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March 31, 2020

Via Electronic Mail Only

Debra A. Howland, Executive Director
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, New Hampshire 03301-2429

Re: DG 20-xxx; Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities – Keene Division Summer 2020 Cost of Gas

Dear Ms. Howland:

On behalf of Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities, enclosed for filing are a redacted public version and a confidential version of Liberty Utilities' Keene Division Summer 2020 Cost of Gas filing, which includes the *Direct Testimony of Deborah Gilbertson and Catherine A. McNamara*.

The confidential material consists of pricing and other information that is presumed confidential under Puc 201.06(a)(11).

Please include the following on the service list for this docket:

Deborah Gilbertson Deborah.Gilbertson@libertyutilities.com
Catherine McNamara Catherine.McNamara@libertyutilities.com
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Pursuant to the Commission's March 17, 2020, secretarial letter, the Company is only making electronic filings of these documents at this time. Thank you for your assistance with this matter. If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "M Sheehan".

Michael J. Sheehan

Enclosures
cc: The Office of the Consumer Advocate

REDACTED

**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 – Keene Division
Summer 2020 Cost of Gas

**DIRECT TESTIMONY
OF
DEBORAH GILBERTSON
AND
CATHERINE MCNAMARA**

March 31, 2020

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1 **I. INTRODUCTION**

2 **Q. Please state your full names, business addresses, and positions.**

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

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

9 A. We are employed by Liberty Utilities Service Corp. (“Liberty”), which provides services
10 to Liberty Utilities (EnergyNorth Natural Gas) Corp. (“EnergyNorth” or “the Company”).

11 **Q. Please describe your educational background and your business and professional**
12 **experience.**

13 A. (DG) I graduated from Bentley College in Waltham, Massachusetts, in 1996 with a
14 Bachelor of Science in Management. In 1997, I was hired by Texas Ohio Gas where I
15 was employed as a Transportation Analyst. In 1999, I joined Reliant Energy as an
16 Operations Analyst. From 2000 to 2003, I was employed by Smart Energy as a Senior
17 Energy Analyst. I joined Keyspan Energy Trading Services in 2004 as a Senior Resource
18 Management Analyst following which I was employed by National Grid from 2008
19 through 2011 as a Lead Analyst in the Project Management Office. In 2011, I was hired
20 by Liberty as a Natural Gas Scheduler and was promoted to Manager of Retail Choice in

1 2012. In October 2016, I was promoted to Senior Manager of Energy Procurement. In
2 this capacity, I provide gas procurement services to EnergyNorth.

3 (CM) I graduated from the University of Massachusetts, Boston, in 1993 with a Bachelor
4 of Science in Management with a concentration in Accounting. In November 2017, I
5 joined Liberty as an Analyst in Rates and Regulatory Affairs. Prior to my employment at
6 Liberty, I was employed by Eversource as a Senior Analyst in Investment Planning from
7 2015 to 2017. From 2008 to 2015, I was a Supervisor in the Plant Accounting. Prior to
8 my position in Plant Accounting, I was a Financial Analyst/General Ledger System
9 Administrator from 2000 to 2008.

10 **Q. Have you previously testified in regulatory proceedings before the New Hampshire**
11 **Public Utilities Commission (the “Commission”)?**

12 A. (DG) Yes, I have previously testified before the Commission.

13 (CM) Yes, I have previously testified before the Commission.

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

15 A. The purpose of our testimony is to explain the Company’s proposed cost of gas rates for
16 its Keene Division for the 2020 Summer (“Off Peak”) Period to be effective beginning
17 May 1, 2020.

1 **II. COST OF GAS FACTOR**

2 **Q. What is the proposed 2020 summer firm cost of gas rate?**

3 A. The Company proposes a firm cost of gas rate of \$0.6173 per therm for the Keene
4 Division as shown on proposed Eleventh Revised Page 90.

5 **Q. Please explain Eleventh Revised Page 90.**

6 A. Eleventh Revised Page 90 contains the calculation of the Summer 2020 COG rate and
7 summarizes the Company's forecast of propane sales and propane costs. The total
8 anticipated cost of propane sendout from May 1 through October 31, 2020, is \$287,948.
9 To derive the Total Anticipated Cost of \$206,218, the prior period over-collection of
10 \$80,938 and the interest of \$792 are subtracted from the anticipated cost of the propane
11 sendout. The Cost of Gas Rate of \$0.6173 per therm is derived by dividing the Total
12 Anticipated Cost by the projected firm sales volumes of 334,086 therms.

13 **Q. What are the components of the adjustments to the cost of propane sendout?**

14 A. The adjustments to gas costs listed on Eleventh Revised Page 90 are as follows:

15	1. Prior Period (Over)/Under Collection	(\$80,938)
16	2. Interest	<u>(\$792)</u>
17	Total Adjustments	(\$81,730)

18 **Q. How was the cost of spot propane purchases determined in Schedule C?**

19 A. In the off-peak period, spot prices are estimated using market quotes from local suppliers.
20 Schedule C serves as a guide to illustrate the components of the quoted price. Column 1
21 shows the Mont Belvieu propane futures quotations as of March 13, 2020. Subsequent

1 columns show projected broker fees, pipeline fees, Propane Education & Research
2 Council (PERC) fees, supplier charges, and trucking charges, which, when added to the
3 futures price, estimate the likely components of the quoted price.

4 **Q. How does the proposed average cost of gas rate in this filing compare to the initial**
5 **cost of gas rate approved by the Commission for the 2019 Summer Period?**

6 A. The cost of gas rate proposed in this filing is \$0.4898 per therm lower than the initial rate
7 approved by the Commission for the 2019 Summer Period (\$0.6173 vs. \$1.1071).

8 **Q. What was the actual weighted average firm sales cost of gas rate for the 2019**
9 **Summer Period?**

10 A. The weighted average cost of gas rate for the 2019 Summer Period was approximately
11 \$0.9445 per therm. This was determined by applying the actual monthly cost of gas rates
12 for May through October 2019 to the monthly therm usage of an average residential
13 heating customer using 172 therms for the six summer period months (see Schedule I-1
14 or Schedule I-2, for more details).

15 **III. PRIOR PERIOD RECONCILIATION**

16 **Q. Has the Company filed its reconciliation of the Summer 2019 Cost of Gas in Docket**
17 **No. DG 19-068?**

18 A. Yes. The Company filed its reconciliation of the Summer 2019 Cost of Gas on
19 December 31, 2019.

1 **Q. Does the Company have any corrections to make to that filing?**

2 A. The Company has no adjustments at this time. We are not anticipating any changes
3 resulting from the audit of Summer 2019.

4 **Q. Has the Company included any production costs in this filing?**

5 A. No.

6 **IV. CUSTOMER BILL IMPACTS**

7 **Q. What is the estimated impact of the proposed firm sales cost of gas rate on an
8 average customer's seasonal bill as compared to the rates in effect last year?**

9 A. The bill impact analysis presented in Schedules I-1 and Schedule I-2 of this filing. The
10 total bill impact for an average residential customer, for the off-peak season, is a decrease
11 of approximately \$61.22, or 17% (see Schedule I-2, column 14, rows 54 and 55,
12 respectively) as compared to the total bill for the 2019 Off-Peak season.

13 **Q. What does the Company plan to do to inform customers about the rate changes?**

14 A. On April 1, 2020, the Company will be posting information regarding this filing on its
15 website. Once the rates are approved, they will be posted on the website by May 1, 2020.
16 The May bills will include on-bill messaging along with a bill insert reminding customers
17 of the new rates, and directing them to the website for more information.

18 **V. PROPANE PURCHASING STABILIZATION PLAN**

19 **Q. What is the Propane Purchasing Stabilization Plan?**

20 A. The Propane Purchasing Stabilization Plan is a strategy the Company undertakes to
21 provide more stability in the winter COG rate and to facilitate the offering of a Fixed

1 Price Option. Under this strategy, the Company systematically purchases supply over a
2 predetermined period. The strategy is intended to provide more price stability rather than
3 to secure lower prices. The Company believes this strategy should continue.

4 **Q. Has the Company performed any analysis regarding its Propane Purchasing**
5 **Stabilization Plan (“Plan”)?**

6 A. Yes. The Company performed two analyses. In Schedule J-1, the Company evaluated
7 the premium/discount associated with securing the pre-purchased volumes for delivery in
8 the winter of 2019–2020 relative to securing a floating price at Mont Belvieu. The
9 comparison reflects the net premium/discount results of the Company’s competitive RFP
10 process. In Schedule J-2, the Company performed a comparison of propane purchase
11 costs under the contract versus representative spot prices had the Company not
12 implemented the Plan. The analysis shows that due to changing market conditions the
13 cost of the pre-purchased gallons was 6.8% higher than the average representative spot
14 purchase cost for the first four months of the current winter period, reflecting a decrease
15 in spot propane prices.

16 **Q. Has the Company issued a Request for Proposal (“RFP”) to potential suppliers for**
17 **the 2020–2021 Plan?**

18 A. Yes. The Company issued the RFP for the 2020–2021 Plan on March 7, 2020. The RFP
19 process was the same as the process used last summer. The RFP was sent to eleven
20 suppliers. The winning bidder was notified on March 23, 2020.

1 **Q. Is the Company proposing any changes to the 2020–2021 Plan?**

2 A. No. The Plan structure specified in the RFP, as detailed on Schedule J-3, has not
3 changed from the design that was used for the previous winter. The Company will
4 purchase 700,000 gallons to maintain, a consistent ratio of hedged volumes to expected
5 sales.

6 **Q. Why did the Plan volumes increase from 575,000 gallons to 700,000 gallons?**

7 A. As discussed in the testimony for winter COG, the increase in Plan volumes is due to
8 EnergyNorth retaining one-half of the Amherst storage volumes that were previously
9 allocated to Keene. The Amherst storage tank is shared between EnergyNorth and Keene
10 and serves as a winter hedge supply of propane for Keene. The increased Plan volume
11 offsets the reduction of the Amherst volume recalled by EnergyNorth. By increasing the
12 Plan contract volume, the Keene division will maintain a pre-purchase hedge volume of
13 approximately 60%, which is consistent with prior years.

14 **VI. COMPRESSED NATURAL GAS (“CNG”)**

15 **Q. Does the Company plan to incorporate CNG into the portfolio this summer?**

16 A. Yes. The Company will utilize CNG to serve a portion of the distribution system known
17 as the Monadnock Marketplace.

18 **Q. How does the CNG per unit pricing compare to the per unit spot propane price?**

19 A. For the upcoming summer period, the projected average cost of propane is [REDACTED] per
20 therm (Schedule K, Line 40) while the projected average cost of CNG is [REDACTED] per

1 therm (Schedule K, Line 25). CNG is projected to be \$.0207 per therm more than the
2 unit cost of spot propane.

3 **Q. Is there a demand charge for the CNG and, if so, how does the Company plan to**
4 **recover the demand costs?**

5 A. Yes, there is a demand charge for the CNG. The demand charge is a fixed charge, which
6 is paid by the Company in 12 monthly installments, totaling [REDACTED]. The Company
7 will allocate the demand charge on a pro-rata basis proportionate to the percentage of off-
8 peak and peak period loads to total annual load. For example, the off-peak load
9 percentage to total annual load is approximately 20% and therefore the expectation is to
10 recover 20% of the demand charge [REDACTED] during the off-peak period, while the
11 remaining 80% [REDACTED] is collected during the peak period.

12 **Q. What is the net overall cost difference when comparing the total summer portfolio**
13 **either with CNG or without CNG?**

14 A. The effect on the overall cost of gas is currently projected to be about 7.6 cents more per
15 therm with CNG included rather than if spot propane were the only commodity utilized to
16 serve the portfolio.

17 **Q. Does the Company have plans to expand the CNG beyond the current footprint and**
18 **if so, when does the Company plan to do this?**

19 A. The Company does plan to expand the CNG footprint; however, construction for any new
20 supply facility will not begin until 2021 and thus any expansion will not occur until after
21 that time. The Company will provide further updates on this effort during the winter

1 COG process. Additionally the Company intends to engage Staff and the OCA
2 informally over the summer as plans develop.

3 **VII. MODIFICATIONS TO THE COG FILING**

4 **Q. Have there been changes to any schedules in the filing and, if so, what changed and**
5 **why did it change?**

6 A. Changes have been made to Schedule K, Schedule H, and Schedule D. These changes
7 were made to improve the filing for ease of review. Schedule K was changed to display
8 therms instead of gallons. The display in gallons was confusing as opposed to using
9 therms, which is the standard unit of measure for billing. Schedule H was modified to
10 show “calendar month sales” as opposed to “cycle billed sales.” In prior filings,
11 Schedule H displayed volumes for cycle billed sales. Using that method, there is always
12 a month lag between ‘billed sales’ volumes and volumes which are actually consumed
13 each calendar month. By using calendar month sales, the consumption of the gas is
14 aligned to the sendout of the gas on a calendar basis. Additionally, Schedule D was
15 expanded to show not only the expected weighted average cost of the propane in the
16 tanks over the period, but also the expected cost of CNG as it pertains to that portion of
17 total sendout.

18 Changes to Schedules B and E reflect the costs of CNG more accurately and align with
19 the Cost of Gas Monthly Adjustment filing.

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

21 A. Yes.

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LIBERTY UTILITIES - KEENE DIVISION
COST OF GAS RATE FILING - DG 20-xxx
SUMMER PERIOD 2020
ORIGINAL FILING

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23 FIRM RATE SCHEDULES - KEENE CUSTOMERS

	Rates Effective February 1, 2020 - April 30, 2020 Rates Effective February 1, 2020 - April 30, 2020 Winter Period Period				Rates Effective September 1, 2019 - October 31, 2019 Rates Effective May 1, 2020 - October 31, 2020 Summer Period			
	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
Residential Non Heating - R-1	\$ 15.20			\$ 15.20	\$ 15.20			\$ 15.20
Customer Charge per Month per Meter	\$ 15.20			\$ 15.20	\$ 15.20			\$ 15.20
All therms	\$ 0.3786	\$ 0.9352	\$ 0.0310	\$ 1.3448	\$ 0.3786	\$ 0.6173	\$ 0.0660	\$ 1.0619
	\$ 0.3786	\$ 0.9352	\$ 0.0310	\$ 1.3448	\$ 0.3786	\$ 0.4843	\$ 0.0660	\$ 0.9289
Residential Heating - R-3	\$ 15.20			\$ 15.20	\$ 15.02			\$ 15.02
Customer Charge per Month per Meter	\$ 15.20			\$ 15.20	\$ 15.20			\$ 15.20
All therms over the first block per month at	\$ 0.5569	\$ 0.9352	\$ 0.0310	\$ 1.5231	\$ 0.5569	\$ 0.6173	\$ 0.0660	\$ 1.2402
	\$ 0.5569	\$ 0.9352	\$ 0.0310	\$ 1.5231	\$ 0.5569	\$ 0.4843	\$ 0.0660	\$ 1.1072
Residential Heating - R-4	\$ 6.08			\$ 6.08	\$ 6.08			\$ 6.08
Customer Charge per Month per Meter	\$ 6.08			\$ 6.08	\$ 6.08			\$ 6.08
All therms over the first block per month at	\$ 0.2228	\$ 0.9352	\$ 0.0310	\$ 1.1890	\$ 0.2228	\$ 0.6173	\$ 0.0660	\$ 0.9061
	\$ 0.2228	\$ 0.9352	\$ 0.0310	\$ 1.1890	\$ 0.2228	\$ 0.4843	\$ 0.0660	\$ 0.7734
Commercial/Industrial - G-41	\$ 56.36			\$ 56.36	\$ 56.36			\$ 56.36
Customer Charge per Month per Meter	\$ 56.36			\$ 56.36	\$ 56.36			\$ 56.36
Size of the first block	100 therms				20 therms			
Therms in the first block per month at	\$ 0.4621	\$ 0.9352	\$ 0.0478	\$ 1.4451	\$ 0.4621	\$ 0.6173	\$ 0.0757	\$ 1.1551
	\$ 0.4621	\$ 0.9352	\$ 0.0478	\$ 1.4451	\$ 0.4621	\$ 0.4843	\$ 0.0757	\$ 1.0224
All therms over the first block per month at	\$ 0.3104	\$ 0.9352	\$ 0.0478	\$ 1.2934	\$ 0.3104	\$ 0.6173	\$ 0.0757	\$ 1.0034
	\$ 0.3104	\$ 0.9352	\$ 0.0478	\$ 1.2934	\$ 0.3104	\$ 0.4843	\$ 0.0757	\$ 0.8704
Commercial/Industrial - G-42	\$ 169.09			\$ 169.09	\$ 169.09			\$ 169.09
Customer Charge per Month per Meter	\$ 169.09			\$ 169.09	\$ 169.09			\$ 169.09
Size of the first block	1000 therms				400 therms			
Therms in the first block per month at	\$ 0.4202	\$ 0.9352	\$ 0.0478	\$ 1.4032	\$ 0.4202	\$ 0.6173	\$ 0.0757	\$ 1.1132
	\$ 0.4202	\$ 0.9352	\$ 0.0478	\$ 1.4032	\$ 0.4202	\$ 0.4843	\$ 0.0757	\$ 0.9802
All therms over the first block per month at	\$ 0.2800	\$ 0.9352	\$ 0.0478	\$ 1.2630	\$ 0.2800	\$ 0.6173	\$ 0.0757	\$ 0.9730
	\$ 0.2800	\$ 0.9352	\$ 0.0478	\$ 1.2630	\$ 0.2800	\$ 0.4843	\$ 0.0757	\$ 0.8400
Commercial/Industrial - G-43	\$ 725.66			\$ 725.66	\$ 725.66			\$ 725.66
Customer Charge per Month per Meter	\$ 725.66			\$ 725.66	\$ 725.66			\$ 725.66
All therms over the first block per month at	\$ 0.2583	\$ 0.9352	\$ 0.0478	\$ 1.2443	\$ 0.1181	\$ 0.6173	\$ 0.0757	\$ 0.8144
	\$ 0.2583	\$ 0.9352	\$ 0.0478	\$ 1.2443	\$ 0.1181	\$ 0.4843	\$ 0.0757	\$ 0.6784
Commercial/Industrial - G-51	\$ 56.36			\$ 56.36	\$ 56.36			\$ 56.36
Customer Charge per Month per Meter	\$ 56.36			\$ 56.36	\$ 56.36			\$ 56.36
Size of the first block	100 therms				100 therms			
Therms in the first block per month at	\$ 0.2785	\$ 0.9352	\$ 0.0478	\$ 1.2615	\$ 0.2785	\$ 0.6173	\$ 0.0757	\$ 0.9715
	\$ 0.2785	\$ 0.9352	\$ 0.0478	\$ 1.2615	\$ 0.2785	\$ 0.4843	\$ 0.0757	\$ 0.8385
All therms over the first block per month at	\$ 0.1811	\$ 0.9352	\$ 0.0478	\$ 1.1641	\$ 0.1811	\$ 0.6173	\$ 0.0757	\$ 0.8741
	\$ 0.1811	\$ 0.9352	\$ 0.0478	\$ 1.1641	\$ 0.1811	\$ 0.4843	\$ 0.0757	\$ 0.7411
Commercial/Industrial - G-52	\$ 169.09			\$ 169.09	\$ 169.09			\$ 169.09
Customer Charge per Month per Meter	\$ 169.09			\$ 169.09	\$ 169.09			\$ 169.09
Size of the first block	1000 therms				1000 therms			
Therms in the first block per month at	\$ 0.2392	\$ 0.9352	\$ 0.0478	\$ 1.2222	\$ 0.1733	\$ 0.6173	\$ 0.0757	\$ 0.8663
	\$ 0.2392	\$ 0.9352	\$ 0.0478	\$ 1.2222	\$ 0.1733	\$ 0.4843	\$ 0.0757	\$ 0.7333
All therms over the first block per month at	\$ 0.1593	\$ 0.9352	\$ 0.0478	\$ 1.1423	\$ 0.0985	\$ 0.6173	\$ 0.0757	\$ 0.7915
	\$ 0.1593	\$ 0.9352	\$ 0.0478	\$ 1.1423	\$ 0.0985	\$ 0.4843	\$ 0.0757	\$ 0.6585
Commercial/Industrial - G-53	\$ 746.81			\$ 746.81	\$ 746.81			\$ 746.81
Customer Charge per Month per Meter	\$ 746.81			\$ 746.81	\$ 746.81			\$ 746.81
All therms over the first block per month at	\$ 0.1672	\$ 0.9352	\$ 0.0478	\$ 1.1502	\$ 0.0802	\$ 0.6173	\$ 0.0757	\$ 0.7732
	\$ 0.1672	\$ 0.9352	\$ 0.0478	\$ 1.1502	\$ 0.0802	\$ 0.4843	\$ 0.0757	\$ 0.6402
Commercial/Industrial - G-54	\$ 746.81			\$ 746.81	\$ 746.81			\$ 746.81
Customer Charge per Month per Meter	\$ 746.81			\$ 746.81	\$ 746.81			\$ 746.81
All therms over the first block per month at	\$ 0.0638	\$ 0.9352	\$ 0.0478	\$ 1.0468	\$ 0.0346	\$ 0.6173	\$ 0.0757	\$ 0.7276
	\$ 0.0638	\$ 0.9352	\$ 0.0478	\$ 1.0468	\$ 0.0346	\$ 0.4843	\$ 0.0757	\$ 0.5946

ISSUED: ~~March~~^{April} XX, 24, 2020

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

EFFECTIVE: ~~April~~^{May} 01, 2020

Authorized by NHPUC Order No. ~~26,305XX.XXX~~ dated ~~October~~^{April} XX~~31~~³¹, 2019~~2020~~, in Docket No. DG ~~19XX-153XXX~~

NHPUC NO. 10 GAS
LIBERTY UTILITIES

~~Tenth-Eleventh~~ Revised Page 90
Superseding ~~Tenth-Ninth~~ Revised Page 90
Summer Cost of Gas

28 CALCULATION OF SUMMER PERIOD COST OF GAS RATE – KEENE CUSTOMERS

CALCULATION OF THE SUMMER COST OF GAS RATE

Period Covered: ~~Summer Period May 1, 2019, through October 31, 2019~~
Summer Period May 1, 2020, through October 31, 2020

Projected Gas Sales - therms	350,507	334,086
Total Anticipated Cost of Propane Sendout	\$462,368	\$287,948
Add: Prior Period Deficiency Uncollected Interest	\$0 \$0	\$0 \$0
Deduct: Prior Period Excess Collected Interest	(\$72,208) <u>(\$2,110)</u>	(\$80,938) (\$792)
Prior Period Adjustments and Interest	(\$74,318)	(\$81,730)
Total Anticipated Cost	\$388,050	\$206,218
Cost of Gas Rate - Beginning Period (per therm)	\$1.4074	\$0.6173
Mid Period Adjustment - June 1, 2019	(\$0.4008)	
Mid Period Adjustment - July 1, 2019	(\$0.4209)	
Revised Cost of Gas Rate - Effective October 1, 2019 (per therm)		
Revised Cost of Gas Rate - Effective October 1, 2020 (per therm)	<u>\$0.8854</u>	<u>\$0.6173</u>
Pursuant to tariff section 16.2(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 (per therm)	<u>\$1.3839</u>	<u>\$0.7716</u>

ISSUED: ~~August-April XX26, 201920~~

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

EFFECTIVE: ~~September-May 01, 20192020~~

TITLE: President

Authorized by NHPUC Order No. ~~26,244-XX,XXX~~ dated April ~~29XX, 20192020~~, in Docket No. DG ~~19XX-068,XXX~~

SCHEDULE A

LIBERTY UTILITIES - KEENE DIVISION
CONVERSION OF GAS COSTS - GALLONS TO THERMS
SUMMER PERIOD 2020

	(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>
PROPANE FROM INVENTORY	GALLONS	0.91502	379,972	347,682	\$0.6219	\$0.6797

LIBERTY UTILITIES - KEENE DIVISION
CALCULATION OF COST OF GAS RATE
SUPPLY / DEMAND BALANCE
SUMMER PERIOD 2020

	PRIOR	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	TOTAL
PROPANE COSTS								
1 PROPANE FIRM SENDOUT (therms)		51,850	38,794	34,999	36,111	42,532	74,452	278,738
2 COMPANY USE (therms)		2,846	1,918	1,903	2,120	2,066	2,756	13,609
3 TOTAL PROPANE SENDOUT (therms)		54,696	40,712	36,902	38,231	44,598	77,208	292,347
4 COST PER THERM (WACOG)		\$0.8238	\$0.7438	\$0.7055	\$0.6888	\$0.6844	\$0.6875	
5 TOTAL CALCULATED COST OF PROPANE		\$45,059	\$30,280	\$26,035	\$26,335	\$30,524	\$53,077	\$211,310
6 PROPANE ADJUSTMENTS		\$0	\$0	\$0	\$0	\$0	\$0	\$0
7 TOTAL COST OF PROPANE		\$45,059	\$30,280	\$26,035	\$26,335	\$30,524	\$53,077	\$211,310
CNG COSTS								
7 CNG SENDOUT (therms)		15,330	8,300	6,308	6,867	8,831	9,699	55,335
8 COST PER THERM (WACOG)		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	
9 TOTAL CALCULATED COST OF CNG		\$0	\$0	\$0	\$0	\$0	\$0	\$0
10 CNG DEMAND CHARGES		\$4,167	\$4,167	\$4,167	\$4,167	\$4,167	\$4,167	\$25,000
11 CNG ADJUSTMENTS		\$0	\$0	\$0	\$0	\$0	\$0	\$0
12 TOTAL CNG COSTS		\$4,167	\$4,167	\$4,167	\$4,167	\$4,167	\$4,167	\$25,000
13 ACCOUNTING ADJUSTMENT		\$0	\$0	\$0	\$0	\$0	\$0	\$0
14 TOTAL COSTS OF GAS		\$49,226	\$34,447	\$30,202	\$30,502	\$34,691	\$57,244	\$236,312
15 FPO PREMIUM		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
16 RETURN ON INVENTORY		\$2,354	\$2,354	\$2,354	\$2,354	\$2,354	\$2,354	\$14,126
REVENUES								
17 BILLED FPO SALES (therms)		0	0	0	0	0	0	
18 COG FPO RATE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0
19 BILLED NON-FPO SALES PRIOR MONTH (therms)		0	0	0	0	0	0	
20 COG NON-FPO RATE PRIOR MONTH		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0
21 BILLED NON-FPO SALES CURRENT MONTH (therms)		66,614	47,641	41,050	43,473	50,418	84,890	334,086
22 COG NON-FPO RATE CURRENT MONTH		\$0.5050	\$0.5050	\$0.5050	\$0.5050	\$0.5050	\$0.5050	\$168,706
23 BILLED SALES OTHER PRIOR PERIODS		0	0	0	0	0	0	
24 COG OTHER PRIOR PERIODS BLENDED RATE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0
25 TOTAL SALES		66,614	47,641	41,050	43,473	50,418	84,890	334,086
26 TOTAL BILLED REVENUES		\$33,639	\$24,058	\$20,729	\$21,953	\$25,460	\$42,868	\$168,707
27 UNBILLED REVENUES (NET)		\$0	\$0	\$0	\$0	\$0	\$0	\$0
28 TOTAL REVENUES		\$33,639	\$24,058	\$20,729	\$21,953	\$25,460	\$42,868	\$168,707
29 (OVER)/UNDER COLLECTION		\$17,941	\$12,743	\$11,827	\$10,903	\$11,585	\$16,730	\$81,731
30 INTEREST AMOUNT		(\$255)	(\$201)	(\$159)	(\$119)	(\$80)	(\$30)	(\$844)
31 FINAL (OVER)/UNDER COLLECTION		(\$80,938)	\$17,686	\$12,542	\$11,668	\$10,784	\$11,505	(\$51)

In Order No. 26,241 at 6 (Apr. 29, 2019), which approved Liberty Keene's 2019 summer cost of gas, the Commission "direct[ed] that in future Liberty-Keene filings, both fuel-type and costs for each fuel, shall be specified in summaries as well as in discrete schedules." The "COST/THERM FROM SCHEDULE K" of \$0.7324 on Line 85 is a blend of propane and CNG costs. The CNG specific cost of purchases received is \$1.1297 per therm on line 54; the propane specific cost is \$0.6572 on line 69 per therm.

SCHEDULE C
REDACTED

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

	(1) Mt. Belvieu	(2) Broker Fee	(3) Pipeline Rate	(4) PERC Fee	(5) Supplier Charge	(6) Cost @ Se Kirk	(7) Trucking to Keene	(8) \$ per Gal.	(9) \$ per Therm
1	MAY								
2	JUN								
3	JUL								
4	AUG								
5	SEP								
6	OCT								

NOTE: Summer spot purchases are based on market quotes from local suppliers. The above schedule provides a breakdown of the quote

1. Propane futures market quotations (cmegroup.com) on 03/13/20 close. See Appendix 1.
2. A generally accepted standard broker fee
3. Summer prices are quoted on a delivered basis with pipeline charges embedded in delivered price
4. Propane Education Research Council (propanecouncil.org)
5. Supplier charge
6. Se Kirk 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

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SCHEDULE D
REDACTED

LIBERTY UTILITIES - KEENE DIVISION

PROPANE INVENTORY & WEIGHTED AVERAGE COST OF PROPANE CALCULATION
SUMMER PERIOD 2020

LINE NO.		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		<u>Therms</u>	<u>Cost</u>	<u>Therm</u>	<u>Gal.</u>	<u>CNG therms</u>	<u>Cost</u>	<u>Total Sendout</u>	<u>Total Cost</u>	<u>Therm Rate</u>
								(1)+(5)	(2)+(6)	(8) / (7)
1	May 2020 (Forecasted)									
2	Beginning Balance	54,138	\$56,827	\$1 0497	\$0.9605					
3	Purchases Received	60,000	\$37,201	\$0 6200	\$0.5673					
4	Total Available	114,138	\$94,028	\$0 8238	\$0.7538					
5	Less Sendout	54,696	\$45,059	\$0 8238	\$0.7538	15,330		70,026		
6	Ending Balance	59,442	\$48,969	\$0 8238	\$0.7538					
7	June 2020 (Forecasted)									
8	Beginning Balance	59,442	\$48,969	\$0 8238	\$0.7538					
9	Purchases Received	40,000	\$24,992	\$0 6248	\$0.5717					
10	Total Available	99,442	\$73,961	\$0.7438	\$0.6806					
11	Less Sendout	40,712	\$30,280	\$0.7438	\$0.6806	8,300		49,012		
12	Ending Balance	58,730	\$43,681	\$0.7438	\$0.6806					
13	July 2020 (Forecasted)									
14	Beginning Balance	58,730	\$43,681	\$0.7438	\$0.6806					
15	Purchases Received	40,000	\$25,975	\$0 6494	\$0.5942					
16	Total Available	98,730	\$69,656	\$0.7055	\$0.6456					
17	Less Sendout	36,902	\$26,035	\$0.7055	\$0.6456	6,308		43,210		
18	Ending Balance	61,828	\$43,621	\$0.7055	\$0.6456					
19	August 2020 (Forecasted)									
20	Beginning Balance	61,828	\$43,621	\$0.7055	\$0.6456					
21	Purchases Received	40,000	\$26,522	\$0 6630	\$0.6067					
22	Total Available	101,828	\$70,143	\$0 6888	\$0.6303					
23	Less Sendout	38,231	\$26,335	\$0 6888	\$0.6303	6,867		45,098		
24	Ending Balance	63,597	\$43,808	\$0 6888	\$0.6303					
25	September 2020 (Forecasted)									
26	Beginning Balance	63,597	\$43,808	\$0 6888	\$0.6303					
27	Purchases Received	40,000	\$27,096	\$0 6774	\$0.6198					
28	Total Available	103,597	\$70,904	\$0 6844	\$0.6263					
29	Less Sendout	44,598	\$30,524	\$0 6844	\$0.6263	8,831		53,429		
30	Ending Balance	58,999	\$40,380	\$0 6844	\$0.6263					
31	October 2020 (Forecasted)									
32	Beginning Balance	58,999	\$40,380	\$0 6844	\$0.6263					
33	Purchases Received	80,000	\$55,175	\$0 6897	\$0.6311					
34	Total Available	138,999	\$95,555	\$0 6875	\$0.6290					
35	Less Sendout	77,208	\$53,077	\$0 6875	\$0.6290	9,699		86,907		
36	Ending Balance	61,791	\$42,478	\$0 6875	\$0.6290					
37	AVERAGE SUMMER RATE - SENDOUT							347,682		

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LIBERTY UTILITIES - KEENE DIVISION
(OVER/UNDER) COLLECTION - MAY 2019 THROUGH OCTOBER 2019

	PRIOR	ACTUAL May-19	ACTUAL Jun-19	ACTUAL Jul-19	ACTUAL Aug-19	ACTUAL Sep-19	ACTUAL Oct-19	TOTAL
COSTS								
1	FIRM SENDOUT PROPANE (therms)	70,209	46,416	40,939	42,549	52,006	69,644	321,763
2	COMPANY USE PROPANE(therms)	2,846	1,918	1,903	2,120	2,066	2,756	13,609
3	TOTAL SENDOUT (therms)	73,055	48,334	42,842	44,669	54,072	72,400	335,372
4	COST PER THERM (WACOG)	\$0.9985	\$0.8872	\$0.7208	\$0.7049	\$0.7153	\$0.7741	\$0.8138
5	TOTAL COSTS PROPANE	\$72,943	\$42,882	\$30,882	\$31,487	\$38,680	\$56,043	\$272,917
6	COMMODITY COSTS CNG						\$7,992	
7	CNG DEMAND CHARGES	\$4,167	(\$41,667)	\$0	\$0	\$0	\$2,083	(\$35,417)
8	TOTAL CNG COSTS	\$4,167	(\$41,667)	\$0	\$0	\$0	\$10,075	(\$27,425)
9	PRODUCTION COSTS	\$1,622	(\$48,032)	\$0	(\$10,806)	\$0	\$0	(\$57,215)
10	ACCOUNTING ADJUSTMENT	\$0	\$0	\$0	(\$4,572)	\$48	\$0	(\$4,524)
11	TOTAL COSTS	\$78,732	(\$46,817)	\$30,882	\$16,109	\$38,728	\$66,118	\$183,753
REVENUES								
12	BILLED FPO SALES (therms)	0	0	0	0	0	0	0
13	COG FPO RATE	\$1.3743	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	
14	FPO REVENUES	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	BILLED NON-FPO SALES PRIOR MONTH (therms)	0	60,103	36,726	34,303	38,050	0	169,182
16	COG NON-FPO RATE PRIOR MONTH	\$1.2651	\$1.1071	\$1.0063	\$0.8854	\$0.7068	\$0.4843	
17	PRIOR MONTH BILLED REVENUES	\$0	\$66,540	\$36,958	\$30,372	\$26,894	\$0	\$160,763
18	BILLED NON-FPO SALES CURRENT MONTH (therms)	11,047	9,305	6,839	5,195	7,622	50,703	90,711
19	COG NON-FPO RATE CURRENT MONTH	\$1.1071	\$1.0063	\$0.8854	\$0.7068	\$0.4843	\$0.4843	
20	CURRENT MONTH BILLED REVENUES	\$12,230	\$9,364	\$6,055	\$3,672	\$3,691	\$24,555	\$59,567
21	BILLED SALES OTHER PRIOR PERIODS	0	900	18	(422)	(205)	(138)	153
22	COG OTHER PRIOR PERIODS BLENDED RATE	\$0.0000	\$0.0008	\$1.1095	\$1.0382	\$0.9547	\$0.6968	
23	OTHER BILLED REVENUES	\$0	\$1	\$20	(\$438)	(\$196)	(\$96)	(\$709)
24	TOTAL SALES	11,047	70,308	43,583	39,076	45,467	50,565	260,046
25	TOTAL BILLED REVENUES	\$12,230	\$75,904	\$43,033	\$33,605	\$30,389	\$24,459	\$219,622
26	UNBILLED REVENUES (NET)	\$62,137	(\$28,096)	(\$5,076)	(\$3,585)	(\$4,580)	\$14,201	\$35,000.46
27	TOTAL REVENUES	\$74,367	\$47,808	\$37,957	\$30,021	\$25,810	\$38,660	\$254,622
28	(OVER)/UNDER COLLECTION	\$4,365	(\$94,625)	(\$7,075)	(\$13,912)	\$12,918	\$27,458	(\$70,870)
29	INTEREST AMOUNT	(\$258)	(\$455)	(\$233)	(\$494)	(\$429)	(\$139)	(\$2,009)
30	FINAL (OVER)/UNDER COLLECTION	\$300	\$4,107	(\$7,307)	(\$14,405)	\$12,489	\$27,318	(\$72,578)

SCHEDULE F

LIBERTY UTILITIES - KEENE DIVISION

INTEREST CALCULATION
SUMMER PERIOD 2020

LINE NO.	MONTH	(1) BEG. OF MONTH BALANCE	(2) (OVER) UNDER COLLECT	(3) REFUNDS	(4) END OF MONTH BALANCE (COL.1+2+3)	(5) AVERAGE BALANCE COL. (COL.1+4)/2	(6) ANNUAL INTEREST RATE	(7) INTEREST AMOUNT	(8) MONTH END BAL. WITH INTEREST (COL.4+7)
1	NOV 2019	(72,578)	\$4,904	\$0	(\$67,674)	(\$70,126)	4.25%	(247)	(\$67,921)
2	DEC	(67,921)	(1,224)	0	(69,145)	(68,533)	4.25%	(263)	(69,408)
3	JAN 2020	(69,408)	(10,375)	0	(79,783)	(74,596)	4.25%	(300)	(80,083)
4	FEB	(80,083)	0	0	(80,083)	(80,083)	4.25%	(284)	(80,367)
5	MAR	(80,367)	0	0	(80,367)	(80,367)	4.25%	(285)	(80,652)
6	APR	(80,652)	0	0	(80,652)	(80,652)	4.25%	(286)	(80,938)
7	MAY	(80,938)	17,941	0	(62,997)	(71,968)	4.25%	(255)	(63,252)
8	JUN	(63,252)	12,743	0	(50,509)	(56,880)	4.25%	(201)	(50,710)
9	JUL	(50,710)	11,827	0	(38,882)	(44,796)	4.25%	(159)	(39,041)
10	AUG	(39,041)	10,903	0	(28,138)	(33,590)	4.25%	(119)	(28,257)
11	SEP	(28,257)	11,585	0	(16,672)	(22,464)	4.25%	(80)	(16,752)
12	OCT	(16,752)	16,730	0	(21)	(8,387)	4.25%	(30)	(51)
13									
14									
									<u>(\$2,509)</u>

15 = COL. 1, LINE 1 + COL. 7, LINES 1 TO 6

16 = (72,578) + (1,665) = (74,243) @ MAY 1, 2020

(TRANSFER TO SCHEDULE B, LINE 13)
(UNLESS ADJUSTMENTS UNDER COLUMN 2 LINES 1-6)

SCHEDULE G

LIBERTY UTILITIES - KEENE DIVISION													
Weather Normalization - Firm Sendout													
Period	Actual Firm Sendout (1)	Base Use (2)	Heat Use (3)	Actual Calendar Month Degree Days (4)	Normal Calendar Month Degree Days (5)	Colder (Warmer) Than Normal (6)	Actual Unit Heat Load Therm/DD (7)	Weather Adjustment (8)	Normal Heat Load (9)	Normalized Firm Sendout (10)	Actual Company Use (11)	Unaccounted For 0.90% (12)	Total Firm Sendout (13)
			(1) - (2)			(4) - (5)	(3) / (4)	(6) X (7)	(3) + (8)	(1) - (3) + (9)		(10 - 11) * 0.90%	(10) - (11) + (12)
May-19	73,055	43,756	29,300	323	283	40	90.71	(3,628)	25,671	69,427	2,846	599	67,180
Jun-19	48,334	43,756	4,579	71	75	(4)	64.49	258	4,836	48,592	1,918	420	47,094
Jul-19	42,842	43,756	0	0	12	(12)	0.00	0	0	42,842	1,903	368	41,307
Aug-19	44,669	43,756	914	20	21	(1)	45.68	46	959	44,715	2,120	383	42,978
Sep-19	54,072	43,756	10,317	178	159	19	57.96	(1,101)	9,215	52,971	2,066	458	51,363
Oct-19	84,363	43,756	40,608	453	473	(20)	89.64	1,793	42,401	86,156	2,756	751	84,151
Total	347,335	262,533	85,716	1,045	1,023	22		(2,633)	83,083	344,702	13,609	2,980	334,073

SCHEDULE H

LIBERTY UTILITIES - KEENE DIVISION											
Revised Weather Normalization - Sales Rate Residential											
Period	Calendar Customers	Calendar Sales	Base Load	Heating Load	Calendar Monthly Actual Degree Days	Calendar Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therm/DD	Weather Adjustment	Normal Heat Load	Normal Firm Sales 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)
May-19	918	15,671	6,927	8,744	323	283	40	27.07	(1,083)	7,661	14,588
Jun-19	878	8,951	6,927	2,024	71	75	(4)	28.51	114	2,138	9,065
Jul-19	897	6,828	6,927	0	0	12	(12)	0	0	0	6,828
Aug-19	897	7,025	6,927	98	20	21	(1)	4.92	5	103	7,030
Sep-19	871	8,628	6,927	1,701	178	159	19	9.56	(182)	1,519	8,446
Oct-19	907	17,407	6,927	10,480	453	473	(20)	23.14	463	10,943	17,870
Total		64,510	41,561	23,048	1,045	1,023	22	31.03	(683)	22,365	63,827

LIBERTY UTILITIES - KEENE DIVISION											
Revised Weather Normalization - Sales Rate Commercial											
Period	Calendar Customers	Calendar Sales	Base Load	Heating Load	Calendar Monthly Actual Degree Days	Calendar Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therm/DD	Weather Adjustment	Normal Heat Load	Normal Firm Sales 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)
May-19	341	54,389	35,305	19,084	323	283	40	59.08	(2,363)	16,720	52,026
Jun-19	323	38,401	35,305	3,096	71	75	(4)	43.60	174	3,270	38,576
Jul-19	333	34,222	35,305	0	0	12	(12)	0	0	0	34,222
Aug-19	333	36,389	35,305	1,083	20	21	(1)	54.17	54	1,138	36,443
Sep-19	322	42,768	35,305	7,463	178	159	19	41.93	(797)	6,666	41,972
Oct-19	338	65,679	35,305	30,374	453	473	(20)	67.05	1,341	31,715	67,020
Total		271,849	211,833	61,099	1,045	1,023	22	72.29	(1,590)	59,509	270,259

Summary - Total Summer Season Billed Sales

	Actual 2019	Normalized
May	70,060	66,614
June	47,352	47,641
July	41,050	41,050
August	43,414	43,473
September	51,396	50,418
October	83,087	84,890
Total	336,359	334,086

SCHEDULE I-1

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

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	Nov-Apr	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Summer May-Oct	Total Nov-Oct
12 MONTHS ENDED 10/2019							Winter								
1 Typical Usage - therms (1)	64	120	158	251	245	132	970	91	28	14	10	9	20	172	1,142
2 Residential Heating R-3															
3 Customer Charge	\$15.02	\$15.02	\$15.02	\$15.02	\$15.02	\$15.02	\$90.12	\$15.02	\$15.02	\$15.20	\$15.20	\$15.20	\$15.20	\$90.84	\$180.96
4 Delivery Charge: All therms @ \$0.5502	\$35.21	\$66.02	\$66.93	\$136.10	\$134.80	\$72.63	\$533.69	\$50.07	\$15.41	\$7.80	\$5.57	\$5.01	\$11.14	\$95.00	\$628.69
5 Base Delivery Revenue Total	\$50.23	\$81.04	\$101.95	\$153.12	\$149.82	\$87.65	\$623.81	\$65.09	\$30.43	\$23.00	\$20.77	\$20.21	\$26.34	\$195.84	\$909.65
6 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	\$0.0000	\$0.0000	\$0.0000
7 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
8 COG Rates	\$1.4002	\$1.4002	\$1.4002	\$1.4002	\$1.4002	\$1.4002	\$1.4002	\$1.1071	\$1.0063	\$0.8854	\$0.7068	\$0.4843	\$0.4843	\$0.9445	\$1.3316
9 Cost of Gas Total	\$89.61	\$168.02	\$221.23	\$351.45	\$343.05	\$184.83	\$1,358.19	\$100.75	\$28.18	\$12.40	\$7.07	\$4.36	\$9.69	\$162.45	\$1,520.64
10 LDAC Rate	\$0.0680	\$0.0680	\$0.0680	\$0.0680	\$0.0680	\$0.0680	\$0.0680	\$0.0680	\$0.0680	\$0.0680	\$0.0680	\$0.0680	\$0.0680	\$0.0680	\$0.0680
11 LDAC Total	\$4.22	\$7.92	\$10.43	\$16.57	\$16.17	\$8.71	\$64.02	\$6.01	\$1.85	\$0.92	\$0.66	\$0.59	\$1.32	\$11.35	\$75.37
12 Total Bill	\$144	\$257	\$334	\$521	\$509	\$281	\$2,046	\$172	\$60	\$36	\$29	\$25	\$37	\$360	\$2,406
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27 12 MONTHS ENDED 10/2020							Winter								
28 Typical Usage - therms (1)	64	120	158	251	245	132	970	91	28	14	10	9	20	172	1,142
29 Residential Heating															
30 Customer Charge	\$15.20	\$15.20	\$15.20	\$15.20	\$15.20	\$15.20	\$91.20	\$15.20	\$15.20	\$15.20	\$15.20	\$15.20	\$15.20	\$91.20	\$182.40
31 Delivery Charge: All therms @ \$0.5569	\$35.64	\$66.83	\$67.99	\$139.78	\$136.44	\$73.51	\$540.19	\$50.68	\$15.59	\$7.80	\$5.57	\$5.01	\$11.14	\$95.79	\$635.98
32 Base Delivery Revenue Total	\$50.84	\$82.03	\$103.19	\$154.98	\$151.64	\$88.71	\$631.39	\$65.88	\$30.79	\$23.00	\$20.77	\$20.21	\$26.34	\$186.99	\$918.38
33 Seasonal Base Delivery Difference from previous year							\$7.98							\$1.15	\$5.73
34 Seasonal Percent Change from previous year							1.2%							0.6%	1.1%
35 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	\$0.0000	\$0.0000	\$0.0000
36 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
37 COG Rates	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$0.9692	\$0.5050	\$0.5050	\$0.5050	\$0.5050	\$0.5050	\$0.5050	\$0.5051	\$0.8993
38 Cost of Gas Total	\$62.03	\$116.30	\$153.13	\$243.27	\$237.45	\$127.83	\$940.11	\$45.96	\$14.14	\$7.07	\$5.05	\$4.55	\$10.10	\$86.87	\$1,026.98
39 LDAC Rate	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.1860	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310
40 LDAC Total	\$1.98	\$3.72	\$4.90	\$7.78	\$7.60	\$4.09	\$30.07	\$2.82	\$0.87	\$0.43	\$0.31	\$0.28	\$0.62	\$5.33	\$35.40
41 Seasonal COG Difference from previous year							-\$418.08							-\$75.68	-\$493.66
42 Seasonal Percent Change from previous year							-30.8%							-46.5%	-32.5%
43 Total Bill	\$115	\$202	\$261	\$406	\$397	\$221	\$1,602	\$115	\$46	\$31	\$26	\$25	\$37	\$279	\$1,881
44 Seasonal Total Bill Difference from previous year							-\$444.45							-\$80.45	-\$524.90
45 Seasonal Percent Change from previous year							-21.7%							-22.4%	-21.8%
46 Seasonal Percent Change resulting from Base Rates (incl. Def. Revenue Surch.)							-2.8%							-2.8%	-2.8%
47 Seasonal Percent Change resulting from COG							-20.4%							-21.0%	-20.6%
48 Seasonal Percent Change resulting from LDAC							-1.7%							-1.7%	-1.7%

(1) Residential Heating Typical Usage: Single family detached home using gas for heat, hot water and cooking.

(2) LDAC included in Keene distribution rates beginning on 05/01/16, as authorized by NHPUC Order No. 26,122 dated April 27, 2016, in Docket No. DG 17-048

SCHEDULE 1-2

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

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	Winter Nov-Apr	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Summer May-Oct	Total Nov-Oct
1	12 MONTHS ENDED 10/2019														
2	Residential Heating	64	120	158	251	245	132	91	28	14	10	9	20	172	1,142
3	Typical Usage - therms (1)														
4	Customer Charge	\$15.02	\$15.02	\$15.02	\$15.02	\$15.02	\$15.02	\$15.02	\$15.02	\$15.02	\$15.02	\$15.02	\$15.02	\$90.12	\$180.24
5	Delivery Charge: All therms @ \$0.5502	\$35.21	\$66.02	\$86.93	\$138.10	\$134.80	\$72.63	\$50.68	\$15.59	\$7.80	\$5.57	\$5.01	\$11.14	\$95.79	\$629.48
6	Base Delivery Revenue Total	\$50.23	\$81.04	\$101.95	\$153.12	\$149.82	\$87.65	\$65.70	\$30.61	\$22.82	\$20.59	\$20.03	\$26.16	\$185.91	\$809.72
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	\$0.00	\$0.00
8	Deferred Revenue Surcharge Total	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.00	\$0.00
9	COG Rates	\$1.3802	\$1.4734	\$1.5311	\$1.5011	\$1.4298	\$1.2651	\$1.1071	\$1.0063	\$0.8854	\$0.7088	\$0.4843	\$0.4843	\$0.9445	\$1.3692
10	Cost of Gas Total	\$88.33	\$176.81	\$241.91	\$376.78	\$350.30	\$166.99	\$100.75	\$28.18	\$12.40	\$7.07	\$4.36	\$9.69	\$162.45	\$1,563.57
11	LDAC Rate	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$1.35	\$11.75
12	LDAC Total	\$0.6600	\$0.6600	\$0.6600	\$0.6600	\$0.6600	\$0.6600	\$6.01	\$1.8480	\$0.9240	\$0.6600	\$0.6600	\$1.3200	\$11.35	\$11.75
13	Total Bill	\$139	\$258	\$344	\$530	\$500	\$255	\$172	\$61	\$36	\$28	\$25	\$37	\$360	\$2,385
14	Seasonal Base Delivery Difference from previous year														
15	Seasonal Percent Change from previous year														
16	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	\$0.00	\$0.00
17	Deferred Revenue Surcharge Total	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.00	\$0.00
18	COG Rates	\$1.3802	\$1.4734	\$1.5311	\$1.5011	\$1.4298	\$1.2651	\$1.1071	\$1.0063	\$0.8854	\$0.7088	\$0.4843	\$0.4843	\$0.9445	\$1.3692
19	Cost of Gas Total	\$88.33	\$176.81	\$241.91	\$376.78	\$350.30	\$166.99	\$100.75	\$28.18	\$12.40	\$7.07	\$4.36	\$9.69	\$162.45	\$1,563.57
20	LDAC Rate	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$1.35	\$11.75
21	LDAC Total	\$0.6600	\$0.6600	\$0.6600	\$0.6600	\$0.6600	\$0.6600	\$6.01	\$1.8480	\$0.9240	\$0.6600	\$0.6600	\$1.3200	\$11.35	\$11.75
22	Total Bill	\$139	\$258	\$344	\$530	\$500	\$255	\$172	\$61	\$36	\$28	\$25	\$37	\$360	\$2,385
23	Seasonal Base Delivery Difference from previous year														
24	Seasonal Percent Change from previous year														
25	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	\$0.00	\$0.00
26	Deferred Revenue Surcharge Total	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.00	\$0.00
27	COG Rates	\$1.3802	\$1.4734	\$1.5311	\$1.5011	\$1.4298	\$1.2651	\$1.1071	\$1.0063	\$0.8854	\$0.7088	\$0.4843	\$0.4843	\$0.9445	\$1.3692
28	Cost of Gas Total	\$88.33	\$176.81	\$241.91	\$376.78	\$350.30	\$166.99	\$100.75	\$28.18	\$12.40	\$7.07	\$4.36	\$9.69	\$162.45	\$1,563.57
29	LDAC Rate	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$0.0660	\$1.35	\$11.75
30	LDAC Total	\$0.6600	\$0.6600	\$0.6600	\$0.6600	\$0.6600	\$0.6600	\$6.01	\$1.8480	\$0.9240	\$0.6600	\$0.6600	\$1.3200	\$11.35	\$11.75
31	Total Bill	\$139	\$258	\$344	\$530	\$500	\$255	\$172	\$61	\$36	\$28	\$25	\$37	\$360	\$2,385
32	Seasonal Base Delivery Difference from previous year														
33	Seasonal Percent Change from previous year														
34	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	\$0.00	\$0.00
35	Deferred Revenue Surcharge Total	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.00	\$0.00
36	COG Rates	\$0.9492	\$0.9492	\$0.9686	\$0.9352	\$0.8906	\$0.6906	\$0.5050	\$0.5050	\$0.5050	\$0.5050	\$0.5050	\$0.5050	\$0.5051	\$0.7965
37	Cost of Gas Total	\$60.75	\$113.90	\$153.04	\$234.74	\$169.20	\$91.16	\$45.96	\$14.14	\$7.07	\$5.05	\$4.55	\$10.10	\$86.87	\$909.66
38	LDAC Rate	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310	\$0.0310
39	LDAC Total	\$1.98	\$3.72	\$4.90	\$7.78	\$7.60	\$4.09	\$2.82	\$0.87	\$0.43	\$0.31	\$0.28	\$0.62	\$5.33	\$55.40
40	Seasonal COG Difference from previous year														
41	Seasonal Percent Change from previous year														
42	Total Bill	\$114	\$200	\$261	\$398	\$328	\$184	\$115	\$46	\$31	\$26	\$25	\$37	\$279	\$1,763
43	Seasonal Total Bill Difference from previous year														
44	Seasonal Percent Change from previous year														
45	Seasonal Total Bill Difference from previous year														
46	Seasonal Percent Change from previous year														
47	Seasonal Total Bill Difference from previous year														
48	Seasonal Percent Change from previous year														
49	Seasonal Total Bill Difference from previous year														
50	Seasonal Percent Change from previous year														
51	Seasonal Total Bill Difference from previous year														
52	Seasonal Percent Change from previous year														
53	Seasonal Total Bill Difference from previous year														
54	Seasonal Percent Change from previous year														
55	Seasonal Total Bill Difference from previous year														
56	Seasonal Percent Change from previous year														
57	Seasonal Total Bill Difference from previous year														
58	Seasonal Percent Change from previous year														

(1) Residential Heating Typical Usage: Single family detached home using gas for heat, hot water and cooking.

(2) LDAC was included in Keene distribution rates beginning on 05/01/18, as authorized by NHPUC Order No. 26,122 dated April 27, 2018, in Docket No. DG 17-048

SCHEDULE J-1
REDACTED

LIBERTY UTILITIES - KEENE DIVISION
B/D PREMIUM FOR PRE-PURCHASED GALLONS - PRIOR YEAR

	Mt. Belvieu Price	Pipeline Rate	Broker + Supplier Fee	PERC	Trucking	Keene Div. Price	Contract Volumes	Keene Div. Cost	Fixed Basis Bid	Plan Price	Contract Volumes	Plan Cost	Cost Premium	Per Gallon Premium
Apr-19	0.6605	\$0.2265	\$0.1000	\$0.0045	\$0.0858	\$1.0773	115,000	\$723,890			115,000			-\$0.0993
May-19	0.6728	\$0.2265	\$0.1000	\$0.0045	\$0.0858	\$1.0896	111,250	\$121,218			111,250			-\$0.0993
Jun-19	0.5752	\$0.2265	\$0.1000	\$0.0045	\$0.0858	\$0.9920	111,250	\$110,360			111,250			-\$0.0993
Jul-19	0.5929	\$0.2265	\$0.1000	\$0.0045	\$0.0858	\$1.0097	140,000	\$141,358			140,000			-\$0.0993
Aug-19	0.4986	\$0.2265	\$0.1000	\$0.0045	\$0.0858	\$0.9154	111,250	\$101,838			111,250			-\$0.0993
Sep-19	0.4894	\$0.2265	\$0.1000	\$0.0045	\$0.0858	\$0.9062	111,250	\$100,815			111,250			-\$0.0993
Total							700,000	\$699,479			700,000	\$629,969	(\$69,510)	-\$0.0993

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SCHEDULE J-2

LIBERTY UTILITIES - KEENE DIVISION

COMPARISON OF CONTRACT COST TO HYPOTHETICAL SPOT COST
WINTER SEASON 2019-2020 TO DATE

Delivery Month	Contract Price (1)	Contract Volumes (2)	Contract Cost (3)	Average Spot Price (4)	Contract Volumes (5)	Hypothetical Spot Cost (6)	Incremental Cost / (Savings) of Plan (7)
			(1) x (2)			(4) x (5)	(3) - (6)
Nov-19	\$0.8900	91,726	\$81,640	\$0.9235	91,726	\$84,709	(\$3,069)
Dec-19	\$0.8986	140,000	\$125,801	\$0.9084	140,000	\$127,176	(\$1,375)
Jan-20	\$0.9081	164,138	\$149,046	\$0.8090	164,138	\$132,787	\$16,259
Feb-20	\$0.9099	135,172	\$122,991	\$0.7713	135,172	\$104,259	\$18,732
Total			\$479,477			\$448,931	\$30,546

6.8%

SCHEDULE J-3

LIBERTY UTILITIES - KEENE DIVISION
PROPANE PURCHASING STABILIZATION PLAN
PRE-PURCHASES AND DELIVERY SCHEDULE

Delivery Month	Pre-Purchases (Gallons)						
	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Total
Nov-20	15,069	14,578	14,578	18,345	14,578	14,578	91,726
Dec-20	23,000	22,250	22,250	28,000	22,250	22,250	140,000
Jan-21	26,966	26,086	26,086	32,828	26,086	26,086	164,138
Feb-21	22,207	21,483	21,483	27,034	21,483	21,483	135,172
Mar-21	17,448	16,879	16,879	21,241	16,879	16,879	106,205
Apr-21	10,310	9,974	9,974	12,552	9,974	9,974	62,759
Total	115,000	111,250	111,250	140,000	111,250	111,250	700,000
Monthly %	16.4%	15.9%	15.9%	20.0%	15.9%	15.9%	

L BERTY UTILITIES - KEENE DIVISION
CALCULATION OF PURCHASED GAS COSTS
SUMMER PERIOD 2020

LINE NO.		May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	TOTAL
1	TOTAL SENDOUT (therms)	70,026	49,012	43,210	45,098	53,429	86,907	347,682
2	CHANGE TO ENDING INVENTORY BALANCE (therms)	-	-	-	-	-	-	-
3	TOTAL REQUIRED PURCHASES (therms)	70,026	49,012	43,210	45,098	53,429	86,907	347,682
4	PROPANE PURCHASE STABILIZATION PLAN DELIVERIES							
5	Therms	-	-	-	-	-	-	-
6	RATES - from Schedule D							
7	Contract Price	\$0.0000	\$0 0000	\$0.0000	\$0 0000	\$0.0000	\$0 0000	
8	Broker Fee	incl.	incl.	incl.	incl.	incl.	incl.	
9	Pipeline Fee	incl.	incl.	incl.	incl.	incl.	incl.	
10	PERC Fee	incl.	incl.	incl.	incl.	incl.	incl.	
11	Trucking Fee	incl.	incl.	incl.	incl.	incl.	incl.	
12	COST PER GALLON	\$0.0000	\$0 0000	\$0.0000	\$0 0000	\$0.0000	\$0 0000	
13	TOTAL COST - Propane Purchase Stabilization Plan Deliveries	\$0	\$0	\$0	\$0	\$0	\$0	\$0
14	AMHERST STORAGE PROPANE DELIVERIES							
15	Therms	-	-	-	-	-	-	-
16	RATES - from Schedule F							
17	WACOG Price	\$0.0000	\$0 0000	\$0.0000	\$0 0000	\$0.0000	\$0 0000	
18	Trucking Fee	\$0.0000	\$0 0000	\$0.0000	\$0 0000	\$0.0000	\$0 0000	
19	COST PER GALLON	\$0.0000	\$0 0000	\$0.0000	\$0 0000	\$0.0000	\$0 0000	
20	TOTAL COST - Amherst Storage Propane Deliveries	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21	CNG DELIVERIES							
22	Therms	15,330	8,300	6,308	6,867	8,831	9,699	55,335
23	RATE							
24	PRICE							
25	COST PER Therm							
26	COST - CNG							
27	DEMAND FIXED							
28	COST PER Therm							
29	TOTAL CNG							
30	SPOT PURCHASES							
31	Therms	54,696	40,712	36,902	38,231	44,598	77,208	292,347
32	RATES - from Schedule E							
33	Mont Belvieu							
34	Broker Fee							
35	Pipeline Fee							
36	PERC Fee							
37	Supplier Charge							
38	Trucking Fee							
39	COST PER GALLON - Market Quotes							
40	COST PER THERM - Market Quotes							
41	TOTAL COST - Spot Purchases							
42	OTHER ITEMS							
43	Storage - Winter Period 2019-2020	\$0	\$0	\$0	\$0	\$0	\$0	\$0
44	Refund of Deferred Revenue Surcharge over collection	\$0	\$0	\$0	\$0	\$0	\$0	\$0
45	TOTAL OTHER ITEMS	\$0	\$0	\$0	\$0	\$0	\$0	\$0
46	TOTAL							
47	THERMS	70,026	49,012	43,210	45,098	53,429	86,907	347,682
48	SENDOUT THERMS	70,026	49,012	43,210	45,098	53,429	86,907	347,682
49	COST	\$48,333	\$35,196	\$32,488	\$34,271	\$40,291	\$64,054	\$254,634
50	COST PER THERM	\$0.6902	\$0.7181	\$0.7519	\$0.7599	\$0.7541	\$0.7370	\$0.7324

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REVISED MONT BELVIEU PROPANE FUTURES - 03/13/20 CLOSE

Mont Belvieu LDH Propane (OPIS) Futures Settlements

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Futures
 Options

Trade Date: Friday, 13 Mar 2020 (Final) ▼

All market data contained within the CME Group website should be considered as a reference only and should not be used as validation against, nor as a complement to, real-time market data feeds. Settlement prices on instruments without open interest or volume are provided for web users only and are not published on Market Data Platform (MDP). These prices are not based on market activity.

Month	Open	High	Low	Last	Change	Settle	Estimated Volume	Prior Day Open Interest
MAR 20	-	-	-	-	+0.01426	.33125	0	13,262
APR 20	-	-	-	-	+0.02250	.31375	3,793	12,002
MAY 20	-	-	-	-	+0.02125	.31813	1,906	11,231
JUN 20	-	-	-	-	+0.02000	.32250	401	12,988
JLY 20	-	-	-	-	+0.02062	.34500	730	10,477
AUG 20	-	-	-	-	+0.02000	.35750	725	6,460
SEP 20	-	-	-	-	+0.02063	.37063	1,043	6,950
OCT 20	-	-	-	-	+0.02063	.38188	544	7,162
NOV 20	-	-	-	-	+0.01875	.39125	993	6,941
DEC 20	-	-	-	-	+0.01875	.40063	573	9,005

REVISED ENTERPRISE TE PRODUCTS PIPELINE FERC TARIFF 54.49.0 - RATES EFFECTIVE 12/13/19

RATES (In Cents-per-bbl.)				
[U] All rates are unchanged				
ITEM NO. 135		Non-Incentive Rates for Propane		
Destination	Origin			
	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)	--	--	238.90	--
Coshocton (Coshocton Co., OH)	682.68	--	729.29	--
Dexter (Stoddard Co., MO)	--	--	346.52	--
Du Bois (Clearfield Co., PA)	764.08 (1)	391.73 (1)(2)	809.63 (1)	391.73 (1)
Finger Lakes (Schuyler Co., NY)	814.81	569.62	860.62	590.88
Fontaine (Green Co., AR)	--	--	325.55	--
Greensburg (Westmoreland Co., PA)	718.51 (1)	391.73 (1)(2)	764.08 (1)	391.73 (1)
Harford Mills (Cortland Co., NY)	--	550.42 (1)	863.54 (1)	573.04 (1)
Kingsland (Cleveland Co., AR)	--	--	276.12	--
Lebanon (Boone Co., IN)	--	--	408.67 (4)	--
North Little Rock (Pulaski Co., AR)	--	--	291.32	--
Oneonta (Otsego Co., NY)	--	595.83	933.10 (1)	615.05 (1)
Princeton (Gibson Co., IN)	411.29	--	444.85	--
Schaefferstown (Lebanon Co., PA)	--	577.57 (2)	872.82	569.91
Selkirk (Albany Co., NY)	--	646.46	992.14 (1)	648.15 (1)
Seymour (Jackson Co., IN)	--	--	388.33	--
Sinking Spring (Berks Co., PA)	--	577.57 (2)	872.82	569.91
Todhunter (Butler Co., OH)	606.87	--	653.48	--
Twin Oaks(Delaware Co., PA)	--	710.81 (2)(3)	--	710.81 (3)
Watkins Glen (Schuyler Co., NY)	773.60 (1)	529.79 (1)	819.38 (1)	553.87 (1)
West Memphis (Crittenden Co., AR)	--	--	346.52 (4)	--
Monee (Will Co., IL)			1470.00 [W](C&)	

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

March 10, 2020

To: All Customers

Re: Fuel Surcharge Notice

As of Monday, March 9, 2020 the Department of Energy New England average price per gallon of diesel fuel was \$2.990. All deliveries invoiced from Sunday, March 15, 2020 through Saturday, March 21, 2020 will be line item assessed at 8.0% fuel surcharge. Thank you should you have any questions, please contact Susan Noyes at 1-800-648-1075 extension:

Northern Gas Transport Inc. - Selkirk to Keene

Revised Northern Gas Transport Inc. - Selkirk to Keene

Gallons	BaseRate	BaseCharge	Fuel Surcharge	Rat Surcharge	TotalCharge	Total Rate Per Gallon
9,200	\$0.0784	\$721.28	1.00%	\$7.21	\$728.49	\$0.0792
9,200	\$0.0784	\$721.28	2.00%	\$14.43	\$735.71	\$0.0800
9,200	\$0.0784	\$721.28	3.00%	\$21.64	\$742.92	\$0.0808
9,200	\$0.0784	\$721.28	3.50%	\$25.24	\$746.52	\$0.0811
9,200	\$0.0784	\$721.28	4.00%	\$28.85	\$750.13	\$0.0815
9,200	\$0.0784	\$721.28	4.50%	\$32.46	\$753.74	\$0.0819
9,200	\$0.0784	\$721.28	5.00%	\$36.06	\$757.34	\$0.0823
9,200	\$0.0784	\$721.28	5.50%	\$39.67	\$760.95	\$0.0827
9,200	\$0.0784	\$721.28	6.00%	\$43.28	\$764.56	\$0.0831
9,200	\$0.0784	\$721.28	6.50%	\$46.88	\$768.16	\$0.0835
9,200	\$0.0784	\$721.28	7.00%	\$50.49	\$771.77	\$0.0839
9,200	\$0.0784	\$721.28	7.50%	\$54.10	\$775.38	\$0.0843
9,200	\$0.0784	\$721.28	8.00%	\$57.70	\$778.98	\$0.0847
9,200	\$0.0784	\$721.28	8.50%	\$61.31	\$782.59	\$0.0851
9,200	\$0.0784	\$721.28	9.00%	\$64.92	\$786.20	\$0.0855
9,200	\$0.0784	\$721.28	9.50%	\$68.52	\$789.80	\$0.0858
9,200	\$0.0784	\$721.28	10.00%	\$72.13	\$793.41	\$0.0862
9,200	\$0.0784	\$721.28	10.50%	\$75.73	\$797.01	\$0.0866
9,200	\$0.0784	\$721.28	11.00%	\$79.34	\$800.62	\$0.0870
9,200	\$0.0784	\$721.28	11.50%	\$82.95	\$804.23	\$0.0874
9,200	\$0.0784	\$721.28	12.00%	\$86.55	\$807.83	\$0.0878
9,200	\$0.0784	\$721.28	12.50%	\$90.16	\$811.44	\$0.0882