

REDACTED

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

Docket No. DG 23-XXX

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty–Keene Division  
Summer 2023 Cost of Gas

**DIRECT TESTIMONY  
OF  
DEBORAH M. GILBERTSON  
AND  
JAMES M. KING**

March 17, 2023



THIS PAGE LEFT BLANK INTENTIONALLY

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty–Keene Division  
Docket No. DG 23-XXX  
Summer 2023 Cost of Gas  
Direct Testimony of D. Gilbertson and J. King  
Page 1 of 14

**I. INTRODUCTION**

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

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

(JK) My name is James M. King. My business address is 15 Buttrick Road, Londonderry, New Hampshire. My title is Rates Analyst II, Rates and Regulatory Affairs.

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

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

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

A. We are testifying on behalf of the Company.

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

A. I graduated from Bentley College in Waltham, Massachusetts, in 1996 with a Bachelor of Science in Management. In 1997, I was hired by Texas Ohio Gas where I was employed as a Transportation Analyst. In 1999, I joined Reliant Energy, located in Burlington, Massachusetts, as an Operations Analyst. From 2000 to 2003, I was employed by Smart Energy as a Senior Energy Analyst. I joined Keyspan Energy Trading Services in 2004 as a Senior Resource Management Analyst following which I was employed by National

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty-Keene Division  
Docket No. DG 23-XXX  
Summer 2023 Cost of Gas  
Direct Testimony of D. Gilbertson and J. King  
Page 2 of 14

1 Grid from 2008 through 2011 as a Lead Analyst in the Project Management Office. In  
2 2011, I was hired by LUSC as a Natural Gas Scheduler and was promoted to Manager of  
3 Retail Choice in 2012. In October 2016, I was promoted to Senior Manager of Energy  
4 Procurement. In this capacity, I provide gas procurement services to Liberty.

5 **Q. Mr. King, please describe your educational background, and your business and**  
6 **professional experience.**

7 A. I joined Liberty in September 2022. Prior to joining Liberty, I was employed by the  
8 Massachusetts Department of Public Utilities from 2014 through 2022. I held positions  
9 as an Economist III and Economist II in the Rates and Revenue Requirements Division  
10 responsible for the review and analysis of base distribution rate cases, as well as other  
11 rate reconciliation mechanisms presented to the Department from Massachusetts' gas,  
12 electric, and water companies. I graduated from Franklin and Marshall College in  
13 Lancaster, Pennsylvania, in 2013 with a Bachelor of Social Science in Government and  
14 Economics.

15 **Q. Ms. Gilbertson, and Mr. King, have you previously testified in regulatory**  
16 **proceedings before the New Hampshire Public Utilities Commission (the**  
17 **“Commission”)?**

18 A. Yes, we have.

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

20 A. The purpose of our testimony is to explain the Company's proposed Cost of Gas  
21 (“COG”) rates for its Keene Division for the 2023 summer (off-peak) period to be

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty-Keene Division  
Docket No. DG 23-XXX  
Summer 2023 Cost of Gas  
Direct Testimony of D. Gilbertson and J. King  
Page 3 of 14

effective beginning May 1, 2023. Our testimony will also address bill comparisons and other items related to the summer period.

**II. SUMMER COST OF GAS RATE**

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

A. The Company proposes a firm cost of gas rate of \$1.4761 per therm for the Keene Division as shown on Attachment JMK-1, Summary Schedule.

**Q. Please explain the calculation of the summer COG rate.**

A. The Summary Schedule in Attachment JMK-1 contains the calculation of the 2023 Summer Period COG and summarizes the Company's forecast of propane and compressed natural gas ("CNG") sales and propane and CNG costs. The total anticipated cost of the gas sendout from May 1 through October 31, 2023, is \$549,116 and forecasted interest is (\$418) for a total of \$548,698. The prior period over collection of (\$26,705) is added to the forecasted cost of gas for a total anticipated cost of \$521,993. The information presented on the summary page is supported by Schedules A through O, which are described later in this testimony.

The Total Anticipated Cost of Gas is derived as follows:

- 1) The prior period over collection of (\$26,705) through April 30, 2023, as shown on Schedule B, pg. 1, line 36 and further supported in Schedule B, pg. 2. This includes \$924 of interest on November 2022 through April 2023 over/under recovery balances as shown on Schedule B, pg. 2, line 47. Interest is accrued

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty–Keene Division  
Docket No. DG 23-XXX  
Summer 2023 Cost of Gas  
Direct Testimony of D. Gilbertson and J. King  
Page 4 of 14

1 using the monthly prime lending rate as reported by the Federal Reserve  
2 Statistical Release of Selected Interest Rates.

- 3 2) The total anticipated cost of the gas sendout from May 1 through October 31,  
4 2023, of \$549,116 as shown on Schedule B, pg.1, line 17. This includes any  
5 adjustments and Fixed Price Option (“FPO”) premiums shown on Schedule B, pg.  
6 1, lines 15 and 16, respectively.
- 7 3) The calculated return on inventory for the forecasted period as shown on Schedule  
8 B, pg. 1, line 18. There was no return on inventory for the forecast period.
- 9 4) Forecasted interest on May–October 2023 over/under recoveries of (\$418) is  
10 added to the anticipated cost of gas sendout. Schedule B, pg, 1, line 39 shows this  
11 forecasted interest calculation for the period May through October 2023. Interest  
12 is accrued using the monthly prime lending rate as reported by the Federal  
13 Reserve Statistical Release of Selected Interest Rates.

14 The Non-Fixed Price Option (“Non-FPO”) cost of gas rate of \$1.4761 per therm was  
15 calculated by dividing the sum of Total Anticipated Cost of Gas and return on inventory,  
16 the over collection, and interest of \$521,993 by the Projected Gas Sales of 353,632  
17 therms. There is no Fixed Price Option for the summer period. The FPO program is only  
18 offered during the winter (peak) period.

19 **Q. Please describe Schedule A, the Conversion of Costs from Gallons to Therms.**

20 A. Schedule A converts the propane gas volumes and unit costs from gallons to therms. The  
21 382,961 therms represent sendout as detailed on Schedule B, pg. 1, line 3 and line 9. The

1 blended unit cost of those supplies is \$ [REDACTED] per therm which represents the weighted  
2 average cost per therm for the summer period gas sendout as detailed on Schedule F, line  
3 37.

4 **Q. Please describe Schedule B, the Calculation of the Cost of Gas Rate**

5 A. Schedule B, pg. 1 presents the final (over)/under collection calculation for the summer  
6 2023 period based on the prior period (over)/under collection, forecasted volumes, the  
7 cost of gas, and applicable interest amounts. The forecasted total propane sendout of  
8 307,268 therms on line 3, plus total CNG sendout of 75,693 therms on line 8, is the sum  
9 of the forecasted summer 2023 total firm sendout. The forecasted Firm Sales on line 25  
10 represent weather normalized 2023 summer period firm sales. The weather  
11 normalization calculations for sendout and sales are found in Schedules I and J,  
12 respectively.

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

14 A. Yes, CNG demand charges are included in Schedule B, pg. 1, on line 11.

15 Schedule B, pg. 1, line 11, includes 25% of the 2023 demand charges. These charges are  
16 [REDACTED] per month or [REDACTED] for the season and represent the portion attributable to  
17 the summer period.

18 **Q. Is this an approved allocation of summer demand charges?**

19 A. Yes, in Order No. 26,505 (July 30, 2021), the Commission approved the Settlement  
20 Agreement in the Company's recent distribution service rate case which fixed the  
21 allocation of Keene CNG demand charges to be 75% in the winter period and 25% in the

1 summer period. The total demand charge for the summer period is thus the total annual  
2 demand charge of [REDACTED] times 25%, or [REDACTED].

3 **Q. Are incremental costs/savings for prior summer periods related to the use of CNG**  
4 **versus propane included in this filing?**

5 A. Yes, the calculation of prior summer period incremental costs/savings between propane  
6 and CNG have been calculated for the summer of 2019, 2020, 2021, and 2022 per  
7 Section 7.1 of the Settlement Agreement in Docket No. DG 20-105. The calculation can  
8 be found on Schedule N. The Company's projected savings for the summer 2023 of  
9 \$19,511 can be found on Schedule M. Of this amount, the Company has included \$111  
10 in this filing, representing the amount of incrementally higher CNG cost accrued since  
11 the commencement of CNG service, which has not been recovered from customers.

12 **Q. Can you itemize the previous years' incremental costs/savings which are shown in**  
13 **this filing?**

14 A. Yes, the previous period incremental costs/savings calculations can be found on Schedule  
15 O. For the summer of 2019, the Company collected 100% of the incrementally higher  
16 CNG costs, which totaled \$5,048. In light of the Settlement Agreement authorizing the  
17 Company to recover only 50% of the incrementally higher CNG costs, \$2,524 was  
18 returned to customers over the Summer 2022 period through the rates proposed in that  
19 filing.

20 For the summer of 2020, CNG costs were \$16,214 higher than propane costs. Over the  
21 course of the 2020 summer the Company deferred 100% of those incremental costs, that



Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty–Keene Division  
Docket No. DG 23-XXX  
Summer 2023 Cost of Gas  
Direct Testimony of D. Gilbertson and J. King  
Page 7 of 14

1 is, the Company did not collect any of the \$16,214. The Settlement Agreement  
2 authorized the Company to collect 50% of those charges, and thus the rate proposed in  
3 DG 22-015 included recovery of \$8,107 of the incrementally higher CNG costs. Again,  
4 these exact calculations for the 2019 and 2020 summers were specifically included in the  
5 Settlement Agreement.

6 For the summer of 2021, CNG costs were \$13,026 less expensive than propane. The  
7 Company again deferred, i.e., it did not include these savings in the 2020 COG rates.  
8 The Settlement Agreement allows the Company to recover 100% of these savings “up to  
9 the amount of incrementally higher CNG costs accrued since the commencement of CNG  
10 service, which have not then been recovered from customers,” and thereafter share any  
11 remaining savings with customers equally. Settlement Agreement at Bates 14. The  
12 amount of the “incrementally higher COG costs accrued since the commencement of  
13 CNG service” that the Company did not recover is \$10,631. The rates proposed there  
14 thus included recovery of that amount, leaving \$2,395 in savings to be addressed in a  
15 future period. For the summer of 2022, CNG costs were \$5,012 incrementally more  
16 expensive than propane. The Company collected one-half of the incrementally higher  
17 CNG supply costs, \$2,506, during the Summer 2022 period, leaving \$2,506 to be added  
18 to the incremental costs not recovered balance. Including the summer 2022 experience,  
19 the current net balance of the incremental costs not recovered through the beginning of  
20 the summer 2023 period is \$111 ( $-\$2,395 + \$2,506 = \$111$ ).

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty-Keene Division  
Docket No. DG 23-XXX  
Summer 2023 Cost of Gas  
Direct Testimony of D. Gilbertson and J. King  
Page 8 of 14

1 **Q. Are projected 2023 incremental cost/savings included in this filing?**

2 A. Yes. The Company projects CNG costs to be \$19,511 less than propane costs over the  
3 summer of 2023. The proposed rates in this filing include \$111 for the amount of  
4 incrementally higher CNG cost accrued since the commencement of CNG service which  
5 have not been recovered from customers. This can be found on line 13 of Schedule B.  
6 The detailed calculation can be found on Schedules M and N.

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

8 A. Unaccounted-for gas is included in the firm sendout on Schedule B, lines 1 and 8. The  
9 Company actively monitors its level of unaccounted-for volumes, which amounted to  
10 2.11% for the twelve months ended June 30, 2022.

11 **Q. How is the information formerly included in Schedule G and H represented in this**  
12 **filing?**

13 A. Schedule G, the Company's prior year cost of gas reconciliation, is now included as  
14 Schedule B, pg.2. Schedule H, the Company's calculation of interest and adjustments, is  
15 now also reflected in Schedule B, pg.2

16 **Q. Why is the Company showing November through April in Schedule B, pg.2?**

17 A. The Company chose to extend the prior summer cost of gas reconciliation through April  
18 2023 to reflect costs related to summer period which occurred during the winter months  
19 but are attributable to the summer period. These out of period adjustments can be seen  
20 in columns 8 through 13. The calculation of interest for this period is reflected on line 44  
21 through line 47.

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty–Keene Division  
Docket No. DG 23-XXX  
Summer 2023 Cost of Gas  
Direct Testimony of D. Gilbertson and J. King  
Page 9 of 14

1 **Q. How do the proposed Summer 2023 cost of gas rates compare with the previous**  
2 **summer's rates?**

3 A. The proposed Non-FPO COG rate of \$1.4761 per therm is a decrease of \$0.1459 or  
4 8.99% from the summer 2022 approved rate of \$1.6220 per therm, per Order No. 26,630  
5 (May 20, 2022).

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

7 A. The main reason for the \$0.1459 decrease is the decrease in projected market supply  
8 costs. An additional reason for the decrease is due to having started Summer 2022 period  
9 with an under collection versus starting the Summer 2023 period with an over collection.

10 **III. PROPANE COMMODITY COSTS**

11 **Q. Please describe the forecasted spot prices of propane addressed in Schedules C and**  
12 **E.**

13 A. Schedule E presents the forecasted market spot prices of propane. Column 1 shows the  
14 Mont Belvieu propane futures quotations as of March 7, 2023. Subsequent columns  
15 show expected broker/supplier fees, pipeline fees, and Propane Education & Research  
16 Council (PERC) fees. These prices, when added together, represent a forecasted summer  
17 price of propane. This price is also represented in Schedule C, line 31. Note, as actual  
18 prices are realized, they will replace estimate pricing. The reconciliation of actual costs  
19 to estimated costs is continued throughout the summer as the actual data becomes  
20 available.

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty–Keene Division  
Docket No. DG 23-XXX  
Summer 2023 Cost of Gas  
Direct Testimony of D. Gilbertson and J. King  
Page 10 of 14

1 **Q. Please describe the Propane Purchasing Stabilization Plan (“PPSP”).**

2 A. The Propane Purchasing Stabilization Plan is a Commission-approved strategy that the  
3 Company undertakes to provide stability in the winter COG rate and to facilitate the  
4 offering of a Fixed Price Option. Under this strategy, the Company systematically  
5 hedges supply purchases over the off-peak period, to be utilized and called upon in the  
6 peak period. The strategy is intended to provide price stability rather than to secure lower  
7 prices. The PPSP was approved in Order No. 24,617 (Apr. 28, 2006) and has been  
8 discussed repeatedly in Keene’s cost of gas proceedings ever since.

9 **Q. Has the Company performed any analysis regarding its Propane Purchasing**  
10 **Stabilization Plan?**

11 A. Yes. The Company performed two analyses. In Schedule J-1, the Company evaluated  
12 the premium/discount associated with securing the pre-purchased volumes for delivery in  
13 the winter of 2022–2023 relative to securing a floating price at Mont Belvieu. The  
14 comparison reflects the net premium/discount results of the Company’s competitive RFP  
15 process. In Schedule J-2, the Company performed a comparison of propane purchase  
16 costs under the contract versus representative spot prices had the Company not  
17 implemented the Plan. The analysis shows that the cost of the pre-purchased gallons was  
18 13.4% higher than the average representative spot purchase cost for the first four months  
19 of the current winter period, reflecting a decrease in spot propane prices over the pre-  
20 purchased volumes.

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty–Keene Division  
Docket No. DG 23-XXX  
Summer 2023 Cost of Gas  
Direct Testimony of D. Gilbertson and J. King  
Page 11 of 14

1 **Q. Has the Company issued a Request for Proposals (“RFP”) to potential suppliers for**  
2 **the 2023–2024 Plan?**

3 A. Yes. The Company issued the RFP for the 2023–2024 Plan on February 23, 2023. The  
4 RFP process was the same as the process used last summer. The RFP was sent to thirteen  
5 suppliers. Once a winning bidder has been selected, they will be notified.

6 **Q. Is the Company proposing any changes to the 2023–2024 Plan?**

7 A. No. The Plan structure specified in the RFP, as detailed on Schedule D-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 – approximately 64%, which also includes storage at the Amherst facility.

11 **IV. COMPRESSED NATURAL GAS COMMODITY COSTS**

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

13 A. The CNG costs are shown in Schedule C, lines 20 through 27. These costs reflect the  
14 contractual agreement between the Company and its supplier, Xpress Natural Gas, LLC.

15 **Q. Please describe the calculation of the Weighted Average Cost of Gas (“WACOG”).**

16 A. Schedule F contains the calculation of the expected weighted average cost of inventory  
17 for each month through October 2023. The unit cost of projected gas to be sent out each  
18 month includes CNG deliveries. Note that the CNG deliveries are shown in separate  
19 columns from the propane-weighted cost but are included in the average summer rate,  
20 which is shown on line 37 of Schedule F.

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty-Keene Division  
Docket No. DG 23-XXX  
Summer 2023 Cost of Gas  
Direct Testimony of D. Gilbertson and J. King  
Page 12 of 14

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

2 A. As noted in prior testimony, the Company began serving customers with CNG in October  
3 2019. At present, the service territory for CNG is limited to the Monadnock Marketplace  
4 and a small portion of Key Road. The Company's short-term plan involves  
5 adding/converting more customers and expanding the natural gas footprint within this  
6 limited area as contemplated in the Settlement Agreement.<sup>1</sup> Overall, there have only  
7 been slight changes to the customer base at the Marketplace since last Fall. A couple of  
8 vacant spaces have been inhabited by new tenants and two stores merged into one store.  
9 There was also one new customer added, the New Hampshire State Police Barracks. The  
10 Company is still pursuing the transition to partial renewable fuel (RNG) and issued a  
11 request for proposals in late Fall of 2022. At this time, proposals are being evaluated.

12 **Q. When does the current CNG contract expire?**

13 A. The current CNG contract expires on June 30, 2024.

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

15 A. For the upcoming off-peak period, spot propane is anticipated to be 26 cents per therm  
16 more expensive than CNG. This determination of cost disparity between the two fuels

---

<sup>1</sup> "Phase 1 of the Keene conversion to natural gas shall consist of: (1) installation of the existing temporary CNG facility; (2) conversion of the propane-air customers' premises at the Monadnock Marketplace to natural gas as of the date of this Settlement; and (3) acquisition of customers at any additional premises not currently physically connected to the gas utility system in Keene after the date of this settlement who would be served CNG from both the existing CNG temporary facility and through existing mains." Settlement Agreement at Bates 14 (emphasis added).

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty–Keene Division  
Docket No. DG 23-XXX  
Summer 2023 Cost of Gas  
Direct Testimony of D. Gilbertson and J. King  
Page 13 of 14

1 can be performed using Spot Purchases cost per therm found on Schedule C, line 31, less  
2 CNG Deliveries cost per therm found on Schedule C, line 24.

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

4 A. Yes.

5 **Q. Can you comment on market price conditions as compared to last summer?**

6 A. Yes, as compared to this time last Spring, commodity prices have decreased. Last year at  
7 this time, for example, Mont Belvieu was forecasted to average \$1.33 per gallon for the  
8 2022 summer period. This upcoming summer that index price is forecasted to average 87  
9 cents per gallon– a 35% decrease. As for natural gas benchmark prices, NYMEX at this  
10 time last year was averaging \$4.85 per dekatherm (“Dth”) whereas today’s forward  
11 summer strip is averaging \$3.17 per Dth’s – a 35% decrease over last year. The  
12 Company will continue to monitor market prices as these costs will directly impact the  
13 rates that customers will pay this summer.

14 **V. BILL IMPACTS**

15 **Q. What is the impact of the Summer 2023 COG rate on the typical residential heat  
16 and hot water customer?**

17 A. As shown on Schedule K, Column 7, lines 24 and 25, the typical residential heat and hot  
18 water customer would experience a decrease of \$38.54 or 28.7% in the gas component of  
19 their bills compared to the prior summer period. When the monthly customer charge,  
20 therm delivery charge, and LDAC are factored into the analysis, the typical residential

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty–Keene Division  
Docket No. DG 23-XXX  
Summer 2023 Cost of Gas  
Direct Testimony of D. Gilbertson and J. King  
Page 14 of 14

customer would see a total bill decrease of \$ 36.37 or 13.3%, as shown on lines 31 and 32.

**Q. Please describe the impact of the Summer 2023 COG rate on the typical commercial customer compared to the prior summer period.**

A. As shown on Schedule L, Column 7, lines 26 and 27, the typical commercial customer would experience a decrease of \$123.22 or 28.8% in the gas component of their bills compared to the prior summer period. When the monthly customer charge, therm delivery charge, and LDAC are factored into the analysis, the typical commercial customer would see a total bill decrease of \$ 86.38 or 9.9%, as shown on lines 33 and 34.

**VI. CONCLUSION**

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

A. Yes, it does.



SUMMARY  
SUMMER 2023 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

CALCULATION OF COST OF GAS RATE  
SUMMARY  
SUMMER PERIOD 2023

Calculation of the Cost of Gas Rate

Period Covered: Summer Period May 1, 2023 through October 31, 2023

Projected Gas Sales - therms 353,632

Total Calculated Cost of Gas Sendout, including interest \$548,698

Add: Prior Period Deficiency Uncollected \$0  
Interest \$0

Deduct: Prior Period (Excess) Collected (\$28,437)  
Interest \$1,732

Prior Period Adjustments and Interest (\$26,705)

Total Anticipated Cost \$521,994

Cost of Gas Rate

Cost of Gas Rate - Beginning Period (per therm) \$1.4761

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

Maximum Cost of Gas Rate - Non-Fixed Price Option (per therm) \$1.8451

REDACTED  
SCHEDULE A  
SUMMER 2023 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

CONVERSION OF COSTS - GALLONS TO THERMS  
SUMMER PERIOD 2023

	(1)	(2)	(3)	(4)	(5)	(6)
			<u>VOLUMES</u>		<u>UNIT COST</u>	
	<u>UNIT</u>	<u>CONVERSION FACTOR</u>	<u>GALLONS</u>	<u>THERMS</u>	<u>PER GALLON</u>	<u>PER THERM</u>
1 GAS FROM PROPANE INVENTORY	GALLONS	0.91502			\$1.3596	\$1.4859
2 GAS FROM CNG	THERMS	N/A	N/A		N/A	
3 TOTAL				382,961		

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

CALCULATION OF COST OF GAS RATE  
SUPPLY / DEMAND BALANCE  
SUMMER PERIOD 2023

LINE NO	PRIOR	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	TOTAL	REFERENCE
<b>PROPANE COSTS</b>									
1	PROPANE FIRM SENDOUT (therms)								Sch. I Col. 13 - Ln 8
2	COMPANY USE (therms)								Sch I Col. 11
3	TOTAL PROPANE SENDOUT (therms)								Ln 1 + Ln 2
4	COST PER THERM (WACOG)	\$1,5347	\$1,5110	\$1,4970	\$1,4899	\$1,4273	\$1,4630		Sch F, Col. 3 (Less Sendout)
5	TOTAL CALCULATED COST OF PROPANE	\$87,891	\$64,257	\$61,908	\$60,506	\$64,801	\$117,196	\$456,559	Ln 3 * Ln 4
6	PROPANE ADJUSTMENTS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
7	TOTAL COST OF PROPANE	\$87,891	\$64,257	\$61,908	\$60,506	\$64,801	\$117,196	\$456,559	Ln 5 + Ln 6
<b>CNG COSTS</b>									
8	CNG SENDOUT (therms)								Sch C, Ln 20
9	COST PER THERM (WACOG)								Sch C, Ln 23
10	TOTAL CALCULATED COST OF CNG								Ln 8 * Ln 9
11	CNG DEMAND CHARGES								Sch C, Ln 26
12	PROJECTED INCREMENTAL COSTS SUMMER 2023	\$19	\$19	\$19	\$19	\$19	\$19	\$111	Sch. N
13	NET INCREMENTAL COSTS	\$19	\$19	\$19	\$19	\$19	\$19	\$111	Ln 12
14	TOTAL CNG COSTS	\$16,400	\$13,639	\$13,997	\$14,082	\$14,750	\$19,690	\$92,557	Ln 10 + Ln 11 + Ln 13
15	ACCOUNTING ADJUSTMENT	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
16	FPO PREMIUM	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Ln 30 * .02 (N/A for summer period)
17	TOTAL COSTS OF GAS	\$104,291	\$77,896	\$75,905	\$74,588	\$79,551	\$136,886	\$549,116	Ln 7 + Ln 14 + Ln 15 + Ln 16
18	RETURN ON INVENTORY	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Company calculation
<b>REVENUES</b>									
19	BILLED FPO SALES (therms)	0	0	0	0	0	0		
20	COG FPO RATE	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
21	BILLED FPO REVENUE - CURRENT MONTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
22	BILLED NON-FPO SALES PRIOR MONTH (therms)	0	0	0	0	0	0		
23	COG NON-FPO RATE PRIOR MONTH	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
24	BILLED FPO REVENUE - PRIOR MONTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
25	BILLED NON-FPO SALES CURRENT MONTH (therms)	66,280	49,014	47,418	47,093	52,842	90,985	353,632	Sch. J
26	COG NON-FPO RATE CURRENT MONTH	\$1,4761	\$1,4761	\$1,4761	\$1,4761	\$1,4761	\$1,4761		(Ln 37 + Ln 17 + Ln 18 + Ln 36) / Ln 25
27	BILLED NON-FPO REVENUE - CURRENT MONTH	\$97,835	\$72,349	\$69,993	\$69,514	\$78,000	\$134,302	\$521,993	Ln 25 * Ln 26
28	BILLED SALES OTHER PRIOR PERIODS	0	0	0	0	0	0		
29	COG OTHER PRIOR PERIODS BLENDED RATE	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000		
30	BILLED OTHER BLENDED REVENUE - PRIOR PERIODS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
31	TOTAL SALES	66,280	49,014	47,418	47,093	52,842	90,985	353,632	Sch. J
32	TOTAL BILLED REVENUES	\$97,835	\$72,349	\$69,993	\$69,514	\$78,000	\$134,302	\$521,993	Ln 21 + Ln 24 + Ln 27 + Ln 30
33	UNBILLED REVENUES (NET)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
34	TOTAL REVENUES	\$97,835	\$72,349	\$69,993	\$69,514	\$78,000	\$134,302	\$521,993	Ln 32 + Ln 33
35	(OVER)/UNDER COLLECTION	\$6,456	\$5,547	\$5,912	\$5,074	\$1,551	\$2,584	\$418	Ln 17 + Ln 18 - Ln 34
36	CUMULATIVE (OVER)/UNDER COLLECTION ELIGIBLE FOR INTEREST	(\$26,705)	(\$20,249)	(\$14,856)	(\$9,056)	(\$4,061)	(\$2,554)	\$9	Prior Mo Ln 36 + Ln 35 + Ln 39
37	PRIME RATE	7.75%	7.75%	7.75%	7.75%	7.75%	7.75%		
38	DAYS PER MONTH	31	30	31	31	30	31		
39	INTEREST AMOUNT	(\$155)	(\$112)	(\$79)	(\$43)	(\$21)	(\$8)	(\$418)	(Prior Mo Ln 36 + Curr Mo Ln 36) / 2 x Ln 37 / 36
40	FINAL CUMULATIVE (OVER)/UNDER COLLECTION WITH INTEREST	(\$20,403)	(\$14,968)	(\$9,135)	(\$4,104)	(\$2,575)	\$1		

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVIS ON

CALCULATION OF COST OF GAS RATE  
SUPPLY / DEMAND BALANCE  
SUMMER PERIOD 2022 RECONCILIATION

LINE NO	(1) PR OR	(2) Actual May-22	(3) Actual Jun-22	(4) Actual Jul-22	(5) Actual Aug-22	(6) Actual Sep-22	(7) Actual Oct-22	(8) Actual Nov-22	(9) Actual Dec-22	(10) Actual Jan-23	(11) Actual Feb-23	(12) Estimate Mar-23	(13) Estimate Apr-23	(14) TOTAL
<b>PROPANE COSTS</b>														
1	PROPANE FIRM SENDOUT (therms)													
2	COMPANY USE (therms)													
3	TOTAL PROPANE SENDOUT (therms)													
4	COST PER THERM (WACOG)	\$1,616.4	\$1,653.4	\$1,639.5	\$1,629.6	\$1,581.3	\$1,537.7	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	
5	TOTAL CALCULATED COST OF PROPANE	\$82,525	\$65,339	\$62,236	\$61,479	\$68,081	\$119,762	\$0	\$0	\$0	\$0	\$0	\$0	\$459,422
6	PROPANE ADJUSTMENTS	\$1	(\$0)	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2
7	TOTAL COST OF PROPANE	\$82,526	\$65,339	\$62,237	\$61,479	\$68,081	\$119,762	\$0	\$0	\$0	\$0	\$0	\$0	\$459,424
<b>CNG COSTS</b>														
8	CNG SENDOUT (therms)													
9	COMPANY USE (therms)													
10	TOTAL CNG SENDOUT (therms)													
11	COST PER THERM	\$16.897	\$15.027	\$12.305	\$15.059	\$18.143	\$19.523	\$53	\$0	\$0	\$0	\$0	\$0	\$97,007
12	TOTAL CALCULATED COST OF CNG													
13	CNG DEMAND CHARGES													
14	CNG ADJUSTMENTS													
15	JE TO MOVE COSTS FROM SUMMER TO WINTER													
16	TOTAL CALCULATED COST OF CNG PLUS DEMAND CHARGES AND ADJUSTMENTS													
17	CNG PER THERM RATE	\$1.379	(\$1.886)	\$1.416	\$1.664	\$1.608	\$1.182							
18	INCREMENTAL COSTS SUMMER 2019 PER Order # 26 505 in DG 20-105													
19	INCREMENTAL COSTS SUMMER 2020 PER Order # 26 505 in DG 20-105													
20	INCREMENTAL COSTS SUMMER 2021													
21	PROJECTED INCREMENTAL COSTS SUMMER 2022													
22	NET INCREMENTAL COSTS													
23	TOTAL CNG COSTS													
24	FPO PREMIUM	\$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
25	TOTAL COSTS OF GAS													
26	RETURN ON INVENTORY	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>REVENUES</b>														
27	BILLED FPO SALES (therms)	0	0	0	0	0	0	0	0	0	0	0	0	0
28	COG FPO 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
29	BILLED FPO REVENUES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
30	BILLED NON-FPO SALES PRIOR MONTH (therms)	0	8,515	12,315	12,803	12,654	3,665	0	0	0	0	0	0	49,952
31	COG NON-FPO RATE PRIOR MONTH	\$0.0000	\$2.4835	\$1.6220	\$2.0198	\$1.8336	\$2.0114	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$1.9203	\$97,555
32	BILLED NON-FPO REVENUES	\$0	\$21,147	\$19,976	\$25,860	\$23,202	\$7,372	\$0	\$0	\$0	\$0	\$0	\$0	\$0
33	BILLED NON-FPO SALES CURRENT MONTH (therms)	37,681	35,831	32,777	33,353	33,413	11,821	0	0	0	0	0	0	184,876
34	COG NON-FPO RATE CURRENT MONTH	\$2.4835	\$1.6220	\$2.0198	\$1.8336	\$2.0114	\$1.9203	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$1.9203	\$0.0000	\$0
35	BILLED NON-FPO REVENUES	\$93,580	\$58,118	\$66,204	\$61,156	\$67,207	\$22,700	\$0	\$0	\$0	\$0	\$0	\$0	\$368,964
36	BILLED SALES OTHER PRIOR PERIODS	180	0	4	16	(17)	1	4,336	255	90,973	4	0	0	95,752
37	COG OTHER PRIOR PERIODS BLENDED RATE	\$1.2524	\$0.0000	\$2.4825	\$1.6220	\$2.0732	\$1.8336	\$1.9259	\$1.9355	\$1.9390	(\$2.1575)	\$0.0000	\$0.0000	\$0
38	BILLED OTHER PR OR PERIODS REVENUES	\$225	\$0	\$10	\$26	(\$35)	\$2	\$8,351	\$494	\$176,401	(\$9)	\$0	\$0	\$185,464
39	TOTAL SALES	37,860	44,346	45,097	46,172	46,049	15,487	4,336	255	90,973	4	0	0	330,580
40	TOTAL BILLED REVENUES	\$93,805	\$79,265	\$86,189	\$87,042	\$90,373	\$30,074	\$8,351	\$494	\$176,401	(\$9)	\$0	\$0	\$651,983
41	UNBILLED REVENUES (NET)	\$5,622	\$14,976	(\$12,755)	\$15,602	(\$23,444)	\$156,861	(\$156,861)	\$0	\$0	\$0	\$0	\$0	\$0
42	TOTAL REVENUES	\$99,427	\$94,240	\$73,434	\$102,643	\$66,929	\$186,935	(\$148,510)	\$494	\$176,401	(\$9)	\$0	\$0	\$651,983
43	(OVER)/UNDER COLLECTION	\$19,196	(\$49,784)	\$3,319	(\$25,544)	\$19,628	(\$44,427)	\$150,855	\$1,798	(\$174,109)	\$2,300	\$2,292	\$2,292	(\$92,185)
44	CUMULATIVE (OVER)/UNDER COLLECTION ELIGIBLE FOR INTEREST	\$63,748	\$82,944	\$33,378	\$36,888	\$11,485	\$31,226	(\$13,104)	\$137,799	\$139,917	(\$33,366)	(\$30,726)	(\$28,625)	(\$26,529)
45	PR ME RATE	3.50%	4.00%	4.75%	5.50%	5.50%	6.25%	6.25%	7.00%	7.50%	7.75%	7.75%	7.75%	
46	DAYS PER MONTH	31	30	31	31	30	31	30	31	31	28	31	30	
47	INTEREST AMOUNT	\$218	\$191	\$142	\$113	\$97	\$48	\$320	\$826	\$339	(\$191)	(\$195)	(\$176)	\$1,732
48	FINAL CUMULATIVE (OVER)/UNDER COLLECTION WITH INTEREST	\$83,162	\$33,569	\$37,030	\$11,598	\$31,323	(\$13,056)	\$138,119	\$140,743	(\$33,027)	(\$30,917)	(\$28,821)	(\$26,705)	

REDACTED  
SCHEDULE C  
SUMMER 2023 COG Filing

LIBERTY UT LITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A L BERTY - KEENE DIVISION

CALCULATION OF PURCHASED GAS COSTS  
SUMMER PERIOD 2023

LINE NO.		May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	TOTAL
1	TOTAL REQU RED PURCHASES							382,961
2	<b>PROPANE PURCHASE STABILIZATION PLAN DELIVERIES</b>							
3	THERMS	-	-	-	-	-	-	-
4	<b>RATES -</b>							
5	Contract Price	\$0.0000	\$0 0000	\$0.0000	\$0.0000	\$0 0000	\$0.0000	
6	Broker Fee	incl.	incl.	incl.	incl.	incl.	incl.	
7	Pipeline Fee	incl.	incl.	incl.	incl.	incl.	incl.	
8	PERC Fee	incl.	incl.	incl.	incl.	incl.	incl.	
9	Trucking Fee	incl.	incl.	incl.	incl.	incl.	incl.	
10	COST PER THERM	\$0.0000	\$0 0000	\$0.0000	\$0.0000	\$0 0000	\$0.0000	
11	TOTAL COST - Propane Purchase Stabilization Plan Deliveries	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12	<b>AMHERST STORAGE PROPANE DELIVERIES</b>							
13	Therms	-	-	-	-	-	-	-
14	<b>RATES - from Schedule F</b>							
15	WACOG Price	\$0.0000	\$1 6000	\$1.6000	\$1.6000	\$1 6000	\$1.6000	
16	Trucking Fee	\$0.0000	\$0 0650	\$0.0650	\$0.0650	\$0 0650	\$0.0650	
17	COST PER THERM	\$0.0000	\$1 6650	\$1.6650	\$1.6650	\$1 6650	\$1.6650	
18	TOTAL COST - Amherst Storage Propane Deliveries	\$0	\$0	\$0	\$0	\$0	\$0	\$0
19	<b>CNG DELIVERIES</b>							
20	THERMS							
21	RATE							
22								
23	COST PER THERM							
24								
25	COST - CNG							
26	DEMAND FIXED \$110,000 Annual -- 75% Peak							
27	TOTAL CNG							
28	<b>SPOT PURCHASES</b>							
29	THERMS							
30	From Schedule E							
31	COST PER THERM							\$0 2583
32	TOTAL COST - Spot Purchases							
33	<b>OTHER ITEMS</b>							
34	Storage	\$0	\$0	\$0	\$0	\$0	\$0	\$0
35	Refund of Deferred Revenue Surcharge over collection	\$0	\$0	\$0	\$0	\$0	\$0	\$0
36	TOTAL OTHER ITEMS	\$0	\$0	\$0	\$0	\$0	\$0	\$0
37	<b>TOTAL</b>							
38	THERMS FROM PROPANE							
39	COST							
40	THERMS FROM CNG							
41	COST							
42	COST PER THERM	\$1.4024	\$1.4298	\$1.4469	\$1.4501	\$1.4272	\$1.4269	\$1.4285

SUBJECT TO CONFIDENTIAL TREATMENT

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - 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-22	\$1.1712	+	\$0.2579	+	\$0.1000	+	\$0.0050	+	\$0.1145	=	\$1.6486	140,000	\$230,801	140,000			-\$0.1122
May-22	\$1.2281	+	\$0.2579	+	\$0.1000	+	\$0.0050	+	\$0.1145	=	\$1.7055	105,000	\$179,078	105,000			-\$0.1122
Jun-22	\$1.2414	+	\$0.2579	+	\$0.1000	+	\$0.0050	+	\$0.1145	=	\$1.7188	105,000	\$180,469	105,000			-\$0.1122
Jul-22	\$1.1515	+	\$0.2579	+	\$0.1000	+	\$0.0050	+	\$0.1145	=	\$1.6289	140,000	\$228,049	140,000			-\$0.1122
Aug-22	\$1.0323	+	\$0.2579	+	\$0.1000	+	\$0.0050	+	\$0.1145	=	\$1.5097	105,000	\$158,520	105,000			-\$0.1122
Sep-22	\$1.0203	+	\$0.2579	+	\$0.1000	+	\$0.0050	+	\$0.1145	=	\$1.4977	105,000	\$157,253	105,000			-\$0.1122
Total											700,000	\$1,134,170		700,000			-\$0.1122

REDACTED  
SCHEDULE D-2

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

COMPARISON OF CONTRACT COST TO HYPOTHETICAL SPOT COST  
WINTER SEASON 2022-2023 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-22		92,000		\$1.2716	92,000	\$116,986	\$21,750
Dec-22		140,000		\$1.1744	140,000	\$164,411	\$46,709
Jan-23		165,000		\$1.4860	165,000	\$245,190	\$3,630
Feb-23		135,000		\$1.3382	135,000	\$180,658	\$22,922
Total						\$707,245	\$95,011
							13.4%

SCHEDULE D-3

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

PROPANE PURCHASING STABILIZATION PLAN  
PRE-PURCHASES AND DELIVERY SCHEDULE

Delivery Month	Pre-Purchases (Gallons)						
	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Total
Nov-23	18,400	13,800	13,800	18,400	13,800	13,800	92,000
Dec-23	28,000	21,000	21,000	28,000	21,000	21,000	140,000
Jan-24	33,000	24,750	24,750	33,000	24,750	24,750	165,000
Feb-24	27,000	20,250	20,250	27,000	20,250	20,250	135,000
Mar-24	21,000	15,750	15,750	21,000	15,750	15,750	105,000
Apr-24	12,600	9,450	9,450	12,600	9,450	9,450	63,000
Total	140,000	105,000	105,000	140,000	105,000	105,000	700,000
Monthly %	20.0%	15.0%	15.0%	20.0%	15.0%	15.0%	



REDACTED  
SCHEDULE E  
SUMMER 2023 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

PROPANE SPOT MARKET PURCHASE COST ANALYSIS  
SUMMER PERIOD 2023

		(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									
2	JUN									
3	JUL									
4	AUG									
5	SEP									
6	OCT									

1. Propane futures market quotations (cmegroup.com) on 3/7/23 close. See Appendix 1.
2. A generally accepted standard broker fee
3. Pipeline rate from Mt. Belvieu to Selkirk
4. Propane Education Research Council (propanecouncil.org)
5. A generally accepted standard supplier charge
6. Selkirk Cost - all fees plus propane cost
7. Northern Gas Transport trucking rate including diesel fuel surcharge. See Appendix 3A & 3B.
8. Delivered Price per Gallon
9. Delivered Price per therm as converted using per gallon price / .91502

REDACTED  
SCHEDULE F  
SUMMER 2023 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

INVENTORY & WEIGHTED AVERAGE COST OF GAS CALCULATION  
SUMMER PERIOD 2023

LINE NO.		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
		<u>Therms</u>	<u>Cost</u>	<u>Therm</u>	<u>Rate</u> <u>Gal.</u>	<u>CNG therms</u>	<u>Cost</u>	<u>Total Sendout</u>	<u>Total Cost</u>		<u>Therm Rate</u>
1	May 2023 (Forecasted)										
2	Beginning Balance	77,606	\$122,994	\$1 5849	\$1.4502						
3	Purchases Received	57,271	\$83,994	\$1.4666	\$1 3420						
4	Total Available	134,877	\$206,988	\$1 5346	\$1.4042						
5	Less Sendout	57,271	\$87,891	\$1 5347	\$1.4042						
6	Ending Balance	77,606	\$119,097	\$1 5346	\$1.4042						
7	June 2022 (Forecasted)										
8	Beginning Balance	77,606	\$119,097	\$1 5346	\$1.4042						
9	Purchases Received	42,525	\$62,425	\$1.4680	\$1 3432						
10	Total Available	120,131	\$181,522	\$1 5110	\$1 3826						
11	Less Sendout	42,525	\$64,257	\$1 5110	\$1 3826						
12	Ending Balance	77,606	\$117,265	\$1 5110	\$1 3826						
13	July 2023 (Forecasted)										
14	Beginning Balance	77,606	\$117,265	\$1 5110	\$1 3826						
15	Purchases Received	41,354	\$60,819	\$1.4707	\$1 3457						
16	Total Available	118,960	\$178,085	\$1.4970	\$1 3698						
17	Less Sendout	41,354	\$61,908	\$1.4970	\$1 3698						
18	Ending Balance	77,606	\$116,177	\$1.4970	\$1 3698						
19	August 2023 (Forecasted)										
20	Beginning Balance	77,606	\$116,177	\$1.4970	\$1 3698						
21	Purchases Received	40,612	\$59,950	\$1.4762	\$1 3507						
22	Total Available	118,218	\$176,127	\$1.4899	\$1 3632						
23	Less Sendout	40,612	\$60,506	\$1.4899	\$1 3632						
24	Ending Balance	77,606	\$115,621	\$1.4898	\$1 3632						
25	September 2023 (Forecasted)										
26	Beginning Balance	77,606	\$115,621	\$1.4898	\$1 3632						
27	Purchases Received	45,400	\$59,950	\$1 3205	\$1 2083						
28	Total Available	123,006	\$175,571	\$1.4273	\$1 3060						
29	Less Sendout	45,400	\$64,801	\$1.4273	\$1 3060						
30	Ending Balance	77,606	\$110,770	\$1.4273	\$1 3060						
31	October 2023 (Forecasted)										
32	Beginning Balance	77,606	\$110,770	\$1.4273	\$1 3060						
33	Purchases Received	80,106	\$119,965	\$1.4976	\$1 3703						
34	Total Available	157,712	\$230,735	\$1.4630	\$1 3387						
35	Less Sendout	80,106	\$117,196	\$1.4630	\$1 3387						
36	Ending Balance	77,606	\$113,539	\$1.4630	\$1 3387						
37	AVERAGE WINTER RATE - SENDOUT										

L BERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION													
Weather Normalization - Firm Sendout (Therms)													
Period	Actual Firm Sendout	Base Use	Heat Use	Actual Calendar Month Degree Days	Normal Calendar Month Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therm/DD	Weather Adjustment	Normal Heat Load	Normalized Firm Sendout	Actual Company Use	Unaccounted For 2.11%	Total Firm Sendout
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
			(1) - (2)			(4) - (5)	(3) / (4)	(6) X (7)	(3) + (8)	(1) - (3) + (9)		(10 - 11) * 2.11%	(10) - (11) + (12)
1 May-22	66,833	50,180	16,653	250	299	(49)	66.61	3,264	19,917	70,097	2,320	1,479	69,256
2 Jun-22	52,200	50,180	2,020	109	103	6	18.53	(111)	1,909	52,089	2,021	1,099	51,167
3 Jul-22	50,374	50,180	194	10	23	(13)	19.40	252	446	50,626	2,065	1,068	49,629
4 Aug-22	49,986	50,180	0	22	43	(21)	0.00	0	0	49,986	1,878	1,055	49,163
5 Sep-22	58,592	50,180	8,412	262	194	68	32.11	(2,183)	6,229	56,409	2,588	1,190	55,011
6 Oct-22	99,072	50,180	48,892	575	537	38	85.03	(3,231)	45,661	95,841	2,961	2,022	94,902
7 Total	377,057	301,080	76,171	1,228	1,199	29		(2,009)	74,162	375,048	13,833	7,914	369,128

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION											
Weather Normalization - Sales (Therms) - Rate Residential											
Period	Customers	Sales	Base Load	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therm/DD	Weather Adjustment	Normal Heat Load	Normal Firm Billing Cycle Therms
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				(1) - (2)			(4) - (5)	(3) / (4)	(6) X (7)	(3) + (8)	(1) - (3) + (9)
May-22	884	12,109	6,136	5,973	250	299	(49)	23.89	1,171	7,144	13,280
Jun-22	843	6,878	6,136	742	109	103	6	6.81	(41)	701	6,837
Jul-22	862	6,230	6,136	94	10	23	(13)	9.40	122	216	6,352
Aug-22	860	6,042	6,136	0	22	43	(21)	0.00	0	0	6,042
Sep-22	862	8,528	6,136	2,392	262	194	68	9.13	(621)	1,771	7,907
Oct-22	893	19,628	6,136	13,493	575	537	38	23.47	(892)	12,601	18,737
Total		59,414	36,814	22,694	1,228	1,199	29	8.98	(260)	22,434	59,155

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION											
Weather Normalization - Sales (Therms) - Rate Commercial											
Period	Customers	Sales	Base Load	Heating Load	Monthly Actual Degree Days	Monthly Normal Degree Days	Colder (Warmer) Than Normal	Actual Unit Heat Load Therm/DD	Weather Adjustment	Normal Heat Load	Normal Firm Billing Cycle Therms
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
				(1) - (3)			(4) - (5)	(3) / (4)	(6) X (7)	(3) + (8)	(1) - (3) + (9)
May-22	323	51,043	41,056	9,987	250	299	(49)	39.95	1,957	11,945	53,000
Jun-22	311	42,243	41,056	1,187	109	103	6	10.89	(65)	1,122	42,177
Jul-22	319	41,060	41,056	4	10	23	(13)	0.44	6	10	41,066
Aug-22	317	41,051	41,056	0	22	43	(21)	0.00	0	0	41,051
Sep-22	318	46,294	41,056	5,239	262	194	68	20.00	(1,360)	3,879	44,935
Oct-22	313	74,455	41,056	33,399	575	537	38	58.09	(2,207)	31,192	72,248
Total		296,146	246,334	49,816	1,228	1,199	29	57.55	(1,669)	48,147	294,477

Summary - Total Summer Season Sales

	Actual 2022	Normalized
May	63,152	66,280
June	49,120	49,014
July	47,290	47,418
August	47,093	47,093
September	54,822	52,842
October	94,083	90,985
Total	355,560	353,632

SCHEDULE K  
SUMMER 2023 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION  
Typical Residential Heating Bill - Non-Fixed Price Option Program  
Forecasted 2023 Summer Period vs. Actual 2022 Summer Period

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Summer May-Oct
Typical Usage - therms (1)	21	10	7	7	8	12	65
<b>Residential Heating R-3</b>							
Customer Charge	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.34
Delivery Charge: All therms @	\$0.5632	\$0.6337	\$0.6519	\$11.83	\$5.63	\$3.94	\$38.88
<b>Base Delivery Revenue Total</b>	<b>\$27.22</b>	<b>\$21.02</b>	<b>\$19.33</b>	<b>\$19.83</b>	<b>\$20.61</b>	<b>\$23.21</b>	<b>\$131.22</b>
COG Rates	\$2.4835	\$1.6220	\$2.0198	\$1.8336	\$2.0114	\$1.9203	\$2.0689
<b>Cost of Gas Total</b>	<b>\$52.15</b>	<b>\$16.22</b>	<b>\$14.14</b>	<b>\$12.84</b>	<b>\$16.09</b>	<b>\$23.04</b>	<b>\$134.48</b>
LDAC Rates	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1318	\$0.1317
<b>LDAC Total</b>	<b>\$2.77</b>	<b>\$1.32</b>	<b>\$0.92</b>	<b>\$0.92</b>	<b>\$1.05</b>	<b>\$1.58</b>	<b>\$8.56</b>
<b>Total Bill</b>	<b>\$82</b>	<b>\$39</b>	<b>\$34</b>	<b>\$34</b>	<b>\$38</b>	<b>\$48</b>	<b>\$274</b>
	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Summer May-Oct
Typical Usage - therms (1)	21	10	7	7	8	12	65
<b>Residential Heating R-3</b>							
Customer Charge	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$15.39	\$92.34
Delivery Charge: All therms @	\$0.6519	\$6.52	\$4.56	\$4.56	\$5.22	\$7.82	\$42.37
<b>Base Delivery Revenue Total</b>	<b>\$29.08</b>	<b>\$21.91</b>	<b>\$19.95</b>	<b>\$19.95</b>	<b>\$20.61</b>	<b>\$23.21</b>	<b>\$134.71</b>
Seasonal Base Delivery Difference from previous year							\$3.49
Seasonal Percent Change from previous year							2.7%
COG Rates	\$1.4761	\$1.4761	\$1.4761	\$1.4761	\$1.4761	\$1.4761	\$1.4760
<b>Cost of Gas Total</b>	<b>\$31.00</b>	<b>\$14.76</b>	<b>\$10.33</b>	<b>\$10.33</b>	<b>\$11.81</b>	<b>\$17.71</b>	<b>\$95.94</b>
Seasonal COG Difference from previous year							-\$38.54
Seasonal Percent Change from previous year							-28.7%
LDAC Rates	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1113	\$0.1114
<b>LDAC Total</b>	<b>\$2.34</b>	<b>\$1.11</b>	<b>\$0.78</b>	<b>\$0.78</b>	<b>\$0.89</b>	<b>\$1.34</b>	<b>\$7.24</b>
Seasonal LDAC Difference from previous year							-\$1.32
Seasonal Percent Change from previous year							-15.4%
<b>Total Bill</b>	<b>\$62</b>	<b>\$38</b>	<b>\$31</b>	<b>\$31</b>	<b>\$33</b>	<b>\$42</b>	<b>\$237.89</b>
Seasonal Total Bill Difference from previous year							-\$36.37
Seasonal Percent Change from previous year							-13.3%
Seasonal Percent Change resulting from COG							-14.1%
Seasonal Percent Change resulting from LDAC							-0.5%

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

SCHEDULE L  
SUMMER 2023 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION  
Typical Commercial Bill - Fixed Price Option Program  
Forecasted 2023 Summer Period vs. Actual 2022 Summer Period

		(1)	(2)	(3)	(4)	(5)	(6)	(7)
		May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Winter Nov-Apr
1								
2								
3	Typical Usage - therms	67	30	22	20	27	40	206
4	<b>Commercial G-41</b>							
5	Customer Charge	\$57.06	\$57.06	\$57.06	\$57.06	\$57.06	\$57.06	\$342.36
6	Delivery Charge: First 20 therms @	\$0.4688	\$0.5007	\$0.5088	\$0.5007	\$0.5088	\$0.5088	\$58.51
7	Over 20 therms @	\$0.3149	\$0.3469	\$0.3550	\$0.3149	\$0.3469	\$0.3550	\$28.17
8	<b>Base Delivery Revenue Total</b>	\$81.24	\$69.59	\$67.07	\$67.07	\$69.73	\$74.34	\$429.04
9	COG Rates	\$2.4835	\$1.6220	\$2.0198	\$1.8336	\$2.0114	\$1.9203	\$2.0742
10	<b>Cost of Gas Total</b>	\$166.39	\$48.66	\$44.44	\$36.67	\$54.31	\$76.81	\$427.28
11	LDAC Rates	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991	\$0.0991
12	<b>LDAC Total</b>	\$6.64	\$2.97	\$2.18	\$1.98	\$2.68	\$3.96	\$20.41
13	<b>Total Bill</b>	<b>\$254</b>	<b>\$121</b>	<b>\$114</b>	<b>\$106</b>	<b>\$127</b>	<b>\$155</b>	<b>\$877</b>
14								
15		May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Winter Nov-Apr
16	Typical Usage - therms	67	30	22	20	27	40	206
17	<b>Commercial G-41</b>							
18	Customer Charge	\$63.30	\$63.30	\$63.30	\$63.30	\$63.30	\$63.30	\$379.80
19	Delivery Charge: First 20 therms @	\$0.5088	\$0.5088	\$0.5088	\$0.5088	\$0.5088	\$0.5088	\$61.08
20	Over 20 therms @	\$0.3550	\$0.3550	\$0.3550	\$0.3550	\$0.3550	\$0.3550	\$27.08
21	<b>Base Delivery Revenue Total</b>	<b>\$88.28</b>	<b>\$76.63</b>	<b>\$74.11</b>	<b>\$73.48</b>	<b>\$75.68</b>	<b>\$79.78</b>	<b>\$467.96</b>
22	Seasonal Base Delivery Difference from previous year							\$38.92
23	Seasonal Percent Change from previous year							9.1%
24	COG Rates	\$1.4761	\$1.4761	\$1.4761	\$1.4761	\$1.4761	\$1.4761	\$1.4760
25	<b>Cost of Gas Total</b>	<b>\$98.90</b>	<b>\$44.28</b>	<b>\$32.47</b>	<b>\$29.52</b>	<b>\$39.85</b>	<b>\$59.04</b>	<b>\$304.06</b>
26	Seasonal COG Difference from previous year							-\$123.22
27	Seasonal Percent Change from previous year							-28.8%
28	LDAC Rates	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890	\$0.0890
29	<b>LDAC Total</b>	<b>\$5.96</b>	<b>\$2.67</b>	<b>\$1.96</b>	<b>\$1.78</b>	<b>\$2.40</b>	<b>\$3.56</b>	<b>\$18.33</b>
30	Seasonal LDAC Difference from previous year							-\$2.08
31	Seasonal Percent Change from previous year							-10.2%
32	<b>Total Bill</b>	<b>\$193</b>	<b>\$124</b>	<b>\$109</b>	<b>\$105</b>	<b>\$118</b>	<b>\$142</b>	<b>\$790</b>
33	Seasonal Total Bill Difference from previous year							-\$86.38
34	Seasonal Percent Change from previous year							-9.9%
35	Seasonal Percent Change resulting from COG							-14.1%
36	Seasonal Percent Change resulting from LDAC							-0.2%

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION  
PROJECTED INCREMENTAL COSTS CNG VS. SPOT PROPANE Summer 2023

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Projected May-23	Projected Jun-23	Projected Jul-23	Projected Aug-23	Projected Sep-23	Projected Oct-23	
1 <b>CNG PURCHASES</b>							
2 CNG Volumes (Schedule C Filing)							
3							
4 CNG Costs (Schedule C Filing)							
5 Total Cost per Actual CNG Costs (Schedule C Filing)							
6							
7 CNG Cost Per Therm Actual							
8							
9 <b>SPOT PROPANE PURCHASES</b>							
10 Spot Propane Volumes (Schedule C Reconciliation)							
11							
12 Total Costs Spot Propane							
13 Total Cost Spot Propane							
14							
15 Spot Propane Cost Per Therm Actual							
16							
17							
18							
19 CNG Volumes							
20 Price difference CNG vs Spot Propane							
21 Adj. for rounding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$0.0000
22 Incremental Costs Propane	\$ 4,598	\$ 2,033	\$ 1,229	\$ 1,332	\$ 3,399	\$ 6,921	\$19,511
23							
24							
25							
					50% if CNG higher		2
					Allowed Recoverable Costs	\$	19,511

**Incremental CNG Supply Costs through October 2022**  
**Amount to be Recovered/(Refunded) Through Keene COG Rates**

	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H
1	CNG Increment Cost/Saving Risk Sharing - 50% Shareholder/Ratepayers							
2	Incremental CNG Supply Costs - October 2019 thru October 2022							
3	COG Period	Year	Incremental Cost/(Savings) Amount	Allowed Recoverable Amount from Customers due to Higher/(Lower) CNG vs Propane Costs	Incremental Costs Not Recoverable/D eferred	Incremental Costs not Recovered Balance	(Refund)/Charge	
4	Summer (DG 20-105 Settlement Agr	2019	5,048	2,524	2,524	2,524	(2,524)	Propane Cheaper
5	Summer (DG 20-105 Settlement Agr	2020	16,214	8,107	8,107	10,631	8,107	Propane Cheaper
6	Summer (DG 21-050 Recon)	2021	(13,026)	(10,631)	(2,395)	(2,395)	10,631	CNG Cheaper the
7	Summer (DG 22-015 Recon)	2022	5,012	2,506	2,506	111	(2,506)	Propane Cheaper
8	Summer 2023 projected	2023	(19,511)	(111)	(19,400)	(19,400)	111	



LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION

ACTUAL INCREMENTAL SAVINGS CNG VS. SPOT PROPANE SUMMER 2022

	Actual May-22	Actual Jun-22	Actual Jul-22	Actual Aug-22	Actual Sep-22	Actual Oct-22
<b><u>CNG PURCHASES</u></b>						
CNG Volumes (Schedule K)						
CNG Costs (Schedule K)						
Total Cost per Actual CNG Costs (Schedule K)						
CNG Cost Per Therm Actual						
<b><u>SPOT PROPANE PURCHASES</u></b>						
Spot Propane Volumes (Schedule K)						
Total Costs Spot Propane						
Total Cost Spot Propane						
Spot Propane Cost Per Therm Actual						
CNG Volumes						
Price difference CNG vs Spot Propane						
Adj. for rounding						\$0.0000
Incremental Costs Propane						\$5,012
					Divided by 2	2
					Allowed Recoverable Costs	\$ 2,506

APPENDIX 1  
SUMMER 2023 COG Filing

MONT BELVIEU PROPANE FUTURES - 3/7/23 CLOSE

MONT BELVIEU LDH PROPANE (OPIS) FUTURES - SETTLEMENTS

TRADE DATE TUESDAY 07 MAR 2023 ▾

FINAL DATA ●

Last Updated 08 Mar 2023 12:45:00 PM CT

ESTIMATED VOLUME TOTALS 6,355						PRIOR DAY OPEN INTEREST TOTALS 137,199		
MONTH	OPEN	HIGH	LOW	LAST	CHANGE	SETTLE	EST. VOLUME	PRIOR DAY
MAR 23	-	-	-	-	-.03096	.87745	0	19,266
APR 23	-	-	-	-	-.03750	.86667	3,306	14,857
MAY 23	-	-	-	-	-.03459	.86458	840	10,063
JUN 23	-	-	-	-	-.03292	.86583	564	9,481
JULY 23	-	-	-	-	-.03209	.86833	329	9,997
AUG 23	-	-	-	-	-.03125	.87333	205	9,773
SEP 23	-	-	-	-	-.02958	.88250	165	8,941
OCT 23	-	-	-	-	-.02833	.89292	257	9,525
NOV 23	-	-	-	-	-.02875	.90083	257	9,761
DEC 23	-	-	-	-	-.02917	.90375	237	10,793
JAN 24	-	-	-	-	-.02958	.90250	35	3,609

## ENTERPRISE TE PRODUCTS PIPELINE FERC TARIFF 54.64.0 - RATES EFFECTIVE 3/1/2023

**RATES (In Cents-per-bbl.)**

[1] All rates are increased.

**ITEM NO. 135****Non-Incentive Rates for Propane**

Destination	Origin		
	Floreffe Junction (Allegheny Co., PA)	Mont Belvieu (Chambers Co., TX)	Tappan Lake (Harrison Co., OH), Todhunter (Butler Co., OH) & Follansbee (Brooke Co., West Virginia)
Coshocton (Coshocton Co., OH)	--	796.08	--
Dexter (Stoddard Co., MO)	--	378.26	--
Du Bois (Clearfield Co., PA)	427.60 (1)(2)	883.77 (1)	427.60 (1)
Fontaine (Green Co., AR)	--	355.36	--
Greensburg (Westmoreland Co., PA)	427.60 (1)(2)	834.05 (1)	427.60 (1)
Harford Mills (Cortland Co., NY)	600.82 (1)	942.62 (1)	625.52 (1)
Lebanon (Boone Co., IN)	--	446.09 (4)	--
Oneonta (Otsego Co., NY)	650.39	1018.54 (1)	671.38 (1)
Princeton (Gibson Co., IN)	--	485.59	--
Schaefferstown (Lebanon Co., PA)	630.46 (2)	952.75	622.11
Selkirk (Albany Co., NY)	705.66	1083.00 (1)	707.50 (1)
Seymour (Jackson Co., IN)	--	423.90	--
Sinking Spring (Berks Co., PA)	630.46 (2)	952.75	622.11
Todhunter Truck Terminal (Butler Co., OH)	--	713.33	--
Watkins Glen (Schuyler Co., NY)	578.31 (1)	894.42 (1)	604.58 (1)
West Memphis (Crittenden Co., AR)	--	378.26 (4)	--
Monee (Will Co., IL)		1604.61 (7)	

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

February 14, 2023

To: All Customers

**Re: Fuel Surcharge Notice**

As of Monday February 13, 2023, the Department of Energy New England average price per gallon of diesel fuel was \$5.054. All deliveries invoiced from Sunday, February 19, 2023 through Saturday, February 25, 2023 will be line item assessed at 28.5% fuel surcharge. Thank you and should you have any questions, please contact Renee Young at 1-800-648-1075 extension 221.

Best Regards,

Renee Young  
Billing Specialist

APPENDIX 3B  
SUMMER 2023 COG Filing

## Northern Gas Transport Inc. - Selkirk to Keene

Gallons	Base Rate	Base Charge	Fuel Surcharge Rate	Surcharge	Total Charge	Total Rate Per Gallon
9,200	\$0.0891	\$819.72	1.00%	\$8.20	\$827.92	\$0.0900
9,200	\$0.0891	\$819.72	2.00%	\$16.39	\$836.11	\$0.0909
9,200	\$0.0891	\$819.72	2.50%	\$20.49	\$840.21	\$0.0913
9,200	\$0.0891	\$819.72	3.00%	\$24.59	\$844.31	\$0.0918
9,200	\$0.0891	\$819.72	3.50%	\$28.69	\$848.41	\$0.0922
9,200	\$0.0891	\$819.72	4.00%	\$32.79	\$852.51	\$0.0927
9,200	\$0.0891	\$819.72	4.50%	\$36.89	\$856.61	\$0.0931
9,200	\$0.0891	\$819.72	5.00%	\$40.99	\$860.71	\$0.0936
9,200	\$0.0891	\$819.72	5.50%	\$45.08	\$864.80	\$0.0940
9,200	\$0.0891	\$819.72	6.00%	\$49.18	\$868.90	\$0.0944
9,200	\$0.0891	\$819.72	6.50%	\$53.28	\$873.00	\$0.0949
9,200	\$0.0891	\$819.72	7.00%	\$57.38	\$877.10	\$0.0953
9,200	\$0.0891	\$819.72	7.50%	\$61.48	\$881.20	\$0.0958
9,200	\$0.0891	\$819.72	8.00%	\$65.58	\$885.30	\$0.0962
9,200	\$0.0891	\$819.72	8.50%	\$69.68	\$889.40	\$0.0967
9,200	\$0.0891	\$819.72	9.00%	\$73.77	\$893.49	\$0.0971
9,200	\$0.0891	\$819.72	9.50%	\$77.87	\$897.59	\$0.0976
9,200	\$0.0891	\$819.72	10.00%	\$81.97	\$901.69	\$0.0980
9,200	\$0.0891	\$819.72	10.50%	\$86.07	\$905.79	\$0.0985
9,200	\$0.0891	\$819.72	11.00%	\$90.17	\$909.89	\$0.0989
9,200	\$0.0891	\$819.72	11.50%	\$94.27	\$913.99	\$0.0993
9,200	\$0.0891	\$819.72	12.00%	\$98.37	\$918.09	\$0.0998
9,200	\$0.0891	\$819.72	12.50%	\$102.47	\$922.19	\$0.1002
9,200	\$0.0891	\$819.72	13.00%	\$106.56	\$926.28	\$0.1007
9,200	\$0.0891	\$819.72	13.50%	\$110.66	\$930.38	\$0.1011
9,200	\$0.0891	\$819.72	14.00%	\$114.76	\$934.48	\$0.1016
9,200	\$0.0891	\$819.72	14.50%	\$118.86	\$938.58	\$0.1020
9,200	\$0.0891	\$819.72	15.00%	\$122.96	\$942.68	\$0.1025
9,200	\$0.0891	\$819.72	15.50%	\$127.06	\$946.78	\$0.1029
9,200	\$0.0891	\$819.72	16.00%	\$131.16	\$950.88	\$0.1034
9,200	\$0.0891	\$819.72	16.50%	\$135.25	\$954.97	\$0.1038
9,200	\$0.0891	\$819.72	17.00%	\$139.35	\$959.07	\$0.1042
9,200	\$0.0891	\$819.72	17.50%	\$143.45	\$963.17	\$0.1047
9,200	\$0.0891	\$819.72	18.00%	\$147.55	\$967.27	\$0.1051
9,200	\$0.0891	\$819.72	18.50%	\$151.65	\$971.37	\$0.1056
9,200	\$0.0891	\$819.72	19.00%	\$155.75	\$975.47	\$0.1060
9,200	\$0.0891	\$819.72	19.50%	\$159.85	\$979.57	\$0.1065
9,200	\$0.0891	\$819.72	20.00%	\$163.94	\$983.66	\$0.1069
9,200	\$0.0891	\$819.72	20.50%	\$168.04	\$987.76	\$0.1074
9,200	\$0.0891	\$819.72	21.00%	\$172.14	\$991.86	\$0.1078
9,200	\$0.0891	\$819.72	21.50%	\$176.24	\$995.96	\$0.1083
9,200	\$0.0891	\$819.72	22.00%	\$180.34	\$1,000.06	\$0.1087
9,200	\$0.0891	\$819.72	22.50%	\$184.44	\$1,004.16	\$0.1091
9,200	\$0.0891	\$819.72	23.00%	\$188.54	\$1,008.26	\$0.1096
9,200	\$0.0891	\$819.72	23.50%	\$192.63	\$1,012.35	\$0.1100
9,200	\$0.0891	\$819.72	24.00%	\$196.73	\$1,016.45	\$0.1105
9,200	\$0.0891	\$819.72	24.50%	\$200.83	\$1,020.55	\$0.1109
9,200	\$0.0891	\$819.72	25.00%	\$204.93	\$1,024.65	\$0.1114
9,200	\$0.0891	\$819.72	25.50%	\$209.03	\$1,028.75	\$0.1118
9,200	\$0.0891	\$819.72	26.00%	\$213.13	\$1,032.85	\$0.1123
9,200	\$0.0891	\$819.72	26.50%	\$217.23	\$1,036.95	\$0.1127
9,200	\$0.0891	\$819.72	27.00%	\$221.32	\$1,041.04	\$0.1132
9,200	\$0.0891	\$819.72	27.50%	\$225.42	\$1,045.14	\$0.1136
9,200	\$0.0891	\$819.72	28.00%	\$229.52	\$1,049.24	\$0.1140
9,200	\$0.0891	\$819.72	28.50%	\$233.62	\$1,053.34	\$0.1145
9,200	\$0.0891	\$819.72	29.00%	\$237.72	\$1,057.44	\$0.1149
9,200	\$0.0891	\$819.72	29.50%	\$241.82	\$1,061.54	\$0.1154
9,200	\$0.0891	\$819.72	30.00%	\$245.92	\$1,065.64	\$0.1158
9,200	\$0.0891	\$819.72	30.50%	\$250.01	\$1,069.73	\$0.1163
9,200	\$0.0891	\$819.72	31.00%	\$254.11	\$1,073.83	\$0.1167
9,200	\$0.0891	\$819.72	31.50%	\$258.21	\$1,077.93	\$0.1172
9,200	\$0.0891	\$819.72	32.00%	\$262.31	\$1,082.03	\$0.1176
9,200	\$0.0891	\$819.72	32.50%	\$266.41	\$1,086.13	\$0.1181
9,200	\$0.0891	\$819.72	33.00%	\$270.51	\$1,090.23	\$0.1185
9,200	\$0.0891	\$819.72	33.50%	\$274.61	\$1,094.33	\$0.1189
9,200	\$0.0891	\$819.72	34.00%	\$278.70	\$1,098.42	\$0.1194
9,200	\$0.0891	\$819.72	34.50%	\$282.80	\$1,102.52	\$0.1198
9,200	\$0.0891	\$819.72	35.00%	\$286.90	\$1,106.62	\$0.1203
9,200	\$0.0891	\$819.72	35.50%	\$291.00	\$1,110.72	\$0.1207
9,200	\$0.0891	\$819.72	36.00%	\$295.10	\$1,114.82	\$0.1212
9,200	\$0.0891	\$819.72	36.50%	\$299.20	\$1,118.92	\$0.1216
9,200	\$0.0891	\$819.72	37.00%	\$303.30	\$1,123.02	\$0.1221
9,200	\$0.0891	\$819.72	37.50%	\$307.40	\$1,127.12	\$0.1225
9,200	\$0.0891	\$819.72	38.00%	\$311.49	\$1,131.21	\$0.1230
9,200	\$0.0891	\$819.72	38.50%	\$315.59	\$1,135.31	\$0.1234
9,200	\$0.0891	\$819.72	39.00%	\$319.69	\$1,139.41	\$0.1238
9,200	\$0.0891	\$819.72	39.50%	\$323.79	\$1,143.51	\$0.1243
9,200	\$0.0891	\$819.72	40.00%	\$327.89	\$1,147.61	\$0.1247