ 1.3467	\$ 0.0818	\$ 0.7908	\$ 0.0478	\$ 0.9204
	\$ 0.0802	\$ 1.2654	\$ 0.0757	\$ 1.4210	\$ 0.0802	\$ 0.7908	\$ 0.0478	\$ 0.9188
<b>Commercial/Industrial - G-54</b>	\$ 746.84			\$ 746.84	\$ 746.84			\$ 746.84
Customer Charge per Month per Meter	\$ 761.39			\$ 761.39	\$ 761.39			\$ 761.39
All therms over the first block per month at	\$ 0.0353	\$ 1.2100	\$ 0.0549	\$ 1.3002	\$ 0.0353	\$ 0.7908	\$ 0.0478	\$ 0.8739
	\$ 0.0346	\$ 1.2654	\$ 0.0757	\$ 1.3754	\$ 0.0346	\$ 0.7908	\$ 0.0478	\$ 0.8732

DATED: October 31, 2020  
DATED: ~~June 24, 2020~~  
EFFECTIVE: November 01, 2020  
EFFECTIVE: July 01, 2020

ISSUED BY: /s/Susan L. Fleck

TITLE: President

Authorized by NHPUC Order No. xx,xxx dated October xx, 2020 in Docket No. DG 20-xxx  
Authorized by NHPUC Order 26,351 dated April 30, 2020 in Docket No. 20-041, see complete revised Order 26,351 (05/01/20)

SCHEDULE A

LIBERTY UTILITIES - KEENE DIVISION

CONVERSION OF COSTS - GALLONS TO THERMS  
WINTER PERIOD 2020 - 2021

	(1)	(2)	(3)	(4)	(5)	(6)
			<u>VOLUMES</u>		<u>UNIT COST</u>	
	<u>UNIT</u>	<u>CONVERSION FACTOR</u>	<u>GALLONS</u>	<u>THERMS</u>	<u>PER GALLON</u>	<u>PER THERM</u>
GAS FROM INVENTORY	GALLONS	0.91502			\$0.9486	\$1.0367

LIBERTY UTILITIES - KEENE DIVISION

CALCULATION OF COST OF GAS RATE  
SUPPLY / DEMAND BALANCE  
WINTER PERIOD 2020 - 2021

	PRIOR	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	TOTAL
<b>PROPANE COSTS</b>								
1 PROPANE FIRM SENDOUT (therms)		134,680	197,338	228,559	186,164	149,852	86,555	983,148
2 COMPANY USE (therms)		5,258	5,297	6,035	6,621	4,548	3,870	31,630
3 TOTAL PROPANE SENDOUT (therms)		139,938	202,635	234,594	192,785	154,400	90,425	1,014,778
4 COST PER THERM (WACOG)		\$0.8606	\$0.8923	\$0.9074	\$0.9161	\$0.9864	\$0.9414	
5 TOTAL CALCULATED COST OF PROPANE		\$120,436	\$180,805	\$212,874	\$176,615	\$152,296	\$85,128	\$928,154
6 PROPANE ADJUSTMENTS		\$0	\$0	\$0	\$0	\$0	\$0	\$0
7 TOTAL COST OF PROPANE		\$120,436	\$180,805	\$212,874	\$176,615	\$152,296	\$85,128	\$928,154
<b>CNG COSTS</b>								
8 CNG SENDOUT (therms)								
9 COST PER THERM (WACOG)								
10 TOTAL CALCULATED COST OF CNG								
11 CNG DEMAND CHARGES								
12 CNG ADJUSTMENTS -Demand Charges Aug 2017 - Sep 2019								
13 TOTAL CNG COSTS								
14 ACCOUNTING ADJUSTMENT		\$0	\$0	\$0	\$0	\$0	\$0	\$0
15 FPO PREMIUM		(\$584)	(\$829)	(\$929)	(\$813)	(\$678)	(\$378)	(\$4,211)
16 TOTAL COSTS OF GAS								
17 RETURN ON INVENTORY		\$2,354	\$2,354	\$2,354	\$2,354	\$2,354	\$2,354	\$14,126
<b>REVENUES</b>								
18 BILLED FPO SALES (therms)		0	0	0	0	0	0	
19 COG FPO RATE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	
		\$0	\$0	\$0	\$0	\$0	\$0	\$0
20 BILLED NON-FPO SALES PRIOR MONTH (therms)		0	0	0	0	0	0	
21 COG NON-FPO RATE PRIOR MONTH		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	
		\$0	\$0	\$0	\$0	\$0	\$0	\$0
22 BILLED NON-FPO SALES CURRENT MONTH (therms)		153,781	218,228	244,463	213,913	178,455	99,579	1,108,419
23 COG NON-FPO RATE CURRENT MONTH		\$1.2100	\$1.2100	\$1.2100	\$1.2100	\$1.2100	\$1.2100	
		\$186,074	\$264,054	\$295,798	\$258,833	\$215,929	\$120,490	\$1,341,177
24 BILLED SALES OTHER PRIOR PERIODS		0	0	0	0	0	0	
25 COG OTHER PRIOR PERIODS BLENDED RATE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	
		\$0	\$0	\$0	\$0	\$0	\$0	\$0
26 TOTAL SALES		153,781	218,228	244,463	213,913	178,455	99,579	1,108,419
27 TOTAL BILLED REVENUES		\$186,074	\$264,054	\$295,798	\$258,833	\$215,929	\$120,490	\$1,341,178
28 UNBILLED REVENUES (NET)		\$0	\$0	\$0	\$0	\$0	\$0	\$0
29 TOTAL REVENUES		\$186,074	\$264,054	\$295,798	\$258,833	\$215,929	\$120,490	\$1,341,178
30 (OVER)/UNDER COLLECTION		(\$14,078)	(\$12,657)	(\$1,614)	(\$8,731)	(\$3,789)	\$10,642	(\$30,225)
31 INTEREST AMOUNT		\$63	\$27	\$7	(\$7)	(\$24)	(\$14)	\$52
32 FINAL (OVER)/UNDER COLLECTION	\$30,171	(\$14,015)	(\$12,630)	(\$1,607)	(\$8,738)	(\$3,813)	\$10,628	(\$2)

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LIBERTY UTILITIES - KEENE DIVISION  
CALCULATION OF PURCHASED GAS COSTS  
WINTER PERIOD 2020 - 2021

LINE NO.		Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	TOTAL
1	TOTAL REQUIRED PURCHASES	161,626	236,469	273,332	225,625	181,465	106,835	1,185,353
2	<b>PROPANE PURCHASE STABILIZATION PLAN DELIVERIES</b>							
3	THERMS	84,182	128,103	150,978	123,528	96,077	57,646	640,514
4	<u>RATES</u> - from Schedule D							
5	Contract Price	\$0.9058	\$0.9058	\$0.9058	\$0.9058	\$0.9058	\$0.9058	
6	Broker Fee	incl.	incl.	incl.	incl.	incl.	incl.	
7	Pipeline Fee	incl.	incl.	incl.	incl.	incl.	incl.	
8	PERC Fee	incl.	incl.	incl.	incl.	incl.	incl.	
9	Trucking Fee	incl.	incl.	incl.	incl.	incl.	incl.	
10	COST PER THERM	\$0.9058	\$0.9058	\$0.9058	\$0.9058	\$0.9058	\$0.9058	\$0.9058
11	TOTAL COST - Propane Purchase Stabilization Plan Deliveries	\$76,250	\$116,032	\$136,752	\$111,888	\$87,024	\$52,214	\$580,160
12	<b>AMHERST STORAGE PROPANE DELIVERIES</b>							
13	THERMS	-	24,948	47,520	33,264	9,504	3,564	118,800
14	<u>RATES</u> - from Schedule F							
15	WACOG Price	\$0.0000	\$0.7186	\$0.7186	\$0.7186	\$0.7186	\$0.7186	
16	Trucking Fee	\$0.0000	\$0.0650	\$0.0650	\$0.0650	\$0.0650	\$0.0650	
17	COST PER THERM	\$0.0000	\$0.7836	\$0.7836	\$0.7836	\$0.7836	\$0.7836	\$0.7836
18	TOTAL COST - Amherst Storage Propane Deliveries	\$0	\$19,549	\$37,237	\$26,066	\$7,447	\$2,793	\$93,092
19	<b>CNG DELIVERIES</b>							
20	THERMS							
21	RATE							
22								
23								
24								
25								
26								
27	<b>SPOT PURCHASES</b>							
28	THERMS							
29	From Schedule E							
30	COST PER THERM	\$0.9544	\$0.9612	\$0.9721	\$0.9735	\$0.9564	\$0.9386	\$0.9595
31	TOTAL COST - Spot Purchases							
32	<b>OTHER ITEMS</b>							
33	Storage	\$0	\$0	\$0	\$0	\$0	\$0	\$0
34	Refund of Deferred Revenue Surcharge over collection	\$0	\$0	\$0	\$0	\$0	\$0	\$0
35	TOTAL OTHER ITEMS	\$0	\$0	\$0	\$0	\$0	\$0	\$0
36	<b>TOTAL</b>							
37	THERMS FROM PROPANE	139,938	202,635	234,594	192,785	154,400	90,425	1,014,778
38	COST	\$129,462	\$183,241	\$209,078	\$172,993	\$141,162	\$82,429	\$918,366
39	THERMS FROM CNG							
40	COST							
41	COST PER THERM	\$1.0346	\$1.0161	\$1.0131	\$1.0322	\$1.0321	\$1.0710	\$1.0284

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SCHEDULE D

LIBERTY UTILITIES - KEENE DIVISION

PROPANE PURCHASING STABILIZATION PLAN  
WINTER PERIOD 2020 - 2021

Line  
No.

1	2 <b>Delivery Month</b>	<b>Hedging Schedule &amp; Volume (Gallons)</b>						Total
		Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	
3	Nov-20	18,400	13,800	13,800	18,400	13,800	13,800	92,000
4	Dec-20	28,000	21,000	21,000	28,000	21,000	21,000	140,000
5	Jan-21	33,000	24,750	24,750	33,000	24,750	24,750	165,000
6	Feb-21	27,000	20,250	20,250	27,000	20,250	20,250	135,000
7	Mar-21	21,000	15,750	15,750	21,000	15,750	15,750	105,000
8	Apr-21	12,600	9,450	9,450	12,600	9,450	9,450	63,000
9	Total Volume	115,000	111,250	111,250	140,000	111,250	111,250	700,000
10	Monthly %	16.4%	15.9%	15.9%	20.0%	15.9%	15.9%	

11	Delivery Price per Gallon	\$0.8289	\$0.8326	\$0.8411	\$0.8403	\$0.8138	\$0.7885	
12	Total Cost	\$76,262	\$116,568	\$138,786	\$113,434	\$85,450	\$49,676	\$580,175
13	Weighted Average Winter Contract Price per gallon							<b>\$0.8288</b>
14	Weighted Average Winter Contract Price per therm							<b>\$0.9058</b>

LIBERTY UTILITIES - KEENE DIVISION  
PROPANE SPOT MARKET PURCHASE COST ANALYSIS  
WINTER PERIOD 2020 - 2021

		(1) Mt. Belvieu		(2) Broker Fee		(3) Pipeline Rate		(4) PERC Fee		(5) Supplier Charge		(6) Cost @ Selkirk		(7) Trucking to Keene		(8) \$ per Gal.		(9) \$ per Therm
1	NOV	0.4769	+	0.0100	+	0.2410	+	0.0050	+	0.0500	=	0.7829	+	0.0904	=	0.8733	=	0.9544
2	DEC	0.4831	+	0.0100	+	0.2410	+	0.0050	+	0.0500	=	0.7891	+	0.0904	=	0.8795	=	0.9612
3	JAN	0.4931	+	0.0100	+	0.2410	+	0.0050	+	0.0500	=	0.7991	+	0.0904	=	0.8895	=	0.9721
4	FEB	0.4944	+	0.0100	+	0.2410	+	0.0050	+	0.0500	=	0.8004	+	0.0904	=	0.8908	=	0.9735
5	MAR	0.4788	+	0.0100	+	0.2410	+	0.0050	+	0.0500	=	0.7847	+	0.0904	=	0.8751	=	0.9564
6	APR	0.4625	+	0.0100	+	0.2410	+	0.0050	+	0.0500	=	0.7685	+	0.0904	=	0.8589	=	0.9386

1. Propane futures market quotations (cmegroup.com) on 9/11/20 close. See Appendix 1.
2. A generally accepted standard broker fee
3. Pipeline rate from Mt.Belvieu to Selkirk
4. Propane Education Research Council (propanecouncil.org)
5. A generally accepted standard supplier charge
6. Selkirk Cost - all fees plus propane cost
7. Northern Gas Transport trucking rate including diesel fuel surcharge. See Appendix 3A & 3B.
8. Delivered Price per Gallon
9. Delivered Price per therm as converted using per gallon price / .91502

LIBERTY UTILITIES - KEENE DIVISION

INVENTORY & WEIGHTED AVERAGE COST OF GAS CALCULATION  
WINTER PERIOD 2020 - 2021

LINE NO.

		<u>Therms</u>	<u>Cost</u>	<u>Therm</u>	<u>Rate</u> <u>Gal.</u>	<u>CNG therms</u>	<u>Cost</u>	<u>Total Sendout</u>	<u>Total Cost</u>	<u>Therm Rate</u>
1	August 2020 (Actual)									
2	Beginning Balance	51,735	\$44,533	\$0.8608	\$0.7876					
3	Purchases Received	131,267	\$100,417	\$0.7650	\$0.7000					
4	Total Available	183,002	\$144,951	\$0.7921	\$0.7248					
5	Less Sendout	33,056	\$26,183	\$0.7921	\$0.7248					
6	Ending Balance	149,946	\$118,768	\$0.7921	\$0.7248					
7	September 2020 (Estimated)									
8	Beginning Balance	149,946	\$118,768	\$0.7921	\$0.7248					
9	Purchases Received	79,232	\$60,612	\$0.7650	\$0.7000					
10	Total Available	229,178	\$179,380	\$0.7827	\$0.7162					
11	Less Sendout	47,824	\$37,432	\$0.7827	\$0.7162					
12	Ending Balance	181,354	\$141,948	\$0.7827	\$0.7162					
13	October 2020 (Estimated)									
14	Beginning Balance	181,354	\$141,948	\$0.7827	\$0.7162					
15	Purchases Received	70,000	\$60,438	\$0.8634	\$0.7900					
16	Total Available	251,354	\$202,386	\$0.8052	\$0.7368					
17	Less Sendout	88,604	\$71,342	\$0.8052	\$0.7368					
18	Ending Balance	162,750	\$131,044	\$0.8052	\$0.7368					
19	November 2020 (Forecasted)									
20	Beginning Balance	162,750	\$131,044	\$0.8052	\$0.7368					
21	Purchases Received	139,938	\$129,462	\$0.9251	\$0.8465					
22	Total Available	302,688	\$260,506	\$0.8606	\$0.7875					
23	Less Sendout	139,938	\$120,436	\$0.8606	\$0.7875					\$0.979
24	Ending Balance	162,750	\$140,070	\$0.8606	\$0.7875					
25	December 2020 (Forecasted)									
26	Beginning Balance	162,750	\$140,070	\$0.8606	\$0.7875					
27	Purchases Received	177,687	\$163,692	\$0.9212	\$0.8430					
28	Total Available	340,437	\$303,762	\$0.8923	\$0.8164					
29	Less Sendout	202,635	\$180,805	\$0.8923	\$0.8164					\$1.006
30	Ending Balance	137,802	\$122,957	\$0.8923	\$0.8164					
31	January 2021 (Forecasted)									
32	Beginning Balance	137,802	\$122,957	\$0.8923	\$0.8164					
33	Purchases Received	187,074	\$171,841	\$0.9186	\$0.8405					
34	Total Available	324,876	\$294,798	\$0.9074	\$0.8303					
35	Less Sendout	234,594	\$212,874	\$0.9074	\$0.8303					\$1.027
36	Ending Balance	90,282	\$81,924	\$0.9074	\$0.8303					
37	February 2021 (Forecasted)									
38	Beginning Balance	90,282	\$81,924	\$0.9074	\$0.8303					
39	Purchases Received	159,521	\$146,927	\$0.9211	\$0.8428					
40	Total Available	249,803	\$228,851	\$0.9161	\$0.8383					
41	Less Sendout	192,785	\$176,615	\$0.9161	\$0.8383					\$1.048
42	Ending Balance	57,018	\$52,236	\$0.9161	\$0.8383					
43	March 2021 (Forecasted)									
44	Beginning Balance	57,018	\$52,236	\$0.9161	\$0.8383					
45	Purchases Received	144,896	\$146,927	\$1.0140	\$0.9278					
46	Total Available	201,914	\$199,163	\$0.9864	\$0.9026					
47	Less Sendout	154,400	\$152,296	\$0.9864	\$0.9025					\$1.093
48	Ending Balance	47,514	\$46,867	\$0.9864	\$0.9026					
49	April 2021 (Forecasted)									
50	Beginning Balance	47,514	\$46,867	\$0.9864	\$0.9026					
51	Purchases Received	86,861	\$79,637	\$0.9168	\$0.8389					
52	Total Available	134,376	\$126,504	\$0.9414	\$0.8614					
53	Less Sendout	90,425	\$85,128	\$0.9414	\$0.8614					\$1.096
54	Ending Balance	43,950	\$41,376	\$0.9414	\$0.8614					
55	AVERAGE WINTER RATE - SENDOUT									
56							FPO Premium (Sch. B, Line 15)		(\$4,211)	
57										

LIBERTY UTILITIES - KEENE DIVISION

PRIOR PERIOD (OVER)/UNDER COLLECTION  
WINTER PERIOD 2020-2021

	PRIOR	Actual Nov-19	Actual Dec-19	Actual Jan-20	Actual Feb-20	Actual Mar-20	Actual Apr-20	TOTAL
<u>PROPANE COSTS</u>								
1 PROPANE FIRM SENDOUT (therms)		151,341	200,079	198,858	179,376	131,344	92,394	953,392
2 COMPANY USE (therms)		5,076	5,297	5,806	5,386	4,382	3,737	29,684
3 TOTAL PROPANE SENDOUT (therms)		156,417	205,376	204,664	184,762	135,726	96,131	983,076
4 COST PER THERM (WACOG)		\$0.8820	\$0.9404	\$0.9705	\$0.9633	\$0.9163	\$0.9249	
5 TOTAL CALCULATED COST OF PROPANE		\$137,953	\$193,134	\$198,631	\$177,980	\$124,364	\$88,913	\$920,975
6 PROPANE ADJUSTMENTS		\$3,209	\$11,602	(\$3,806)	(\$0)	(\$0)	(\$2,658)	\$8,347
7 TOTAL COST OF PROPANE		\$141,162	\$204,736	\$194,825	\$177,980	\$124,364	\$86,255	\$929,322
<u>CNG COSTS</u>								
8 TOTAL CNG SENDOUT (therms)								
9 CNG DEMAND CHARGES								
10 CNG COMMODITY CHARGES								
11 CNG ADJUSTMENTS								
12 TOTAL CNG COSTS								
13 ACCOUNTING ADJUSTMENT		\$0	\$0	\$0	\$0	\$0	\$0	\$0
14 TOTAL COSTS OF GAS								
15 FPO PREMIUM		\$0	\$0	\$0	\$0	\$0	\$0	\$0
16 RETURN ON INVENTORY		\$2,354	\$2,354	\$2,354	\$2,354	\$2,354	\$2,354	\$14,126
<u>REVENUES</u>								
17 BILLED FPO SALES (therms)		1,130	15,187	17,503	14,648	15,626	10,836	74,930
18 COG FPO RATE		\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$0.9692	0.9692
		\$1,095	\$14,719	\$16,964	\$14,197	\$15,145	\$10,502	\$72,622
19 BILLED NON-FPO SALES PRIOR MONTH (therms)		0	0	243,819	189,929	174,264	119,232	727,244
20 COG NON-FPO RATE PRIOR MONTH		\$0.9492	\$0.9492	\$0.9492	\$0.9686	\$0.9352	\$0.6906	0.9085
		\$0	\$0	\$231,433	\$183,965	\$162,972	\$82,342	\$660,711
21 BILLED NON-FPO SALES CURRENT MONTH (therms)		7,355	175,567	32,145	20,845	24,323	13,431	273,667
22 COG NON-FPO RATE CURRENT MONTH		\$0.9492	\$0.9492	\$0.9686	\$0.9352	\$0.6906	\$0.4408	0.9025
		\$6,981	\$166,649	\$31,136	\$19,495	\$16,797	\$5,920	\$246,978
23 BILLED SALES OTHER PRIOR PERIODS		0	0	0	(17,747)	(218)	92	(17,873)
24 COG OTHER PRIOR PERIODS BLENDED RATE		\$0.0000	\$0.4843	\$0.4843	\$0.9492	\$0.9586	\$0.9360	0.9494
		\$0	\$0	\$0	(\$16,845)	(\$209)	\$86	(\$16,968)
25 TOTAL SALES		8,485	190,754	293,467	207,675	213,995	143,591	1,057,968
26 TOTAL BILLED REVENUES		\$8,077	\$181,368	\$279,533	\$200,811	\$194,705	\$98,850	\$963,344
27 UNBILLED REVENUES (NET)		\$154,760	\$41,801	(\$9,693)	(\$15,563)	(\$86,915)	(\$43,789)	\$40,599
28 TOTAL REVENUES		\$162,836	\$223,169	\$269,839	\$185,248	\$107,789.64	\$55,061	\$1,003,943
29 (OVER)/UNDER COLLECTION		\$17,899	\$39,528	(\$25,322)	\$29,031	\$31,985	\$53,468	\$146,589
30 INTEREST AMOUNT		(\$630)	(\$525)	(\$510)	(\$373)	(\$383)	(\$141)	(\$2,562)
31 FINAL (OVER)/UNDER COLLECTION	(\$170,381)	\$17,269	\$39,003	(\$25,832)	\$28,658	\$31,601	\$53,327	(\$26,354)

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SCHEDULE H

LIBERTY UTILITIES - KEENE DIVISION

INTEREST CALCULATION  
WINTER PERIOD 2020 - 2021

LINE NO.	MONTH	(1) BEG. OF MONTH BALANCE	(2) (OVER) UNDER COLLECT	(3) ADJUSTMENTS	(4) REFUNDS	(5) END OF MONTH BALANCE (COL.1+2+3)	(6) AVERAGE BALANCE COL. (COL. [1+4]/2)	(7) ANNUAL INTEREST RATE	(8) INTEREST AMOUNT	(9) MONTH END BAL. WITH INTEREST (COL. 4+7)
1	MAY 2020	(\$26,354)	\$0	\$26,521	\$0	\$166	(\$13,094)	3.25%	(\$35)	\$131
2	JUN	131	0	29,262	0	\$29,393	14,762	3.25%	40	29,433
3	JUL	29,433	0	414	0	\$29,848	29,640	3.25%	80	29,928
4	AUG	29,928	0	0	0	\$29,928	29,928	3.25%	81	30,009
5	SEP	30,009	0	0	0	\$30,009	30,009	3.25%	81	30,090
6	OCT	30,090	0	0	0	\$30,090	30,090	3.25%	81	30,171
7	NOV	30,171	(14,078)	0	0	\$16,093	23,132	3.25%	63	16,156
8	DEC	16,156	(12,657)	0	0	\$3,499	9,828	3.25%	27	3,526
9	JAN 2021	3,526	(1,614)	0	0	\$1,913	2,719	3.25%	7	1,920
10	FEB	1,920	(8,731)	0	0	(\$6,811)	(2,446)	3.25%	(7)	(6,818)
11	MAR	(6,818)	(3,789)	0	0	(\$10,607)	(8,712)	3.25%	(24)	(10,631)
12	APR	(10,631)	10,642	0	0	\$12	(5,310)	3.25%	(14)	(2)
13										
14									<u>\$380</u>	

15 PRIOR PERIOD BEG. BALANCE w/INTEREST @ NOVEMBER 1, 2020 =  
 16 PRIOR PERIOD BEG. BAL. @ MAY 1, 2020 + INTEREST AMOUNT FOR MAY 2021 - OCTOBER 2021

17 = COL. 1, LINE 1 + COL. 3 LINES 1 TO 6 + COL. 8, LINES 1 TO 6  
 18 = (26,354) + \$56,197 + 328 = 30,171 @ NOVEMBER 1, 2020  
 (TRANSFER TO SCHEDULE B, LINE 32)

Liberty Utilities - Keene Division Weather Normalization - Firm Sendout (Therms)													
Period	Actual Firm Sendout	Base Use	Heat Use	Actual Calendar Month Degree Days	Normal Calendar Month Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therm/DD	Weather Adjustment	Normal Heat Load	Normalized Firm Sendout	Actual Company Use	Unaccounted For 0.56%	Total Firm Sendout
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
			(1) - (2)			(4) - (5)	(3) / (4)	(6) X (7)	(3) + (8)	(1) - (3) + (9)		(10 - 11) * 0.56%	(10) - (11) + (12)
Nov-19	180,741	43,756	136,985	925	790	135	148.09	(19,992)	116,992	160,748	5,258	878	156,368
Dec-19	239,889	43,756	196,133	1,164	1,136	28	168.50	(4,718)	191,415	235,171	5,297	1,298	231,172
Jan-20	238,684	43,756	194,929	1,135	1,328	(193)	171.74	33,146	228,075	271,831	6,035	1,501	267,297
Feb-20	216,430	43,756	172,674	1,084	1,134	(50)	159.29	7,965	180,639	224,395	6,621	1,230	219,004
Mar-20	159,619	43,756	115,864	839	990	(151)	138.10	20,853	136,716	180,472	4,548	993	176,917
Apr-20	113,832	43,756	70,076	664	589	75	105.54	(7,915)	62,161	105,916	3,870	919	102,965
Total	1,149,195	262,535	886,660	5,811	5,967	(156)		29,338	915,999	1,178,533	31,630	6,819	1,153,723

SCHEDULE J

Liberty Utilities - Keene Division Weather Normalization - Sales (Therms) - Rate Residential											
Period	Customers	Sales	Base Load	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therm/DD	Weather Adjustment	Normal Heat Load	Normal Firm Billing Cycle Therms
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				(1) - (2)			(4) - (5)	(3) / (4)	(6) X (7)	(3) + (8)	(1) - (3) + (9)
Nov-19	889	40,718	6,927	33,791	925	790	135	36.53	(4,932)	28,859	35,786
Dec-19	924	51,411	6,927	44,485	1,164	1,136	28	38.22	(1,070)	43,415	50,341
Jan-20	927	50,713	6,927	43,786	1,135	1,328	(193)	38.58	7,446	51,232	58,159
Feb-20	869	48,956	6,927	42,029	1,084	1,134	(50)	38.77	1,939	43,968	50,895
Mar-20	930	39,206	6,927	32,279	839	990	(151)	38.47	5,809	38,088	45,015
Apr-20	897	28,940	6,927	22,014	664	589	75	33.15	(2,486)	19,527	26,454
Total		259,944	41,561	218,384	5,811	5,967	(156)	42.98	6,705	225,089	266,650

Liberty Utilities - Keene Division Weather Normalization - Sales (Therms) - Rate Commercial											
Period	Customers	Sales	Base Load	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therm/DD	Weather Adjustment	Normal Heat Load	Normal Firm Billing Cycle Therms
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				(1) - (3)			(4) - (5)	(3) / (4)	(6) X (7)	(3) + (8)	(1) - (3) + (9)
Nov-19	334	132,121	35,333	96,788	925	790	135	104.64	(14,126)	82,662	117,995
Dec-19	344	171,154	35,333	135,821	1,164	1,136	28	116.69	(3,267)	132,554	167,887
Jan-20	344	164,363	35,333	129,030	1,135	1,328	(193)	113.68	21,941	150,971	186,304
Feb-20	322	157,388	35,333	122,055	1,084	1,134	(50)	112.60	5,630	127,685	163,018
Mar-20	342	118,477	35,333	83,143	839	990	(151)	99.10	14,964	98,107	133,440
Apr-20	328	77,937	35,333	42,604	664	589	75	64.16	(4,812)	37,792	73,125
Total		821,440	211,999	609,442	5,811	5,967	(156)	130.32	20,329	629,771	841,769

Summary - Total Winter Season Sales

	Actual 2019-2020	Normalized
November	172,839	153,781
December	222,566	218,228
January	215,077	244,463
February	206,344	213,913
March	157,682	178,455
April	106,878	99,579
Total	1,081,385	1,108,419

LIBERTY UTILITIES - KEENE DIVISION  
Typical Residential Heating Bill - Fixed Price Option Program  
Forecasted 2020-2021 Winter Period vs. Actual 2019-2020 Winter Period

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
<b>12 MONTHS ENDED 04/2020</b>	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	Winter Nov-Apr	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Summer May-Oct	Total Nov-Oct
Typical Usage - therms (1)	39	69	81	103	89	66	447	35	18	9	7	8	12	89	536
<b>Residential Heating R-3</b>															
Customer Charge 7/1/2019 - 6/30/2020 5/1/2019 - 6/30/19	\$15.20	\$15.20	\$15.20	\$15.20	\$15.20	\$15.20	\$91.20	\$15.02	\$15.02	\$15.20	\$15.20	\$15.20	\$15.20	\$90.84	\$182.04
Delivery Charge:															
All therms @ \$0.5569 \$0.5502	\$21.72	\$38.43	\$45.11	\$57.36	\$49.56	\$36.76	\$248.94	\$19.26	\$9.90	\$5.01	\$3.90	\$4.46	\$6.68	\$49.21	\$298.15
<b>Base Delivery Revenue Total</b>	<b>\$36.92</b>	<b>\$53.63</b>	<b>\$60.31</b>	<b>\$72.56</b>	<b>\$64.76</b>	<b>\$51.96</b>	<b>\$340.14</b>	<b>\$34.28</b>	<b>\$24.92</b>	<b>\$20.21</b>	<b>\$19.10</b>	<b>\$19.66</b>	<b>\$21.88</b>	<b>\$140.05</b>	<b>\$480.19</b>
Deferred Revenue Surcharge Rate	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
<b>Deferred Revenue Surcharge Total</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
COG Rates	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$1.1071	\$1.0063	\$0.8854	\$0.7068	\$0.4843	\$0.4843	\$0.8928	
<b>Cost of Gas Total</b>	<b>\$37.80</b>	<b>\$66.87</b>	<b>\$78.51</b>	<b>\$99.83</b>	<b>\$86.26</b>	<b>\$63.97</b>	<b>\$433.24</b>	<b>\$38.75</b>	<b>\$18.11</b>	<b>\$7.97</b>	<b>\$4.95</b>	<b>\$3.87</b>	<b>\$5.81</b>	<b>\$79.46</b>	<b>\$512.70</b>
LDAC Rates	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	
<b>LDAC Total</b>	<b>\$1.21</b>	<b>\$2.14</b>	<b>\$2.51</b>	<b>\$3.19</b>	<b>\$2.76</b>	<b>\$2.05</b>	<b>\$13.86</b>	<b>\$2.31</b>	<b>\$1.19</b>	<b>\$0.59</b>	<b>\$0.46</b>	<b>\$0.53</b>	<b>\$0.79</b>	<b>\$5.87</b>	<b>\$19.73</b>
<b>Total Bill</b>	<b>\$76</b>	<b>\$123</b>	<b>\$141</b>	<b>\$176</b>	<b>\$154</b>	<b>\$118</b>	<b>\$787</b>	<b>\$75</b>	<b>\$44</b>	<b>\$29</b>	<b>\$25</b>	<b>\$24</b>	<b>\$28</b>	<b>\$225</b>	<b>\$1,013</b>
<b>12 MONTHS ENDED 04/2021</b>	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	Winter Nov-Apr	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Summer May-Oct	Total Nov-Oct
Typical Usage - therms (1)	39	69	81	103	89	66	447	35	18	9	7	8	12	89	536
<b>Residential Heating R-3</b>															
Customer Charge 7/1/2020 7/1/2019 - 6/30/202	\$15.50	\$15.50	\$15.50	\$15.50	\$15.50	\$15.50	\$93.00	\$15.20	\$15.20	\$15.50	\$15.50	\$15.50	\$15.50	\$92.40	\$185.40
Delivery Charge:															
All therms @ \$0.5678 \$0.5569	\$22.14	\$39.18	\$45.99	\$58.48	\$50.53	\$37.47	\$253.79	\$19.49	\$10.02	\$5.11	\$3.97	\$4.54	\$6.81	\$49.94	\$303.73
<b>Base Delivery Revenue Total</b>	<b>\$37.64</b>	<b>\$54.68</b>	<b>\$61.49</b>	<b>\$73.98</b>	<b>\$66.03</b>	<b>\$52.97</b>	<b>\$346.79</b>	<b>\$34.69</b>	<b>\$25.22</b>	<b>\$20.61</b>	<b>\$19.47</b>	<b>\$20.04</b>	<b>\$22.31</b>	<b>\$142.34</b>	<b>\$489.13</b>
Seasonal Base Delivery Difference from previous year							\$6.65							\$2.29	\$8.94
Seasonal Percent Change from previous year							2.0%							1.6%	1.9%
Deferred Revenue Surcharge Rate	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
<b>Deferred Revenue Surcharge Total</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
COG Rates	\$1.2300	\$1.2300	\$1.2300	\$1.2300	\$1.2300	\$1.2300	\$1.2300	\$0.6326	\$0.6816	\$0.7908	\$0.7908	\$0.7908	\$0.7908	\$0.7066	
<b>Cost of Gas Total</b>	<b>\$47.97</b>	<b>\$84.87</b>	<b>\$99.63</b>	<b>\$126.69</b>	<b>\$109.47</b>	<b>\$81.18</b>	<b>\$549.81</b>	<b>\$22.14</b>	<b>\$12.27</b>	<b>\$7.12</b>	<b>\$5.54</b>	<b>\$6.33</b>	<b>\$9.49</b>	<b>\$62.89</b>	<b>\$612.70</b>
Seasonal COG Difference from previous year							\$116.57							-\$16.57	\$100.00
Seasonal Percent Change from previous year							26.9%							-20.9%	19.5%
LDAC Rates	\$0.0603	\$0.0603	\$0.0603	\$0.0603	\$0.0603	\$0.0603	\$0.0603	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	
<b>LDAC Total</b>	<b>\$2.35</b>	<b>\$4.16</b>	<b>\$4.88</b>	<b>\$6.21</b>	<b>\$5.37</b>	<b>\$3.98</b>	<b>\$26.95</b>	<b>\$1.09</b>	<b>\$0.56</b>	<b>\$0.28</b>	<b>\$0.22</b>	<b>\$0.25</b>	<b>\$0.37</b>	<b>\$2.77</b>	<b>\$29.72</b>
Seasonal LDAC Difference from previous year							\$13.09							-\$3.10	\$9.99
Seasonal Percent Change from previous year							94.4%							-52.8%	50.6%
<b>Total Bill</b>	<b>\$88</b>	<b>\$144</b>	<b>\$166</b>	<b>\$207</b>	<b>\$181</b>	<b>\$138</b>	<b>\$924</b>	<b>\$58</b>	<b>\$38</b>	<b>\$28</b>	<b>\$25</b>	<b>\$27</b>	<b>\$32</b>	<b>\$208</b>	<b>\$1,132</b>
Seasonal Total Bill Difference from previous year							\$136.31							-\$17.38	\$118.93
Seasonal Percent Change from previous year							17.3%							-7.7%	11.7%
Seasonal Percent Change resulting from Base Rates (incl. Def. Revenue Surch.)							0.8%							1.0%	0.9%
Seasonal Percent Change resulting from COG							14.8%							-7.4%	9.9%
Seasonal Percent Change resulting from LDAC							1.7%							-1.4%	1.0%

(1) Residential Heating Typical Usage: Residence using gas for heat, hot water and cooking.

**LIBERTY UTILITIES - KEENE DIVISION**  
**Typical Residential Heating Bill - Non-Fixed Price Option Program**  
**Forecasted 2020-2021 Winter Period vs. Actual 2019-2020 Winter Period**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
<b>12 MONTHS ENDED 04/2020</b>	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	Winter Nov-Apr	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Summer May-Oct	Total Nov-Oct
Typical Usage - therms (1)	39	69	81	103	89	66	447	35	18	9	7	8	12	89	536
<b>Residential Heating R-3</b>															
Customer Charge 7/1/2019 - 6/30/2020 5/1/2019 - 6/30/19	\$15.20	\$15.20	\$15.20	\$15.20	\$15.20	\$15.20	\$91.20	\$15.02	\$15.02	\$15.20	\$15.20	\$15.20	\$15.20	\$90.84	\$182.04
Delivery Charge:															
All therms @ \$0.5569 \$0.5502	\$21.72	\$38.43	\$45.11	\$57.36	\$49.56	\$36.76	\$248.94	\$19.26	\$9.90	\$5.01	\$3.90	\$4.46	\$6.68	\$49.21	\$298.15
<b>Base Delivery Revenue Total</b>	<b>\$36.92</b>	<b>\$53.63</b>	<b>\$60.31</b>	<b>\$72.56</b>	<b>\$64.76</b>	<b>\$51.96</b>	<b>\$340.14</b>	<b>\$34.28</b>	<b>\$24.92</b>	<b>\$20.21</b>	<b>\$19.10</b>	<b>\$19.66</b>	<b>\$21.88</b>	<b>\$140.05</b>	<b>\$480.19</b>
Deferred Revenue Surcharge Rate	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
<b>Deferred Revenue Surcharge Total</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
COG Rates	\$0.9492	\$0.9492	\$0.9686	\$0.9352	\$0.6906	\$0.4408	\$0.8229	\$1.1071	\$1.0063	\$0.8854	\$0.7068	\$0.4843	\$0.4843	\$0.8928	
<b>Cost of Gas Total</b>	<b>\$37.02</b>	<b>\$65.49</b>	<b>\$78.46</b>	<b>\$96.33</b>	<b>\$61.46</b>	<b>\$29.09</b>	<b>\$367.85</b>	<b>\$38.75</b>	<b>\$18.11</b>	<b>\$7.97</b>	<b>\$4.95</b>	<b>\$3.87</b>	<b>\$5.81</b>	<b>\$79.46</b>	<b>\$447.31</b>
LDAC Rates	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	
<b>LDAC Total</b>	<b>\$1.21</b>	<b>\$2.14</b>	<b>\$2.51</b>	<b>\$3.19</b>	<b>\$2.76</b>	<b>\$2.05</b>	<b>\$13.86</b>	<b>\$2.31</b>	<b>\$1.19</b>	<b>\$0.59</b>	<b>\$0.46</b>	<b>\$0.53</b>	<b>\$0.79</b>	<b>\$5.87</b>	<b>\$19.73</b>
<b>Total Bill</b>	<b>\$75</b>	<b>\$121</b>	<b>\$141</b>	<b>\$172</b>	<b>\$129</b>	<b>\$83</b>	<b>\$722</b>	<b>\$75</b>	<b>\$44</b>	<b>\$29</b>	<b>\$25</b>	<b>\$24</b>	<b>\$28</b>	<b>\$225</b>	<b>\$947</b>
<b>12 MONTHS ENDED 04/2021</b>	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	Winter Nov-Apr	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Summer May-Oct	Total Nov-Oct
Typical Usage - therms (1)	39	69	81	103	89	66	447	35	18	9	7	8	12	89	536
<b>Residential Heating R-3</b>															
Customer Charge 7/1/2020 7/1/2019 - 6/30/2020	\$15.50	\$15.50	\$15.50	\$15.50	\$15.50	\$15.50	\$93.00	\$15.20	\$15.20	\$15.50	\$15.50	\$15.50	\$15.50	\$92.40	\$185.40
Delivery Charge:															
All therms @ \$0.5678 \$0.5569	\$22.14	\$39.18	\$45.99	\$58.48	\$50.53	\$37.47	\$253.79	\$19.49	\$10.02	\$5.11	\$3.97	\$4.54	\$6.81	\$49.94	\$303.73
<b>Base Delivery Revenue Total</b>	<b>\$37.64</b>	<b>\$54.68</b>	<b>\$61.49</b>	<b>\$73.98</b>	<b>\$66.03</b>	<b>\$52.97</b>	<b>\$346.79</b>	<b>\$34.69</b>	<b>\$25.22</b>	<b>\$20.61</b>	<b>\$19.47</b>	<b>\$20.04</b>	<b>\$22.31</b>	<b>\$142.34</b>	<b>\$489.13</b>
Seasonal Base Delivery Difference from previous year							\$6.65							\$2.29	\$8.94
Seasonal Percent Change from previous year							2.0%							1.6%	1.9%
Deferred Revenue Surcharge Rate	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
<b>Deferred Revenue Surcharge Total</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
COG Rates	\$1.2100	\$1.2100	\$1.2100	\$1.2100	\$1.2100	\$1.2100	\$1.2100	\$0.6326	\$0.6816	\$0.7908	\$0.7908	\$0.7908	\$0.7908	\$0.7066	
<b>Cost of Gas Total</b>	<b>\$47.19</b>	<b>\$83.49</b>	<b>\$98.01</b>	<b>\$124.63</b>	<b>\$107.69</b>	<b>\$79.86</b>	<b>\$540.87</b>	<b>\$22.14</b>	<b>\$12.27</b>	<b>\$7.12</b>	<b>\$5.54</b>	<b>\$6.33</b>	<b>\$9.49</b>	<b>\$62.89</b>	<b>\$603.76</b>
Seasonal COG Difference from previous year							\$173.02							-\$16.57	\$156.45
Seasonal Percent Change from previous year							47.0%							-20.9%	35.0%
LDAC Rates	\$0.0603	\$0.0603	\$0.0603	\$0.0603	\$0.0603	\$0.0603	\$0.0603	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.03	
<b>LDAC Total</b>	<b>\$2.35</b>	<b>\$4.16</b>	<b>\$4.88</b>	<b>\$6.21</b>	<b>\$5.37</b>	<b>\$3.98</b>	<b>\$26.95</b>	<b>\$1.09</b>	<b>\$0.56</b>	<b>\$0.28</b>	<b>\$0.22</b>	<b>\$0.25</b>	<b>\$0.37</b>	<b>\$2.77</b>	<b>\$29.72</b>
Seasonal LDAC Difference from previous year							\$13.09							-\$3.10	-\$19.73
Seasonal Percent Change from previous year							3.6%							-3.9%	-4.4%
<b>Total Bill</b>	<b>\$87</b>	<b>\$142</b>	<b>\$164</b>	<b>\$205</b>	<b>\$179</b>	<b>\$137</b>	<b>\$915</b>	<b>\$58</b>	<b>\$38</b>	<b>\$28</b>	<b>\$25</b>	<b>\$27</b>	<b>\$32</b>	<b>\$208</b>	<b>\$1,123</b>
Seasonal Total Bill Difference from previous year							\$192.76							-\$17.38	\$175.38
Seasonal Percent Change from previous year							26.7%							-7.7%	18.5%
Seasonal Percent Change resulting from Base Rates (incl. Def. Revenue Surch.)							0.9%							1.0%	0.9%
Seasonal Percent Change resulting from COG							24.0%							-7.4%	16.5%
Seasonal Percent Change resulting from LDAC							1.8%							-1.4%	-2.1%

(1) Residential Heating Typical Usage: Residence using gas for heat, hot water and cooking.

LIBERTY UTILITIES - KEENE DIVISION  
Typical Commercial Bill - Fixed Price Option Program  
Forecasted 2020-2021 Winter Period vs. Actual 2019-2020 Winter Period

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
<b>12 MONTHS ENDED 04/2020</b>	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	Winter Nov-Apr	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Summer May-Oct	Total Nov-Oct
Typical Usage - therms	133	249	307	403	367	262	1,721	128	56	22	16	18	26	266	1,987
<b>Commercial G-41</b>															
Customer Charge 7/1/2019 - 6/30/2020 5/1/2019 - 6/30/19	\$56.36	\$56.36	\$56.36	\$56.36	\$56.36	\$56.36	\$338.16	\$55.68	\$55.68	\$56.36	\$56.36	\$56.36	\$56.36	\$336.80	\$674.96
Delivery Charge:															
First 100 therms @ \$0.4621 \$0.4566	\$46.21	\$46.21	\$46.21	\$46.21	\$46.21	\$46.21	\$277.26	\$9.13	\$9.13	\$9.24	\$7.39	\$8.32	\$9.24	\$52.45	\$329.71
Over 100 therms @ \$0.3104 \$0.3067	\$10.24	\$46.25	\$64.25	\$94.05	\$82.88	\$50.28	\$347.95	\$33.12	\$11.04	\$0.62	\$0.00	\$0.00	\$1.86	\$46.64	\$394.59
<b>Base Delivery Revenue Tota</b>	<b>\$112.81</b>	<b>\$148.82</b>	<b>\$166.82</b>	<b>\$196.62</b>	<b>\$185.45</b>	<b>\$152.85</b>	<b>\$963.37</b>	<b>\$97.93</b>	<b>\$75.85</b>	<b>\$66.22</b>	<b>\$63.75</b>	<b>\$64.68</b>	<b>\$67.46</b>	<b>\$435.89</b>	<b>\$1,399.26</b>
Deferred Revenue Surcharge Rate	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
<b>Deferred Revenue Surcharge Tota</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>						
COG Rates	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$1.1071	\$1.0063	\$0.8854	\$0.7068	\$0.4843	\$0.4843	\$0.9405	
<b>Cost of Gas Total</b>	<b>\$128.90</b>	<b>\$241.33</b>	<b>\$297.54</b>	<b>\$390.59</b>	<b>\$355.70</b>	<b>\$253.93</b>	<b>\$1,667.99</b>	<b>\$141.71</b>	<b>\$56.35</b>	<b>\$19.48</b>	<b>\$11.31</b>	<b>\$8.72</b>	<b>\$12.59</b>	<b>\$250.16</b>	<b>\$1,918.15</b>
LDAC Rates	\$0.0478	\$0.0478	\$0.0478	\$0.0478	\$0.0478	\$0.0478	\$0.0478	\$0.0757	\$0.0757	\$0.0757	\$0.0757	\$0.0757	\$0.0757	\$0.0757	0.05153
<b>LDAC Total</b>	<b>\$6.36</b>	<b>\$11.90</b>	<b>\$14.67</b>	<b>\$19.26</b>	<b>\$17.54</b>	<b>\$12.52</b>	<b>\$82.26</b>	<b>\$9.69</b>	<b>\$4.24</b>	<b>\$1.67</b>	<b>\$1.21</b>	<b>\$1.36</b>	<b>\$1.97</b>	<b>\$20.14</b>	<b>\$102.40</b>
<b>Total Bill</b>	<b>\$248</b>	<b>\$402</b>	<b>\$479</b>	<b>\$606</b>	<b>\$559</b>	<b>\$419</b>	<b>\$2,714</b>	<b>\$249</b>	<b>\$136</b>	<b>\$87</b>	<b>\$76</b>	<b>\$75</b>	<b>\$82</b>	<b>\$706</b>	<b>\$3,420</b>
<b>12 MONTHS ENDED 04/2021</b>	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	Winter Nov-Apr	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Summer May-Oct	Total Nov-Oct
Typical Usage - therms	133	249	307	403	367	262	1,721	128	56	22	16	18	26	266	1,987
<b>Commercial G-41</b>															
Customer Charge 7/1/2020 7/1/2019 - 6/30/2020	\$57.46	\$57.46	\$57.46	\$57.46	\$57.46	\$57.46	\$344.76	\$56.36	\$56.36	\$57.46	\$57.46	\$57.46	\$57.46	\$342.56	\$687.32
Delivery Charge:															
First 100 therms @ \$0.4711 \$0.4621	\$47.11	\$47.11	\$47.11	\$47.11	\$47.11	\$47.11	\$282.66	\$9.24	\$9.24	\$9.42	\$7.54	\$8.48	\$9.42	\$53.34	\$336.00
Over 100 therms @ \$0.3165 \$0.3104	\$10.44	\$47.16	\$65.52	\$95.90	\$84.51	\$51.27	\$354.80	\$33.52	\$11.17	\$0.63	\$0.00	\$0.00	\$1.90	\$47.22	\$402.02
<b>Base Delivery Revenue Tota</b>	<b>\$115.01</b>	<b>\$151.73</b>	<b>\$170.09</b>	<b>\$200.47</b>	<b>\$189.08</b>	<b>\$155.84</b>	<b>\$982.22</b>	<b>\$99.12</b>	<b>\$76.77</b>	<b>\$67.51</b>	<b>\$65.00</b>	<b>\$65.94</b>	<b>\$68.78</b>	<b>\$443.12</b>	<b>\$1,425.34</b>
Seasonal Base Delivery Difference from previous year							\$18.85							\$7.23	\$26.08
Seasonal Percent Change from previous year							2.0%							1.7%	1.9%
Deferred Revenue Surcharge Rate	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
<b>Deferred Revenue Surcharge Tota</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>						
COG Rates	\$1.2300	\$1.2300	\$1.2300	\$1.2300	\$1.2300	\$1.2300	\$1.2300	\$0.6326	\$0.6816	\$0.7908	\$0.7908	\$0.7908	\$0.7908	\$0.6917	
<b>Cost of Gas Total</b>	<b>\$163.59</b>	<b>\$306.27</b>	<b>\$377.61</b>	<b>\$495.69</b>	<b>\$451.41</b>	<b>\$322.26</b>	<b>\$2,116.83</b>	<b>\$80.97</b>	<b>\$38.17</b>	<b>\$17.40</b>	<b>\$12.65</b>	<b>\$14.23</b>	<b>\$20.56</b>	<b>\$183.98</b>	<b>\$2,300.81</b>
Seasonal COG Difference from previous year							\$448.84							-\$66.18	\$382.66
Seasonal Percent Change from previous year							26.9%							-26.5%	19.9%
LDAC Rates	\$0.0549	\$0.0549	\$0.0549	\$0.0549	\$0.0549	\$0.0549	\$0.0549	\$0.0478	\$0.0478	\$0.0478	\$0.0478	\$0.0478	\$0.0478	\$0.0478	
<b>LDAC Total</b>	<b>\$7.30</b>	<b>\$13.67</b>	<b>\$16.85</b>	<b>\$22.12</b>	<b>\$20.15</b>	<b>\$14.38</b>	<b>\$94.47</b>	<b>\$6.12</b>	<b>\$2.68</b>	<b>\$1.05</b>	<b>\$0.76</b>	<b>\$0.86</b>	<b>\$1.24</b>	<b>\$12.71</b>	<b>\$107.18</b>
Seasonal LDAC Difference from previous year							\$12.21							-\$7.43	\$382.66
Seasonal Percent Change from previous year							14.8%							-36.9%	19.9%
<b>Total Bill</b>	<b>\$286</b>	<b>\$472</b>	<b>\$565</b>	<b>\$718</b>	<b>\$661</b>	<b>\$492</b>	<b>\$3,194</b>	<b>\$186</b>	<b>\$118</b>	<b>\$86</b>	<b>\$78</b>	<b>\$81</b>	<b>\$91</b>	<b>\$640</b>	<b>\$3,833</b>
Seasonal Total Bill Difference from previous year							\$479.89							-\$66.38	\$413.52
Seasonal Percent Change from previous year							17.7%							-9.4%	12.1%
Seasonal Percent Change resulting from Base Rates (incl. Def. Revenue Surch.)							0.7%							1.0%	0.8%
Seasonal Percent Change resulting from COG							16.5%							-9.4%	11.2%
Seasonal Percent Change resulting from LDAC							0.4%							-1.1%	11.2%

**LIBERTY UTILITIES - KEENE DIVISION**  
**Typical Commercial Bill - Non-Fixed Price Option Program**  
**Forecasted 2020-2021 Winter Period vs. Actual 2019-2020 Winter Period**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	Winter Nov-Apr	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Summer May-Oct	Total Nov-Oct
<b>12 MONTHS ENDED 04/2020</b>															
Typical Usage - therms	133	249	307	403	367	262	1,721	128	56	22	16	18	26	266	1,987
<b>Commercial G-41</b>															
Customer Charge 7/1/2019 - 6/30/2020 5/1/2019 - 6/30/19	\$56.36	\$56.36	\$56.36	\$56.36	\$56.36	\$56.36	\$338.16	\$55.68	\$55.68	\$56.36	\$56.36	\$56.36	\$56.36	\$336.80	\$674.96
Delivery Charge:															
First 100 therms @ \$0.4621 \$0.4566	\$46.21	\$46.21	\$46.21	\$46.21	\$46.21	\$46.21	\$277.26	\$9.13	\$9.13	\$9.24	\$7.39	\$8.32	\$9.24	\$52.45	\$329.71
Over 100 therms @ \$0.3104 \$0.3067	\$10.24	\$46.25	\$64.25	\$94.05	\$82.88	\$50.28	\$347.95	\$33.12	\$11.04	\$0.62	\$0.00	\$0.00	\$1.86	\$46.64	\$394.59
<b>Base Delivery Revenue Total</b>	<b>\$112.81</b>	<b>\$148.82</b>	<b>\$166.82</b>	<b>\$196.62</b>	<b>\$185.45</b>	<b>\$152.85</b>	<b>\$963.37</b>	<b>\$97.93</b>	<b>\$75.85</b>	<b>\$66.22</b>	<b>\$63.75</b>	<b>\$64.68</b>	<b>\$67.46</b>	<b>\$435.89</b>	<b>\$1,399.26</b>
Deferred Revenue Surcharge Rate	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
<b>Deferred Revenue Surcharge Total</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>						
COG Rates	\$0.9492	\$0.9492	\$0.9686	\$0.9352	\$0.6906	\$0.4408	\$0.8168	\$1.1071	\$1.0063	\$0.8854	\$0.7068	\$0.4843	\$0.4843	\$0.9405	
<b>Cost of Gas Total</b>	<b>\$126.24</b>	<b>\$236.35</b>	<b>\$297.36</b>	<b>\$376.89</b>	<b>\$253.45</b>	<b>\$115.49</b>	<b>\$1,405.78</b>	<b>\$141.71</b>	<b>\$56.35</b>	<b>\$19.48</b>	<b>\$11.31</b>	<b>\$8.72</b>	<b>\$12.59</b>	<b>\$250.16</b>	<b>\$1,655.94</b>
LDAC Rates	\$0.0478	\$0.0478	\$0.0478	\$0.0478	\$0.0478	\$0.0478	\$0.0478	\$0.0757	\$0.0757	\$0.0757	\$0.0757	\$0.0757	\$0.0757	\$0.0757	-\$6.8260
<b>LDAC Total</b>	<b>\$6.36</b>	<b>\$11.90</b>	<b>\$14.67</b>	<b>\$19.26</b>	<b>\$17.54</b>	<b>\$12.52</b>	<b>\$82.25</b>	<b>\$9.69</b>	<b>\$4.24</b>	<b>\$1.67</b>	<b>\$1.21</b>	<b>\$1.36</b>	<b>\$1.97</b>	<b>\$20.14</b>	<b>\$102.39</b>
<b>Total Bill</b>	<b>\$245</b>	<b>\$397</b>	<b>\$479</b>	<b>\$593</b>	<b>\$456</b>	<b>\$281</b>	<b>\$2,451</b>	<b>\$249</b>	<b>\$136</b>	<b>\$87</b>	<b>\$76</b>	<b>\$75</b>	<b>\$82</b>	<b>\$706</b>	<b>\$3,158</b>
<b>12 MONTHS ENDED 04/2021</b>															
Typical Usage - therms	133	249	307	403	367	262	1,721	128	56	22	16	18	26	266	1,987
<b>Commercial G-41</b>															
Customer Charge 7/1/2020 7/1/2019 - 6/30/2020	\$57.46	\$57.46	\$57.46	\$57.46	\$57.46	\$57.46	\$344.76	\$56.36	\$56.36	\$57.46	\$57.46	\$57.46	\$57.46	\$342.56	\$687.32
Delivery Charge:															
First 100 therms @ \$0.4711 \$0.4621	\$47.11	\$47.11	\$47.11	\$47.11	\$47.11	\$47.11	\$282.66	\$9.24	\$9.24	\$9.42	\$7.54	\$8.48	\$9.42	\$53.34	\$336.00
Over 100 therms @ \$0.3165 \$0.3104	\$10.44	\$47.16	\$65.52	\$95.90	\$84.51	\$51.27	\$354.80	\$33.52	\$11.17	\$0.63	\$0.00	\$0.00	\$1.90	\$47.22	\$402.02
<b>Base Delivery Revenue Total</b>	<b>\$115.01</b>	<b>\$151.73</b>	<b>\$170.09</b>	<b>\$200.47</b>	<b>\$189.08</b>	<b>\$155.84</b>	<b>\$982.22</b>	<b>\$99.12</b>	<b>\$76.77</b>	<b>\$67.51</b>	<b>\$65.00</b>	<b>\$65.94</b>	<b>\$68.78</b>	<b>\$443.12</b>	<b>\$1,425.34</b>
Seasonal Base Delivery Difference from previous year							\$18.85							\$7.23	\$28.08
Seasonal Percent Change from previous year							2.0%							1.7%	1.9%
Deferred Revenue Surcharge Rate	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
<b>Deferred Revenue Surcharge Total</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>						
COG Rates	\$1.2100	\$1.2100	\$1.2100	\$1.2100	\$1.2100	\$1.2100	\$1.2100	\$0.6326	\$0.6816	\$0.7908	\$0.7908	\$0.7908	\$0.7908	\$0.6917	
<b>Cost of Gas Total</b>	<b>\$160.93</b>	<b>\$301.29</b>	<b>\$371.47</b>	<b>\$487.63</b>	<b>\$444.07</b>	<b>\$317.02</b>	<b>\$2,082.41</b>	<b>\$80.97</b>	<b>\$38.17</b>	<b>\$17.40</b>	<b>\$12.65</b>	<b>\$14.23</b>	<b>\$20.56</b>	<b>\$183.98</b>	<b>\$2,266.39</b>
Seasonal COG Difference from previous year							\$676.63							-\$66.18	\$610.45
Seasonal Percent Change from previous year							48.1%							-26.5%	36.9%
LDAC Rates	\$0.0549	\$0.0549	\$0.0549	\$0.0549	\$0.0549	\$0.0549	\$0.0549	\$0.0478	\$0.0478	\$0.0478	\$0.0478	\$0.0478	\$0.0478	\$0.0478	
<b>LDAC Total</b>	<b>\$7.30</b>	<b>\$13.67</b>	<b>\$16.85</b>	<b>\$22.12</b>	<b>\$20.15</b>	<b>\$14.38</b>	<b>\$94.47</b>	<b>\$6.12</b>	<b>\$2.68</b>	<b>\$1.05</b>	<b>\$0.76</b>	<b>\$0.86</b>	<b>\$1.24</b>	<b>\$12.71</b>	<b>\$107.18</b>
Seasonal LDAC Difference from previous year							\$12.22							-\$7.43	\$4.79
Seasonal Percent Change from previous year							14.9%							-36.9%	4.7%
<b>Total Bill</b>	<b>\$283</b>	<b>\$467</b>	<b>\$558</b>	<b>\$710</b>	<b>\$653</b>	<b>\$487</b>	<b>\$3,159</b>	<b>\$186</b>	<b>\$118</b>	<b>\$86</b>	<b>\$78</b>	<b>\$81</b>	<b>\$91</b>	<b>\$640</b>	<b>\$3,799</b>
Seasonal Total Bill Difference from previous year							\$707.70							-\$66.38	\$641.32
Seasonal Percent Change from previous year							28.9%							-9.4%	20.3%
Seasonal Percent Change resulting from Base Rates (incl. Def. Revenue Surch.)							0.8%							1.0%	0.8%
Seasonal Percent Change resulting from COG							0.5%							-9.4%	19.3%
Seasonal Percent Change resulting from LDAC							3.9%							-1.1%	0.2%

SCHEDULE M

LIBERTY UTILITIES - KEENE DIVISION									
Historical COG Comparison - FPO vs. Non-FPO Bill									
Winter Period	FPO Rate	Amount of Premium	Percent Participation (therms)	Actual FPO Volumes	Premium Revenue	Typical Residential FPO bill	Average Non-FPO Rate	Typical Residential Non-FPO bill	Cost/(Savings) to FPO Customers
2019-2020	\$0.9692	\$0.02	7.08%	74,930	\$1,499	\$433	\$0.9085	\$406	\$27
2018-2019	\$1.3743	(\$0.01)	15.64%	181,485	-\$1,071	\$614	\$1.4301	\$639	(\$25)
2017-2018	\$1.2408	\$0.02	20.14%	221,383	\$4,428	\$527	\$1.4053	\$597	(\$70)
2016-2017	\$1.5352	\$0.02	19.32%	201,959	\$4,039	\$863	\$1.5247	\$900	(\$37)
2015-2016	\$0.8988	\$0.02	24.54%	224,981	\$4,500	\$480	\$0.6620	\$354	\$126
2014-2015	\$1.7269	\$0.02	32.16%	384,297	\$7,686	\$929	\$1.4213	\$765	\$164
2013-2014	\$1.6985	\$0.02	17.94%	206,379	\$4,128	\$914	\$2.0092	\$1,081	(\$167)
2012-2013	\$1.5217	\$0.02	20.81%	207,298	\$4,146	\$819	\$1.5002	\$807	\$12
2011-2012	\$2.2357	\$0.02	18.21%	152,560	\$3,051	\$1,203	\$2.1253	\$1,143	\$59
2010-2011	----- FPO not offered due to Selkirk terminal embargo -----								
2009-2010	\$1.3402	\$0.02	17.12%	163,486	\$3,270	\$721	\$1.4900	\$802	(\$81)
2008-2009	\$2.2408	\$0.02	21.08%	205,970	\$4,119	\$1,206	\$1.7347	\$933	\$272
2007-2008	\$1.5212	\$0.02	28.01%	266,419	\$5,328	\$818	\$1.7646	\$949	(\$131)
2006-2007	\$1.4741	\$0.02	21.86%	206,686	\$4,134	\$793	\$1.5397	\$828	(\$35)
2005-2006	\$1.5260	\$0.02	42.91%	348,849	\$6,977	\$821	\$1.3742	\$739	\$82
2004-2005	\$1.2323	n/a	39.44%	340,315	n/a	\$663	\$1.2647	\$680	(\$17)
2003-2004	\$0.8877	n/a	38.78%	316,300	n/a	\$478	\$1.0325	\$555	(\$78)
Average						\$790		\$785	\$5

## MONT BELVIEU PROPANE FUTURES - 09/11/20 CLOSE

**FUTURES** OPTIONS

Trade Date: **Friday, 11 Sep 2020 (Final)**

All market data contained within the CME Group website should be considered as a reference only and should not be used as a substitute for real-time market data feeds. Settlement prices on instruments without open interest or volume are provided for Platform (MDP). These prices are not based on market activity.

MONTH	OPEN	HIGH	LOW	LAST	CHANGE	SETTLE	ESTIMATED VOLUME
SEP 20	-	-	-	-	+.00988	.47482	
OCT 20	-	-	-	-	+.01500	.47000	
NOV 20	-	-	-	-	+.01313	.47688	
DEC 20	-	-	-	-	+.01188	.48313	
JAN 21	-	-	-	-	+.00875	.49313	
FEB 21	-	-	-	-	+.00688	.49438	
MAR 21	-	-	-	-	+.00625	.47875	
APR 21	-	-	-	-	+.00500	.46250	

**ENTERPRISE TE PRODUCTS PIPELINE FERC TARIFF 54.44.0 - EFFECTIVE 6/6/20**

**RATES (In Cents-per-bbl.)**  
[U] All rates are unchanged.

<b>ITEM NO. 135 Non-Incentive Rates for Propane</b>				
<b>Destination</b>	<b>Origin</b>			
	Arcadia (Bienville Parish, LA)	Floreffe Junction (Allegheny Co., PA)	Mont Belvieu (Chambers Co., TX)	Tappan Lake (Harrison Co., OH), Todhunter (Butler Co., OH) & Follansbee (Brooke Co., West Virginia)
Arcadia (Bienville Parish, LA)	--	--	243.71	--
Coshocton (Coshocton Co., OH)	696.43	--	743.98	--
Dexter (Stoddard Co., MO)	--	--	353.50	--
Du Bois (Clearfield Co., PA)	779.47 (1)	399.62 (1)(2)	825.94 (1)	399.62 (1)
Finger Lakes (Schuyler Co., NY)	831.22	581.09	877.95	602.78
Fontaine (Green Co., AR)	--	--	332.11	--
Greensburg (Westmoreland Co., PA)	732.98 (1)	399.62 (1)(2)	779.47 (1)	399.62 (1)
Harford Mills (Cortland Co., NY)	--	561.50 (1)	880.93 (1)	584.58 (1)
Kingsland (Cleveland Co., AR)	--	--	281.68	--
Lebanon (Boone Co., IN)	--	--	416.90 (4)	--
North Little Rock (Pulaski Co., AR)	--	--	297.19	--
Oneonta (Otsego Co., NY)	--	607.83	951.89 (1)	627.44 (1)
Princeton (Gibson Co., IN)	419.57	--	453.81	--
Schaefferstown (Lebanon Co., PA)	--	589.20 (2)	890.40	581.39
Selkirk (Albany Co., NY)	--	659.48	1012.12 (1)	661.20 (1)
Seymour (Jackson Co., IN)	--	--	396.15	--
Sinking Spring (Berks Co., PA)	--	589.20 (2)	890.40	581.39
Todhunter Truck Terminal (Butler Co., OH)	619.09	--	666.64	--
Twin Oaks (Delaware Co., PA)	--	725.13 (2) (3)	--	725.13 (3)
Watkins Glen (Schuyler Co., NY)	789.18 (1)	540.46 (1)	835.88 (1)	565.02 (1)
West Memphis (Crittenden Co., AR)	--	--	353.50 (4)	--
Monee (Will Co., IL)			1499.60 (7)	

APPENDIX 3A

Northern Gas Transport, Inc.  
Box 106  
Lyndonville, VT 05851-0106  
1-800-648-1075  
FAX: 802-626-5039

September 15, 2020

To: All Customers

**Re: Fuel Surcharge Notice**

As of Monday, September 14, 2020 the Department of Energy New England average price per gallon of diesel fuel was \$2.605. All deliveries invoiced from Sunday, September 20, 2020 through Saturday, September 26, 2020 will be line item assessed at 4.5% fuel surcharge. Thank you and should you have any questions, please contact Susan Noyes at 1-800-648-1075 extension 223.

Best Regards,

APPENDIX 3B

Northern Gas Transport Inc. - Selkirk to Keene

Gallons	Base Rate	Base Charge	Fuel Surcharge		Total Charge	Total Rate Per Gallon
			Rate	Surcharge		
9,200	\$0.0865	\$795.80	1.00%	\$7.96	\$803.76	\$0.0874
9,200	\$0.0865	\$795.80	2.00%	\$15.92	\$811.72	\$0.0882
9,200	\$0.0865	\$795.80	2.50%	\$19.90	\$815.70	\$0.0887
9,200	\$0.0865	\$795.80	3.00%	\$23.87	\$819.67	\$0.0891
9,200	\$0.0865	\$795.80	3.50%	\$27.85	\$823.65	\$0.0895
9,200	\$0.0865	\$795.80	4.00%	\$31.83	\$827.63	\$0.0900
9,200	\$0.0865	\$795.80	4.50%	\$35.81	\$831.61	\$0.0904
9,200	\$0.0865	\$795.80	5.00%	\$39.79	\$835.59	\$0.0908
9,200	\$0.0865	\$795.80	5.50%	\$43.77	\$839.57	\$0.0913
9,200	\$0.0865	\$795.80	6.00%	\$47.75	\$843.55	\$0.0917
9,200	\$0.0865	\$795.80	6.50%	\$51.73	\$847.53	\$0.0921
9,200	\$0.0865	\$795.80	7.00%	\$55.71	\$851.51	\$0.0926
9,200	\$0.0865	\$795.80	7.50%	\$59.69	\$855.49	\$0.0930
9,200	\$0.0865	\$795.80	8.00%	\$63.66	\$859.46	\$0.0934
9,200	\$0.0865	\$795.80	8.50%	\$67.64	\$863.44	\$0.0939
9,200	\$0.0865	\$795.80	9.00%	\$71.62	\$867.42	\$0.0943
9,200	\$0.0865	\$795.80	9.50%	\$75.60	\$871.40	\$0.0947
9,200	\$0.0865	\$795.80	10.00%	\$79.58	\$875.38	\$0.0952
9,200	\$0.0865	\$795.80	10.50%	\$83.56	\$879.36	\$0.0956
9,200	\$0.0865	\$795.80	11.00%	\$87.54	\$883.34	\$0.0960
9,200	\$0.0865	\$795.80	11.50%	\$91.52	\$887.32	\$0.0964
9,200	\$0.0865	\$795.80	12.00%	\$95.50	\$891.30	\$0.0969
9,200	\$0.0865	\$795.80	12.50%	\$99.48	\$895.28	\$0.0973
9,200	\$0.0865	\$795.80	13.00%	\$103.45	\$899.25	\$0.0977
9,200	\$0.0865	\$795.80	13.50%	\$107.43	\$903.23	\$0.0982
9,200	\$0.0865	\$795.80	14.00%	\$111.41	\$907.21	\$0.0986
9,200	\$0.0865	\$795.80	14.50%	\$115.39	\$911.19	\$0.0990
9,200	\$0.0865	\$795.80	15.00%	\$119.37	\$915.17	\$0.0995
9,200	\$0.0865	\$795.80	15.50%	\$123.35	\$919.15	\$0.0999
9,200	\$0.0865	\$795.80	16.00%	\$127.33	\$923.13	\$0.1003
9,200	\$0.0865	\$795.80	16.50%	\$131.31	\$927.11	\$0.1008
9,200	\$0.0865	\$795.80	17.00%	\$135.29	\$931.09	\$0.1012
9,200	\$0.0865	\$795.80	17.50%	\$139.27	\$935.07	\$0.1016
9,200	\$0.0865	\$795.80	18.00%	\$143.24	\$939.04	\$0.1021
9,200	\$0.0865	\$795.80	18.50%	\$147.22	\$943.02	\$0.1025
9,200	\$0.0865	\$795.80	19.00%	\$151.20	\$947.00	\$0.1029
9,200	\$0.0865	\$795.80	19.50%	\$155.18	\$950.98	\$0.1034
9,200	\$0.0865	\$795.80	20.00%	\$159.16	\$954.96	\$0.1038
9,200	\$0.0865	\$795.80	20.50%	\$163.14	\$958.94	\$0.1042
9,200	\$0.0865	\$795.80	21.00%	\$167.12	\$962.92	\$0.1047
9,200	\$0.0865	\$795.80	21.50%	\$171.10	\$966.90	\$0.1051
9,200	\$0.0865	\$795.80	22.00%	\$175.08	\$970.88	\$0.1055
9,200	\$0.0865	\$795.80	22.50%	\$179.06	\$974.86	\$0.1060
9,200	\$0.0865	\$795.80	23.00%	\$183.03	\$978.83	\$0.1064
9,200	\$0.0865	\$795.80	23.50%	\$187.01	\$982.81	\$0.1068
9,200	\$0.0865	\$795.80	24.00%	\$190.99	\$0.06	\$0.0000
9,200	\$0.0865	\$795.80	24.50%	\$194.97	\$990.77	\$0.1077
9,200	\$0.0865	\$795.80	25.00%	\$198.95	\$994.75	\$0.1081
9,200	\$0.0865	\$795.80	25.50%	\$202.93	\$998.73	\$0.1086
9,200	\$0.0865	\$795.80	26.00%	\$206.91	\$1,002.71	\$0.1090
9,200	\$0.0865	\$795.80	26.50%	\$210.89	\$1,006.69	\$0.1094
9,200	\$0.0865	\$795.80	27.00%	\$214.87	\$1,010.67	\$0.1099
9,200	\$0.0865	\$795.80	27.50%	\$218.85	\$1,014.65	\$0.1103
9,200	\$0.0865	\$795.80	28.00%	\$222.82	\$1,018.62	\$0.1107
9,200	\$0.0865	\$795.80	28.50%	\$226.80	\$1,022.60	\$0.1112
9,200	\$0.0865	\$795.80	29.00%	\$230.78	\$1,026.58	\$0.1116
9,200	\$0.0865	\$795.80	29.50%	\$234.76	\$1,030.56	\$0.1120
9,200	\$0.0865	\$795.80	30.00%	\$238.74	\$1,034.54	\$0.1125
9,200	\$0.0865	\$795.80	30.50%	\$242.72	\$1,038.52	\$0.1129
9,200	\$0.0865	\$795.80	31.00%	\$246.70	\$1,042.50	\$0.1133
9,200	\$0.0865	\$795.80	31.50%	\$250.68	\$1,046.48	\$0.1137
9,200	\$0.0865	\$795.80	32.00%	\$254.66	\$1,050.46	\$0.1142
9,200	\$0.0865	\$795.80	32.50%	\$258.64	\$1,054.44	\$0.1146
9,200	\$0.0865	\$795.80	33.00%	\$262.61	\$1,058.41	\$0.1150
9,200	\$0.0865	\$795.80	33.50%	\$266.59	\$1,062.39	\$0.1155
9,200	\$0.0865	\$795.80	34.00%	\$270.57	\$1,066.37	\$0.1159
9,200	\$0.0865	\$795.80	34.50%	\$274.55	\$1,070.35	\$0.1163
9,200	\$0.0865	\$795.80	35.00%	\$278.53	\$1,074.33	\$0.1168
9,200	\$0.0865	\$795.80	35.50%	\$282.51	\$1,078.31	\$0.1172
9,200	\$0.0865	\$795.80	36.00%	\$286.49	\$1,082.29	\$0.1176
9,200	\$0.0865	\$795.80	36.50%	\$290.47	\$1,086.27	\$0.1181
9,200	\$0.0865	\$795.80	37.00%	\$294.45	\$1,090.25	\$0.1185
9,200	\$0.0865	\$795.80	37.50%	\$298.43	\$1,094.23	\$0.1189
9,200	\$0.0865	\$795.80	38.00%	\$302.40	\$1,098.20	\$0.1194
9,200	\$0.0865	\$795.80	38.50%	\$306.38	\$1,102.18	\$0.1198
9,200	\$0.0865	\$795.80	39.00%	\$310.36	\$1,106.16	\$0.1202
9,200	\$0.0865	\$795.80	39.50%	\$314.34	\$1,110.14	\$0.1207
9,200	\$0.0865	\$795.80	40.00%	\$318.32	\$1,114.12	\$0.1211