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May 4, 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: Docket No. DG 20-041; 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 – Keene Division, enclosed are corrected Exhibit 1 and Exhibit 2, adding “redacted” and “confidential” in the header on the appropriate pages where previously omitted.

Pursuant to the Commission’s March 17, 2020, secretarial letter, the Company is only filing electronic versions of these documents.

Thank you.

Sincerely,

A handwritten signature in grey ink that reads "Michael J. Sheehan".

Michael J. Sheehan

Enclosure
cc: Service list

REDACTED

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

Docket No. DG 20-041

Liberty Utilities (EnergyNorth Natural Gas) Corp.
d/b/a Liberty Utilities - Keene Division
Summer 2020 Cost of Gas

SECOND REVISED DIRECT TESTIMONY

OF

DEBORAH GILBERTSON

AND

CATHERINE MCNAMARA

April 27, 2020

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 A. (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 A. (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 A. (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 \$0.6326 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 sales and costs. The total anticipated cost of
8 sendout from May 1 through October 31, 2020, is \$252,874. To derive the Total
9 Anticipated Cost of \$179,417, the prior period over-collection of \$80,938 and the interest
10 of \$910 are subtracted from the anticipated cost of sendout. Next, the COVID-19
11 adjustments are made by adding \$12,141 for the reduction of the prior period over
12 collection and subtracting [REDACTED] for the reduction of CNG Demand Charges. The prior
13 period over-collection of (\$80,938) and the CNG demand charge of [REDACTED] were both
14 reduced by the estimated overall summer period demand reduction of [REDACTED]. Additional
15 details of the COVID-19 adjustments are given in section VIII. The Cost of Gas Rate of
16 \$0.6326 per therm is derived by dividing the Total Anticipated Cost of \$179,417 by the
17 projected firm sales volumes of 283,614 therms.

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

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

| | | |
|----|---|------------|
| 20 | 1. Prior Period (Over)/Under Collection | (\$80,938) |
| 21 | 2. Interest | (\$910) |

| | | | | |
|---|----|--|------|------------|
| 1 | 3. | COVID-19 Prior Period Over-Collection Reduction of | ████ | ████ |
| 2 | 4. | COVID-19 CNG Demand Charge Reduction | ████ | ████ |
| 3 | | Total Adjustments | | (\$73,457) |

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

5 A. In the off-peak period, spot prices are estimated using market quotes from local suppliers.
6 Schedule C serves as a guide to illustrate the components of the quoted price. Column 1
7 shows the Mont Belvieu propane futures quotations as of April 14, 2020. Subsequent
8 columns show projected broker fees, pipeline fees, Propane Education & Research
9 Council (PERC) fees, supplier charges, and trucking charges, which, when added to the
10 futures price, estimate the likely components of the quoted price.

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

13 A. The cost of gas rate proposed in this filing is \$0.4745 per therm lower than the initial rate
14 approved by the Commission for the 2019 Summer Period (\$0.6326 vs. \$1.1071).

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

17 A. The weighted average cost of gas rate for the 2019 Summer Period was approximately
18 \$0.9007 per therm. This was determined by applying the actual monthly cost of gas rates
19 for May through October 2019 to the monthly therm usage of an average residential
20 heating customer using 87 therms for the six summer period months (see Schedule I-1 or
21 Schedule I-2, for more details).

1 **III. PRIOR PERIOD RECONCILIATION**

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

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

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

7 A. There were no audit findings in the final audit report issued April 7, 2020, so the
8 Company has no adjustments to make to that filing.

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

10 A. No.

11 **IV. CUSTOMER BILL IMPACTS**

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

14 A. The bill impact analysis presented in Schedules I-1 and Schedule I-2 of this filing. The
15 total bill impact for an average residential customer, for the off-peak season, is a decrease
16 of approximately \$25.67, or 11.5% (see Schedule I-2, column 14, rows 54 and 55,
17 respectively) as compared to the total bill for the 2019 Off-Peak season.

18

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

20 A. On April 1, 2020, the Company will be posting information regarding this filing on its
21 website. Once the rates are approved, they will be posted on the website by May 1, 2020.

1 The May bills will include on-bill messaging along with a bill insert reminding customers
2 of the new rates, and directing them to the website for more information.

3 **V. PROPANE PURCHASING STABILIZATION PLAN**

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

5 A. The Propane Purchasing Stabilization Plan is a strategy the Company undertakes to
6 provide more stability in the winter COG rate and to facilitate the offering of a Fixed
7 Price Option. Under this strategy, the Company systematically purchases supply over a
8 predetermined period. The strategy is intended to provide more price stability rather than
9 to secure lower prices. The Company believes this strategy should continue.

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

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

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

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

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

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

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

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

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

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

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

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

6 A. For the upcoming summer period, the projected average cost of propane is [REDACTED] per
7 therm (Schedule K, Line 40) while the projected average cost of CNG (including the
8 demand charge) is [REDACTED] per therm (Schedule K, Line 28). CNG is projected to be
9 \$0.4451 per therm more than the unit cost of spot propane.

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

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

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

3 A. The effect on the overall cost of gas is currently projected to be about █ cents more per
4 therm with CNG included rather than if spot propane were the only com

5 A.modity utilized to serve the portfolio.

6 **Q. What was the overall cost difference when comparing the cost of CNG to the cost of**
7 **propane in the summer of 2019?**

8 A. The Company began using CNG in October 2019, therefore there is only one month of
9 cost differential to review between CNG and propane. Please see the table below, which
10 illustrates two methods for comparison. Since there are no production costs associated
11 with CNG and since production costs are a direct cost for using and maintaining the
12 propane facilities, the Company has added the propane production costs as part of the
13 cost comparison. The table shows in October 2019, the total CNG cost was
14 approximately █ more than the total propane cost when including production costs.
15 Without including the production costs, the CNG cost differential becomes closer to
16 █ more. Please see the footnote which identifies a potential reduction to the CNG
17 cost as discussions ensue with the vendor.

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| INCLUDES PRODUCTION COSTS | | | NO PRODUCTION COSTS | | |
|---------------------------|-----------|---------------------------|---------------------|-----------|---------------------------|
| Therms | Therms | | Therms | Therms | |
| 72,400.00 | 11,770.00 | | 72,400.00 | 11,770.00 | |
| Propane Price | CNG Price | | Propane Price | CNG Price | |
| \$0.8671 | | CG | \$0.8671 | | CG |
| | | Adder | | | Adder |
| | | Basis* | | | Basis* |
| | | therm | | | therm |
| \$62,778.66 | | Subtotal | \$62,778.66 | | Subtotal |
| \$ 12,058.17 | | October Demand Allocation | \$62,778.66 | | October demand allocation |
| \$74,836.83 | | Production Costs | \$62,778.66 | | Total |
| | | Total | | | |
| \$1.03 | | Cost per Therm | \$ 0.87 | | Cost per Therm |
| | | Cost difference | | | Cost difference |
| | | Additional Cost of CNG | | | Additional Cost of CNG |

1

2

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

5 A. The Company does plan to expand the CNG footprint; however, construction for any new
6 supply facility will not begin until 2021 and thus any expansion will not occur until after
7 that time. The Company will provide further updates on this effort during the winter
8 COG process. Additionally the Company intends to engage Staff and the OCA
9 informally over the summer as plans develop.

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

2 **Q. Have there been changes to any schedules in the filing as compared to prior**
3 **submittals and, if so, what changed and why did it change?**

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

16 Changes to Schedules B and E reflect the costs of CNG more accurately and align with
17 the Cost of Gas Monthly Adjustment filing. Schedule B also includes changes requested
18 by Staff via e-mail on April 10, 2020.

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1 **VIII. MODIFICATIONS TO THE FILING AS A RESULT OF COVID-19**

2 **Q. Has the Company performed any analysis on demand impact resulting from the**
3 **pandemic which was declared on March 11, 2020?**

4 A. Yes, the Company compiled a list of customers in the service territory who are actively
5 closed or curtailed as a result of the virus. Additionally, a comparison between March
6 expected demand sendout (no COVID-19) and March actual demand sendout (with
7 COVID-19) was performed. For Keene, it appears that demand fell approximately 6%
8 over expected demand, which is likely attributed to COVID-19. The Company is
9 continually gathering data. Once the month of April closes, actual demand sendout will
10 be analyzed for impact.

11 **Q. Is it expected that the demand forecast will decrease over the summer period as a**
12 **result of the analysis which was performed and if so, by how much?**

13 A. Based on the limited data the Company has at this time it is expected that the demand
14 over the summer period will be impacted to some degree. It is assumed that while
15 commercial usage is falling, residential usage is climbing due to stay in place directives.
16 The Company expects there to be more demand erosion in earlier months than in the
17 outer months. Overall, a reasonable estimate at this time is that the portfolio as a whole
18 will decrease by about 25% in May from the initial, pre-COVID-19 demand projection,
19 and start to recover, with a reduction from the initial demand projection of 5% by
20 October. The overall COVID-19 impact is estimated to be a [REDACTED] decrease in demand for
21 the total summer period compared to the initial, pre-COVID-19 demand forecast. The
22 Company anticipates the decrease in the portfolio will be largely due to impacts to

1 commercial accounts. These reductions to the demand forecast as a result of the virus
2 can be seen in seen in schedule G and H of the filing.

3 Q While lowering the forecasted demand by [REDACTED] due to anticipated demand destruction
4 caused by COVID-19, did the Company take into account the other two factors which
5 comprise the customer rate?

6 A. Yes, the [REDACTED] reduction was also applied to the prior period over-collection of (\$80,938)
7 and the [REDACTED] CNG demand charge. These additional reductions were made to defer an
8 over-collection of (\$8,321) to summer 2021 so customers affected by COVID-19 would
9 be able to receive a portion of the prior-period over-collection which they helped
10 accumulate.

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

12 A. Yes.

LIBERTY UTILITIES - KEENE DIVISION
COST OF GAS RATE FILING - DG 20-041
SUMMER PERIOD 2020
FILING

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23 FIRM RATE SCHEDULES - KEENE CUSTOMERS

| | Rates Effective February 1, 2020 - April 30, 2020 | | | | Rates Effective September 1, 2019 - October 31, 2019 | | | |
|--|---|--------------------------|----------------------|----------------------|--|--------------------------|----------------------|----------------------|
| | Winter Period | | | | 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 | \$ 0.6326 | \$ 0.0310 | \$ 1.0422 |
| | \$ 0.3786 | \$ 0.9352 | \$ 0.0310 | \$ 1.3448 | \$ 0.3786 | \$ 0.4843 | \$ 0.0660 | \$ 0.9289 |
| Residential Heating - R-3 | \$ 15.20 | | | \$ 15.20 | \$ 15.20 | | | \$ 15.20 |
| 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 | \$ 0.6326 | \$ 0.0310 | \$ 1.2205 |
| | \$ 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 | \$ 0.6326 | \$ 0.0310 | \$ 0.8964 |
| | \$ 0.2228 | \$ 0.9352 | \$ 0.0310 | \$ 1.1890 | \$ 0.2228 | \$ 0.4843 | \$ 0.0660 | \$ 0.7731 |
| 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 | | | 100 therms | 20 therms | | | 20 therms |
| Therms in the first block per month at | \$ 0.4621 | \$ 0.9352 | \$ 0.0478 | \$ 1.4451 | \$ 0.4621 | \$ 0.6326 | \$ 0.0478 | \$ 1.1425 |
| | \$ 0.4621 | \$ 0.9352 | \$ 0.0478 | \$ 1.4451 | \$ 0.4621 | \$ 0.4843 | \$ 0.0757 | \$ 1.0221 |
| All therms over the first block per month at | \$ 0.3104 | \$ 0.9352 | \$ 0.0478 | \$ 1.2934 | \$ 0.3104 | \$ 0.6326 | \$ 0.0478 | \$ 0.9908 |
| | \$ 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 | | | 1000 therms | 400 therms | | | 400 therms |
| Therms in the first block per month at | \$ 0.4202 | \$ 0.9352 | \$ 0.0478 | \$ 1.4032 | \$ 0.4202 | \$ 0.6326 | \$ 0.0478 | \$ 1.1006 |
| | \$ 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 | \$ 0.6326 | \$ 0.0478 | \$ 0.9604 |
| | \$ 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 | \$ 1.2413 | \$ 0.1181 | \$ 0.6326 | \$ 0.0478 | \$ 0.7985 |
| | \$ 0.2583 | \$ 0.9352 | \$ 0.0478 | \$ 1.2413 | \$ 0.1181 | \$ 0.4843 | \$ 0.0757 | \$ 0.6781 |
| 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 | 100 therms | | | 100 therms |
| Therms in the first block per month at | \$ 0.2785 | \$ 0.9352 | \$ 0.0478 | \$ 1.2615 | \$ 0.2785 | \$ 0.6326 | \$ 0.0478 | \$ 0.9589 |
| | \$ 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 | \$ 0.6326 | \$ 0.0478 | \$ 0.8615 |
| | \$ 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 | 1000 therms | | | 1000 therms |
| Therms in the first block per month at | \$ 0.2392 | \$ 0.9352 | \$ 0.0478 | \$ 1.2222 | \$ 0.1733 | \$ 0.6326 | \$ 0.0478 | \$ 0.8537 |
| | \$ 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 | \$ 0.6326 | \$ 0.0478 | \$ 0.7789 |
| | \$ 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 | \$ 0.6326 | \$ 0.0478 | \$ 0.7606 |
| | \$ 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 | \$ 0.6326 | \$ 0.0478 | \$ 0.7150 |
| | \$ 0.0638 | \$ 0.9352 | \$ 0.0478 | \$ 1.0468 | \$ 0.0346 | \$ 0.4843 | \$ 0.0757 | \$ 0.5946 |

NHPUC NO. 10 GAS
LIBERTY UTILITIES

Eleventh Revised Page 90
Superseding Tenth Revised Page 90

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

| | | |
|--|------------|------------|
| Projected Gas Sales - therms | | 283,614 |
| Total Anticipated Cost of Sendout | | \$252,874 |
| Add: Prior Period Deficiency Uncollected Interest | | \$0 \$0 |
| Deduct: Prior Period Excess Collected Interest | (\$80,938) | |
| Prior Period Adjustments and Interest | (\$910) | (\$81,848) |
| Deduct COVID19 reductions deferred until Summer 2021 | | \$8,391 |

Total Anticipated Cost \$179,417

Cost of Gas Rate - Beginning Period (per therm) \$0.6326

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 (per therm) \$0.7908

Dated: April __, 2019
Effective: May 1, 2019

Issued By: /s/ Susan L. Fleck _____
Susan L. Fleck
Title: President

SCHEDULE A

LIBERTY UTILITIES - KEENE DIVISION

CONVERSION OF PROPANE 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 | 322,487 | 295,082 | \$0.7403 | \$0.8091 |

LIBERTY UTILITIES - KEENE DIVISION
REVISED 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) | | 38,887 | 29,096 | 28,000 | 32,500 | 38,279 | 70,729 | 237,490 |
| 2 COMPANY USE (therms) | | 2,135 | 1,439 | 1,522 | 1,908 | 1,859 | 2,618 | 11,481 |
| 3 TOTAL PROPANE SENDOUT (therms) (line 1 + line 2) | | 41,022 | 30,534 | 29,522 | 34,408 | 40,138 | 73,347 | 248,971 |
| 4 COST PER THERM (WACOG) | | \$0.8714 | \$0.7988 | \$0.7525 | \$0.7246 | \$0.7110 | \$0.6985 | |
| 5 TOTAL CALCULATED COST OF PROPANE (line 3 * line 4) | | \$35,746 | \$24,392 | \$22,216 | \$24,933 | \$28,538 | \$51,233 | \$187,058 |
| 6 PROPANE ADJUSTMENTS | | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 7 TOTAL COST OF PROPANE (line 5 + line 6) | | \$35,746 | \$24,392 | \$22,216 | \$24,933 | \$28,538 | \$51,233 | \$187,058 |
| CNG COSTS | | | | | | | | |
| 8 CNG SENDOUT (therms) | | 11,498 | 6,225 | 5,046 | 6,180 | 7,948 | 9,214 | 46,111 |
| 9 COST PER THERM (WACOG) | | \$0.9131 | \$1.1575 | \$1.3448 | \$1.2937 | \$1.1376 | \$1.1030 | |
| 10 TOTAL CALCULATED COST OF CNG (line 8 * line 9) | | \$10,498 | \$7,205 | \$6,787 | \$7,996 | \$9,041 | \$10,163 | \$51,690 |
| 11 CNG ADJUSTMENTS | | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 12 TOTAL COST OF CNG (line 10 + line 11) | | \$10,498 | \$7,205 | \$6,787 | \$7,996 | \$9,041 | \$10,163 | \$51,690 |
| 13 ACCOUNTING ADJUSTMENT | | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 14 TOTAL COSTS OF GAS (line 7 + line 12 + line 13) | | \$46,244 | \$31,597 | \$29,003 | \$32,929 | \$37,579 | \$61,396 | \$238,748 |
| 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 | |
| 19 BILLED FPO SALES (line 17 * line 18) | | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 20 BILLED NON-FPO SALES PRIOR MONTH (therms) | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 21 COG NON-FPO RATE PRIOR MONTH | | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | |
| 22 BILLED NON-FPO SALES PRIOR MONTH (line 20 * line 21) | | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 23 BILLED NON-FPO SALES CURRENT MONTH (therms) | | 49,819 | 35,868 | 32,789 | 39,175 | 45,282 | 80,682 | 283,614 |
| 24 COG NON-FPO RATE CURRENT MONTH | | \$0.6326 | \$0.6326 | \$0.6326 | \$0.6326 | \$0.6326 | \$0.6326 | |
| 25 BILLED NON-FPO SALES CURRENT MONTH (line 23 * line 24) | | \$31,516 | \$22,690 | \$20,743 | \$24,783 | \$28,645 | \$51,040 | \$179,417 |
| 26 BILLED SALES OTHER PRIOR PERIODS | | 0 | 0 | 0 | 0 | 0 | 0 | |
| 27 COG OTHER PRIOR PERIODS BLENDED RATE | | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | |
| 28 BILLED SALES OTHER PRIOR PERIODS (line 26 * line 27) | | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 29 TOTAL SALES (line 17 + line 20 + line 23 + line 26) | | 49,819 | 35,868 | 32,789 | 39,175 | 45,282 | 80,682 | 283,614 |
| 30 TOTAL BILLED REVENUES (line 19 + line 22 + line 25 + line 28) | | \$31,516 | \$22,690 | \$20,743 | \$24,783 | \$28,645 | \$51,040 | \$179,417 |
| 31 UNBILLED REVENUES (NET) | | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 32 TOTAL REVENUES (line 30 + line 31) | | \$31,516 | \$22,690 | \$20,743 | \$24,783 | \$28,645 | \$51,040 | \$179,417 |
| 33 (OVER)/UNDER COLLECTION (line 14 + Line 15 + line 16 - line 32) | | \$17,082 | \$11,261 | \$10,614 | \$10,500 | \$11,288 | \$12,710 | \$73,457 |
| 34 INTEREST AMOUNT | | (\$256) | (\$207) | (\$169) | (\$132) | (\$94) | (\$52) | (\$910) |
| 35 FINAL (OVER)/UNDER COLLECTION (line 33 + line 34) | (\$80,938) | \$16,826 | \$11,054 | \$10,445 | \$10,368 | \$11,194 | \$12,658 | (\$8,391) |

* COVID-19 Adjustments for reductions in CNG demand charges and the prior period over-collection

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 @ Selkirk | (7) Trucking to Keene | (8) \$ per Gal. | (9) \$ per Therm |
|-------|--------------------|----------------------|-------------------------|--------------------|---------------------------|--------------------------|-----------------------------|--------------------|---------------------|
| 1 MAY | [REDACTED] | | | | | | | | |
| 2 JUN | [REDACTED] | | | | | | | | |
| 3 JUL | [REDACTED] | | | | | | | | |
| 4 AUG | [REDACTED] | | | | | | | | |
| 5 SEP | [REDACTED] | | | | | | | | |
| 6 OCT | [REDACTED] | | | | | | | | |

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 04/14/20 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. 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

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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 | 45,000 | \$29,561 | \$0.6569 | \$0.6011 | | | | | |
| 4 | Total Available | 99,138 | \$86,388 | \$0.8714 | \$0.7973 | | | | | |
| 5 | Less Sendout | 41,022 | \$35,746 | \$0.8714 | \$0.7973 | 11,498 | | 52,519 | | |
| 6 | Ending Balance | 58,116 | \$50,642 | \$0.8714 | \$0.7974 | | | | | |
| 7 | June 2020 (Forecasted) | | | | | | | | | |
| 8 | Beginning Balance | 58,116 | \$50,642 | \$0.8714 | \$0.7974 | | | | | |
| 9 | Purchases Received | 30,000 | \$19,748 | \$0.6583 | \$0.6023 | | | | | |
| 10 | Total Available | 88,116 | \$70,390 | \$0.7988 | \$0.7310 | | | | | |
| 11 | Less Sendout | 30,534 | \$24,392 | \$0.7988 | \$0.7310 | 6,225 | | 36,759 | | |
| 12 | Ending Balance | 57,582 | \$45,998 | \$0.7988 | \$0.7309 | | | | | |
| 13 | July 2020 (Forecasted) | | | | | | | | | |
| 14 | Beginning Balance | 57,582 | \$45,998 | \$0.7988 | \$0.7309 | | | | | |
| 15 | Purchases Received | 32,000 | \$21,414 | \$0.6692 | \$0.6123 | | | | | |
| 16 | Total Available | 89,582 | \$67,412 | \$0.7525 | \$0.6886 | | | | | |
| 17 | Less Sendout | 29,522 | \$22,216 | \$0.7525 | \$0.6886 | 5,046 | | 34,568 | | |
| 18 | Ending Balance | 60,060 | \$45,196 | \$0.7525 | \$0.6886 | | | | | |
| 19 | August 2020 (Forecasted) | | | | | | | | | |
| 20 | Beginning Balance | 60,060 | \$45,196 | \$0.7525 | \$0.6886 | | | | | |
| 21 | Purchases Received | 36,000 | \$24,411 | \$0.6781 | \$0.6205 | | | | | |
| 22 | Total Available | 96,060 | \$69,607 | \$0.7246 | \$0.6630 | | | | | |
| 23 | Less Sendout | 34,408 | \$24,933 | \$0.7246 | \$0.6631 | 6,180 | | 40,588 | | |
| 24 | Ending Balance | 61,652 | \$44,674 | \$0.7246 | \$0.6630 | | | | | |
| 25 | September 2020 (Forecasted) | | | | | | | | | |
| 26 | Beginning Balance | 61,652 | \$44,674 | \$0.7246 | \$0.6630 | | | | | |
| 27 | Purchases Received | 36,000 | \$24,755 | \$0.6876 | \$0.6292 | | | | | |
| 28 | Total Available | 97,652 | \$69,429 | \$0.7110 | \$0.6506 | | | | | |
| 29 | Less Sendout | 40,138 | \$28,538 | \$0.7110 | \$0.6506 | 7,948 | | 48,086 | | |
| 30 | Ending Balance | 57,514 | \$40,891 | \$0.7110 | \$0.6506 | | | | | |
| 31 | October 2020 (Forecasted) | | | | | | | | | |
| 32 | Beginning Balance | 57,514 | \$40,891 | \$0.7110 | \$0.6506 | | | | | |
| 33 | Purchases Received | 76,000 | \$52,368 | \$0.6891 | \$0.6305 | | | | | |
| 34 | Total Available | 133,514 | \$93,259 | \$0.6985 | \$0.6391 | | | | | |
| 35 | Less Sendout | 73,347 | \$51,233 | \$0.6985 | \$0.6391 | 9,214 | | 82,561 | | |
| 36 | Ending Balance | 60,166 | \$42,026 | \$0.6985 | \$0.6391 | | | | | |
| 37 | AVERAGE SUMMER RATE - SENDOUT | | | | | | | 295,082 | | |

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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 | \$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 | \$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 | \$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 | \$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) | 17,082 | 0 | (63,856) | (72,397) | 4.25% | (256) | (64,112) |
| 8 | JUN | (64,112) | 11,261 | 0 | (52,851) | (58,481) | 4.25% | (207) | (53,058) |
| 9 | JUL | (53,058) | 10,614 | 0 | (42,443) | (47,751) | 4.25% | (169) | (42,612) |
| 10 | AUG | (42,612) | 10,500 | 0 | (32,112) | (37,362) | 4.25% | (132) | (32,244) |
| 11 | SEP | (32,244) | 11,288 | 0 | (20,956) | (26,600) | 4.25% | (94) | (21,050) |
| 12 | OCT | (21,050) | 12,710 | 0 | (8,339) | (14,695) | 4.25% | (52) | (8,391) |
| 13 | | | | | | | | | |
| 14 | | | | | | | | <u>(\$2,575)</u> | |

15 = COL. 1, LINE 1 + COL. 2, LINES 1 TO 6 + COL. 7, LINES 1 TO 6

16 (72,578) + (\$6,694.99) + (1,665) = (80,938) @ MAY 1, 2020
 (TRANSFER TO SCHEDULE B, LINE 35)

SCHEDULE G

| LIBERTY UTILITIES - KEENE DIVISION | | | | | | | | | | | | | | | | |
|--------------------------------------|---------------------|----------|-----------|-----------------------------------|-----------------------------------|-----------------------------|--------------------------------|--------------------|------------------|-------------------------|--|----------------------|--------------------|----------------------|-----------------------|--------------------|
| Weather Normalization - Firm Sendout | | | | | | | | | | | | | | | | |
| 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 | Normalized Firm Sendout COVID19 Impact | % Reduction COVID-19 | Actual Company Use | % Reduction COVID-19 | Unaccounted For 0.90% | Total Firm Sendout |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) |
| | | | (1) - (2) | | | (4) - (5) | (3) / (4) | (6) X (7) | (5) + (7) | (1) - (3) + (9) | (10)*(1-(12) | | | (13)*(1-(12) | (11 - 14) * 0.90% | (11) - (14) +(15) |
| May-19 | 73,055 | 43,756 | 29,300 | 323 | 283 | 40 | 90.71 | (3,628) | 25,671 | 69,427 | 52,070 | 25% | 2,846 | 2,135 | 449 | 50,385 |
| Jun-19 | 48,334 | 43,756 | 4,579 | 71 | 75 | (4) | 64.49 | 258 | 4,836 | 48,592 | 36,444 | 25% | 1,918 | 1,439 | 315 | 35,321 |
| Jul-19 | 42,842 | 43,756 | 0 | 0 | 12 | (12) | 0.00 | 0 | 0 | 42,842 | 34,274 | 20% | 1,903 | 1,522 | 295 | 33,046 |
| Aug-19 | 44,669 | 43,756 | 914 | 20 | 21 | (1) | 45.68 | 46 | 959 | 44,715 | 40,243 | 10% | 2,120 | 1,908 | 345 | 38,680 |
| Sep-19 | 54,072 | 43,756 | 10,317 | 178 | 159 | 19 | 57.96 | (1,101) | 9,215 | 52,971 | 47,674 | 10% | 2,066 | 1,859 | 412 | 46,227 |
| Oct-19 | 84,363 | 43,756 | 40,608 | 453 | 473 | (20) | 89.64 | 1,793 | 42,401 | 86,156 | 81,848 | 5% | 2,756 | 2,618 | 713 | 79,943 |
| Total | 347,335 | 262,533 | 85,716 | 1,045 | 1,023 | 22 | | (2,633) | 83,083 | 344,702 | 292,553 | | 13,609 | 11,481 | 2,530 | 283,601 |

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 | Normal Firm COVID 19 IMPACT |
| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | -11 |
| | | | | (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 | 14,588 |
| Jun-19 | 878 | 8,951 | 6,927 | 2,024 | 71 | 75 | (4) | 28.51 | 114 | 2,138 | 9,065 | 9,065 |
| Jul-19 | 897 | 6,828 | 6,927 | 0 | 0 | 12 | (12) | | 0 | 0 | 6,828 | 6,828 |
| Aug-19 | 897 | 7,025 | 6,927 | 98 | 20 | 21 | (1) | 4.92 | 5 | 103 | 7,030 | 7,030 |
| Sep-19 | 871 | 8,628 | 6,927 | 1,701 | 178 | 159 | 19 | 9.56 | (182) | 1,519 | 8,446 | 8,446 |
| Oct-19 | 907 | 17,407 | 6,927 | 10,480 | 453 | 473 | (20) | 23.14 | 463 | 10,943 | 17,870 | 17,870 |
| Total | | 64,510 | 41,561 | 23,048 | 1,045 | 1,023 | 22 | 31.03 | (683) | 22,365 | 63,827 | 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 | Normal Firm COVID 19 IMPACT | Percent Impact COVID19 |
| | | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (12) | (13) |
| | | | | (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 | 35,231 | 32% |
| Jun-19 | 323 | 38,401 | 35,305 | 3,096 | 71 | 75 | (4) | 43.60 | 174 | 3,270 | 38,576 | 26,803 | 31% |
| Jul-19 | 333 | 34,222 | 35,305 | 0 | 0 | 12 | (12) | | 0 | 0 | 34,222 | 25,961 | 24% |
| Aug-19 | 333 | 36,389 | 35,305 | 1,083 | 20 | 21 | (1) | 54.17 | 54 | 1,138 | 36,443 | 32,145 | 12% |
| Sep-19 | 322 | 42,768 | 35,305 | 7,463 | 178 | 159 | 19 | 41.93 | (797) | 6,666 | 41,972 | 36,836 | 12% |
| Oct-19 | 338 | 65,679 | 35,305 | 30,374 | 453 | 473 | (20) | 67.05 | 1,341 | 31,715 | 67,020 | 62,812 | 6% |
| Total | | 271,849 | 211,833 | 61,099 | 1,045 | 1,023 | 22 | 72.29 | (1,590) | 59,509 | 270,259 | 219,787 | 19% |

Summary - Total Summer Season Sales

| | Actual 2019 | Normalized |
|-----------|-------------|------------|
| May | 70,060 | 49,819 |
| June | 47,352 | 35,868 |
| July | 41,050 | 32,789 |
| August | 43,414 | 39,175 |
| September | 51,396 | 45,282 |
| October | 83,087 | 80,682 |
| Total | 336,359 | 283,614 |

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) | | | |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|--------|---------|----------|
| 12 MONTHS ENDED 10/2019 | 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 | | | |
| Typical Usage - therms (1) | 39 | 69 | 81 | 103 | 89 | 66 | 447 | 35 | 18 | 9 | 7 | 7 | 11 | 87 | 534 | | | |
| Residential Heating R-3 | | | | | | | | | | | | | | | | | | |
| Customer Charge | Nov-18 - Apr-19 | May-19 - Jun-19 | Jul-19 - Oct-19 | | | | | | | | | | | | | | | |
| Delivery Charge: | Winter \$0.5502 | Summer \$0.5502 | Summer \$0.5569 | | | | \$90.12 | \$15.02 | \$15.02 | \$15.20 | \$15.20 | \$15.20 | \$15.20 | \$90.84 | \$180.96 | | | |
| All therms @ | \$0.5502 | \$0.5502 | \$0.5569 | \$21.22 | \$38.05 | \$44.49 | \$56.78 | \$48.98 | \$36.42 | \$245.94 | \$19.20 | \$9.84 | \$5.12 | \$3.73 | \$4.00 | \$6.23 | \$48.12 | \$294.06 |
| Base Delivery Revenue Total | \$36.24 | \$53.07 | \$59.51 | \$71.80 | \$64.00 | \$51.44 | \$336.06 | \$34.22 | \$24.86 | \$20.32 | \$18.93 | \$19.20 | \$21.43 | \$138.96 | \$475.02 | | | |
| 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 | \$1.4002 | \$1.4002 | \$1.4002 | \$1.4002 | \$1.4002 | \$1.4002 | \$1.4002 | \$1.1071 | \$1.0063 | \$0.8854 | \$0.7068 | \$0.4843 | \$0.4843 | \$0.9007 | \$1.3188 | | | |
| Cost of Gas Total | \$54.00 | \$96.83 | \$113.21 | \$144.49 | \$124.66 | \$92.68 | \$625.87 | \$38.63 | \$18.00 | \$8.13 | \$4.73 | \$3.48 | \$5.42 | \$78.39 | \$704.26 | | | |
| 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 | | | | | |
| LDAC Total | \$2.55 | \$4.56 | \$5.34 | \$6.81 | \$5.88 | \$4.37 | \$29.50 | \$2.30 | \$1.18 | \$0.61 | \$0.44 | \$0.47 | \$0.74 | \$5.74 | \$35.25 | | | |
| Total Bill | \$93 | \$154 | \$178 | \$223 | \$195 | \$148 | \$991 | \$75 | \$44 | \$29 | \$24 | \$23 | \$28 | \$223 | \$1,215 | | | |
| 12 MONTHS ENDED 10/2020 | Nov-19 | Dec-19 | Jan-20 | Feb-20 | Mar-20 | Apr-20 | Winter Nov-Apr | May-20 | Jun-20 | Jul-20 | Aug-20 | Sep-20 | Oct-20 | Summer May-Oct | Total Nov-Oct | | | |
| Typical Usage - therms (1) | 27 | 71 | 82 | 76 | 81 | 66 | 404 | 35 | 18 | 9 | 7 | 7 | 11 | 87 | 491 | | | |
| Residential Heating | | | | | | | | | | | | | | | | | | |
| Customer Charge | Nov-19 - Apr-20 | May-20 - Jun-20 | Jul-20 - Oct-20 | | | | | | | | | | | | | | | |
| Delivery Charge: | Winter \$0.5569 | Summer \$0.5569 | Summer \$0.5569 | | | | \$91.20 | \$15.20 | \$15.20 | \$15.20 | \$15.20 | \$15.20 | \$15.20 | \$91.20 | \$182.40 | | | |
| All therms @ | \$0.5569 | \$0.5569 | \$0.5569 | \$15.25 | \$39.54 | \$45.76 | \$42.33 | \$44.99 | \$36.86 | \$224.73 | \$19.43 | \$9.96 | \$5.12 | \$3.73 | \$4.00 | \$6.23 | \$48.47 | \$273.20 |
| Base Delivery Revenue Total | \$30.45 | \$54.74 | \$60.96 | \$57.53 | \$60.19 | \$52.06 | \$315.93 | \$34.63 | \$25.16 | \$20.32 | \$18.93 | \$19.20 | \$21.43 | \$139.67 | \$455.60 | | | |
| Seasonal Base Delivery Difference from previous year | | | | | | | | | | | | | | \$0.71 | -\$19.42 | | | |
| Seasonal Percent Change from previous year | | | | | | | | | | | | | | 0.5% | -4.1% | | | |
| 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 | \$0.9692 | \$0.9692 | \$0.9692 | \$0.9692 | \$0.9692 | \$0.9692 | \$0.9692 | \$0.6326 | \$0.6326 | \$0.6326 | \$0.6326 | \$0.6326 | \$0.6326 | \$0.6326 | \$0.9095 | | | |
| Cost of Gas Total | \$26.53 | \$68.82 | \$79.64 | \$73.66 | \$78.30 | \$64.15 | \$391.10 | \$22.08 | \$11.32 | \$5.81 | \$4.23 | \$4.54 | \$7.08 | \$55.06 | \$446.16 | | | |
| 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 | | | | | |
| LDAC Total | \$0.85 | \$2.20 | \$2.55 | \$2.36 | \$2.50 | \$2.05 | \$12.51 | \$1.08 | \$0.55 | \$0.28 | \$0.21 | \$0.22 | \$0.35 | \$2.70 | \$15.21 | | | |
| Seasonal COG Difference from previous year | | | | | | | | | | | | | | -\$23.33 | -\$258.10 | | | |
| Seasonal Percent Change from previous year | | | | | | | | | | | | | | -29.8% | -36.6% | | | |
| Total Bill | \$58 | \$126 | \$143 | \$134 | \$141 | \$118 | \$720 | \$58 | \$37 | \$26 | \$23 | \$24 | \$29 | \$197 | \$917 | | | |
| Seasonal Total Bill Difference from previous year | | | | | | | | | | | | | | -\$25.67 | -\$297.56 | | | |
| Seasonal Percent Change from previous year | | | | | | | | | | | | | | -11.5% | -24.5% | | | |
| Seasonal Percent Change resulting from Base Rates (incl. Def. Revenue Surch.) | | | | | | | | | | | | | | -2.3% | -4.5% | | | |
| Seasonal Percent Change resulting from COG | | | | | | | | | | | | | | -10.5% | -21.3% | | | |
| Seasonal Percent Change resulting from LDAC | | | | | | | | | | | | | | -1.4% | -1.6% | | | |

(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

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) |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 12 MONTHS ENDED 10/2019 | 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 |
| Typical Usage - therms (1) | 39 | 69 | 81 | 103 | 89 | 66 | 447 | 35 | 18 | 9 | 7 | 7 | 11 | 87 | 534 |
| Residential Heating | | | | | | | | | | | | | | | |
| 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 |
| Delivery Charge: | | | | | | | | | | | | | | | |
| All therms @ | \$0.5502 | \$0.5502 | \$0.5569 | \$0.5569 | \$0.5569 | \$0.5569 | \$228.19 | \$19.20 | \$9.84 | \$5.12 | \$3.73 | \$4.00 | \$6.23 | \$48.12 | \$276.31 |
| Base Delivery Revenue Total | \$36.24 | \$54.09 | \$60.23 | \$56.84 | \$59.47 | \$51.44 | \$318.31 | \$34.22 | \$24.86 | \$20.32 | \$18.93 | \$19.20 | \$21.43 | \$138.96 | \$457.27 |
| 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 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.00 | \$0.00 |
| COG Rates | \$1.3802 | \$1.4734 | \$1.5311 | \$1.5011 | \$1.4298 | \$1.2651 | \$1.4427 | \$1.1071 | \$1.0063 | \$0.8854 | \$0.7068 | \$0.4843 | \$0.4843 | \$0.9007 | \$1.3543 |
| Cost of Gas Total | \$53.23 | \$101.89 | \$123.80 | \$154.90 | \$127.29 | \$83.74 | \$644.85 | \$38.63 | \$18.00 | \$8.13 | \$4.73 | \$3.48 | \$5.42 | \$78.39 | \$723.24 |
| 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 | | |
| LDAC Total | \$2.55 | \$4.56 | \$5.34 | \$6.81 | \$5.88 | \$4.37 | \$29.5012 | \$2.30 | \$1.807 | \$0.6062 | \$0.4416 | \$0.4741 | \$0.7384 | \$5.74 | \$35.25 |
| Total Bill | \$92 | \$161 | \$189 | \$219 | \$193 | \$140 | \$993 | \$75 | \$44 | \$29 | \$24 | \$23 | \$28 | \$223 | \$1,216 |
| 12 MONTHS ENDED 10/2020 | Nov-19 | Dec-19 | Jan-20 | Feb-20 | Mar-20 | Apr-20 | Winter Nov-Apr | May-20 | Jun-20 | Jul-20 | Aug-20 | Sep-20 | Oct-20 | Summer May-Oct | Total Nov-Oct |
| Typical Usage - therms (1) | 27 | 71 | 82 | 76 | 81 | 66 | 404 | 35 | 18 | 9 | 7 | 7 | 11 | 87 | 491 |
| Residential Heating | | | | | | | | | | | | | | | |
| 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 |
| Delivery Charge: | | | | | | | | | | | | | | | |
| All therms @ | \$0.5569 | \$0.5569 | \$0.5569 | \$0.5569 | \$0.5569 | \$0.5569 | \$224.73 | \$19.43 | \$9.96 | \$5.12 | \$3.73 | \$4.00 | \$6.23 | \$48.47 | \$273.20 |
| Base Delivery Revenue Total | \$30.45 | \$54.74 | \$60.96 | \$57.53 | \$60.19 | \$52.06 | \$315.93 | \$34.63 | \$25.16 | \$20.32 | \$18.93 | \$19.20 | \$21.43 | \$139.67 | \$455.60 |
| Seasonal Base Delivery Difference from previous year | | | | | | | | | | | | | | \$0.71 | -\$1.67 |
| Seasonal Percent Change from previous year | | | | | | | | | | | | | | 0.5% | -0.4% |
| 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 |
| COG Rates | \$0.9492 | \$0.9492 | \$0.9686 | \$0.9352 | \$0.6906 | \$0.6906 | \$0.8563 | \$0.6326 | \$0.6326 | \$0.6326 | \$0.6326 | \$0.6326 | \$0.6326 | \$0.6326 | \$0.8166 |
| Cost of Gas Total | \$25.98 | \$67.40 | \$79.59 | \$71.08 | \$55.80 | \$45.71 | \$345.56 | \$22.08 | \$11.32 | \$5.81 | \$4.23 | \$4.54 | \$7.08 | \$55.06 | \$400.62 |
| 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 | | |
| LDAC Total | \$0.85 | \$2.20 | \$2.55 | \$2.36 | \$2.50 | \$2.05 | \$12.51 | \$1.08 | \$0.55 | \$0.28 | \$0.21 | \$0.22 | \$0.35 | \$2.69 | \$15.20 |
| Seasonal COG Difference from previous year | | | | | | | | | | | | | | -\$23.33 | -\$322.62 |
| Seasonal Percent Change from previous year | | | | | | | | | | | | | | -29.8% | -44.6% |
| Total Bill | \$57 | \$124 | \$143 | \$131 | \$118 | \$100 | \$674 | \$58 | \$37 | \$26 | \$23 | \$24 | \$29 | \$197 | \$871 |
| Seasonal Total Bill Difference from previous year | | | | | | | | | | | | | | -\$25.67 | -\$344.34 |
| Seasonal Percent Change from previous year | | | | | | | | | | | | | | -11.5% | -28.3% |
| Seasonal Percent Change resulting from Base Rates (incl. Def. Revenue Surch.) | | | | | | | | | | | | | | -2.3% | -3.0% |
| Seasonal Percent Change resulting from COG | | | | | | | | | | | | | | -10.5% | -26.5% |
| Seasonal Percent Change resulting from LDAC | | | | | | | | | | | | | | -1.4% | -1.6% |

(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

BID 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 | \$123,890 | | | 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% | |

SCHEDULE K
REDACTED

LIBERTY 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) | 52,519 | 36,759 | 34,568 | 40,588 | 48,086 | 82,561 | 295,082 |
| 2 | CHANGE TO ENDING INVENTORY BALANCE (therms) | - | - | - | - | - | - | - |
| 3 | TOTAL REQUIRED PURCHASES (therms) | 52,519 | 36,759 | 34,568 | 40,588 | 48,086 | 82,561 | 295,082 |
| 4 | <u>PROPANE PURCHASE STABILIZATION PLAN DELIVERIES</u> | | | | | | | |
| 5 | Therms | - | - | - | - | - | - | - |
| 6 | <u>RATES</u> - 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 | <u>AMHERST STORAGE PROPANE DELIVERIES</u> | | | | | | | |
| 15 | Therms | - | - | - | - | - | - | - |
| 16 | <u>RATES</u> - 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 | <u>CNG DELIVERIES</u> | | | | | | | |
| 22 | Therms | 11,498 | 6,225 | 5,046 | 6,180 | 7,948 | 9,214 | 46,111 |
| 23 | RATE | | | | | | | |
| 24 | PRICE | | | | | | | |
| 25 | COST PER Therm | | | | | | | |
| 26 | COST - CNG | | | | | | | |
| 27 | DEMAND FIXED | | | | | | | |
| 28 | COST PER Therm | | | | | | | |
| 29 | TOTAL CNG | | | | | | | |
| 30 | <u>SPOT PURCHASES</u> | | | | | | | |
| 31 | Therms | 41,022 | 30,534 | 29,522 | 34,408 | 40,138 | 73,347 | 248,971 |
| 32 | <u>RATES</u> - 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 | <u>OTHER ITEMS</u> | | | | | | | |
| 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 | <u>TOTAL</u> | | | | | | | |
| 47 | THERMS | 52,519 | 36,759 | 34,568 | 40,588 | 48,086 | 82,561 | 295,082 |
| 48 | SENDOUT THERMS | 52,519 | 36,759 | 34,568 | 40,588 | 48,086 | 82,561 | 295,082 |
| 49 | COST | \$37,445 | \$27,305 | \$26,543 | \$31,327 | \$36,641 | \$60,703 | \$219,964 |
| 50 | COST PER THERM | \$0.7130 | \$0.7428 | \$0.7678 | \$0.7718 | \$0.7620 | \$0.7352 | \$0.7454 |

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APPENDIX 1

REVISED MONT BELVIEU PROPANE FUTURES - 04/15/20 CLOSE

Trade Date: **Tuesday, 14 Apr 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 |
|--------|------|------|-----|------|----------|--------|------------------|-------------------------|
| APR 20 | - | - | - | - | +0.00345 | .32884 | 0 | 12,351 |
| MAY 20 | - | - | - | - | +0.00750 | .35188 | 2,556 | 12,317 |
| JUN 20 | - | - | - | - | +0.01771 | .35313 | 1,317 | 13,079 |
| JLY 20 | - | - | - | - | +0.00438 | .36313 | 538 | 9,580 |
| AUG 20 | - | - | - | - | +0.00250 | .37125 | 60 | 6,710 |
| SEP 20 | - | - | - | - | +0.00187 | .38000 | 50 | 7,156 |
| OCT 20 | - | - | - | - | +0.00125 | .38813 | 347 | 7,950 |

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&) | |

APPENDIX 3A

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 and should you have any questions, please contact Susan Noyes at 1-800-648-1075 extension 223.

APPENDIX 3B

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 |