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

Docket No. DG 21-XXX

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Winter 2021/2022 Cost of Gas–Keene Division

**DIRECT TESTIMONY
OF
DEBORAH M. GILBERTSON,
CATHERINE A. McNAMARA,
AND
DAVID B. SIMEK**

September 15, 2021



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Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty

Docket No. DG 21-XXX

Winter 2021/2022 Cost of Gas—Keene Division

Direct Testimony of D. Gilbertson, C. McNamara, and D. Simek

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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. (“LUSC”), which provides services
12 to Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty (“Liberty” or the
13 “Company”) and Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty.

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

15 A. We are testifying on behalf of Liberty’s Keene Division.

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

18 A. I graduated from Bentley College in Waltham, Massachusetts, in 1996 with a Bachelor of
19 Science in Management. In 1997, I was hired by Texas Ohio Gas where I was employed
20 as a Transportation Analyst. In 1999, I joined Reliant Energy, located in Burlington,

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

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

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

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

A. I graduated from Ferris State University in 1993 with a Bachelor of Science in Finance. I received a Master of Science in Finance from Walsh College in 2000. I also received a Master of Business Administration from Walsh College in 2001. In 2006, earned a

1 Graduate Certificate in Power Systems Management from Worcester Polytechnic
2 Institute. In August 2013, I joined LUSC as a Utility Analyst and I was promoted to
3 Manager, Rates and Regulatory Affairs in August 2017. Prior to my employment at
4 LUSC, I was employed by NSTAR Electric & Gas ("NSTAR") as a Senior Analyst in
5 Energy Supply from 2008 to 2012. Prior to my position in Energy Supply at NSTAR, I
6 was a Senior Financial Analyst with the NSTAR Investment Planning group from 2004
7 to 2008.

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

11 A. Yes, we have.

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

13 A. The purpose of our testimony is to explain the Company's proposed cost of gas rates for
14 its Keene Division for the 2021/2022 winter (peak) period to be effective beginning
15 November 1, 2021. Our testimony will also address bill comparisons and other items
16 related to the winter period.

17 **II. WINTER 2021/2022 COST OF GAS FACTOR**

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

19 A. The Company proposes a firm cost of gas rate of \$1.8741 per therm for the Keene
20 Division as shown on proposed First Revised Page 97.

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1 **Q. Please explain the calculation of the Cost of Gas rate on tariff page Proposed First**
2 **Revised Page 97.**

3 A. Proposed First Revised Page 97 contains the calculation of the 2021/2022 Winter Period
4 Cost of Gas Rate (“COG”) and summarizes the Company's forecast of propane and
5 compressed natural gas (“CNG”) sales and propane and CNG costs. The total anticipated
6 cost of the gas sendout from November 1, 2021, through April 30, 2022, is \$1,976,436.
7 The information presented on the tariff page is supported by Schedules A through J that
8 are described later in this testimony.

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

- 10 1) The prior period under-collection of \$69,913 is added from the anticipated cost of
11 gas sendout; and
12 2) Interest of \$399 is added to the anticipated cost of gas sendout. Schedule H
13 shows this forecasted interest calculation for the period May 2021 through April
14 2022. Interest is accrued using the monthly prime lending rate as reported by the
15 Federal Reserve Statistical Release of Selected Interest Rates.

16 The Non-Fixed Price Option (“Non-FPO”) cost of gas rate of \$1.8741 per therm was
17 calculated by dividing the Total Anticipated Cost of Gas of \$2,046,748 by the Projected
18 Gas Sales of 1,092,113 therms. The Fixed Price Option (“FPO”) rate of \$1.8941 per
19 therm was established by adding a \$0.02 per therm premium to the Non-FPO rate.

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1 **Q. Please describe Schedule A.**

2 A. Schedule A converts the gas volumes and unit costs from gallons to therms. The
3 1,145,029 therms represent gas propane sendout as detailed on Schedule B, line 3. The
4 blended unit cost of those supplies is \$1.4990 per therm which represents the weighted
5 average cost per therm for the winter period gas sendout as detailed on Schedule F, line
6 55.

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

8 A. Schedule B presents the (over)/under collection calculation for the Winter 2021/2022
9 period based on the forecasted volumes, the cost of gas, and applicable interest amounts.
10 The forecasted total propane sendout on line 3, plus total CNG sendout on line 8, is the
11 sum of the weather normalized 2021/2022 winter period firm sendout and company use.
12 The forecasted Firm Sales on line 27 represent weather normalized 2021/2022 winter
13 period firm sales. The weather normalization calculations for sendout and sales are found
14 in Schedules I and J, respectively.

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

16 A. Yes, CNG demand charges are included in Schedule B on line 11.

17 Schedule B, line 11 includes 75% of the 2021/2022 demand charges. These charges are
18 [REDACTED] per month or [REDACTED] for the season and represent the portion attributable to the
19 winter period.

1 **Q. Are incremental costs for prior winter periods related to the use of CNG vs.**
2 **propane included in this filing?**

3 A. Yes, prior winter period incremental costs are included at a rate of 50% for the winter of
4 2019/2020 and winter of 2020/2021, per Section 7.1 of the Settlement Agreement in
5 Docket No. DG 20-105. The calculation can be found on Schedule O.

6 **Q. What prior incremental costs are included in this filing?**

7 A. Incremental costs of \$66,299 for the winter of 2019/2020 are offset by the removal of
8 50% of the actual incremental costs or \$22,008 for the winter of 2020/2021. The net
9 incremental costs included in this filing are \$44,291. These items can be found on
10 Schedule B, lines 12–13. The incremental costs of \$68,263 reported in the DG 20-105
11 Settlement Agreement were a combination of actual and projected costs. The actual
12 incremental cost calculations can be found on Schedule P.

13 **Q. Are any projected incremental costs included for winter 2021/2022?**

14 A. No, there are no projected incremental costs included for winter 2021/2022. The
15 calculated incremental cost was only \$226 and deemed immaterial. This calculation can
16 be found on Schedule N.

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 0.19% for the twelve months ended June 30, 2021.

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 2021/2022 winter period, segregated by Propane Purchasing Stabilization Plan (“PPSP”)
4 purchases, available storage deliveries from Liberty’s Amherst facility, CNG deliveries,
5 and spot purchases.

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

9 Schedule E presents the forecasted market spot prices of propane. Column 1 of the
10 schedule represents the Mont Belvieu propane futures quotations as of August 31, 2021,
11 followed by projected broker fees, pipeline fees, PERC fees, supplier charges, and
12 trucking charges. Together, the pricing and fees make up the expected cost of spot
13 propane purchases as represented in Schedule C, line 31.

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

15 A. The PPSP, as approved in Order No. 24,617 in Docket No. DG 06-037, was again
16 implemented for the winter 2021/2022. As shown on Schedule D, the Company pre-
17 purchased 700,000 gallons of propane between April and September at a weighted
18 average price of \$1.2857 per gallon (\$1.4051 per therm), inclusive of broker, pipeline,
19 Propane Education & Research Council (“PERC”), and trucking charges in effect at the
20 time of the supplier’s bid.

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1 **Q. Have the pre-purchased volumes in the PPSP changed since 2020/2021?**

2 A. No. The volume remains at 700,000 gallons or 640,500 therms. The Keene Division
3 maintains a pre-purchase hedge of approximately 66%.

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

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

7 **Q. Please describe Schedule F.**

8 A. Schedule F contains the calculation of the weighted average cost of inventory for each
9 month through April 2022. The unit cost of projected gas to be sent out each month
10 utilizes this weighted average inventory cost, which is inclusive of all PPSP purchases,
11 spot purchases, Amherst storage withdrawals, and CNG deliveries. Note that the CNG
12 deliveries are shown in separate columns from the propane-weighted cost but are
13 included in the average winter rate, which is established on line 55 of Schedule F. This
14 mix of supply purchases is also itemized on Schedule C.

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

16 A. Schedule G shows the under-collected balance for the prior winter 2020/2021 period,
17 including interest calculated in a manner consistent with prior years. The under-collected
18 balance of \$38,715 (line 50) is shown on Schedule H, line 1, Column 1.

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

20 A. Schedule H presents the interest calculation and adjustments on (over)/under-collected
21 balances through April 2022. The prior period under-collection of \$38,715 plus

adjustments of \$29,104 plus interest of \$2,095 on that balance through October 31, 2021, are included on Schedule B, line 33, in the “Prior” column for a total of \$69,913. The adjustments of \$29,104 are primarily due to the demand charges allocated to the winter months that were booked May-21 thru July-21 at \$7,812.50 per month or 75% of the total demand charges per month. The remainder totaling \$5,666 is due to the timing of collections and the difference between accrued revenues and actual revenues. The forecasted monthly interest of \$399 for the winter 2021/2022 period in Column 8 is included on Schedule B, line 32. The adjusted prior period under-collection plus the interest amount is also included on the tariff page.

III. FIXED PRICE OPTION PROGRAM

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

A. The Company will offer the FPO program for the upcoming winter period to provide customers the opportunity to lock in their cost of gas rate. Enrollment in the program is limited to 50% of forecasted winter sales, with allotments made available to both residential and commercial customers on a first-come, first-served basis. The Company is forecasting that 12.4% of total sales volumes will enroll in the FPO program. The 12.4% is the five-year average FPO participation rate from winter 2016/2017 through the winter of 2020/2021.

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

A. Yes. As approved in Order No. 24,516 in Docket No. DG 05-144, the Company has added a \$0.02 per therm premium to the Non-FPO cost of gas rate to derive the FPO rate

of \$1.8941 per therm. The Company is not seeking an increase in the premium because participation, based on prior customer behavior, is expected to remain well below the 50% threshold.

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

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

IV. COST OF GAS RATE AND BILL COMPARISONS

Q. How does the proposed Winter 2021/2022 cost of gas rate compare with the previous winter's rate?

A. The proposed Non-FPO COG rate of \$1.8741 per therm is an increase of \$0.8488 or 82.8% from the winter 2021/2022 beginning rate of \$1.0253 per therm. The proposed FPO rate is \$1.8941 per therm, representing an increase of \$0.6641 per therm or 54.0% from last winter's beginning fixed rate of \$1.2300.

Q. What are the primary reasons for the change in rates?

A. The main reason for the \$0.8488 increase is due to the increase in supply costs because of market futures. This accounts for approximately 86.0% of the price increase. Production and storage costs of \$208,129, as included in the Settlement Agreement and approved in Order 26,505 in DG 20-105 account for 10.2% of the increase. The remaining 3.8% is attributable to prior period under collection, FPO premium, return on inventory, and interest.

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1 **Q. What is the impact of the Winter 2021/2022 COG rate on the typical residential heat**
2 **and hot water customer participating in the FPO program?**

3 A. As shown on Schedule K-1, Column 7, lines 30 and 31, the typical residential heat and
4 hot water FPO customer would experience an increase of \$379.38 or 81.2% in the gas
5 component of their bills compared to the prior winter period. When the monthly
6 customer charge, therm delivery charge, and LDAC are factored into the analysis, the
7 typical customer would see a total bill increase of \$427.81 or 50.9%, as shown on lines
8 37 and 38. The LDAC rate used in Schedule K-1, line 32 is the LDAC rate proposed in
9 the currently pending COG Filing for the Company's EnergyNorth system, Docket No.
10 DG 21-130.

11 **Q. What is the impact of the Winter 2021/2022 COG rate on the typical residential heat**
12 **and hot water customer choosing the Non-FPO program?**

13 A. As shown on Schedule K-2, Column 7, lines 30 and 31, the typical residential heat and
14 hot water Non-FPO customer is projected to see an increase of \$380.82 or 83.4% in the
15 gas component of their bills compared to the prior winter period. When the monthly
16 customer charge, therm delivery charge, and LDAC are factored into the analysis, the
17 typical customer would see a total bill increase of \$431.30 or 52% 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 21-130.

3 **Q. Please describe the impact of the Winter 2021/2022 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 \$1,464.16
6 or 81.5% increase in the gas component of their bill and a 52.6% increase in their total
7 bill. Schedule L-2 shows that the typical commercial Non-FPO customer would see
8 increases of \$1,819.54 or 129.4% increase in the gas component of their bill and 75.2%
9 increase in their total bill.

10 **V. OTHER ITEMS**

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

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. After an RFP
15 process, the Company entered a new contract with Xpress Natural Gas (XNG), which
16 went into effect July 1, 2021. The Company will otherwise follow the guidelines from
17 the recent rate case settlement and order to continue the conversion of the Keene Division
18 to natural gas.

19 **Q. What is the price differential between the cost of spot propane and the cost of CNG?**

20 A. For the upcoming peak period the cost differential between spot propane and CNG is
21 .0091 cents per therm more expensive for CNG over the cost of spot propane. The

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1 calculation is Spot Purchases cost per therm found on Schedule C, line 31 less the CNG
2 Deliveries cost per therm found on Schedule C, line 24.

3 **Q. Does that comparison include the CNG demand charge?**

4 A. Yes.

5 **Q. Has there been any change to the allocation of the demand charge between the**
6 **summer and winter as compared to last year?**

7 A. Yes, the Company previously allocated 80% of the demand charge to the winter period,
8 and 20% of the demand charge to the summer period. In Order No. 26,505 (July 30,
9 2021), the Commission approved the Settlement Agreement in the Company's recent rate
10 case, which adjusted this allocation to 75% in the winter period and 25% in the summer.

11 **Q. Can you comment on why the commodity price of propane has increased**
12 **significantly over last year, yet the price of CNG has fallen?**

13 A. Yes, as with natural gas, propane national inventories are currently below their six-year
14 average. This, coupled with the increasing ability and financial incentive for producers to
15 ship propane out of the country, has meant that the propane stocks have not been
16 replenished at a rate necessary for the market to be comfortable by the onset of the winter
17 season demand. For the CNG cost, with the new CNG contract which went into effect
18 July 1 2021, the Company was able to secure more favorable terms for pricing over the
19 previous contract price terms.

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

2 A. The Company has net storage capacity at its plant in Keene for approximately 75,000
3 gallons of propane. Additionally, Liberty has approximately 129,800 gallons of propane
4 at the Amherst storage facility located approximately 50 miles from the Keene plant.
5 This storage facility is partially shared between the Keene Division and EnergyNorth. In
6 addition, the Company will arrange its standard trucking commitment with Northern Gas
7 Transport, Inc. for transportation from this storage facility to the Keene plant. Further,
8 the Company has contracted for CNG deliveries to provide service to a small section of
9 its system. The firm trucking arrangement coupled with onsite CNG trailers are more
10 than enough to meet the 7-day demand requirement for those customers being served
11 exclusively by CNG for the 2021/2022 peak period.

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

13 A. Yes, it does.

LIBERTY - KEENE DIVISION

COST OF GAS RATE FILING - DG 21-XXX

WINTER PERIOD 2021 - 2022

ORIGINAL FILING

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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, 2021 through April 30, 2022

Projected Gas Sales - therms 1,092,113

Total Calculated Cost of Gas Sendout	\$1,757,930
Indirect Costs from DG 20-105	\$208,129
Return on Inventory	<u>\$10,377</u>
Total Anticipated Cost of Gas Sendout	\$1,976,436

Add:	Prior Period Deficiency Uncollected Interest	\$69,913
		\$399

Deduct:	Prior Period Excess Collected Interest	0
		0

Prior Period Adjustments and Interest	\$70,312
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Total Anticipated Cost	<u>\$2,046,748</u>
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<u>Cost of Gas Rate</u>	<u>Excluding Gas Assistance Program</u>	<u>Gas Assistance Program</u>
Non-Fixed Price Option Cost of Gas Rate - Beginning Period (per therm)	<u>\$1.8741</u>	<u>\$1.0308</u>
Mid Period Adjustment - December 1, 2021	\$0.0000	\$0.0000
Mid Period Adjustment - January 1, 2022	\$0.0000	\$0.0000
Mid Period Adjustment - February 1, 2022	\$0.0000	\$0.0000
Mid Period Adjustment - March 1, 2022	\$0.0000	\$0.0000
Mid Period Adjustment - April 1, 2022	\$0.0000	\$0.0000
Revised Non-Fixed Price Option Cost of Gas Rate - Effective November 1, 2021 (per therm)	<u>\$1.8741</u>	<u>\$1.0308</u>
Fixed Price Option Cost of Gas Rate (per therm) November 2021-April 2022	<u>\$1.8941</u>	<u>\$1.0418</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>\$2.3426</u>	<u>\$1.0308</u>

DATED: xxx xx, 2021

EFFECTIVE: November 1, 2021

ISSUED BY: /s/ Neil Proudman

Neil Proudman

TITLE: President

Authorized by NHPUC Order No. xx,xxx dated October xx, 2021 in Docket No. DG 21-xxx

NHPUC No.11 GAS

LIBERTY UTILITIES

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~~
 Period Covered: Winter Period November 1, 2021 through April 30, 2022

Projected Gas Sales - therms	\$ 1,108,419	\$ 1,092,113
Total Calculated Cost of Gas Sendout	\$ 1,310,950	\$ 1,757,930
Indirect Costs from DG 20-105		\$ 208,129
Return on Inventory	\$ (204,764)	\$ 10,377
Total Anticipated Cost of Gas Sendout	\$ 1,106,196	\$ 1,976,436

Add:	Prior Period Deficiency Uncollected	\$ 30,174	\$ 69,913
	Interest	\$ 136	\$ 399

Deduct:	Prior Period Excess Collected	\$ -	\$ -
	Interest	\$ -	\$ -

Prior Period Adjustments and Interest	\$ 30,307	\$ 70,312
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Total Anticipated Cost	\$ 1,136,503	\$ 2,046,748
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<u>Cost of Gas Rate</u>	Excluding Gas Assistance Program		Excluding Gas Assistance Program	
	Gas Assistance Program	Gas Assistance Program	Gas Assistance Program	Gas Assistance Program
Non-Fixed Price Option Cost of Gas Rate - Beginning Period (per therm)	\$ 1.0253	\$ 0.5639	\$ 1.8741	\$ 1.0308
Mid Period Adjustment - December 1, 2020 December 1, 2021	\$ -	\$ -	\$ -	\$ -
Mid Period Adjustment - January 1, 2021 January 1, 2022	\$ (0.0283)	\$ (0.0156)	\$ -	\$ -
Mid Period Adjustment - February 1, 2021 February 1, 2022	\$ (0.0042)	\$ (0.0023)	\$ -	\$ -
Mid Period Adjustment - March 1, 2021 March 1, 2022	\$ -	\$ -	\$ -	\$ -
Mid Period Adjustment - April 1, 2021 April 1, 2022	\$ 0.2888	\$ 0.1588	\$ -	\$ -
Revised Non-Fixed Price Option Cost of Gas Rate - Effective April 1, 2021 Effective April 1, 2022 (per therm)	\$ 1.2816	\$ 0.7048	\$ 1.8741	\$ 1.0308
Fixed Price Option Cost of Gas Rate (per therm) November 2020-April 2021 November 2021-April 2022	\$ 1.0277	\$ 0.5652	\$ 1.8941	\$ 1.0418

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)	\$ 1.2816	\$ 0.7049	\$ 2.3426	\$ 1.0308
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DATED: xxx xx, 2021
~~DATED: March 24, 2020~~
 EFFECTIVE: November 1, 2021
~~EFFECTIVE: April 01, 2020~~

ISSUED BY: /s/ Neil Proudman
 Neil Proudman
 TITLE: President

Authorized by NHPUC Order No. xx,xxx dated October xx, 2021 in Docket No. DG 21-xxx
~~Authorized by NHPUC Order No. 26,421 dated October 30, 2020, in Docket No. DG 20-152~~

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LIBERTY UTILITIES

Proposed Second Revised Page 88
Superseding First Revised Page 88

	Rates Effective November 1, 2021 - April 30, 2022				Rates Effective September 1, 2021 - October 31, 2021			
	Winter Period				Summer Period			
	<u>Delivery Charge</u>	<u>Cost of Gas Rate Page 97</u>	<u>LDAC Page 101</u>	<u>Total Rate</u>	<u>Delivery Charge</u>	<u>Cost of Gas Rate Page 93</u>	<u>LDAC Page 101</u>	<u>Total Rate</u>
<u>Residential Non Heating - R-1</u>								
Customer Charge per Month per Meter	\$ 15.39			\$ 15.39	\$ 15.39			\$ 15.39
All therms	\$ 0.3844	\$ 1.8741	\$ 0.0589	\$ 2.3174	\$ 0.3844	\$ 1.3440	\$ 0.0310	\$ 1.7594
<u>Residential Heating - R-3</u>								
Customer Charge per Month per Meter	\$ 15.39			\$ 15.39	\$ 15.39			\$ 15.39
All therms over the first block per month at	\$ 0.5632	\$ 1.8741	\$ 0.0589	\$ 2.4962	\$ 0.5632	\$ 1.3440	\$ 0.0310	\$ 1.9382
<u>Residential Heating - R-4</u>								
Customer Charge per Month per Meter	\$ 8.47			\$ 8.47	\$ 15.39			\$ 15.39
All therms over the first block per month at	\$ 0.3098	\$ 1.0308	\$ 0.0589	\$ 1.3995	\$ 0.5632	\$ 1.3440	\$ 0.0310	\$ 1.9382
<u>Commercial/Industrial - G-41</u>								
Customer Charge per Month per Meter	\$ 57.06			\$ 57.06	\$ 57.06			\$ 57.06
Size of the first block	100 therms				20 therms			
Therms in the first block per month at	\$ 0.4688	\$ 1.8741	\$ 0.0555	\$ 2.3984	\$ 0.4688	\$ 1.3440	\$ 0.0478	\$ 1.8606
All therms over the first block per month at	\$ 0.3149	\$ 1.8741	\$ 0.0555	\$ 2.2445	\$ 0.3149	\$ 1.3440	\$ 0.0478	\$ 1.7067
<u>Commercial/Industrial - G-42</u>								
Customer Charge per Month per Meter	\$ 171.19			\$ 171.19	\$ 171.19			\$ 171.19
Size of the first block	1000 therms				400 therms			
Therms in the first block per month at	\$ 0.4261	\$ 1.8741	\$ 0.0555	\$ 2.3557	\$ 0.4261	\$ 1.3440	\$ 0.0478	\$ 1.8179
All therms over the first block per month at	\$ 0.2839	\$ 1.8741	\$ 0.0555	\$ 2.2135	\$ 0.2839	\$ 1.3440	\$ 0.0478	\$ 1.6757
<u>Commercial/Industrial - G-43</u>								
Customer Charge per Month per Meter	\$ 734.69			\$ 734.69	\$ 734.69			\$ 734.69
All therms over the first block per month at	\$ 0.2620	\$ 1.8741	\$ 0.0555	\$ 2.1916	\$ 0.1198	\$ 1.3440	\$ 0.0478	\$ 1.5116
<u>Commercial/Industrial - G-51</u>								
Customer Charge per Month per Meter	\$ 57.06			\$ 57.06	\$ 57.06			\$ 57.06
Size of the first block	100 therms				100 therms			
Therms in the first block per month at	\$ 0.2819	\$ 1.8741	\$ 0.0555	\$ 2.2115	\$ 0.2819	\$ 1.3440	\$ 0.0478	\$ 1.6737
All therms over the first block per month at	\$ 0.1833	\$ 1.8741	\$ 0.0555	\$ 2.1129	\$ 0.1833	\$ 1.3440	\$ 0.0478	\$ 1.5751
<u>Commercial/Industrial - G-52</u>								
Customer Charge per Month per Meter	\$ 171.19			\$ 171.19	\$ 171.19			\$ 171.19
Size of the first block	1000 therms				1000 therms			
Therms in the first block per month at	\$ 0.2428	\$ 1.8741	\$ 0.0555	\$ 2.1724	\$ 0.1759	\$ 1.3440	\$ 0.0478	\$ 1.5677
All therms over the first block per month at	\$ 0.1617	\$ 1.8741	\$ 0.0555	\$ 2.0913	\$ 0.1000	\$ 1.3440	\$ 0.0478	\$ 1.4918
<u>Commercial/Industrial - G-53</u>								
Customer Charge per Month per Meter	\$ 756.10			\$ 756.10	\$ 756.10			\$ 756.10
All therms over the first block per month at	\$ 0.1697	\$ 1.8741	\$ 0.0555	\$ 2.0993	\$ 0.0814	\$ 1.3440	\$ 0.0478	\$ 1.4732
<u>Commercial/Industrial - G-54</u>								
Customer Charge per Month per Meter	\$ 756.10			\$ 756.10	\$ 756.10			\$ 756.10
All therms over the first block per month at	\$ 0.0648	\$ 1.8741	\$ 0.0555	\$ 1.9944	\$ 0.0352	\$ 1.3440	\$ 0.0478	\$ 1.4270

DATED: xxx xx, 2021

EFFECTIVE: November 1, 2021

ISSUED BY: /s/Neil Proudman

Neil Proudman

TITLE: President

Authorized by NHPUC Order No. xx,xxx dated October xx, 2021 in Docket No. DG 21-xxx

NHPUC No.11 GAS
LIBERTY UTILITIES

Proposed Second Revised Page 88
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	Rates Effective April 1, 2021 – April 30, 2021 Rates Effective November 1, 2021 - April 30, 2022 Winter Period				Rates Effective July 1, 2020 – October 31, 2020 Rates Effective September 1, 2021 - October 31, 2021 Summer Period [1]			
	Delivery Charge	Cost of Gas Rate Page 97	LDAC Page 101	Total Rate	Delivery Charge	Cost of Gas Rate Page 93	LDAC Page 101	Total Rate
Residential Non Heating - R-1	\$ 15.50			\$ 15.50	\$ 15.20			\$ 15.20
Customer Charge per Month per Meter	\$ 15.39			\$ 15.39	\$ 15.39			\$ 15.39
All therms	\$ 0.3844	\$ 1.8741	\$ 0.0589	\$ 2.3174	\$ 0.3844	\$ 1.3440	\$ 0.0310	\$ 1.7594
	\$ 0.3860	\$ 1.2816	\$ 0.0589	\$ 1.7265	\$ 0.3786	\$ 0.7908	\$ 0.0310	\$ 1.2004
Residential Heating - R-3	\$ 15.50			\$ 15.50	\$ 15.20			\$ 15.20
Customer Charge per Month per Meter	\$ 15.39			\$ 15.39	\$ 15.39			\$ 15.39
All therms over the first block per month at	\$ 0.5632	\$ 1.8741	\$ 0.0589	\$ 2.4962	\$ 0.5632	\$ 1.3440	\$ 0.0660	\$ 1.9732
	\$ 0.5678	\$ 1.2816	\$ 0.0589	\$ 1.9083	\$ 0.5569	\$ 0.7908	\$ 0.0310	\$ 1.3787
Residential Heating - R-4	\$ 8.53			\$ 8.53	\$ 6.08			\$ 6.08
Customer Charge per Month per Meter	\$ 8.47			\$ 8.47	\$ 15.39			\$ 15.39
All therms over the first block per month at	\$ 0.3098	\$ 1.8741	\$ 0.0589	\$ 2.2428	\$ 0.5632	\$ 1.3440	\$ 0.0310	\$ 1.9382
	\$ 0.3123	\$ 0.7048	\$ 0.0589	\$ 1.0760	\$ 0.2228	\$ 0.7908	\$ 0.0310	\$ 1.0446
Commercial/Industrial - G-41	\$ 57.46			\$ 57.46	\$ 56.36			\$ 56.36
Customer Charge per Month per Meter	\$ 57.06			\$ 57.06	\$ 57.06			\$ 57.06
Size of the first block	100 therms				20 therms			
Therms in the first block per month at	\$ 0.4688	\$ 1.8741	\$ 0.0555	\$ 2.3984	\$ 0.4688	\$ 1.3440	\$ 0.0478	\$ 1.8606
	\$ 0.4711	\$ 1.2816	\$ 0.0555	\$ 1.8082	\$ 0.4621	\$ 0.7908	\$ 0.0478	\$ 1.3007
All therms over the first block per month at	\$ 0.3149	\$ 1.8741	\$ 0.0555	\$ 2.2445	\$ 0.3149	\$ 1.3440	\$ 0.0478	\$ 1.7067
	\$ 0.3165	\$ 1.2816	\$ 0.0555	\$ 1.6536	\$ 0.3104	\$ 0.7908	\$ 0.0478	\$ 1.1490
Commercial/Industrial - G-42	\$ 172.39			\$ 172.39	\$ 169.09			\$ 169.09
Customer Charge per Month per Meter	\$ 171.19			\$ 171.19	\$ 171.19			\$ 171.19
Size of the first block	1000 therms				400 therms			
Therms in the first block per month at	\$ 0.4261	\$ 1.8741	\$ 0.0555	\$ 2.3557	\$ 0.4261	\$ 1.3440	\$ 0.0478	\$ 1.8179
	\$ 0.4284	\$ 1.2816	\$ 0.0555	\$ 1.7655	\$ 0.4202	\$ 0.7908	\$ 0.0478	\$ 1.2588
All therms over the first block per month at	\$ 0.2839	\$ 1.8741	\$ 0.0555	\$ 2.2135	\$ 0.2839	\$ 1.3440	\$ 0.0478	\$ 1.6757
	\$ 0.2855	\$ 1.2816	\$ 0.0555	\$ 1.6226	\$ 0.2800	\$ 0.7908	\$ 0.0478	\$ 1.1186
Commercial/Industrial - G-43	\$ 739.83			\$ 739.83	\$ 725.65			\$ 725.65
Customer Charge per Month per Meter	\$ 734.69			\$ 734.69	\$ 734.69			\$ 734.69
All therms over the first block per month at	\$ 0.2620	\$ 1.8741	\$ 0.0555	\$ 2.1916	\$ 0.1198	\$ 1.3440	\$ 0.0478	\$ 1.5116
	\$ 0.2633	\$ 1.2816	\$ 0.0555	\$ 1.6004	\$ 0.1181	\$ 0.7908	\$ 0.0478	\$ 0.9567
Commercial/Industrial - G-51	\$ 57.46			\$ 57.46	\$ 56.36			\$ 56.36
Customer Charge per Month per Meter	\$ 57.06			\$ 57.06	\$ 57.06			\$ 57.06
Size of the first block	100 therms				100 therms			
Therms in the first block per month at	\$ 0.2819	\$ 1.8741	\$ 0.0555	\$ 2.2115	\$ 0.2819	\$ 1.3440	\$ 0.0478	\$ 1.6737
	\$ 0.2839	\$ 1.2816	\$ 0.0555	\$ 1.6210	\$ 0.2785	\$ 0.7908	\$ 0.0478	\$ 1.1174
All therms over the first block per month at	\$ 0.1833	\$ 1.8741	\$ 0.0555	\$ 2.1129	\$ 0.1833	\$ 1.3440	\$ 0.0478	\$ 1.5751
	\$ 0.1846	\$ 1.2816	\$ 0.0555	\$ 1.5217	\$ 0.1811	\$ 0.7908	\$ 0.0478	\$ 1.0197
Commercial/Industrial - G-52	\$ 172.39			\$ 172.39	\$ 169.09			\$ 169.09
Customer Charge per Month per Meter	\$ 171.19			\$ 171.19	\$ 171.19			\$ 171.19
Size of the first block	1000 therms				1000 therms			
Therms in the first block per month at	\$ 0.2428	\$ 1.8741	\$ 0.0555	\$ 2.1724	\$ 0.1759	\$ 1.3440	\$ 0.0478	\$ 1.5677
	\$ 0.2439	\$ 1.2816	\$ 0.0555	\$ 1.5810	\$ 0.1733	\$ 0.7908	\$ 0.0478	\$ 1.0119
All therms over the first block per month at	\$ 0.1617	\$ 1.8741	\$ 0.0555	\$ 2.0913	\$ 0.1000	\$ 1.3440	\$ 0.0478	\$ 1.4918
	\$ 0.1624	\$ 1.2816	\$ 0.0555	\$ 1.4995	\$ 0.0985	\$ 0.7908	\$ 0.0478	\$ 0.9374
Commercial/Industrial - G-53	\$ 761.39			\$ 761.39	\$ 746.81			\$ 746.81
Customer Charge per Month per Meter	\$ 756.10			\$ 756.10	\$ 756.10			\$ 756.10
All therms over the first block per month at	\$ 0.1697	\$ 1.8741	\$ 0.0555	\$ 2.0993	\$ 0.0814	\$ 1.3440	\$ 0.0478	\$ 1.4732
	\$ 0.1705	\$ 1.2816	\$ 0.0555	\$ 1.5076	\$ 0.0802	\$ 0.7908	\$ 0.0478	\$ 0.9188
Commercial/Industrial - G-54	\$ 761.39			\$ 761.39	\$ 746.81			\$ 746.81
Customer Charge per Month per Meter	\$ 756.10			\$ 756.10	\$ 756.10			\$ 756.10
All therms over the first block per month at	\$ 0.0648	\$ 1.8741	\$ 0.0555	\$ 1.9944	\$ 0.0352	\$ 1.3440	\$ 0.0478	\$ 1.4270
	\$ 0.0650	\$ 1.2816	\$ 0.0555	\$ 1.4021	\$ 0.0346	\$ 0.7908	\$ 0.0478	\$ 0.8732

DATED: xxx xx, 2021
DATED: June 24, 2020
EFFECTIVE: November 1, 2021
EFFECTIVE: July 01, 2020

ISSUED BY: /s/ Neil Proudman
Neil Proudman
TITLE: President

Authorized by NHPUC Order No. xx,xxx dated October xx, 2021 in Docket No. DG 21-xxx
Authorized by NHPUC Order No. 26,421 dated October 30, 2020, in Docket No. DG 20-152

REDACTED
SCHEDULE A

LIBERTY - KEENE DIVISION

CONVERSION OF COSTS - GALLONS TO THERMS
WINTER PERIOD 2021 - 2022

	(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>
1 GAS FROM INVENTORY	GALLONS	0.91502			\$1.3527	\$1.4783
2 GAS FROM CNG	THERMS	N/A	N/A		N/A	
3 TOTAL				<u>1,145,029</u>		

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LIBERTY - KEENE DIVISION

CALCULATION OF COST OF GAS RATE
SUPPLY / DEMAND BALANCE
WINTER PERIOD 2021 - 2022

	PRIOR	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	TOTAL
PROPANE COSTS								
1 PROPANE FIRM SENDOUT (therms)								
2 COMPANY USE (therms)								
3 TOTAL PROPANE SENDOUT (therms)								
4 COST PER THERM (WACOG)		\$1.4772	\$1.4698	\$1.4533	\$1.4568	\$1.5530	\$1.4748	
5 TOTAL CALCULATED COST OF PROPANE		\$178,858	\$275,424	\$322,930	\$287,093	\$247,252	\$133,239	\$1,444,796
6 INDIRECT COSTS FROM DG 20-105		\$34,688	\$34,688	\$34,688	\$34,688	\$34,688	\$34,688	\$208,129
7 PROPANE ADJUSTMENTS								
8 TOTAL COST OF PROPANE		\$213,546	\$310,112	\$357,618	\$321,781	\$281,940	\$167,927	\$1,652,925
CNG COSTS								
8 CNG SENDOUT (therms)								
9 COST PER THERM (WACOG)								
10 TOTAL CALCULATED COST OF CNG								
11 CNG DEMAND CHARGES								
12 INCREMENTAL COSTS WINTER 2019-2020 PER Order # 26,505 in DG 20-105								
13 INCREMENTAL COSTS WINTER 2020-2021 PER Order # 26,505 in DG 20-105								
14 TOTAL CNG COSTS								
15 ACCOUNTING ADJUSTMENT		\$0	\$0	\$0	\$0	\$0	\$0	\$0
16 FPO PREMIUM		(\$333)	(\$518)	(\$615)	(\$545)	(\$445)	(\$252)	(\$2,708)
17 TOTAL COSTS OF GAS								
18 RETURN ON INVENTORY		\$1,729	\$1,729	\$1,729	\$1,729	\$1,729	\$1,729	\$10,377
REVENUES								
19 BILLED FPO SALES (therms)		0	0	0	0	0	0	
20 COG FPO RATE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	
		\$0	\$0	\$0	\$0	\$0	\$0	\$0
21 BILLED NON-FPO SALES PRIOR MONTH (therms)		0	0	0	0	0	0	
22 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
23 BILLED NON-FPO SALES CURRENT MONTH (therms)		134,349	209,008	248,017	219,653	179,426	101,660	1,092,113
24 COG NON-FPO RATE CURRENT MONTH		\$1.8741	\$1.8741	\$1.8741	\$1.8741	\$1.8741	\$1.8741	
		\$251,786	\$391,705	\$464,813	\$411,655	\$336,265	\$190,523	\$2,046,748
25 BILLED SALES OTHER PRIOR PERIODS		0	0	0	0	0	0	
26 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
27 TOTAL SALES		134,349	209,008	248,017	219,653	179,426	101,660	1,092,113
28 TOTAL BILLED REVENUES		\$251,786	\$391,705	\$464,813	\$411,655	\$336,265	\$190,523	\$2,046,747
29 UNBILLED REVENUES (NET)		\$0	\$0	\$0	\$0	\$0	\$0	\$0
30 TOTAL REVENUES		\$251,786	\$391,705	\$464,813	\$411,655	\$336,265	\$190,523	\$2,046,747
31 (OVER)/UNDER COLLECTION		\$7,138	(\$22,567)	(\$41,651)	(\$29,901)	\$219	\$16,448	(\$70,311)
32 INTEREST AMOUNT		\$199	\$179	\$92	(\$4)	(\$45)	(\$22)	\$399
33 FINAL (OVER)/UNDER COLLECTION		\$69,913	\$7,337	(\$22,388)	(\$41,559)	\$174	\$16,426	\$1

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LIBERTY - KEENE DIVISION

CALCULATION OF PURCHASED GAS COSTS
WINTER PERIOD 2021 - 2022

LINE NO.		Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	TOTAL
1	TOTAL REQUIRED PURCHASES							
2	<u>PROPANE PURCHASE STABILIZATION PLAN DELIVERIES</u>							
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	\$1.4051	\$1.4051	\$1.4051	\$1.4051	\$1.4051	\$1.4051	
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	\$1.4051	\$1.4051	\$1.4051	\$1.4051	\$1.4051	\$1.4051	\$1.4051
11	TOTAL COST - Propane Purchase Stabilization Plan Deliveries	\$118,284	\$179,998	\$212,141	\$173,570	\$134,999	\$80,999	\$899,991
12	<u>AMHERST STORAGE PROPANE DELIVERIES</u>							
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	\$1.4200	\$1.4200	\$1.4200	\$1.4200	\$1.4200	
16	Trucking Fee	\$0.0000	\$0.0650	\$0.0650	\$0.0650	\$0.0650	\$0.0650	
17	COST PER THERM	\$0.0000	\$1.4850	\$1.4850	\$1.4850	\$1.4850	\$1.4850	\$1.4850
18	TOTAL COST - Amherst Storage Propane Deliveries	\$0	\$37,048	\$70,567	\$49,397	\$14,113	\$5,293	\$176,418
19	<u>CNG DELIVERIES</u>							
20	THERMS							
21	RATE							
22								
23	COST PER THERM							
24								
25	COST - CNG							
26								
27	TOTAL CNG							
28	<u>SPOT PURCHASES</u>							
29	THERMS							
30	From Schedule E							
31	COST PER THERM	\$1.6901	\$1.6743	\$1.6566	\$1.6238	\$1.5657	\$1.4571	\$1.6100
32	TOTAL COST - Spot Purchases							
33	<u>OTHER ITEMS</u>							
34	Storage	\$0	\$0	\$0	\$0	\$0	\$0	\$0
35	Refund of Deferred Revenue Surcharge over collection	\$0	\$0	\$0	\$0	\$0	\$0	\$0
36	TOTAL OTHER ITEMS	\$0	\$0	\$0	\$0	\$0	\$0	\$0
37	<u>TOTAL</u>							
38	THERMS FROM PROPANE							
39	COST							
40	THERMS FROM CNG							
41	COST							
42	COST PER THERM	\$1.5377	\$1.4834	\$1.4603	\$1.4788	\$1.4840	\$1.4801	\$1.4837

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SCHEDULE D

LIBERTY - KEENE DIVISION

PROPANE PURCHASING STABILIZATION PLAN
WINTER PERIOD 2021 - 2022

Line
No.

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

11	Delivery Price per Gallon	\$1.3303	\$1.3229	\$1.3152	\$1.2881	\$1.2234	\$1.1591	
12	Total Cost	\$122,389	\$185,211	\$217,006	\$173,897	\$128,454	\$73,021	\$899,979
13	Weighted Average Winter Contract Price per gallon							\$1.2857
14	Weighted Average Winter Contract Price per therm							\$1.4051

LIBERTY - KEENE DIVISION

PROPANE SPOT MARKET PURCHASE COST ANALYSIS
WINTER PERIOD 2021 - 2022

		(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	1.1513	+	0.0100	+	0.2396	+	0.0050	+	0.0500	=	1.4558	+	0.0906	=	1.5464	=	1.6901
2	DEC	1.1369	+	0.0100	+	0.2396	+	0.0050	+	0.0500	=	1.4415	+	0.0906	=	1.5321	=	1.6743
3	JAN	1.1206	+	0.0100	+	0.2396	+	0.0050	+	0.0500	=	1.4252	+	0.0906	=	1.5158	=	1.6566
4	FEB	1.0906	+	0.0100	+	0.2396	+	0.0050	+	0.0500	=	1.3952	+	0.0906	=	1.4858	=	1.6238
5	MAR	1.0375	+	0.0100	+	0.2396	+	0.0050	+	0.0500	=	1.3421	+	0.0906	=	1.4327	=	1.5657
6	APR	0.9381	+	0.0100	+	0.2396	+	0.0050	+	0.0500	=	1.2427	+	0.0906	=	1.3333	=	1.4571

1. Propane futures market quotations (cmegroup.com) on 8/31/21 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 - KEENE DIVISION

INVENTORY & WEIGHTED AVERAGE COST OF GAS CALCULATION
WINTER PERIOD 2021 - 2022

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 2021 (Actual)									
2	Beginning Balance	53,838	\$73,321	\$1.3619	\$1.2461					
3	Purchases Received	32,000	\$47,360	\$1.4800	\$1.3542					
4	Total Available	85,838	\$120,681	\$1.4059	\$1.2864					
5	Less Sendout	33,056	\$46,474	\$1.4059	\$1.2864					
6	Ending Balance	52,782	\$74,207	\$1.4059	\$1.2864					
7	September 2021 (Estimated)									
8	Beginning Balance	52,782	\$74,207	\$1.4059	\$1.2864					
9	Purchases Received	158,800	\$235,024	\$1.4800	\$1.3542					
10	Total Available	211,582	\$309,231	\$1.4615	\$1.3373					
11	Less Sendout	39,316	\$57,461	\$1.4615	\$1.3373					
12	Ending Balance	172,266	\$251,770	\$1.4615	\$1.3373					
13	October 2021 (Estimated)									
14	Beginning Balance	172,266	\$251,770	\$1.4615	\$1.3373					
15	Purchases Received	70,000	\$103,600	\$1.4800	\$1.3542					
16	Total Available	242,266	\$355,370	\$1.4669	\$1.3422					
17	Less Sendout	69,041	\$101,273	\$1.4669	\$1.3422					
18	Ending Balance	173,225	\$254,097	\$1.4669	\$1.3422					
19	November 2021 (Forecasted)									
20	Beginning Balance	173,225	\$254,097	\$1.4669	\$1.3422					
21	Purchases Received	121,081	\$180,645	\$1.4919	\$1.3652					
22	Total Available	294,306	\$434,742	\$1.4772	\$1.3516					
23	Less Sendout	121,081	\$178,858	\$1.4772	\$1.3516					
24	Ending Balance	173,225	\$255,884	\$1.4772	\$1.3516					\$1.525
25	December 2021 (Forecasted)									
26	Beginning Balance	173,225	\$255,884	\$1.4772	\$1.3516					
27	Purchases Received	162,436	\$237,484	\$1.4620	\$1.3378					
28	Total Available	335,661	\$493,368	\$1.4698	\$1.3449					
29	Less Sendout	187,384	\$275,424	\$1.4698	\$1.3449					
30	Ending Balance	148,277	\$217,944	\$1.4698	\$1.3449					\$1.488
31	January 2022 (Forecasted)									
32	Beginning Balance	148,277	\$217,944	\$1.4698	\$1.3449					
33	Purchases Received	174,686	\$251,415	\$1.4392	\$1.3169					
34	Total Available	322,963	\$469,359	\$1.4533	\$1.3298					
35	Less Sendout	222,206	\$322,930	\$1.4533	\$1.3298					
36	Ending Balance	100,757	\$146,429	\$1.4533	\$1.3298					\$1.464
37	February 2022 (Forecasted)									
38	Beginning Balance	100,757	\$146,429	\$1.4533	\$1.3298					
39	Purchases Received	163,813	\$238,985	\$1.4589	\$1.3349					
40	Total Available	264,570	\$385,414	\$1.4568	\$1.3330					
41	Less Sendout	197,077	\$287,093	\$1.4568	\$1.3330					
42	Ending Balance	67,493	\$98,321	\$1.4568	\$1.3330					\$1.473
43	March 2022 (Forecasted)									
44	Beginning Balance	67,493	\$98,321	\$1.4568	\$1.3330					
45	Purchases Received	149,710	\$238,985	\$1.5963	\$1.4607					
46	Total Available	217,203	\$337,306	\$1.5530	\$1.4210					
47	Less Sendout	159,214	\$247,252	\$1.5530	\$1.4210					
48	Ending Balance	57,989	\$90,054	\$1.5530	\$1.4210					\$1.559
49	April 2022 (Forecasted)									
50	Beginning Balance	57,989	\$90,054	\$1.5530	\$1.4210					
51	Purchases Received	86,780	\$123,451	\$1.4226	\$1.3017					
52	Total Available	144,769	\$213,505	\$1.4748	\$1.3495					
53	Less Sendout	90,344	\$133,239	\$1.4748	\$1.3495					
54	Ending Balance	54,425	\$80,266	\$1.4748	\$1.3495					\$1.522
55	AVERAGE WINTER RATE - SENDOUT									
56							FPO Premium (Sch. B, Line 15)		(\$2,708)	
57										

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LIBERTY - KEENE DIVISION

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

	PRIOR	Actual Nov-20	Actual Dec-20	Actual Jan-21	Actual Feb-21	Actual Mar-21	Actual Apr-21	TOTAL
1	PROPANE COSTS							
2	PROPANE FIRM SENDOUT (therms)							
3	COMPANY USE (therms)							
4	TOTAL PROPANE SENDOUT (therms)							
5	COST PER THERM (WACOG)	\$0.8860	\$0.9308	\$0.9441	\$1.0463	\$1.0724	\$1.0172	
6	TOTAL CALCULATED COST OF PROPANE	\$107,605	\$174,363	\$214,927	\$207,206	\$164,311	\$92,754	\$961,166
7	PROPANE ADJUSTMENTS	\$0	\$0	(\$10,000)	(\$354)	\$0	\$0	(\$10,354)
8	TOTAL COST OF PROPANE	\$107,605	\$174,363	\$204,927	\$206,852	\$164,311	\$92,754	\$950,812
9	CNG COSTS							
10	TOTAL CNG SENDOUT (therms)							
11	CNG DEMAND CHARGES							
12	CNG COMMODITY CHARGES							
13	CNG ADJUSTMENTS							
14	TOTAL CNG COSTS							
15	ACCOUNTING ADJUSTMENT	(\$22,089)	(\$22,089)	(\$22,089)	(\$22,089)	(\$22,089)	(\$22,089)	(\$132,533)
16	TOTAL COSTS OF GAS							
17	FPO PREMIUM	(\$672)	(\$1,899)	(\$2,513)	(\$2,882)	(\$2,131)	(\$1,971)	(\$12,068)
18	RETURN ON INVENTORY	\$1,496	\$1,496	\$1,496	\$1,496	\$1,496	\$1,496	\$8,978
19	REVENUES							
20	BILLED FPO SALES (therms) - Interim Rate - Nov 2020	6,716	4,909	0	0	0	0	11,625
21	COG FPO RATE - Interim Rate - Nov 2020	\$1.2300	\$1.2300	\$1.2300	\$1.2300	\$1.2300	\$1.2300	
22	TOTAL	\$8,261	\$6,038	\$0	\$0	\$0	\$0	\$14,299
23	BILLED FPO SALES (therms) - R-4 (GAP) - Interim Rate - Nov 2020	204	174	0	0	0	0	378
24	COG R-4 FPO RATE - Interim Rate - Nov 2020	\$0.6765	\$0.6765	\$0.6765	\$0.6765	\$0.6765	\$0.6765	
25	TOTAL	\$138	\$118	\$0	\$0	\$0	\$0	\$256
26	BILLED FPO SALES (therms) - Dec 2020 - Apr 2021	0	11,834	17,830	21,340	15,269	9,429	75,702
27	COG FPO RATE - Dec 2020 - Apr 2021	\$0.0000	\$1.0277	\$1.0277	\$1.0277	\$1.0277	\$1.0277	
28	TOTAL	\$0	\$12,162	\$18,324	\$21,931	\$15,692	\$9,690	\$77,799
29	BILLED FPO SALES (therms) - R-4 (GAP) Dec 2020 - Apr 2021	0	447	733	861	687	343	3,071
30	COG R-4 FPO RATE - Dec 2020 - Apr 2021	\$0.0000	\$0.5652	\$0.5652	\$0.5652	\$0.5652	\$0.5652	
31	TOTAL	\$0	\$253	\$414	\$487	\$388	\$194	\$1,736
32	BILLED NON-FPO SALES CURRENT MONTH (therms)	62,286	188,285	145,706	164,856	166,818	77,361	805,312
33	COG NON-FPO RATE CURRENT MONTH	\$1.0253	\$1.0253	\$0.9970	\$0.9928	\$0.9928	\$1.2816	
34	TOTAL	\$63,862	\$193,049	\$145,269	\$163,669	\$165,617	\$99,146	\$830,611
35	BILLED NON-FPO SALES PRIOR MONTH (therms)	0	0	58,329	66,700	0	24,298	149,327
36	COG NON-FPO RATE PRIOR MONTH	\$0.0000	\$1.0253	\$1.0253	\$0.9970	\$0.9928	\$0.9928	
37	TOTAL	\$0	\$0	\$59,805	\$66,500	\$0	\$24,123	\$150,428
38	BILLED NON-FPO SALES CURRENT MONTH (therms) - R-4 (GAP)	1,211	3,459	3,289	3,884	4,060	1,779	17,682
39	COG NON-FPO RATE CURRENT MONTH	\$0.5639	\$0.5639	\$0.5484	\$0.5460	\$0.5460	\$0.7048	
40	TOTAL	\$683	\$1,951	\$1,804	\$2,121	\$2,217	\$1,254	\$10,029
41	BILLED NON-FPO SALES PRIOR MONTH (therms) - R-4 (GAP)	0	0	1,514	1,701	0	1,107	4,322
42	COG NON-FPO RATE PRIOR MONTH	\$0.0000	\$0.5639	\$0.5639	\$0.5484	\$0.5460	\$0.5460	
43	TOTAL	\$0	\$0	\$854	\$933	\$0	\$604	\$2,391
44	BILLED SALES OTHER PRIOR PERIODS	63	0	0	(2,469)	654	1,058	(694)
45	COG OTHER PRIOR PERIODS BLENDED RATE	\$0.5237	\$0.0000	\$0.0000	\$1.0196	\$1.2062	\$0.7273	
46	TOTAL	\$33	\$0	\$0	(\$2,517)	\$789	\$769	(\$926)
47	TOTAL SALES	70,480	209,108	227,401	256,873	187,488	115,375	1,066,725
48	TOTAL BILLED REVENUES	\$72,976	\$213,569	\$226,469	\$253,123	\$184,703	\$135,781	\$1,086,621
49	UNBILLED REVENUES (NET)	\$69,145	\$7,897	\$8,481	(\$53,256)	(\$8,834)	(\$250)	\$23,182
50	TOTAL REVENUES	\$142,121	\$221,466	\$234,950	\$199,867	\$175,868.69	\$135,531	\$1,109,803
51	(OVER)/UNDER COLLECTION	(\$28,424)	(\$29,002)	(\$4,727)	\$58,612	\$2,088	(\$42,242)	(\$31,628)
52	INTEREST AMOUNT	\$206	\$189	\$210	\$312	\$491	\$482	\$1,890
53	FINAL (OVER)/UNDER COLLECTION	\$80,521	(\$28,218)	(\$28,813)	(\$4,517)	\$58,924	\$2,579	(\$41,761)
54								\$38,715

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SCHEDULE H

LIBERTY - KEENE DIVISION
INTEREST CALCULATION
WINTER PERIOD 2021 - 2022

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 2021	\$38,715	\$0	\$8,914	\$0	\$47,629	\$43,172	3.25%	484	\$48,113
2	JUN	48,113	0	7,849	0	\$55,962	52,037	3.25%	492	56,453
3	JUL	56,453	0	12,340	0	\$68,793	62,623	3.25%	555	69,348
4	AUG	69,348	0	0	0	\$69,348	69,348	3.25%	188	69,536
5	SEP	69,536	0	0	0	\$69,536	69,536	3.25%	188	69,724
6	OCT	69,724	0	0	0	\$69,724	69,724	3.25%	189	69,913
7	NOV	69,913	7,138	0	0	\$77,051	73,482	3.25%	199	77,250
8	DEC	77,250	(22,567)	0	0	\$54,684	65,967	3.25%	179	54,863
9	JAN 2022	54,863	(41,651)	0	0	\$13,212	34,038	3.25%	92	13,304
10	FEB	13,304	(29,901)	0	0	(\$16,596)	(1,646)	3.25%	(4)	(16,600)
11	MAR	(16,600)	219	0	0	(\$16,381)	(16,490)	3.25%	(45)	(16,426)
12	APR	(16,426)	16,448	0	0	\$23	(8,202)	3.25%	(22)	1
13										
14									<u>\$2,494</u>	

		BEGINNING BALANCE MAY 2021		ADJUSTMENTS MAY-OCT 2021		INTEREST MAY-OCT 2021		ENDING BALANCE w/ INTERST OCTOBER 2021	
15	=	COL. 1, LINE 1	+	COL. 3 LINES 1 TO 6	+	COL. 8, LINES 1 TO 6		COL 9, LINE 6	
16	=	38,715	+	\$29,104	+	2,095	=	<u>69,913</u>	(TRANSFER TO SCHEDULE B, LINE 32)

SCHEDULE I

Liberty - 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 0.19%	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) * 0.19%	(10) - (11) + (12)
Nov-21	141,679	43,883	97,796	840	829	11	116.42	(1,281)	96,515	140,398	4,077	878	137,199
Dec-21	219,629	43,883	175,746	1,131	1,119	12	155.39	(1,865)	173,881	217,764	5,682	1,298	213,380
Jan-22	254,042	43,883	210,159	1,256	1,280	(24)	167.32	4,016	214,175	258,058	6,252	1,501	253,307
Feb-22	230,679	43,883	186,796	1,136	1,123	13	164.43	(2,138)	184,658	228,541	5,657	1,230	224,114
Mar-22	181,025	43,883	137,142	943	984	(41)	145.43	5,963	143,105	186,988	4,751	993	183,230
Apr-22	108,633	43,883	64,750	626	605	21	103.43	(2,172)	62,578	106,461	3,341	919	104,039
Total	1,135,687	263,298	872,389	5,932	5,940	(8)		2,523	874,912	1,138,210	29,760	6,819	1,115,269

SCHEDULE J

Liberty - 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-21	901	32,878	6,520	26,359	840	829	11	31.38	(345)	26,013	32,533
Dec-21	931	50,283	6,520	43,763	1,131	1,119	12	38.69	(464)	43,299	49,819
Jan-22	931	60,016	6,520	53,496	1,256	1,280	(24)	42.59	1,022	54,519	61,038
Feb-22	842	54,743	6,520	48,223	1,136	1,123	13	42.45	(552)	47,671	54,191
Mar-22	930	42,007	6,520	35,487	943	984	(41)	37.63	1,543	37,030	43,550
Apr-22	894	23,292	6,520	16,772	626	605	21	26.79	(563)	16,209	22,729
Total		263,219	39,118	224,101	5,932	5,940	(8)	80.14	641	224,742	263,860

Liberty - 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-21	326	102,701	35,103	67,598	840	829	11	80.47	(885)	66,713	101,816
Dec-21	333	160,520	35,103	125,417	1,131	1,119	12	110.89	(1,331)	124,086	159,189
Jan-22	330	184,131	35,103	149,028	1,256	1,280	(24)	118.65	2,848	151,876	186,979
Feb-22	299	166,971	35,103	131,868	1,136	1,123	13	116.08	(1,509)	130,359	165,462
Mar-22	329	131,677	35,103	96,574	943	984	(41)	102.41	4,199	100,773	135,876
Apr-22	313	80,452	35,103	45,350	626	605	21	72.44	(1,521)	43,828	78,931
Total		826,453	210,618	615,835	5,932	5,940	(8)	225.03	1,800	617,635	828,253

Summary - Total Winter Season Sales		
	Actual 2020-2021	Normalized
November	135,579	134,349
December	210,803	209,008
January	244,147	248,017
February	221,714	219,653
March	173,684	179,426
April	103,744	101,660
Total	1,089,672	1,092,113

SCHEDULE K-1

LIBERTY - KEENE DIVISION
Typical Residential Heating Bill - Fixed Price Option Program
Forecasted 2021-2022 Winter Period vs. Actual 2020-2021 Winter Period

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	Winter Nov-Apr	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Summer May-Oct	Total Nov-Oct
12 MONTHS ENDED 10/31/2021															
Typical Usage - therms (1)	39	69	81	103	89	66	447	35	18	9	7	8	12	89	536
Residential Heating R-3															
10/1/2020-7/31/2021 8/1/2021-Present															
Customer Charge \$15.50 \$15.39	\$15.50	\$15.50	\$15.50	\$15.50	\$15.50	\$15.50	\$93.00	\$15.50	\$15.50	\$15.50	\$15.39	\$15.39	\$15.39	\$92.67	\$185.67
Delivery Charge:															
All therms @ \$0.5678 \$0.5632	\$22.14	\$39.18	\$45.99	\$58.48	\$50.53	\$37.47	\$253.79	\$19.87	\$10.22	\$5.11	\$3.94	\$4.51	\$6.76	\$50.41	\$304.20
Base Delivery Revenue Total	\$37.64	\$54.68	\$61.49	\$73.98	\$66.03	\$52.97	\$346.79	\$35.37	\$25.72	\$20.61	\$19.33	\$19.90	\$22.15	\$143.08	\$489.87
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		
Deferred Revenue Surcharge Total	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COG Rates	\$1.2300	\$1.0277	\$1.0277	\$1.0277	\$1.0277	\$1.0277	\$1.0453	\$1.1821	\$1.2665	\$1.4680	\$1.4680	\$1.3440	\$1.3440	\$1.2870	
Cost of Gas Total	\$47.97	\$70.91	\$83.24	\$105.85	\$91.47	\$67.83	\$467.27	\$41.37	\$22.80	\$13.21	\$10.28	\$10.75	\$16.13	\$114.54	\$581.81
LDAC Rates	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	
LDAC Total	\$2.30	\$4.06	\$4.77	\$6.07	\$5.24	\$3.89	\$26.33	\$2.06	\$1.06	\$0.53	\$0.41	\$0.47	\$0.71	\$5.24	\$31.57
Total Bill	\$88	\$130	\$150	\$186	\$163	\$125	\$840	\$79	\$50	\$34	\$30	\$31	\$39	\$263	\$1,103
12 MONTHS ENDED 10/31/2022															
Nov-21 Dec-21 Jan-22 Feb-22 Mar-22 Apr-22															
Winter Nov-Apr															
Typical Usage - therms (1)	39	69	81	103	89	66	447	35	18	9	7	8	12	89	536
Residential Heating R-3															
10/1/2020-7/31/2021 8/1/2021-Present															
Customer Charge \$15.50 \$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.34	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.34	\$184.68
Delivery Charge:															
All therms @ \$0.5678 \$0.5632	\$21.96	\$38.86	\$45.62	\$58.01	\$50.12	\$37.17	\$251.74	\$19.71	\$10.14	\$5.07	\$3.94	\$4.51	\$6.76	\$50.13	\$301.87
Base Delivery Revenue Total	\$37.35	\$54.25	\$61.01	\$73.40	\$65.51	\$52.56	\$344.08	\$35.10	\$25.53	\$20.46	\$19.33	\$19.90	\$22.15	\$142.47	\$486.55
Seasonal Base Delivery Difference from previous year							-\$2.71							-\$0.61	-\$3.32
Seasonal Percent Change from previous year							-0.8%							-0.4%	-0.7%
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		
Deferred Revenue Surcharge Total	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COG Rates	\$1.8941	\$1.8941	\$1.8941	\$1.8941	\$1.8941	\$1.8941	\$1.8941	\$1.1821	\$1.2665	\$1.4680	\$1.4680	\$1.3440	\$1.3440	\$1.2870	
Cost of Gas Total	\$73.87	\$130.69	\$153.42	\$195.09	\$168.57	\$125.01	\$846.65	\$41.37	\$22.80	\$13.21	\$10.28	\$10.75	\$16.13	\$114.54	\$581.81
Seasonal COG Difference from previous year							\$379.38							\$0.00	\$379.38
Seasonal Percent Change from previous year							81.2%							0.0%	65.2%
LDAC Rates	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	
LDAC Total	\$6.76	\$11.96	\$14.04	\$17.85	\$15.42	\$11.44	\$77.47	\$6.07	\$3.12	\$1.56	\$1.21	\$1.39	\$2.08	\$15.43	\$92.90
Seasonal LDAC Difference from previous year							\$51.14							\$10.19	\$61.33
Seasonal Percent Change from previous year							194.2%							194.5%	194.3%
Total Bill	\$118	\$197	\$228	\$286	\$250	\$189	\$1,268	\$83	\$51	\$35	\$31	\$32	\$40	\$272	\$1,541
Seasonal Total Bill Difference from previous year							\$427.81							\$9.58	\$437.39
Seasonal Percent Change from previous year							50.9%							3.6%	39.6%
Seasonal Percent Change resulting from Base Rates (incl. Def. Revenue Surch.)							-0.3%							-0.2%	-0.3%
Seasonal Percent Change resulting from COG							45.1%							0.0%	34.4%
Seasonal Percent Change resulting from LDAC							6.1%							3.9%	5.6%

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

SCHEDULE K-2

LIBERTY - KEENE DIVISION
Typical Residential Heating Bill - Non-Fixed Price Option Program
Forecasted 2021-2022 Winter Period vs. Actual 2020-2021 Winter Period

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	Winter Nov-Apr	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Summer May-Oct	Total Nov-Oct
12 MONTHS ENDED 10/31/2021															
Typical Usage - therms (1)	39	69	81	103	89	66	447	35	18	9	7	8	12	89	536
Residential Heating R-3															
10/1/2020-7/31/2021 8/1/2021-Present															
Customer Charge \$15 50 \$15 39	\$15.50	\$15.50	\$15.50	\$15.50	\$15.50	\$15.50	\$93.00	\$15.50	\$15.50	\$15.50	\$15.39	\$15.39	\$15.39	\$92.67	\$185.67
Delivery Charge:															
All therms @ \$0 5678 \$0.5632	\$22.14	\$39.18	\$45.99	\$58.48	\$50.53	\$37.47	\$253.79	\$19.71	\$10.14	\$5.11	\$3.97	\$4.54	\$6.81	\$50.28	\$304.07
Base Delivery Revenue Total	\$37.64	\$54.68	\$61.49	\$73.98	\$66.03	\$52.97	\$346.79	\$35.21	\$25.64	\$20.61	\$19.36	\$19.93	\$22.20	\$142.95	\$489.74
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		
Deferred Revenue Surcharge Total	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COG Rates	\$1.0253	\$0.9970	\$0.9928	\$0.9928	\$0.9928	\$1.1677	\$1.0221	\$1.1821	\$1.2665	\$1.4680	\$1.4680	\$1.3440	\$1.3440	\$1.2870	
Cost of Gas Total	\$39.99	\$68.79	\$80.42	\$102.26	\$88.36	\$77.07	\$456.89	\$41.37	\$22.80	\$13.21	\$10.28	\$10.75	\$16.13	\$114.54	\$571.43
LDAC Rates	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	\$0.0589	
LDAC Total	\$2.30	\$4.06	\$4.77	\$6.07	\$5.24	\$3.89	\$26.33	\$2.06	\$1.06	\$0.53	\$0.41	\$0.47	\$0.71	\$5.24	\$31.57
Total Bill	\$80	\$128	\$147	\$182	\$160	\$134	\$830	\$79	\$50	\$34	\$30	\$31	\$39	\$263	\$1,093
12 MONTHS ENDED 10/31/2022															
Nov-21 Dec-21 Jan-22 Feb-22 Mar-22 Apr-22 Winter Nov-Apr May-22 Jun-22 Jul-22 Aug-22 Sep-22 Oct-22 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
Residential Heating R-3															
10/1/2020-7/31/2021 8/1/2021-Present															
Customer Charge \$15 50 \$15 39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.34	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.34	\$184.68
Delivery Charge:															
All therms @ \$0 5678 \$0.5632	\$22.14	\$39.18	\$45.99	\$58.48	\$50.53	\$37.47	\$253.79	\$19.71	\$10.14	\$5.11	\$3.97	\$4.54	\$6.81	\$50.28	\$304.07
Base Delivery Revenue Total	\$37.53	\$54.57	\$61.38	\$73.87	\$65.92	\$52.86	\$346.13	\$35.10	\$25.53	\$20.50	\$19.36	\$19.93	\$22.20	\$142.62	\$488.75
Seasonal Base Delivery Difference from previous year							-\$0.66							-\$0.33	-\$0.99
Seasonal Percent Change from previous year							-0.2%							-0.2%	-0.2%
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		
Deferred Revenue Surcharge Total	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COG Rates	\$1.8741	\$1.8741	\$1.8741	\$1.8741	\$1.8741	\$1.8741	\$1.8741	\$1.1821	\$1.2665	\$1.4680	\$1.4680	\$1.3440	\$1.3440	\$1.2870	
Cost of Gas Total	\$73.09	\$129.31	\$151.80	\$193.03	\$166.79	\$123.69	\$837.71	\$41.37	\$22.80	\$13.21	\$10.28	\$10.75	\$16.13	\$114.54	\$592.25
Seasonal COG Difference from previous year							\$380.82							\$0.00	\$380.82
Seasonal Percent Change from previous year							83.4%							0.0%	66.6%
LDAC Rates	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.1733	\$0.17	
LDAC Total	\$6.76	\$11.96	\$14.04	\$17.85	\$15.42	\$11.44	\$77.47	\$6.07	\$3.12	\$1.56	\$1.21	\$1.39	\$2.08	\$15.43	\$92.90
Seasonal LDAC Difference from previous year							\$51.14							\$10.19	-\$31.57
Seasonal Percent Change from previous year							11.2%							8.9%	-5.5%
Total Bill	\$117	\$196	\$227	\$285	\$248	\$188	\$1,261	\$83	\$51	\$35	\$31	\$32	\$40	\$273	\$1,534
Seasonal Total Bill Difference from previous year							\$431.30							\$9.86	\$441.16
Seasonal Percent Change from previous year							52.0%							3.8%	40.4%
Seasonal Percent Change resulting from Base Rates (incl. Def. Revenue Surch.)							-0.1%							-0.1%	-0.1%
Seasonal Percent Change resulting from COG							45.9%							0.0%	34.9%
Seasonal Percent Change resulting from LDAC							6.2%							3.9%	-2.9%

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

SCHEDULE L-1

LIBERTY - KEENE DIVISION
Typical Commercial Bill - Fixed Price Option Program
Forecasted 2021-2022 Winter Period vs. Actual 2020-2021 Winter Period

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	Winter Nov-Apr	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Summer May-Oct	Total Nov-Oct
12 MONTHS ENDED 10/31/2021															
Typical Usage - therms	133	249	307	403	367	262	1,721	128	56	22	16	18	26	266	1,987
Commercial G-41															
Customer Charge	\$57.46	\$57.46	\$57.46	\$57.46	\$57.46	\$57.46	\$344.76	\$57.46	\$57.46	\$57.46	\$57.06	\$57.06	\$57.06	\$343.56	\$688.32
Delivery Charge:															
First 100 therms @	\$0.4711	\$0.4688	\$0.4711	\$0.4711	\$0.4711	\$0.4711	\$282.66	\$9.42	\$9.42	\$9.42	\$7.50	\$8.44	\$9.38	\$53.58	\$336.24
Over 100 therms @	\$0.3165	\$0.3149	\$0.3165	\$0.3149	\$0.3165	\$0.3149	\$354.80	\$34.18	\$11.39	\$0.63	\$0.00	\$0.00	\$1.89	\$48.09	\$402.89
Base Delivery Revenue Total	\$115.01	\$151.73	\$170.09	\$200.47	\$189.08	\$155.84	\$982.22	\$101.06	\$78.27	\$67.51	\$64.56	\$65.50	\$68.33	\$445.23	\$1,427.45
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		
Deferred Revenue Surcharge Total	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COG Rates	\$1.2300	\$1.0277	\$1.0277	\$1.0277	\$1.0277	\$1.0277	\$1.0433	\$1.1821	\$1.2665	\$1.4680	\$1.4680	\$1.3440	\$1.3440	\$1.2675	
Cost of Gas Total	\$163.59	\$255.90	\$315.50	\$414.16	\$377.17	\$269.26	\$1,795.58	\$151.31	\$70.92	\$32.30	\$23.49	\$24.19	\$34.94	\$337.15	\$2,132.73
LDAC Rates	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	0.05550
LDAC Total	\$7.38	\$13.82	\$17.04	\$22.37	\$20.37	\$14.54	\$95.52	\$7.10	\$3.11	\$1.22	\$0.89	\$1.00	\$1.44	\$14.76	\$110.28
Total Bill	\$286	\$421	\$503	\$637	\$587	\$440	\$2,873	\$259	\$152	\$101	\$89	\$91	\$105	\$797	\$3,670
12 MONTHS ENDED 10/31/2022															
Typical Usage - therms	133	249	307	403	367	262	1,721	128	56	22	16	18	26	266	1,987
Commercial G-41															
Customer Charge	\$57.46	\$57.46	\$57.46	\$57.46	\$57.46	\$57.46	\$342.36	\$57.06	\$57.06	\$57.06	\$57.06	\$57.06	\$57.06	\$342.36	\$684.72
Delivery Charge:															
First 100 therms @	\$0.4711	\$0.4688	\$0.4688	\$0.4688	\$0.4688	\$0.4688	\$281.28	\$46.88	\$26.25	\$10.31	\$7.50	\$8.44	\$12.19	\$111.57	\$392.85
Over 100 therms @	\$0.3165	\$0.3149	\$0.3149	\$0.3149	\$0.3149	\$0.3149	\$353.00	\$8.82	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8.82	\$361.82
Base Delivery Revenue Total	\$114.33	\$150.86	\$169.12	\$199.35	\$188.02	\$154.95	\$976.64	\$112.76	\$83.31	\$67.37	\$64.56	\$65.50	\$69.25	\$462.75	\$1,439.39
Seasonal Base Delivery Difference from previous year							-\$5.58							\$17.52	\$11.94
Seasonal Percent Change from previous year							-0.6%							3.9%	0.8%
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		
Deferred Revenue Surcharge Total	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COG Rates	\$1.8941	\$1.8941	\$1.8941	\$1.8941	\$1.8941	\$1.8941	\$1.8941	\$1.1821	\$1.2665	\$1.4680	\$1.4680	\$1.3440	\$1.3440	\$1.2675	
Cost of Gas Total	\$251.92	\$471.63	\$581.49	\$763.32	\$695.13	\$496.25	\$3,259.74	\$151.31	\$70.92	\$32.30	\$23.49	\$24.19	\$34.94	\$337.15	\$3,596.89
Seasonal COG Difference from previous year							\$1,464.16							\$0.00	\$1,464.16
Seasonal Percent Change from previous year							81.5%							0.0%	68.7%
LDAC Rates	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0861	
LDAC Total	\$11.44	\$21.41	\$26.40	\$34.66	\$31.56	\$22.53	\$148.00	\$11.01	\$4.82	\$1.89	\$1.38	\$1.55	\$2.24	\$22.89	\$170.89
Seasonal LDAC Difference from previous year							\$52.48							\$8.13	\$1,464.16
Seasonal Percent Change from previous year							54.9%							55.0%	68.7%
Total Bill	\$378	\$644	\$777	\$997	\$915	\$674	\$4,384	\$275	\$159	\$102	\$89	\$91	\$106	\$823	\$5,207
Seasonal Total Bill Difference from previous year							\$1,511.07							\$25.64	\$1,536.71
Seasonal Percent Change from previous year							52.6%							3.2%	41.9%
Seasonal Percent Change resulting from Base Rates (incl. Def. Revenue Surch.)							-0.2%							2.2%	0.3%
Seasonal Percent Change resulting from COG							51.0%							0.0%	39.9%
Seasonal Percent Change resulting from LDAC							1.8%							1.0%	39.9%

SCHEDULE L-2

LIBERTY - KEENE DIVISION
Typical Commercial Bill - Non-Fixed Price Option Program
Forecasted 2021-2022 Winter Period vs. Actual 2020-2021 Winter Period

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	Winter Nov-Apr	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Summer May-Oct	Total Nov-Oct
12 MONTHS ENDED 10/31/2021															
Typical Usage - therms	133	249	307	403	367	262	1,721	128	56	22	16	18	26	266	1,987
Commercial G-41															
10/1/2020-7/31/2021 8/1/2021-Present															
Customer Charge \$57.46	\$57.46	\$57.46	\$57.46	\$57.46	\$57.46	\$57.46	\$344.76	\$57.46	\$57.46	\$57.46	\$57.06	\$57.06	\$57.06	\$343.56	\$688.32
Delivery Charge:															
First 100 therms @ \$0.4711	\$47.11	\$47.11	\$47.11	\$47.11	\$47.11	\$47.11	\$282.66	\$9.42	\$9.42	\$9.42	\$7.50	\$8.44	\$9.38	\$53.58	\$336.24
Over 100 therms @ \$0.3165	\$10.44	\$47.16	\$65.52	\$95.90	\$84.51	\$51.27	\$354.80	\$34.18	\$11.39	\$0.63	\$0.00	\$0.00	\$1.89	\$48.09	\$402.89
Base Delivery Revenue Total	\$115.01	\$151.73	\$170.09	\$200.47	\$189.08	\$155.84	\$982.22	\$101.06	\$78.27	\$67.51	\$64.56	\$65.50	\$68.33	\$445.23	\$1,427.45
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		
Deferred Revenue Surcharge Total	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COG Rates	\$0.9492	\$0.9492	\$0.9686	\$0.9352	\$0.6906	\$0.4408	\$0.8168	\$1.1821	\$1.2665	\$1.4680	\$1.4680	\$1.3440	\$1.3440	\$1.2675	
Cost of Gas Total	\$126.24	\$236.35	\$297.36	\$376.89	\$253.45	\$115.49	\$1,405.78	\$151.31	\$70.92	\$32.30	\$23.49	\$24.19	\$34.94	\$337.15	\$1,742.93
LDAC Rates	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	\$0.0555	-\$7.3520
LDAC Total	\$7.38	\$13.82	\$17.04	\$22.37	\$20.37	\$14.54	\$95.52	\$7.10	\$3.11	\$1.22	\$0.89	\$1.00	\$1.44	\$14.76	\$110.28
Total Bill	\$249	\$402	\$484	\$600	\$463	\$286	\$2,484	\$259	\$152	\$101	\$89	\$91	\$105	\$797	\$3,281
12 MONTHS ENDED 10/31/2022															
Nov-21 Dec-21 Jan-22 Feb-22 Mar-22 Apr-22															
Winter Nov-Apr															
May-22 Jun-22 Jul-22 Aug-22 Sep-22 Oct-22															
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
Commercial G-41															
10/1/2020-7/31/2021 8/1/2021-Present															
Customer Charge \$57.46	\$57.06	\$57.06	\$57.06	\$57.06	\$57.06	\$57.06	\$342.36	\$57.06	\$57.06	\$57.06	\$57.06	\$57.06	\$57.06	\$342.36	\$684.72
Delivery Charge:															
First 100 therms @ \$0.4711	\$46.88	\$46.88	\$46.88	\$46.88	\$46.88	\$46.88	\$281.28	\$46.88	\$26.25	\$10.31	\$7.50	\$8.44	\$12.19	\$111.57	\$392.85
Over 100 therms @ \$0.3165	\$10.39	\$46.92	\$65.18	\$95.41	\$84.08	\$51.01	\$353.00	\$8.82	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8.82	\$361.82
Base Delivery Revenue Total	\$114.33	\$150.86	\$169.12	\$199.35	\$188.02	\$154.95	\$976.64	\$112.76	\$83.31	\$67.37	\$64.56	\$65.50	\$69.25	\$462.75	\$1,439.39
Seasonal Base Delivery Difference from previous year							-\$5.58							\$17.52	\$11.94
Seasonal Percent Change from previous year							-0.6%							3.9%	0.8%
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		
Deferred Revenue Surcharge Total	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COG Rates	\$1.8741	\$1.8741	\$1.8741	\$1.8741	\$1.8741	\$1.8741	\$1.8741	\$1.1821	\$1.2665	\$1.4680	\$1.4680	\$1.3440	\$1.3440	\$1.2675	
Cost of Gas Total	\$249.26	\$466.65	\$575.35	\$755.26	\$687.79	\$491.01	\$3,225.32	\$151.31	\$70.92	\$32.30	\$23.49	\$24.19	\$34.94	\$337.15	\$3,562.47
Seasonal COG Difference from previous year							\$1,819.54							\$0.00	\$1,819.54
Seasonal Percent Change from previous year							129.4%							0.0%	104.4%
LDAC Rates	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0860	\$0.0861	
LDAC Total	\$11.44	\$21.41	\$26.40	\$34.66	\$31.56	\$22.53	\$148.00	\$11.01	\$4.82	\$1.89	\$1.38	\$1.55	\$2.24	\$22.89	\$170.89
Seasonal LDAC Difference from previous year							\$52.48							\$8.13	\$60.61
Seasonal Percent Change from previous year							54.9%							55.1%	55.0%
Total Bill	\$375	\$639	\$771	\$989	\$907	\$668	\$4,350	\$275	\$159	\$102	\$89	\$91	\$106	\$823	\$5,173
Seasonal Total Bill Difference from previous year							\$1,866.44							\$25.65	\$1,892.09
Seasonal Percent Change from previous year							75.2%							3.2%	57.7%
Seasonal Percent Change resulting from Base Rates (incl. Def. Revenue Surch.)							-0.2%							2.2%	0.4%
Seasonal Percent Change resulting from COG							2.1%							0.0%	55.5%
Seasonal Percent Change resulting from LDAC							6.0%							1.0%	1.8%

SCHEDULE M

LIBERTY - 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
2020-2021	\$1.0277	\$0.56	8.51%	90,776	\$51,189	\$459	\$1.03	\$459	\$0
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

REDACTED
SCHEDULE N

LIBERTY - KEENE DIVISION
PROJECTED INCREMENTAL COSTS CNG VS. SPOT PROPANE Winter 2021-2022

	Projected Nov-21	Projected Dec-21	Projected Jan-22	Projected Feb-22	Projected Mar-22	Projected Apr-22
<u>CNG PURCHASES</u>						
CNG Volumes (Schedule C Reconciliation)						
CNG Costs (Schedule C Reconciliation)						
Total Cost per Actual CNG Costs (Schedule C Reconciliation)						
CNG Cost Per Therm Actual						
<u>SPOT PROPANE PURCHASES</u>						
Spot Propane Volumes (Schedule C Reconciliation)						217,992
Total Costs Spot Propane						
Total Cost Spot Propane						
Spot Propane Cost Per Therm Actual	\$ 1.6901	\$ 1.6743	\$ 1.6566	\$ 1.6238	\$ 1.5657	\$ 1.4571
CNG Volumes						
Price difference CNG vs Spot Propane						
Adj. for rounding						\$0.0000
Incremental Costs Propane						(\$452)

Divided by 2 2
Allowed Recoverable Costs \$ (226)

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SCHEDULE O

CNG Incremental Cost/Saving Risk Sharing - 50% Shareholder/Customers						
Incremental CNG Supply Costs - Winter 2019 - Winter 2021						
COG Period	Year	Actual / Estimate	Amount	50% Recovery	Deferred	(Refund)/Charge
Winter	2019-20	Actuals	\$132,469	\$66,235	\$132,533	\$66,299
Winter	2020-21	Actuals	\$44,016	\$22,008	\$0	-\$22,008
Included in Winter 2021-2022 filing						\$44,291

REDACTED
SCHEDULE P

LIBERTY - KEENE DIVISION
ACTUAL INCREMENTAL COSTS INC ADJUSTMENT FOR MARKETER BASIS CHARGE DISPUTE CNG VS. SPOT PROPANE Winter 2019-2020
Per Exhibit 12 in 20-152 (Data Request Staff 1-6)

	Actual Nov-19	Actual Dec-20	Actual Jan-21	Actual Feb-21	Actual Mar-21	Actual Apr-21	
CNG PURCHASES							
CNG Volumes (Schedule C Reconciliation excluding Marketer Basis Charge dispute which has since been settled)							
CNG Costs (Schedule C Reconciliation excluding Marketer Basis Charge dispute which has since been settled)							
Total Cost per Actual CNG Costs (Schedule C Reconciliation excluding Marketer Basis Charge dispute which has since been settled)							
CNG Cost Per Therm Actual							
SPOT PROPANE PURCHASES							
Spot Propane Volumes (Schedule C Reconciliation)	63,040	53,014	12,977	35,388	36,658	26,219	227,296
Total Costs Spot Propane	\$63,622	\$52,631	\$11,473	\$29,830	\$22,695	\$21,080	\$201,331
Total Cost Spot Propane	\$63,622	\$52,631	\$11,473	\$29,830	\$22,695	\$21,080	\$201,331
Spot Propane Cost Per Therm Actual	\$1 0092	\$0 9928	\$0.8841	\$0.8429	\$0.6191	\$0.8040	
CNG Volumes							
Price difference CNG vs Spot Propane							
Adj. for rounding							\$ -
Incremental Costs Propane	\$17,857	\$22,890	\$31,169	\$20,980	\$22,764	\$16,809	\$132,469
							Divided by 2 <u>2</u>
							Allowed Recoverable Costs \$ 66,235

LIBERTY - KEENE DIVISION
INCREMENTAL COSTS CNG VS. SPOT PROPANE WINTER 2020-2021
ACTUALS

	Actual Nov-20	Actual Dec-20	Actual Jan-21	Actual Feb-21	Actual Mar-21	Actual Apr-21	
CNG PURCHASES							
CNG Volumes (Schedule C Reconciliation)							
CNG Costs (Schedule C Reconciliation)							
Total Cost per Actual CNG Costs (Schedule C Reconciliation)							
CNG Cost Per Therm Actual							
SPOT PROPANE PURCHASES							
Spot Propane Volumes (Schedule C Reconciliation)							
Total Costs Spot Propane							
Total Cost Spot Propane							
Spot Propane Cost Per Therm Actual	\$1 0005	\$1 2249	\$1.4448	\$1.5670	\$1.3870	\$1.3675	\$1.3059
CNG Volumes							
Price difference CNG vs Spot Propane							
Adj. for rounding							
Incremental Costs Propane							
							Divided by 2 <u>2</u>
							Allowed Recoverable Costs \$ 22,008

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MONT BELVIEU PROPANE FUTURES - 08/31/21 CLOSE

MONT BELVIEU LDH PROPANE (OPIS) FUTURES - SETTLEMENTS

TRADE DATE TUESDAY 31 AUG 2021 ▼

FINAL DATA ●

Last Updated 01 Sep 2021 09:30:00 AM CT

ESTIMATED VOLUME TOTALS 11,393						PRIOR DAY OPEN INTEREST TOTALS 1	
MONTH	OPEN	HIGH	LOW	LAST	CHANGE	SETTLE	EST. VOL
AUG 21	-	-	-	-	+.00003	1.11344	0
SEP 21	1.14500	1.15500	1.14250A	1.15500	+.01000	1.15500	1,468
OCT 21	-	-	-	-	+.01000	1.15500	1,866
NOV 21	-	-	-	-	+.01000	1.15125	387
DEC 21	-	-	-	-	+.00938	1.13688	1,212
JAN 22	-	-	-	-	+.00750	1.12063	896
FEB 22	-	-	-	-	+.00625	1.09063	996
MAR 22	-	-	-	-	+.00687	1.01375	641
APR 22	-	-	-	-	+.00688	.93813	453

ENTERPRISE TE PRODUCTS PIPELINE FERC TARIFF 54.44.0 - EFFECTIVE 7/1/21

RATES (In Cents-per-bbl.)

[U] All rates are unchanged.

ITEM NO. 135

Non-Incentive Rates for Propane

Destination	Origin		
	Floreffe Junction (Allegheny Co., PA)	Mont Belvieu (Chambers Co., TX)	Tappan Lake (Harrison Co., OH), Todhunter (Butler Co., OH) & Follansbee (Brooke Co., West Virginia)
Coshocton (Coshocton Co., OH)	--	739.66	--
Dexter (Stoddard Co., MO)	--	351.45	--
Du Bois (Clearfield Co., PA)	397.30 (1)(2)	821.14 (1)	397.30 (1)
Fontaine (Green Co., AR)	--	330.18	--
Greensburg (Westmoreland Co., PA)	397.30 (1)(2)	774.94 (1)	397.30 (1)
Harford Mills (Cortland Co., NY)	558.24 (1)	875.81 (1)	581.18 (1)
Lebanon (Boone Co., IN)	--	414.48 (4)	--
Oneonta (Otsego Co., NY)	604.30	946.36 (1)	623.79 (1)
Princeton (Gibson Co., IN)	--	451.17	--
Schaefferstown (Lebanon Co., PA)	585.78 (2)	885.22	578.01
Selkirk (Albany Co., NY)	655.65	1006.24 (1)	657.36 (1)
Seymour (Jackson Co., IN)	--	393.85	--
Sinking Spring (Berks Co., PA)	585.78 (2)	885.22	578.01
Todhunter Truck Terminal (Butler Co., OH)	--	662.77	--
Twin Oaks (Delaware Co., PA)	720.92 (2) (3)	--	720.92 (3)
Watkins Glen (Schuyler Co., NY)	537.32 (1)	831.02 (1)	561.74 (1)
West Memphis (Crittenden Co., AR)	--	351.45 (4)	--
Monee (Will Co., IL)		1490.88 (7)	

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

August 10, 2021

To: All Customers

Re: Fuel Surcharge Notice

As of Monday August 9, 2021 the Department of Energy New England average price per gallon of diesel fuel was \$3.262. All deliveries invoiced from Sunday, August 15, 2021 through Saturday, August 21, 2021 will be line item assessed at 11% fuel surcharge. Thank you and should you have any questions, please contact Susan Noyes at 1-800-648-1075 extension 223.

Best Regards,

Bruce Grant
President/Owner

APPENDIX 3B

Northern Gas Transport Inc. - Selkirk to Keene

Gallons	Base Rate	Base Charge	Fuel Surcharge Rate	Fuel Surcharge	Total Charge	Total Rate Per Gallon
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