

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

Docket No. DG 24-042

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty–Keene Division  
Summer 2024 Cost of Gas

**DIRECT TESTIMONY  
OF  
DEBORAH M. GILBERTSON  
AND  
ALYSSA E. MASTON  
AND  
ROBERT GARCIA**

April 2, 2024



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**I. INTRODUCTION**

**Q. What are your full names, business addresses, and positions?**

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.

(RG) My name is Robert Garcia. My business address is 15 Buttrick Road, Londonderry, New Hampshire. My title is Manager, Rates and Regulatory Affairs.

(AM) My name is Alyssa E. Maston. 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, would you 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,

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

8 **Q. Mr. Garcia, would you describe your educational and professional background and**  
9 **training?**

10 A. I have an Artium Baccalaureus (Bachelor of Arts) degree in Political Science and French  
11 from Wabash College (Crawfordsville, Indiana) and a Master of Public Administration  
12 degree from the School of Public and Environmental Affairs at Indiana University  
13 (Bloomington, Indiana) with concentrations in Policy (Quantitative) Analysis and  
14 International Affairs. I also obtained a Certificat De Langue Et Civilisation Française  
15 from the Université de Paris – Sorbonne (Paris, France) and, as part of my graduate  
16 studies, studied French and European government at the École Nationale  
17 D'Administration (Paris, France).

18 I was employed by ComEd from April 2001 to March 2023. I began my employment  
19 with ComEd in the Regulatory Department as a Regulatory Specialist and moved on to  
20 the positions of Senior Regulatory Specialist in 2004, Manager of Regulatory Strategies

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1 and Solutions in 2008, and Director of Regulatory Strategy and Services in 2013 before  
2 assuming my last position as Director of Regulatory Innovation & Initiatives in 2021.

3 Prior to joining ComEd, I worked for nearly nine years at the Illinois Commerce  
4 Commission, beginning in 1992 as an intern in what was then the Office of Policy and  
5 Planning and ending in 2001 as the senior policy advisor to a Commissioner. I initially  
6 joined the Commission Staff through the James H. Dunn Memorial Fellowship program,  
7 a one-year program sponsored by the Office of the Governor. Through this Fellowship, I  
8 also held short-term positions in the Bureau of the Budget and the Governor’s Legislative  
9 Office.

10 **Q. Ms. Maston, would you describe your educational background, and your business**  
11 **and professional experience?**

12 A. I graduated from Southern New Hampshire University in 2019 with a Bachelor of  
13 Science degree in Accounting, and earned my Masters in Professional Accountancy from  
14 the same institution in 2020. I have held an active Certified Public Accountant (“CPA”)  
15 license since 2022. I joined Liberty in August 2023. Prior to joining Liberty, I was  
16 employed by Baker Newman Noyes, a public accounting firm, from 2020 through 2022. I  
17 held positions as an Audit Senior and Audit Staff, and was responsible for performing  
18 financial audits of companies in a large range of industries, such as banking and  
19 healthcare.



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1 **Q. Ms. Gilbertson and Mr. Garcia, have you previously testified in regulatory**  
2 **proceedings before the New Hampshire Public Utilities Commission (the**  
3 **“Commission”)?**

4 A. Yes, we have.

5 **Q. Ms. Maston, have you previously testified in regulatory proceedings before the New**  
6 **Hampshire Public Utilities Commission (the “Commission”)?**

7 A. No, I have not.

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

9 A. The purpose of our testimony is to explain the Company’s proposed Cost of Gas  
10 (“COG”) rates for its Keene Division for the 2024 summer (off-peak) period to be  
11 effective beginning May 1, 2024. Our testimony will also address bill comparisons and  
12 other items related to the summer period.

13 **II. SUMMER COST OF GAS RATE**

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

15 A. The Company proposes a firm cost of gas rate of \$1.6337 per therm for the Keene  
16 Division as shown on Attachment AEM-1, Summary Schedule.

17 **Q. How was the summer COG rate calculated?**

18 A. The Summary Schedule in Attachment AEM-1, contains the calculation of the 2024  
19 Summer Period COG and summarizes the Company's forecast of propane and  
20 compressed natural gas (“CNG”) sales and costs. The total anticipated cost of the gas  
21 sendout from May 1 through October 31, 2024, is \$526,343 and forecasted interest is

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1       \$972 for a total of \$527,315. The prior summer period under collection of \$47,173 is  
2       added to the forecasted cost of gas for a total anticipated cost of \$574,488. The  
3       information presented on the summary page is supported by Schedules A through N,  
4       which are described later in this testimony.

5       The Total Anticipated Cost of Gas is derived as follows:

- 6           1) The forecasted under collection of \$47,173 as of April 30, 2024 as shown on  
7           Schedule B, line 39, inclusive of \$3,009 of interest from November 2023 through  
8           April 2024 as shown on Schedule B, line 38. Interest is accrued using the  
9           monthly prime lending rate as reported by the Federal Reserve Statistical Release  
10          of Selected Interest Rates.
- 11          2) The total anticipated cost of the gas sendout from May 1 through October 31,  
12          2024, of \$526,343 as shown on Schedule B, line 19. This includes the  
13          adjustments shown on Schedule B, lines 17 and 18, respectively.
- 14          3) The calculated return on inventory for the forecasted period as shown on Schedule  
15          B, line 20. There was no return on inventory for the forecast period, as this item is  
16          only applicable to the winter periods.
- 17          4) Forecasted interest on May-October 2024 under recoveries of \$972 is added to the  
18          anticipated cost of gas sendout. Schedule B, line 38 shows this forecasted interest  
19          calculation for the period May 2024 through October 2024. Interest is accrued  
20          using the monthly prime lending rate as reported by the Federal Reserve  
21          Statistical Release of Selected Interest Rates.

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1 The Non-Fixed Price Option (“Non-FPO”) cost of gas rate of \$1.6337 per therm was  
2 calculated by dividing the sum of Total Anticipated Cost of Gas and return on inventory,  
3 the undercollection, and interest of \$574,488 by the Projected Gas Sales of 351,641  
4 therms. Of course, there is no Fixed Price Option for the summer period.

5 **Q. What is Schedule A, the Conversion of Costs from Gallons to Therms?**

6 A. Schedule A converts the propane gas volumes and unit costs from gallons to therms. The  
7 369,781 therms represent sendout as detailed on Schedule B, line 3 and line 10. The  
8 blended unit cost of those supplies is \$1.3862 per therm which represents the weighted  
9 average cost per therm for the summer period gas sendout as detailed on Schedule F, line  
10 39.

11 **Q. What is Schedule B, the Calculation of the Cost of Gas Rate?**

12 A. Schedule B presents the final (over)/under-collection calculation for the summer 2024  
13 period based on the prior period (over)/under-collection, forecasted volumes, the cost of  
14 gas, and applicable interest amounts. The schedule begins with the audited ending  
15 balance from the prior summer period reconciliation in Docket No. DG 23-034 and  
16 includes the months of November 2023 through April 2024 to reflect costs related to the  
17 summer period. These out of period adjustments can be seen in columns 2 through 7. The  
18 forecasted total propane sendout of 296,267 therms on line 3, plus total CNG sendout of  
19 73,514 therms on line 10, is the sum of the forecasted summer 2024 total firm sendout.  
20 The forecasted Firm Sales on line 24 represent weather normalized 2024 summer period

REDACTED  
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1 firm sales. The weather normalization calculations for sendout and sales are found in  
2 Schedules I and J, respectively.

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

4 A. Yes, CNG demand charges are included in Schedule B on line 13.

5 Schedule B, line 13, includes 25% of the 2024 demand charges. These charges are

6 [REDACTED] per month or [REDACTED] for the year and represent the portion attributable to the  
7 summer period.

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

9 A. Yes, in Order No. 26,505 (July 30, 2021), the Commission approved the Settlement  
10 Agreement in the Company's last distribution service rate case, which fixed the  
11 allocation of Keene CNG demand charges to be 75% in the winter period and 25% in the  
12 summer period. The total demand charge for the summer period is thus the total annual  
13 demand charge of [REDACTED] multiplied by 25%, or [REDACTED].

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

16 A. Yes, the calculation of prior summer period incremental CNG costs/savings between  
17 propane and CNG have been calculated on Schedule N for the summers 2019 through  
18 2023 per Section 7.1 of the Settlement Agreement approved in Docket No. DG 20-105.  
19 The Company's projected incremental savings for the summer 2024 of \$24,195 is  
20 calculated on Schedule M. The incremental savings is not recovered in the proposed

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1 rates in this filing, but 50% of the savings (\$12,098) will be added to the cumulative  
2 balance of net incremental costs.<sup>1</sup>

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

5 A. Yes, the prior period incremental CNG costs/savings can be found on Schedule N. For  
6 the summer of 2019, the Company collected 100% of the incrementally higher CNG  
7 costs, which totaled \$5,048. In light of the subsequent Settlement Agreement in DG 22-  
8 015 authorizing the Company to recover only 50% of the incrementally higher CNG  
9 costs, \$2,524 was returned to customers over Summer 2022 through the rates proposed  
10 for that period and approved in Order No. 26,630 (May 20, 2022).

11 For the summer of 2020, CNG costs were \$16,214 higher than propane costs. Over the  
12 course of the summer of 2020, the Company deferred 100% of those incremental costs.  
13 The Settlement Agreement authorized the Company to collect 50% of those charges;  
14 therefore, the rates proposed in DG 22-015 for the Summer 2022 period also included  
15 recovery of \$8,107 of the incrementally higher CNG costs deferred from the summer of

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<sup>1</sup> The Company is seeking further guidance on Section 7.1 of the Settlement Agreement approved in Docket No. DG 20-105, which states in relevant part: “If the CNG supply cost is lower than the propane supply cost, the Company shall recover and retain the full amount of the incrementally lower CNG supply cost up to the amount of incrementally higher CNG costs accrued since the commencement of CNG service, which have not then been recovered from customers, at which point the Company shall recover and retain one-half of the incrementally lower CNG supply costs.(emphasis added)” It is unclear to the Company whether it is required to increase the CNG Purchases (*i.e.*, recover) for the amount of incremental savings, which are deferred in the current period.

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1       2020. Note that these exact calculations of the differences between CNG and propane  
2       costs for the summers of 2019 and 2020 were specifically included in the Settlement  
3       Agreement.

4       For the summer of 2021, CNG costs were \$13,026 less expensive than propane. The  
5       Company again deferred the difference in costs. The Settlement Agreement allowed the  
6       Company to recover 100% of these savings “up to the amount of incrementally higher  
7       CNG costs accrued since the commencement of CNG service, which have not then been  
8       recovered from customers,” and thereafter share any remaining savings with customers  
9       equally. The amount of the “incrementally higher COG costs accrued since the  
10      commencement of CNG service” that the Company had not recovered as of the Summer  
11      2021 period was \$10,631 (\$2,524 from 2019 and \$8,107 from 2020). The rates proposed  
12      for the Summer 2022 period thus included recovery of that amount, leaving 50% of the  
13      remaining \$2,395 in savings to be addressed in a future period.

14      For the summer of 2022, CNG costs were \$5,012 incrementally more expensive than  
15      propane. The Company collected one-half of the incrementally higher CNG supply costs,  
16      \$2,506, during the Summer 2022 period, leaving \$2,506 to be added to the incremental  
17      costs not recovered balance. The cumulative balance of incremental costs not recovered  
18      as of the end of the Summer 2022 period was \$1,309, which is equal to the \$2,506 in  
19      costs from the Summer 2022 period less 50% of the \$2,395 savings from the Summer  
20      2021 period.

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1 For the summer of 2023, CNG costs were \$5,425 less expensive than propane. The rates  
2 proposed in DG 23-034 for the Summer 2023 period included the entire cumulative  
3 balance of incremental costs not recovered as of the end of the Summer 2022 period of  
4 \$1,309, leaving 50% of the remaining \$4,116 in CNG cost savings to be addressed in a  
5 future period.

6 Including the summer 2023 experience, the net balance of the incremental costs not  
7 recovered through the beginning of the Summer 2024 period is -\$2,058 ( $-\$4,116 * 50\% =$   
8  $-\$2,058$ ).

9 **Q. Are projected 2024 incremental cost/savings included in this filing?**

10 A. Yes. The Company projects CNG costs to be \$24,195 less than propane costs over the  
11 summer of 2024 and there are no previously deferred incremental costs to be recovered  
12 during the 2024 Summer period. Per Section 7.1 of the Settlement Agreement approved  
13 in Docket No. DG 20-105, 50% of the incremental CNG savings ( $-\$12,098$ ) will be  
14 added to the cumulative balance of net incremental CNG costs/(savings) not recovered,  
15 making the new balance  $-\$14,156$  ( $-\$2,058 + -\$12,098$ ). The detailed calculation can be  
16 found on Schedules M and N.

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

18 A. Unaccounted-for gas is included in the firm sendout on Schedule B, lines 1 and 8. The  
19 Company actively monitors its level of unaccounted-for volumes, which amounted to  
20 0.64% for the twelve months ended June 30, 2023.

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1 **Q. How do the proposed Summer 2024 cost of gas rates compare with the previous**  
2 **summer's rates?**

3 A. The proposed Non-FPO COG rate of \$1.6337 per therm is an increase of \$0.1542 or  
4 10.42% from the summer 2023 approved rate of \$1.4795 per therm, per Order No. 26,807  
5 (April 25, 2023).

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

7 A. The main reason for the \$0.1542 increase relative to last summer's COG rates is due to  
8 having started Summer 2023 period with an overcollection versus starting the Summer  
9 2024 period with an undercollection.

10 **III. PROPANE COMMODITY COSTS**

11 **Q. What are the forecasted spot prices of propane addressed in Schedules C and E?**

12 A. Schedule E presents the forecasted market spot prices of propane. Row 1 shows the  
13 Mont Belvieu propane futures quotations as of March 28, 2024. Subsequent rows show  
14 expected broker/supplier fees, pipeline fees, and Propane Education & Research Council  
15 (PERC) fees. These prices, when added together, represent a forecasted summer price of  
16 propane. This price is also represented in Schedule C, line 30. Note: as actual prices are  
17 realized, they will replace estimate pricing. The reconciliation of actual costs to  
18 estimated costs is continued throughout the summer as the actual data becomes available.

19 **Q. What is the Propane Purchasing Stabilization Plan ("PPSP")?**

20 A. The Propane Purchasing Stabilization Plan is a Commission-approved strategy that the  
21 Company undertakes to provide stability in the winter COG rate and to facilitate the



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

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

8 A. Yes. The Company performed two analyses. In Schedule D-1, the Company evaluated  
9 the premium/discount associated with securing the pre-purchased volumes for delivery in  
10 the winter of 2023–2024 relative to securing a floating price at Mont Belvieu. The  
11 comparison reflects the net premium/discount results of the Company’s competitive RFP  
12 process. In Schedule D-2, the Company performed a comparison of propane purchase  
13 costs under the contract versus representative spot prices had the Company not  
14 implemented the Plan. The analysis shows that the cost of the pre-purchased gallons was  
15 12.4% lower than the average representative spot purchase cost for the first four months  
16 of the current winter period, reflecting an increase in spot propane prices over the pre-  
17 purchased volumes.

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 2024–2025 Plan on February 29, 2024. The  
4 RFP process was the same as the process used last summer. The RFP was sent to [REDACTED]  
5 suppliers. Once a winning bidder has been selected, they will be notified.

6 **Q. Is the Company proposing any changes to the 2024–2025 Plan?**

7 A. Yes. Although the overall Plan purchase volumes specified in the RFP, and detailed on  
8 Schedule D-3 have not changed, the purchase volumes requested each month over the  
9 summer period are slightly more levelized from month to month than in the previous  
10 summer. As in prior years, the Company will purchase 700,000 gallons to maintain a  
11 consistent ratio of hedged volumes to expected sales – approximately 62%, which also  
12 includes storage at the Amherst facility.

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

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

15 A. The CNG costs are shown in Schedule C, lines 20 through 26. These costs reflect the  
16 contractual agreement between the Company and its supplier, Xpress Natural Gas, LLC.

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

18 A. Schedule F contains the calculation of the expected weighted average cost of inventory  
19 for each month through October 2024. The unit cost of projected gas to be sent out each  
20 month includes CNG deliveries. Note that the CNG deliveries are shown separately from

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1 the propane-weighted cost but are included in the average summer rate, which is shown  
2 on line 39 of Schedule F. CNG deliveries are shown on lines 31 through 33.

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

4 A. As noted in prior testimony, the Company began serving customers with CNG in October  
5 2019. At present, the service territory for CNG is limited to the Monadnock Marketplace  
6 and a small portion of Key Road. The Company's short-term plan involves  
7 adding/converting more customers and expanding the natural gas footprint within this  
8 limited area as contemplated in the Settlement Agreement.<sup>2</sup>

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

10 A. The current CNG contract was set to expire on June 30, 2024; however, the contract has a  
11 provisional clause that allows for an additional one-year auto-renewal in the event that  
12 neither party terminated the agreement (in writing) within six months of the June 30,  
13 2024 expiration date.

14 **Q. Did either party terminate the contract within the six-month notice period?**

15 A. No.

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<sup>2</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).

1 **Q. Did the Company issue an RFP to seek more favorable terms?**

2 A. Yes, the Company issued a request for proposal (RFP) on September 15, 2023. The  
3 request was sent to [REDACTED] companies. Of those, the Company received offers from  
4 [REDACTED] companies, some with more than one proposal.

5 **Q. Did the Company determine a winning bid?**

6 A. Yes, Xpress Natural Gas LLC (XNG) submitted the winning bid.

7 **Q. Were the terms of the winning bid more favorable than the existing contract terms**  
8 **which we have currently with XNG?**

9 A. No, the next three-year contract term will have a slightly higher cost than the previous  
10 contract; however, because neither party exercised their option (in writing) to terminate  
11 the existing contract, the existing contract will remain in effect for one additional year.  
12 After that period, the new contract with XNG will go into effect on July 1, 2025 for a  
13 three-year term.

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 33 cents per therm  
16 more expensive than CNG. This determination of cost disparity between the two fuels  
17 can be performed using Spot Purchases cost per therm found on Schedule C, line 30, less  
18 CNG Deliveries cost per therm found on Schedule C, line 23.

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

20 A. Yes.

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

2 A. Yes, as compared to this time last Spring, commodity prices have decreased. Last year at  
3 this time, for example, Mont Belvieu was forecasted to average 87 cents per gallon for  
4 the 2023 summer period. This upcoming summer, that index price is forecasted to  
5 average 83 cents per gallon– a 5% decrease. As for natural gas benchmark prices,  
6 NYMEX at this time last year was averaging \$3.17 per dekatherm (“Dth”) whereas  
7 today’s forward summer strip is averaging \$2.25 per Dth’s – which is approximately a  
8 29% decrease over last year. The Company will continue to monitor market prices as  
9 these costs will directly impact the rates that customers will pay this summer.

10 **V. BILL IMPACTS**

11 **Q. What is the impact of the Summer 2024 COG rate on the typical residential heat**  
12 **and hot water customer?**

13 A. As shown on Schedule K, Column 7, lines 24 and 25, the typical residential heat and hot  
14 water customer would experience an increase of \$34.88 or 48.9% in the gas component  
15 of their bills compared to the prior summer period. When the monthly customer charge,  
16 therm delivery charge, and LDAC are factored into the analysis, the typical residential  
17 customer would see a total bill increase of \$50.70 or 23.8%, as shown on lines 31 and 32.

18 **Q. Please describe the impact of the Summer 2024 COG rate on the typical commercial**  
19 **customer compared to the prior summer period.**

20 A. As shown on Schedule L, Column 7, lines 26 and 27, the typical commercial customer  
21 would experience an increase of \$112.28 or 50.1% in the gas component of their bills

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1 compared to the prior summer period. When the monthly customer charge, therm  
2 delivery charge, and LDAC are factored into the analysis, the typical commercial  
3 customer would see a total bill increase of \$141.97 or 20.1%, as shown on lines 33 and  
4 34.

5 **VI. CONCLUSION**

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

7 **A.** Yes, it does.

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6. CONVERSION OF GAS COSTS - GALLONS TO THERMS	SCHEDULE A
7. CALCULATION OF COST OF GAS RATE	SCHEDULE B
8. CALCULATION OF PURCHASED GAS COSTS	SCHEDULE C
9. HEDGING ANALYSIS	SCHEDULE D-1
10. SPOT PRICE COMPARISON	SCHEDULE D-2
11. PROPANE PURCHASE STABILIZATION PROGRAM	SCHEDULE D-3
12. PROPANE SPOT MARKET PURCHASE COST ANALYSIS	SCHEDULE E
13. INVENTORY & WACOG CALCULATION	SCHEDULE F
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NO LONGER APPLICABLE	SCHEDULE H
14. WEATHER NORMALIZATION - SENDOUT	SCHEDULE I
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<u>BILL IMPACT ANALYSIS:</u>	
16. RESIDENTIAL NON-FPO	SCHEDULE K
17. COMMERCIAL NON-FPO	SCHEDULE L
<u>INCREMENTAL COST CALCULATION:</u>	
18. PROJECTED INCREMENTAL COST CALCULATION SUMMER 2024	SCHEDULE M
19. 50 PERCENT OF INCREMENTAL CNG COSTS SUMMER 2019-2024	SCHEDULE N
NO LONGER APPLICABLE	SCHEDULE O
<u>APPENDICES:</u>	
20. MONT BELVIEU PROPANE FUTURES PRICES	APPENDIX 1
21. ENTERPRISE TE PRODUCTS PIPELINE FERC TARIFF - EFF. 10/12/23	APPENDIX 2
22. TRUCKING FUEL SURCHARGE NOTIFICATION	APPENDIX 3A
23. TRUCKING FUEL SURCHARGE RATE PER GALLON	APPENDIX 3B

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Firm Rate Schedule

## 23 FIRM RATE SCHEDULES - KEENE CUSTOMERS

## II RATE SCHEDULES

	Rates Effective April 1, 2024 - April 30, 2024 Winter Period				Rates Effective May 1, 2024 - October 31, 2024 Summer Period			
	Delivery Charge	Cost of Gas Rate Page 97	LDAC Page 101	Total Rate	Delivery Charge	Cost of Gas Rate Page 93	LDAC Page 101	Total Rate
<b>Residential Non Heating - R-1</b>								
Customer Charge per Month per Meter	\$ 16.76			\$ 16.76	\$ 16.76			\$ 16.76
All therms	\$ 0.5025	\$ 1.4965	\$ 0.1986	\$ 2.1976	\$ 0.5025	\$ 1.6337	\$ 0.1986	\$ 2.3348
<b>Residential Heating - R-3</b>								
Customer Charge per Month per Meter	\$ 16.76			\$ 16.76	\$ 16.76			\$ 16.76
Therms in the first block per month at	\$ 0.6716	\$ 1.4965	\$ 0.1986	\$ 2.3667	\$ 0.6716	\$ 1.6337	\$ 0.1986	\$ 2.5039
<b>Residential Heating - R-4</b>								
Customer Charge per Month per Meter	\$ 9.22			\$ 9.22	\$ 16.76			\$ 16.76
Therms in the first block per month at	\$ 0.3694	\$ 0.8231	\$ 0.1986	\$ 1.3911	\$ 0.6716	\$ 1.6337	\$ 0.1986	\$ 2.5039
<b>Commercial/Industrial - G-41</b>								
Customer Charge per Month per Meter	\$ 66.23			\$ 66.23	\$ 66.23			\$ 66.23
Size of the first block	100 Therms				20 Therms			
Therms in the first block per month at	\$ 0.5367	\$ 1.4965	\$ 0.0874	\$ 2.1206	\$ 0.5367	\$ 1.6337	\$ 0.0874	\$ 2.2578
All therms over the first block per month at	\$ 0.3692	\$ 1.4965	\$ 0.0874	\$ 1.9531	\$ 0.3692	\$ 1.6337	\$ 0.0874	\$ 2.0903
<b>Commercial/Industrial - G-42</b>								
Customer Charge per Month per Meter	\$ 198.65			\$ 198.65	\$ 198.65			\$ 198.65
Size of the first block	1000 Therms				400 Therms			
Therms in the first block per month at	\$ 0.4884	\$ 1.4965	\$ 0.0874	\$ 2.0723	\$ 0.4884	\$ 1.6337	\$ 0.0874	\$ 2.2095
All therms over the first block per month at	\$ 0.3336	\$ 1.4965	\$ 0.0874	\$ 1.9175	\$ 0.3336	\$ 1.6337	\$ 0.0874	\$ 2.0547
<b>Commercial/Industrial - G-43</b>								
Customer Charge per Month per Meter	\$ 850.68			\$ 850.68	\$ 850.68			\$ 850.68
All therms over the first block per month at	\$ 0.3012	\$ 1.4965	\$ 0.0874	\$ 1.8851	\$ 0.1464	\$ 1.6337	\$ 0.0874	\$ 1.8675
<b>Commercial/Industrial - G-51</b>								
Customer Charge per Month per Meter	\$ 66.29			\$ 66.29	\$ 66.29			\$ 66.29
Size of the first block	100 Therms				100 Therms			
Therms in the first block per month at	\$ 0.3234	\$ 1.4965	\$ 0.0874	\$ 1.9073	\$ 0.3234	\$ 1.6337	\$ 0.0874	\$ 2.0445
All therms over the first block per month at	\$ 0.2159	\$ 1.4965	\$ 0.0874	\$ 1.7998	\$ 0.2159	\$ 1.6337	\$ 0.0874	\$ 1.9370
<b>Commercial/Industrial - G-52</b>								
Customer Charge per Month per Meter	\$ 198.48			\$ 198.48	\$ 198.48			\$ 198.48
Size of the first block	1000 Therms				1000 Therms			
Therms in the first block per month at	\$ 0.2788	\$ 1.4965	\$ 0.0874	\$ 1.8627	\$ 0.2059	\$ 1.6337	\$ 0.0874	\$ 1.9270
All therms over the first block per month at	\$ 0.1905	\$ 1.4965	\$ 0.0874	\$ 1.7744	\$ 0.1233	\$ 1.6337	\$ 0.0874	\$ 1.8444
<b>Commercial/Industrial - G-53</b>								
Customer Charge per Month per Meter	\$ 877.45			\$ 877.45	\$ 877.45			\$ 877.45
All therms over the first block per month at	\$ 0.1949	\$ 1.4965	\$ 0.0874	\$ 1.7788	\$ 0.0988	\$ 1.6337	\$ 0.0874	\$ 1.8199
<b>Commercial/Industrial - G-54</b>								
Customer Charge per Month per Meter	\$ 878.18			\$ 878.18	\$ 878.18			\$ 878.18
All therms over the first block per month at	\$ 0.0743	\$ 1.4965	\$ 0.0874	\$ 1.6582	\$ 0.0420	\$ 1.6337	\$ 0.0874	\$ 1.7631

DATED: April XX, 2024

ISSUED BY: /s/Neil Proudman

EFFECTIVE: May 1, 2024

Neil Proudman  
TITLE: President

Authorized by NHPUC Order No. XX,XXX dated April XX, 2024, in Docket No. 24-042



NHPUC NO. 11 GAS  
LIBERTY UTILITIES

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Firm Rate Schedule

## 23 FIRM RATE SCHEDULES - KEENE CUSTOMERS

### II RATE SCHEDULES

	Rates Effective April 1, 2024 - April 30, 2024 Winter Period				Rates Effective May 1, 2024 - October 31, 2024 Summer Period			
	Delivery Charge	Cost of Gas Rate Page 97	LDAC Page 101	Total Rate	Delivery Charge	Cost of Gas Rate Page 93	LDAC Page 101	Total Rate
<b>Residential Non Heating - R-1</b>								
Customer Charge per Month per Meter	\$ 16.76			\$ 16.76	\$ 16.76			\$ 16.76
All therms	\$ 0.5025	\$ 1.4965	\$ 0.1986	\$ 2.1976	\$ 0.5025	\$ 1.6337 <del>\$ -0.2094</del>	\$ 0.1986	\$ 2.3348 <del>\$ -0.9102</del>
<b>Residential Heating - R-3</b>								
Customer Charge per Month per Meter	\$ 16.76			\$ 16.76	\$ 16.76			\$ 16.76
Therms in the first block per month at	\$ 0.6716	\$ 1.4965	\$ 0.1986	\$ 2.3667	\$ 0.6716	\$ 1.6337 <del>\$ -0.2094</del>	\$ 0.1986	\$ 2.5039 <del>\$ -1.0793</del>
<b>Residential Heating - R-4</b>								
Customer Charge per Month per Meter	\$ 9.22			\$ 9.22	\$ 16.76			\$ 16.76
Therms in the first block per month at	\$ 0.3694	\$ 0.8231	\$ 0.1986	\$ 1.3911	\$ 0.6716	\$ 1.6337 <del>\$ -0.2094</del>	\$ 0.1986	\$ 2.5039 <del>\$ -1.0793</del>
<b>Commercial/Industrial - G-41</b>								
Customer Charge per Month per Meter	\$ 66.23			\$ 66.23	\$ 66.23			\$ 66.23
Size of the first block	100 Therms				20 Therms			
Therms in the first block per month at	\$ 0.5367	\$ 1.4965	\$ 0.0874	\$ 2.1206	\$ 0.5367	\$ 1.6337 <del>\$ -0.2094</del>	\$ 0.0874	\$ 2.2578 <del>\$ -0.8332</del>
All therms over the first block per month at	\$ 0.3692	\$ 1.4965	\$ 0.0874	\$ 1.9531	\$ 0.3692	\$ 1.6337 <del>\$ -0.2094</del>	\$ 0.0874	\$ 2.0903 <del>\$ -0.6657</del>
<b>Commercial/Industrial - G-42</b>								
Customer Charge per Month per Meter	\$ 198.65			\$ 198.65	\$ 198.65			\$ 198.65
Size of the first block	1000 Therms				400 Therms			
Therms in the first block per month at	\$ 0.4884	\$ 1.4965	\$ 0.0874	\$ 2.0723	\$ 0.4884	\$ 1.6337 <del>\$ -0.2094</del>	\$ 0.0874	\$ 2.2095 <del>\$ -0.7849</del>
All therms over the first block per month at	\$ 0.3336	\$ 1.4965	\$ 0.0874	\$ 1.9175	\$ 0.3336	\$ 1.6337 <del>\$ -0.2094</del>	\$ 0.0874	\$ 2.0547 <del>\$ -0.6304</del>
<b>Commercial/Industrial - G-43</b>								
Customer Charge per Month per Meter	\$ 850.68			\$ 850.68	\$ 850.68			\$ 850.68
All therms over the first block per month at	\$ 0.3012	\$ 1.4965	\$ 0.0874	\$ 1.8851	\$ 0.1464	\$ 1.6337 <del>\$ -0.2094</del>	\$ 0.0874	\$ 1.8675 <del>\$ -0.4429</del>
<b>Commercial/Industrial - G-51</b>								
Customer Charge per Month per Meter	\$ 66.29			\$ 66.29	\$ 66.29			\$ 66.29
Size of the first block	100 Therms				100 Therms			
Therms in the first block per month at	\$ 0.3234	\$ 1.4965	\$ 0.0874	\$ 1.9073	\$ 0.3234	\$ 1.6337 <del>\$ -0.2094</del>	\$ 0.0874	\$ 2.0445 <del>\$ -0.6499</del>
All therms over the first block per month at	\$ 0.2159	\$ 1.4965	\$ 0.0874	\$ 1.7998	\$ 0.2159	\$ 1.6337 <del>\$ -0.2094</del>	\$ 0.0874	\$ 1.9370 <del>\$ -0.5124</del>
<b>Commercial/Industrial - G-52</b>								
Customer Charge per Month per Meter	\$ 198.48			\$ 198.48	\$ 198.48			\$ 198.48
Size of the first block	1000 Therms				1000 Therms			
Therms in the first block per month at	\$ 0.2788	\$ 1.4965	\$ 0.0874	\$ 1.8627	\$ 0.2059	\$ 1.6337 <del>\$ -0.2094</del>	\$ 0.0874	\$ 1.9270 <del>\$ -0.5024</del>
All therms over the first block per month at	\$ 0.1905	\$ 1.4965	\$ 0.0874	\$ 1.7744	\$ 0.1233	\$ 1.6337 <del>\$ -0.2094</del>	\$ 0.0874	\$ 1.8444 <del>\$ -0.4198</del>
<b>Commercial/Industrial - G-53</b>								
Customer Charge per Month per Meter	\$ 877.45			\$ 877.45	\$ 877.45			\$ 877.45
All therms over the first block per month at	\$ 0.1949	\$ 1.4965	\$ 0.0874	\$ 1.7788	\$ 0.0988	\$ 1.6337 <del>\$ -0.2094</del>	\$ 0.0874	\$ 1.8199 <del>\$ -0.3953</del>
<b>Commercial/Industrial - G-54</b>								
Customer Charge per Month per Meter	\$ 878.18			\$ 878.18	\$ 878.18			\$ 878.18
All therms over the first block per month at	\$ 0.0743	\$ 1.4965	\$ 0.0874	\$ 1.6582	\$ 0.0420	\$ 1.6337 <del>\$ -0.2094</del>	\$ 0.0874	\$ 1.7631 <del>\$ -0.3385</del>

DATED: ~~April XX, 2024~~ March 22, 2024

ISSUED BY: /s/Neil Proudman

EFFECTIVE: ~~May 1, 2024~~ April 1, 2024

Neil Proudman  
President

Authorized by NHPUC Order No. XX,XXX dated April XX, 2024, in Docket No. 24-042  
~~Authorized by NHPUC Order No. 26,900 dated October 31, 2023, in Docket No. 23-084~~

NHPUC NO. 11 GAS  
LIBERTY UTILITIES

Illustrative Fifteenth Revised Page 93  
Superseding Fourteenth Revised Page 93  
Summer Cost of Gas

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

Period Covered: Summer Period May 1, 2024 through October 31, 2024

Projected Gas Sales - therms		351,641
Total Calculated Cost of Gas Sendout, including interest		\$527,315
Add:	Prior Period Deficiency Uncollected Interest	\$44,164 \$3,009
Deduct:	Prior Period (Excess) Collected Interest	\$0 \$0
	Prior Period Adjustments and Interest	\$47,173
Total Anticipated Cost		<hr/> <hr/> \$574,488

Cost of Gas Rate

Cost of Gas Rate - Beginning Period (per therm)	\$1.6337
---	----------

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

Maximum Cost of Gas Rate - Non-Fixed Price Option (per therm)	<u>\$2.0421</u>
---	-----------------

DATED: April XX, 2024

ISSUED BY: /s/Neil Proudman  
Neil Proudman

EFFECTIVE: May 1, 2024

TITLE: President

Authorized by NHPUC Order No. XX,XXX dated April XX, 2024, in Docket No. DG 24-042

NHPUC NO. 11 GAS  
LIBERTY UTILITIES

Illustrative Fifteenth~~Fourteenth~~ Revised Page 93  
Superseding Fourteenth~~Thirteenth~~ Revised Page 93  
Summer Cost of Gas

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

Period Covered: ~~Summer Period May 1, 2023 through October 31, 2023~~  
Summer Period May 1, 2024 through October 31, 2024

Projected Gas Sales - therms	351,641	<del>353,632</del>
Total Calculated Cost of Gas Sendout, including interest	\$527,315	<del>\$549,897</del>
Add: Prior Period Deficiency Uncollected Interest	\$44,164 \$3,009	\$0 \$0
Deduct: Prior Period (Excess) Collected Interest	\$0 \$0	<del>(\$28,437)</del> <del>\$1,732</del>
Prior Period Adjustments and Interest	\$47,173	<del>(\$26,705)</del>
Total Anticipated Cost	<u>\$574,488</u>	<u><del>\$523,192</del></u>

### Cost of Gas Rate

Cost of Gas Rate - Beginning Period (per therm)	\$1.6337	<del>\$1.4795</del>
<del>Cost of Gas Rate June 1, 2023 - October 31, 2023, Per Order No. 26,807 in Docket No. DG 23-034</del>		<del>\$1.2439</del>
<del>Cost of Gas Rate July 1, 2023 - October 31, 2023, Per Order No. 26,807 in Docket No. DG 23-034</del>		<del>\$1.2156</del>
<del>Cost of Gas Rate August 1, 2023 - October 31, 2023, Per Order No. 26,807 in Docket No. DG 23-034</del>		<del>\$1.0880</del>
<del>Cost of Gas Rate September 1, 2023 - October 31, 2023, Per Order No. 26,807 in Docket No. DG 23-034</del>		<del>\$1.1464</del>
<del>Cost of Gas Rate October 1, 2023 - October 31, 2023, Per Order No. 26,807 in Docket No. DG 23-034</del>		<del>\$0.2091</del>

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

Maximum Cost of Gas Rate - Non-Fixed Price Option (per therm)	<u>\$2.0421</u>	<u><del>\$1.8494</del></u>
---	-----------------	----------------------------

DATED: April XX, 2024~~September 22, 2023~~

ISSUED BY: /s/Neil Proudman  
Neil Proudman

EFFECTIVE: May 1, 2024~~October 1, 2023~~

TITLE: President

Authorized by NHPUC Order No. XX,XXX dated April XX, 2024, in Docket No. DG 24-042  
~~Authorized by NHPUC Order No. 26,807 dated April 25, 2023, in Docket No. DG 23-034~~

SUMMARY  
SUMMER 2024 COG Filing

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

CALCULATION OF COST OF GAS RATE  
SUMMARY  
SUMMER PERIOD 2024

Calculation of the Cost of Gas Rate

Period Covered: Summer Period May 1, 2024 through October 31, 2024

Projected Gas Sales - therms 351,641

Total Calculated Cost of Gas Sendout, including interest \$527,315

Add:	Prior Period Deficiency Uncollected	\$44,164
	Interest	\$3,009

Deduct:	Prior Period (Excess) Collected	\$0
	Interest	\$0

Prior Period Adjustments and Interest \$47,173

Total Anticipated Cost	<u>\$574,488</u>
------------------------	------------------

Cost of Gas Rate

Cost of Gas Rate - Beginning Period (per therm) \$1.6337

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) \$2.0421

REDACTED  
SCHEDULE A  
SUMMER 2024 COG Filing

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

CONVERSION OF GAS COSTS - GALLONS TO THERMS  
SUMMER PERIOD 2024

	(1)	(2)	(3)	(4)	(5)	(6)
			VOLUMES		UNIT COST	
	<u>UNIT</u>	<u>CONVERSION FACTOR</u>	<u>GALLONS</u>	<u>THERMS</u>	<u>PER GALLON</u>	<u>PER THERM</u>
GAS FROM PROPANE INVENTORY	GALLONS	0.91502			\$1.3227	\$1.4455
GAS FROM CNG	THERMS	N/A	N/A		N/A	
TOTAL				369,781		

REDACTED  
SCHEDULE B  
SUMMER 2024 COG Filing

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

CALCULATION OF COST OF GAS RATE  
SUPPLY / DEMAND BALANCE  
MAY 2023-APRIL 2024

LINE NO.	(1) PRIOR	(2) Actual Nov-23	(3) Actual Dec-23	(4) Actual Jan-24	(5) Actual Feb-24	(6) Estimate Mar-24	(7) Estimate Apr-24	(8) Estimate May-24	(9) Estimate Jun-24	(10) Estimate Jul-24	(11) Estimate Aug-24	(12) Estimate Sep-24	(13) Estimate Oct-24	(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)	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$1.4100	\$1.4307	\$1.4435	\$1.4529	\$1.4611	\$1.4704	
5	TOTAL CALCULATED COST OF PROPANE	\$0	\$0	\$0	\$0	\$0	\$0	\$81 180	\$60 036	\$56 986	\$61 264	\$65 637	\$103 164	\$428 266
6	PROPANE ADJUSTMENTS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	TOTAL COST OF PROPANE	\$0	\$0	\$0	\$0	\$0	\$0	\$81 180	\$60 036	\$56 986	\$61 264	\$65 637	\$103 164	\$428 266
<b>CNG COSTS</b>														
8	CNG SENDOUT (therms)													
9	COMPANY USE (therms)													
10	TOTAL CNG SENDOUT (therms)													
11	COST PER THERM													
12	TOTAL CALCULATED COST OF CNG													
13	CNG DEMAND CHARGES													
14	PROJECTED INCREMENTAL COSTS													
15	CNG ADJUSTMENTS													
16	TOTAL CNG COSTS													
17	ACCOUNTING ADJUSTMENT	\$0	\$0	\$0	\$1 309	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1 309
18	FPO PREMIUM	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
19	TOTAL COSTS OF GAS													
20	RETURN ON INVENTORY	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>REVENUES</b>														
21	BILLED FPO SALES (therms)	0	0	0	0	0	0	0	0	0	0	0	0	0
22	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	\$0.0000
23	BILLED FPO REVENUES	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
24	BILLED NON-FPO SALES CURRENT MONTH (therms)	0	0	0	0	0	0	69 977	50 795	46 225	47 975	51 889	84 780	351 641
25	COG NON-FPO RATE CURRENT MONTH	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$1.6337	\$1.6337	\$1.6337	\$1.6337	\$1.6337	\$1.6337	\$1.6337
26	BILLED NON-FPO REVENUES	\$0	\$0	\$0	\$0	\$0	\$0	\$114 321	\$82 984	\$75 518	\$78 377	\$84 771	\$138 505	\$574 476
27	BILLED SALES OTHER PRIOR PERIODS	29 076	598	741	67	0	0	0	0	0	0	0	0	30 482
28	COG OTHER PRIOR PERIODS BLENDED RATE	\$0.0000	\$0.2091	\$0.9257	\$0.2518	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
29	BILLED OTHER PRIOR PERIODS REVENUES	\$8 156	\$125	\$686	\$17	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8 984
30	TOTAL SALES	29 076	598	741	67	0	0	69 977	50 795	46 225	47 975	51 889	84 780	382 123
31	TOTAL BILLED REVENUES	\$8 156	\$125	\$686	\$17	\$0	\$0	\$114 321	\$82 984	\$75 518	\$78 377	\$84 771	\$138 505	\$583 460
32	UNBILLED REVENUES (NET)	(\$5 645)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$5 645)
33	TOTAL REVENUES	\$2 511	\$125	\$686	\$17	\$0	\$0	\$114 321	\$82 984	\$75 518	\$78 377	\$84 771	\$138 505	\$577 815
34	(OVER)/UNDER COLLECTION	\$2 358	\$2 167	\$1 605	\$3 584	\$2 292	\$2 292	(\$14 848)	(\$6 713)	(\$3 844)	(\$3 251)	(\$4 900)	(\$14 576)	(\$33 836)
35	CUMULATIVE (OVER)/UNDER COLLECTION ELIGIBLE FOR INTEREST	\$29 867	\$32 225	\$34 609	\$37 841	\$41 692	\$44 252	\$46 844	\$32 325	\$25 888	\$22 254	\$19 177	\$14 417	(\$39)
36	PRIME RATE	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%
37	DAYS PER MONTH	31	30	31	31	30	31	30	31	31	29	31	30	30
38	INTEREST AMOUNT	\$217	\$1 627	\$267	\$269	\$300	\$329	\$277	\$210	\$174	\$140	\$121	\$50	\$3 980
39	FINAL CUMULATIVE (OVER)/UNDER COLLECTION WITH INTEREST	\$32 442	\$36 236	\$38 108	\$41 960	\$44 552	\$47 173	\$32 601	\$26 098	\$22 428	\$19 317	\$14 538	\$12	

Note 1: The beginning balance in column 1 ties to the 10/23 Ending Balance per SAP and Roll Forward in the DG 23-034 Summer Cost of Gas Reconciliation Final Audit Report issued on March 11 2024.

REDACTED  
SCHEDULE C  
SUMMER 2024 COG Filing

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

CALCULATION OF PURCHASED GAS COSTS  
SUMMER PERIOD 2024

LINE NO.		Estimate May-24	Estimate Jun-24	Estimate Jul-24	Estimate Aug-24	Estimate Sep-24	Estimate Oct-24	TOTAL
1	TOTAL REQUIRED PURCHASES							
2	<u>PROPANE PURCHASE STABILIZATION PLAN DELIVERIES</u>							
3	THERMS	-	-	-	-	-	-	-
4	<u>RATES -</u>							
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	<u>AMHERST STORAGE PROPANE DELIVERIES</u>							
13	Therms	-	-	-	-	-	-	-
14	<u>RATES - from Schedule F</u>							
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	<u>CNG DELIVERIES</u>							
20	THERMS							
21	RATE							
22								
23	COST PER THERM							
24	COST - CNG							
25								
26	TOTAL CNG							
27	<u>SPOT PURCHASES</u>							
28	THERMS							
29	From Schedule E							
30	COST PER THERM							
31	TOTAL COST - Spot Purchases							
32	<u>OTHER ITEMS</u>							
33	Storage	\$0	\$0	\$0	\$0	\$0	\$0	\$0
34	Refund of Deferred Revenue Surcharge over collection	\$0	\$0	\$0	\$0	\$0	\$0	\$0
35	TOTAL OTHER ITEMS	\$0	\$0	\$0	\$0	\$0	\$0	\$0
36	<u>TOTAL</u>							
37	THERMS FROM PROPANE							
38	COST							
39	THERMS FROM CNG							
40	COST							
41	COST PER THERM	\$1.3785	\$1.4144	\$1.4451	\$1.4522	\$1.4308	\$1 3797	\$1.4106

REDACTED  
SCHEDULE D-1  
SUMMER 2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION  
BID PREMIUM FOR PRE-PURCHASED GALLONS - PRIOR YEAR

LINE NO		Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Total
1	Mt. Belvieu	\$0.8632	\$0.7039	\$0.6746	\$0.6243	\$0.7736	\$0.7579	
2	Pipeline Rate	\$0.2579	\$0.2579	\$0.2579	\$0.2579	\$0.2579	\$0.2579	
3	Broker + Supplier Fee	\$0.1000	\$0.1000	\$0.1000	\$0.1000	\$0.1000	\$0.1000	
4	PERC	\$0.0050	\$0.0050	\$0.0050	\$0.0050	\$0.0050	\$0.0050	
5	Trucking	\$0.1145	\$0.1145	\$0.1145	\$0.1145	\$0.1145	\$0.1145	
6	Keene Div. Price	\$1.3406	\$1.1813	\$1.1520	\$1.1017	\$1.2510	\$1.2353	
7	Contract Volumes	140,000	105,000	105,000	140,000	105,000	105,000	700,000
8	Keene Div. Price	\$187,688	\$124,036	\$120,955	\$154,233	\$131,352	\$129,706	\$847,969
9	Fixed Basis Bid							
10	Plan Price							
11	Contract Volumes	140,000	105,000	105,000	140,000	105,000	105,000	700,000
12	Plan Cost							
13	Cost Premium							
14	Per Gallon Premium	(\$0.0598)	(\$0.0598)	(\$0.0598)	(\$0.0598)	(\$0.0598)	(\$0.0598)	



REDACTED  
SCHEDULE D-2  
SUMMER 2024 COG Filing

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

COMPARISON OF CONTRACT COST TO HYPOTHETICAL SPOT COST  
WINTER SEASON 2023–2024 TO DATE

LINE						
NO	Delivery Month	Nov-23	Dec-23	Jan-24	Feb-24	Total
1	Contract Price					
2	Contract Volumes	92,000	140,000	165,000	135,000	
3	Contract Cost					Ln 1 * Ln 2
4	Average Spot Price	\$1.1851	\$1.2480	\$1.3990	\$1.3680	
5	Contract Volumes	92,000	140,000	165,000	135,000	
6	Hypothetical Spot Cost					Ln 4 * Ln 5
7	Incremental Cost/(Savings) of Plan					Ln 3 - Ln 6
						-12.4%

SCHEDULE D-3  
SUMMER 2024 COG Filing

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-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Total
Nov-24	15,377	15,311	15,311	15,311	15,311	15,377	92,000
Dec-24	23,400	23,300	23,300	23,300	23,300	23,400	140,000
Jan-25	27,579	27,461	27,461	27,461	27,461	27,579	165,000
Feb-25	22,564	22,468	22,468	22,468	22,468	22,564	135,000
Mar-25	17,550	17,475	17,475	17,475	17,475	17,550	105,000
Apr-25	10,530	10,485	10,485	10,485	10,485	10,530	63,000
Total	117,000	116,500	116,500	116,500	116,500	117,000	700,000
Monthly %	16.7%	16.6%	16.6%	16.6%	16.6%	16.7%	

REDACTED  
SCHEDULE E  
SUMMER 2024 COG Filing

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

PROPANE SPOT MARKET PURCHASE COST ANALYSIS  
SUMMER PERIOD 2024

LINE NO		May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24
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. Propane futures market quotations (cmegroup.com) on 3/28/2024 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 2024 COG Filing

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

INVENTORY & WEIGHTED AVERAGE COST OF GAS CALCULATION  
SUMMER PERIOD 2024

LINE NO		May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24
1	Propane:						
2	Therms:						
3	Beginning Balance:	84,715	84,715	84,715	84,715	84,715	84,715
4	Purchases Received:	57,575	41,963	39,476	42,168	44,924	70,162
5	Total Available:	142,290	126,678	124,191	126,883	129,639	154,877
6	Less Sendout:	57,575	41,963	39,476	42,168	44,924	70,162
7	Ending Balance:	84,715	84,715	84,715	84,715	84,715	84,715
8							
9	Cost:						
10	Beginning Balance:	\$ 115,536	\$ 119,448	\$ 121,201	\$ 122,290	\$ 123,079	\$ 123,775
11	Purchases Received:	\$ 85,092	\$ 61,789	\$ 58,074	\$ 62,053	\$ 66,333	\$ 103,951
12	Total Available:	\$ 200,628	\$ 181,237	\$ 179,275	\$ 184,342	\$ 189,412	\$ 227,726
13	Less Sendout:	\$ 81,180	\$ 60,036	\$ 56,986	\$ 61,264	\$ 65,637	\$ 103,164
14	Ending Balance:	\$ 119,448	\$ 121,201	\$ 122,290	\$ 123,079	\$ 123,775	\$ 124,562
15							
16	Rate (Therm):						
17	Beginning Balance:	\$ 1.3638	\$ 1.4100	\$ 1.4307	\$ 1.4435	\$ 1.4529	\$ 1.4611
18	Purchases Received:	\$ 1.4779	\$ 1.4725	\$ 1.4711	\$ 1.4716	\$ 1.4766	\$ 1.4816
19	Total Available:	\$ 1.4100	\$ 1.4307	\$ 1.4435	\$ 1.4529	\$ 1.4611	\$ 1.4704
20	Less Sendout:	\$ 1.4100	\$ 1.4307	\$ 1.4435	\$ 1.4529	\$ 1.4611	\$ 1.4704
21	Ending Balance:	\$ 1.4100	\$ 1.4307	\$ 1.4435	\$ 1.4529	\$ 1.4611	\$ 1.4704
22							
23	Rate (Gal):						
24	Beginning Balance:	\$ 1.2479	\$ 1.2902	\$ 1.3091	\$ 1.3209	\$ 1.3294	\$ 1.3369
25	Purchases Received:	\$ 1.3523	\$ 1.3473	\$ 1.3461	\$ 1.3465	\$ 1.3511	\$ 1.3557
26	Total Available:	\$ 1.2902	\$ 1.3091	\$ 1.3209	\$ 1.3294	\$ 1.3369	\$ 1.3454
27	Less Sendout:	\$ 1.2902	\$ 1.3091	\$ 1.3209	\$ 1.3294	\$ 1.3369	\$ 1.3454
28	Ending Balance:	\$ 1.2902	\$ 1.3091	\$ 1.3209	\$ 1.3294	\$ 1.3369	\$ 1.3454
29							
30	CNG:						
31	Therms:						
32	Cost:						
33	Rate (Therm):						
34							
35							
36	Total Sendout:						
37	Total Cost:						
38							
39	Average Rate - Sendout:						

SCHEDULE I  
SUMMER 2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION  
Weather Normalization - Firm Sendout (Therms)

LINE NO.		May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Total	
1	Actual Firm Sendout	76,524	54,573	48,468	50,607	54,882	84,061	369,115	
2	Base Use	49,538	49,538	49,538	49,538	49,538	49,538	297,225	
3	Heat Use	26,987	5,036	-	1,070	5,345	34,524	72,960	Ln 1 - Ln 2
4	Actual Calendar Month Degree Days	341	141	20	54	220	469	1,245	
5	Normal Calendar Month Degree Days	295	103	22	43	199	525	1,187	
6	Colder (Warmer) Than Normal	46	38	(2)	11	21	(56)	58	Ln 4 - Ln 5
7	Actual Unit Heat Load Therm/DD	79.14	35.71	-	19.81	24.29	73.61		Ln 3 / Ln 4
8	Weather Adjustment	(3,640)	(1,357)	-	(218)	(510)	4,122	(1,603)	Ln 6 x Ln 7
9	Normal Heat Load	23,346	3,678	-	852	4,834	38,646	71,356	Ln 3 + Ln 8
10	Normalized Firm Sendout	72,884	53,216	48,468	50,389	54,372	88,183	367,512	Ln 1 - Ln 3 + Ln 9
11	Actual Company Use	2,522	2,115	1,947	2,125	2,162	2,769	13,640	
12	Unaccounted For	451	328	298	310	335	548	2,270	(Ln 10 - Ln 11) * 0.64%
13	Total Firm Sendout	70,813	51,429	46,819	48,574	52,545	85,962	356,141	Ln 10 - Ln 11 + Ln 12

SCHEDULE J  
SUMMER 2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION  
Weather Normalization - Sales (Therms) - Rate Residential

LINE NO	Period	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Total
1	Customers	862	828	871	899	779	822	
2	Sales	12,829	7,346	5,897	6,591	7,539	13,565	53,767
3	Base Load	6,244	6,244	6,244	6,244	6,244	6,244	37,465
4	Heating Load	6,585	1,102	-	347	1,295	7,321	16,650 Ln 2 - Ln 3
5	Monthly Actual Degree Days	341	141	20	54	220	469	1,245
6	Monthly Normal Degree Days	295	103	22	43	199	525	1,187
7	Colder (Warmer) Than Normal	46	38	(2)	11	21	(56)	58 Ln 5 - Ln 6
8	Actual Unit Heat Load Therm/DD	19.31	7.81	-	6.43	5.89	15.61	8.71 Ln 4 / Ln 5
9	Weather Adjustment	(888)	(297)	-	(71)	(124)	874	(505) Ln 7 * -Ln 8
10	Normal Heat Load	5,697	805	-	277	1,171	8,195	16,145 Ln 4 + Ln 9
11	Normal Firm Billing Cycle Therms	11,941	7,049	5,897	6,521	7,416	14,439	53,263 Ln 2 - Ln 4 + Ln 10

Weather Normalization - Sales (Therms) - Rate Commercial

LINE NO	Period	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Total
12	Customers	327	313	328	337	291	313	
13	Sales	60,700	44,776	40,328	41,582	44,845	67,207	299,437
14	Base Load	40,955	40,955	40,955	40,955	40,955	40,955	245,730
15	Heating Load	19,745	3,821	-	627	3,890	26,252	54,334 Ln 2 - Ln 3
16	Monthly Actual Degree Days	341	141	20	54	220	469	1,245
17	Monthly Normal Degree Days	295	103	22	43	199	525	1,187
18	Colder (Warmer) Than Normal	46	38	(2)	11	21	(56)	58 Ln 5 - Ln 6
19	Actual Unit Heat Load Therm/DD	57.90	27.10	-	11.62	17.68	55.97	18.24 Ln 4 / Ln 5
20	Weather Adjustment	(2,663)	(1,030)	-	(128)	(371)	3,135	(1,058) Ln 7 * -Ln 8
21	Normal Heat Load	17,081	2,791	-	500	3,518	29,386	53,277 Ln 4 + Ln 9
22	Normal Firm Billing Cycle Therms	58,036	43,746	40,328	41,454	44,473	70,341	298,378 Ln 2 - Ln 4 + Ln 10

Summary - Total Summer Season Sales

LINE NO	Month	May	Jun	Jul	Aug	Sep	Oct	Total
23	Actual 2023	73,528	52,122	46,224	48,174	52,384	80,772	353,204
24	Normalized	69,977	50,795	46,225	47,975	51,889	84,780	351,641

SCHEDULE K  
SUMMER 2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION  
Typical Residential Heating Bill - Non-Fixed Price Option Program  
Forecasted 2024 Summer Period vs. Actual 2023 Summer Period

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	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	\$13.69	\$6.52	\$4.56	\$4.32	\$4.93	\$7.40	\$41.42
<b>Base Delivery Revenue Total</b>	<b>\$29.08</b>	<b>\$21.91</b>	<b>\$19.95</b>	<b>\$19.71</b>	<b>\$20.32</b>	<b>\$22.79</b>	<b>\$133.76</b>
COG Rates	\$1.4795	\$1.2439	\$1.2156	\$1.0880	\$1.1464	\$0.2091	\$1.0972
<b>Cost of Gas Total</b>	<b>\$31.07</b>	<b>\$12.44</b>	<b>\$8.51</b>	<b>\$7.62</b>	<b>\$9.17</b>	<b>\$2.51</b>	<b>\$71.32</b>
LDAC Rates	\$0.1113	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1180	\$0.1160
<b>LDAC Total</b>	<b>\$2.34</b>	<b>\$1.18</b>	<b>\$0.83</b>	<b>\$0.83</b>	<b>\$0.94</b>	<b>\$1.42</b>	<b>\$7.54</b>
<b>Total Bill</b>	<b>\$62</b>	<b>\$36</b>	<b>\$29</b>	<b>\$28</b>	<b>\$30</b>	<b>\$27</b>	<b>\$213</b>
	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer May-Oct
Typical Usage - therms (1)	21	10	7	7	8	12	65
<b>Residential Heating R-3</b>							
Customer Charge	\$16.76	\$16.76	\$16.76	\$16.76	\$16.76	\$16.76	\$100.56
Delivery Charge: All therms @ \$0.6716	\$14.10	\$6.72	\$4.70	\$4.70	\$5.37	\$8.06	\$43.65
<b>Base Delivery Revenue Total</b>	<b>\$30.86</b>	<b>\$23.48</b>	<b>\$21.46</b>	<b>\$21.46</b>	<b>\$22.13</b>	<b>\$24.82</b>	<b>\$144.21</b>
Seasonal Base Delivery Difference from previous year							\$10.45
Seasonal Percent Change from previous year							7.8%
COG Rates	\$1.6337	\$1.6337	\$1.6337	\$1.6337	\$1.6337	\$1.6337	\$1.6338
<b>Cost of Gas Total</b>	<b>\$34.31</b>	<b>\$16.34</b>	<b>\$11.44</b>	<b>\$11.44</b>	<b>\$13.07</b>	<b>\$19.60</b>	<b>\$106.20</b>
Seasonal COG Difference from previous year							\$34.88
Seasonal Percent Change from previous year							48.9%
LDAC Rates	\$0.1986	\$0.1986	\$0.1986	\$0.1986	\$0.1986	\$0.1986	\$0.1986
<b>LDAC Total</b>	<b>\$4.17</b>	<b>\$1.99</b>	<b>\$1.39</b>	<b>\$1.39</b>	<b>\$1.59</b>	<b>\$2.38</b>	<b>\$12.91</b>
Seasonal LDAC Difference from previous year							\$5.37
Seasonal Percent Change from previous year							71.2%
<b>Total Bill</b>	<b>\$69</b>	<b>\$42</b>	<b>\$34</b>	<b>\$34</b>	<b>\$37</b>	<b>\$47</b>	<b>\$263.32</b>
Seasonal Total Bill Difference from previous year							\$50.70
Seasonal Percent Change from previous year							23.8%
Seasonal Percent Change resulting from COG							16.4%
Seasonal Percent Change resulting from LDAC							2.5%

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

SCHEDULE L  
SUMMER 2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION  
Typical Commercial Bill - Non-Fixed Price Option Program  
Forecasted 2024 Summer Period vs. Actual 2023 Summer Period

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Winter Nov-Apr
Typical Usage - therms	67	30	22	20	27	40	206
<b>Commercial G-41</b>							
Customer Charge	\$63.30	\$63.30	\$63.30	\$60.81	\$60.81	\$60.81	\$372.33
Delivery Charge: First 20 therms @	\$10.18	\$10.18	\$10.18	\$9.86	\$9.86	\$9.86	\$60.12
Over 20 therms @	\$16.69	\$3.55	\$0.71	\$0.00	\$2.37	\$6.78	\$30.10
<b>Base Delivery Revenue Total</b>	<b>\$90.17</b>	<b>\$77.03</b>	<b>\$74.19</b>	<b>\$70.67</b>	<b>\$73.04</b>	<b>\$77.45</b>	<b>\$462.55</b>
COG Rates	\$1.4795	\$1.2439	\$1.2156	\$1.0880	\$1.1464	\$0.2091	\$1.0886
<b>Cost of Gas Total</b>	<b>\$99.13</b>	<b>\$37.32</b>	<b>\$26.74</b>	<b>\$21.76</b>	<b>\$30.95</b>	<b>\$8.36</b>	<b>\$224.26</b>
LDAC Rates	\$0.0890	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0957	\$0.0935
<b>LDAC Total</b>	<b>\$5.96</b>	<b>\$2.87</b>	<b>\$2.11</b>	<b>\$1.91</b>	<b>\$2.58</b>	<b>\$3.83</b>	<b>\$19.27</b>
<b>Total Bill</b>	<b>\$195</b>	<b>\$117</b>	<b>\$103</b>	<b>\$94</b>	<b>\$107</b>	<b>\$90</b>	<b>\$706</b>
	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Winter Nov-Apr
Typical Usage - therms	67	30	22	20	27	40	206
<b>Commercial G-41</b>							
Customer Charge	\$66.23	\$66.23	\$66.23	\$66.23	\$66.23	\$66.23	\$397.38
Delivery Charge: First 20 therms @	\$10.73	\$10.73	\$10.73	\$10.73	\$10.73	\$10.73	\$64.38
Over 20 therms @	\$17.35	\$3.69	\$0.74	\$0.00	\$2.58	\$7.38	\$31.74
<b>Base Delivery Revenue Total</b>	<b>\$94.31</b>	<b>\$80.65</b>	<b>\$77.70</b>	<b>\$76.96</b>	<b>\$79.54</b>	<b>\$84.34</b>	<b>\$493.50</b>
Seasonal Base Delivery Difference from previous year							\$30.95
Seasonal Percent Change from previous year							6.7%
COG Rates	\$1.6337	\$1.6337	\$1.6337	\$1.6337	\$1.6337	\$1.6337	\$1.6337
<b>Cost of Gas Total</b>	<b>\$109.46</b>	<b>\$49.01</b>	<b>\$35.94</b>	<b>\$32.67</b>	<b>\$44.11</b>	<b>\$65.35</b>	<b>\$336.54</b>
Seasonal COG Difference from previous year							\$112.28
Seasonal Percent Change from previous year							50.1%
LDAC Rates	\$0.0874	\$0.0874	\$0.0874	\$0.0874	\$0.0874	\$0.0874	\$0.0874
<b>LDAC Total</b>	<b>\$5.86</b>	<b>\$2.62</b>	<b>\$1.92</b>	<b>\$1.75</b>	<b>\$2.36</b>	<b>\$3.50</b>	<b>\$18.01</b>
Seasonal LDAC Difference from previous year							-\$1.26
Seasonal Percent Change from previous year							-6.5%
<b>Total Bill</b>	<b>\$210</b>	<b>\$132</b>	<b>\$116</b>	<b>\$111</b>	<b>\$126</b>	<b>\$153</b>	<b>\$848</b>
Seasonal Total Bill Difference from previous year							\$141.97
Seasonal Percent Change from previous year							20.1%
Seasonal Percent Change resulting from COG							15.9%
Seasonal Percent Change resulting from LDAC							-0.2%



REDACTED  
SCHEDULE M  
SUMMER 2024 COG Filing

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY - KEENE DIVISION  
PROJECTED INCREMENTAL COSTS CNG VS. SPOT PROPANE Summer 2024

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Projected	Projected	Projected	Projected	Projected	Projected	
	May-24	Jun-24	Jul-24	Aug-24	Aug-24	Sep-24	
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	\$ (7,291)	\$ (3,109)	\$ (1,270)	\$ (984)	\$ (2,503)	\$ (9,038)	\$ (24,195)
23							
24							
25							
					Divided by 2 if CNG higher	2	
					Allowed Recoverable Costs	\$	(24,195)

SCHEDULE N  
SUMMER 2024 COG Filing

Incremental CNG Supply Costs through October 2024  
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 2024							
	COG Period	Reference	Year	Incremental CNG Cost/(Savings) Amount	Allowed Recoverable Amount from Customers due to Higher/(Lower) CNG vs Propane Costs	Incremental Costs Not Recoverable/Deferred	Incremental Costs not Recovered Balance	(Refund)/Charge
4	Summer 2019	DG 20-105 Settlement Agreement	2019	5,048	2,524	2,524	2,524	(2,524)
5	Summer 2020	DG 20-105 Settlement Agreement	2020	16,214	8,107	8,107	10,631	8,107
6	Summer 2021	DG 21-050 Reconciliation	2021	(13,026)	(10,631)	(2,395)	(1,198)	10,631
7	Summer 2022	DG 22-015 Reconciliation	2022	5,012	2,506	2,506	1,309	(2,506)
8	Summer 2023	DG 23-034 Reconciliation	2023	(5,425)	(1,309)	(4,117)	(2,058)	1,309
9	Summer 2024	Projection - Schedule M	2024	(24,195)	0	(12,098)	(14,156)	0

Note 1: Propane Cheaper than CNG - do not charge customer for full amount, only half. Bank other half for review in future period (col. F)

Note 2: CNG Cheaper than propane - Collect full amount from customers up to the amount previously deferred.

Note 3: Settlement agreement stated a charge of \$8,107 so left as is.

APPENDIX 1  
SUMMER 2024 COG Filing

MONT BELVIEU PROPANE FUTURES - 3/28/2024 CLOSE

TRADE DATE Thursday, 28 Mar 2024 ▼

FINAL DATA ⓘ

Last Updated 28 Mar 2024 10:32:00 PM CT

ESTIMATED VOLUME TOTALS 9,834

PRIOR DAY OPEN INTEREST TOTALS 16

MONTH	OPEN	HIGH	LOW	LAST	CHANGE	SETTLE	EST. VOLUME
MAR 24	-	-	-	-	.00000	.81827	0
APR 24	-	-	-	-	.00000	.83500	1,945
MAY 24	.83000	.83000	.83000	.83000	-.00292	.83000	1,750
JUN 24	-	-	-	-	-.00250	.82500	591
JUL 24	-	-	-	-	-.00250	.82375	253
AUG 24	-	-	-	-	-.00250	.82417	363
SEP 24	-	-	-	-	-.00250	.82875	203
OCT 24	-	-	-	-	-.00334	.83333	722

APPENDIX 2  
SUMMER 2024 COG Filing

## ENTERPRISE TE PRODUCTS PIPELINE FERC TARIFF 54.70.0 - RATES EFFECTIVE 10/12/2023

<b>RATES (In Cents-per-bbl.)</b>			
<b>ITEM NO. 135 Non-Incentive Rates for Propane</b>			
<b>[U] Unchanged unless otherwise noted.</b>			
<b>Destination</b>	<b>Origin</b>		
	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)	--	902.11	--
Dexter (Stoddard Co., MO)	--	428.64	--
Du Bois (Clearfield Co., PA)	484.55 (1)(2)	1001.48 (1)	484.55 (1)
Fontaine (Green Co., AR)	--	402.69	--
Greensburg (Westmoreland Co., PA)	484.55 (1)(2)	945.14 (1)	484.55 (1)
[N] Griffith (Petrogas Terminal) (Lake Co., IN)	--	462.00	--
Harford Mills (Cortland Co., NY)	680.85 (1)	1068.17 (1)	708.84 (1)
Lebanon (Boone Co., IN)	--	505.51 (4)	--
Oneonta (Otsego Co., NY)	737.02	1154.20 (1)	760.80 (1)
Princeton (Gibson Co., IN)	--	550.27	--
Schaefferstown (Lebanon Co., PA)	714.43 (2)	1079.65	704.97
Selkirk (Albany Co., NY)	799.65	1227.25 (1)	801.73 (1)
Seymour (Jackson Co., IN)	--	480.36	--
Sinking Spring (Berks Co., PA)	714.43 (2)	1079.65	704.97
Todhunter Truck Terminal (Butler Co., OH)	--	808.34	--
Watkins Glen (Schuyler Co., NY)	655.34 (1)	1013.55 (1)	685.11 (1)
West Memphis (Crittenden Co., AR)	--	428.64 (4)	--
Monee (Will Co., IL)		1818.33 (7)	

APPENDIX 3A  
SUMMER 2024 COG Filing

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

February 21, 2024

To: All Customers

**Re: Fuel Surcharge Notice**

As of Monday February 19, 2024, the Department of Energy New England average price per gallon of diesel fuel was \$4.320. All deliveries invoiced from Sunday, February 25, 2024 through Saturday, March 2, 2024 will be line item assessed at 21.5% 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 2024 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	\$0.1030	\$947.60	1.00%	\$9.48	\$957.08	\$0.1040
9,200	\$0.1030	\$947.60	2.00%	\$18.95	\$966.55	\$0.1051
9,200	\$0.1030	\$947.60	2.50%	\$23.69	\$971.29	\$0.1056
9,200	\$0.1030	\$947.60	3.00%	\$28.43	\$976.03	\$0.1061
9,200	\$0.1030	\$947.60	3.50%	\$33.17	\$980.77	\$0.1066
9,200	\$0.1030	\$947.60	4.00%	\$37.90	\$985.50	\$0.1071
9,200	\$0.1030	\$947.60	4.50%	\$42.64	\$990.24	\$0.1076
9,200	\$0.1030	\$947.60	5.00%	\$47.38	\$994.98	\$0.1082
9,200	\$0.1030	\$947.60	5.50%	\$52.12	\$999.72	\$0.1087
9,200	\$0.1030	\$947.60	6.00%	\$56.86	\$1,004.46	\$0.1092
9,200	\$0.1030	\$947.60	6.50%	\$61.59	\$1,009.19	\$0.1097
9,200	\$0.1030	\$947.60	7.00%	\$66.33	\$1,013.93	\$0.1102
9,200	\$0.1030	\$947.60	7.50%	\$71.07	\$1,018.67	\$0.1107
9,200	\$0.1030	\$947.60	8.00%	\$75.81	\$1,023.41	\$0.1112
9,200	\$0.1030	\$947.60	8.50%	\$80.55	\$1,028.15	\$0.1118
9,200	\$0.1030	\$947.60	9.00%	\$85.28	\$1,032.88	\$0.1123
9,200	\$0.1030	\$947.60	9.50%	\$90.02	\$1,037.62	\$0.1128
9,200	\$0.1030	\$947.60	10.00%	\$94.76	\$1,042.36	\$0.1133
9,200	\$0.1030	\$947.60	10.50%	\$99.50	\$1,047.10	\$0.1138
9,200	\$0.1030	\$947.60	11.00%	\$104.24	\$1,051.84	\$0.1143
9,200	\$0.1030	\$947.60	11.50%	\$108.97	\$1,056.57	\$0.1148
9,200	\$0.1030	\$947.60	12.00%	\$113.71	\$1,061.31	\$0.1154
9,200	\$0.1030	\$947.60	12.50%	\$118.45	\$1,066.05	\$0.1159
9,200	\$0.1030	\$947.60	13.00%	\$123.19	\$1,070.79	\$0.1164
9,200	\$0.1030	\$947.60	13.50%	\$127.93	\$1,075.53	\$0.1169
9,200	\$0.1030	\$947.60	14.00%	\$132.66	\$1,080.26	\$0.1174
9,200	\$0.1030	\$947.60	14.50%	\$137.40	\$1,085.00	\$0.1179
9,200	\$0.1030	\$947.60	15.00%	\$142.14	\$1,089.74	\$0.1185
9,200	\$0.1030	\$947.60	15.50%	\$146.88	\$1,094.48	\$0.1190
9,200	\$0.1030	\$947.60	16.00%	\$151.62	\$1,099.22	\$0.1195
9,200	\$0.1030	\$947.60	16.50%	\$156.35	\$1,103.95	\$0.1200
9,200	\$0.1030	\$947.60	17.00%	\$161.09	\$1,108.69	\$0.1205
9,200	\$0.1030	\$947.60	17.50%	\$165.83	\$1,113.43	\$0.1210
9,200	\$0.1030	\$947.60	18.00%	\$170.57	\$1,118.17	\$0.1215
9,200	\$0.1030	\$947.60	18.50%	\$175.31	\$1,122.91	\$0.1221
9,200	\$0.1030	\$947.60	19.00%	\$180.04	\$1,127.64	\$0.1226
9,200	\$0.1030	\$947.60	19.50%	\$184.78	\$1,132.38	\$0.1231
9,200	\$0.1030	\$947.60	20.00%	\$189.52	\$1,137.12	\$0.1236
9,200	\$0.1030	\$947.60	20.50%	\$194.26	\$1,141.86	\$0.1241
9,200	\$0.1030	\$947.60	21.00%	\$199.00	\$1,146.60	\$0.1246
9,200	\$0.1030	\$947.60	21.50%	\$203.73	\$1,151.33	\$0.1251
9,200	\$0.1030	\$947.60	22.00%	\$208.47	\$1,156.07	\$0.1257
9,200	\$0.1030	\$947.60	22.50%	\$213.21	\$1,160.81	\$0.1262
9,200	\$0.1030	\$947.60	23.00%	\$217.95	\$1,165.55	\$0.1267
9,200	\$0.1030	\$947.60	23.50%	\$222.69	\$1,170.29	\$0.1272
9,200	\$0.1030	\$947.60	24.00%	\$227.42	\$1,175.02	\$0.1277
9,200	\$0.1030	\$947.60	24.50%	\$232.16	\$1,179.76	\$0.1282
9,200	\$0.1030	\$947.60	25.00%	\$236.90	\$1,184.50	\$0.1288
9,200	\$0.1030	\$947.60	25.50%	\$241.64	\$1,189.24	\$0.1293
9,200	\$0.1030	\$947.60	26.00%	\$246.38	\$1,193.98	\$0.1298
9,200	\$0.1030	\$947.60	26.50%	\$251.11	\$1,198.71	\$0.1303
9,200	\$0.1030	\$947.60	27.00%	\$255.85	\$1,203.45	\$0.1308
9,200	\$0.1030	\$947.60	27.50%	\$260.59	\$1,208.19	\$0.1313
9,200	\$0.1030	\$947.60	28.00%	\$265.33	\$1,212.93	\$0.1318
9,200	\$0.1030	\$947.60	28.50%	\$270.07	\$1,217.67	\$0.1324
9,200	\$0.1030	\$947.60	29.00%	\$274.80	\$1,222.40	\$0.1329
9,200	\$0.1030	\$947.60	29.50%	\$279.54	\$1,227.14	\$0.1334
9,200	\$0.1030	\$947.60	30.00%	\$284.28	\$1,231.88	\$0.1339
9,200	\$0.1030	\$947.60	30.50%	\$289.02	\$1,236.62	\$0.1344
9,200	\$0.1030	\$947.60	31.00%	\$293.76	\$1,241.36	\$0.1349
9,200	\$0.1030	\$947.60	31.50%	\$298.49	\$1,246.09	\$0.1354
9,200	\$0.1030	\$947.60	32.00%	\$303.23	\$1,250.83	\$0.1360
9,200	\$0.1030	\$947.60	32.50%	\$307.97	\$1,255.57	\$0.1365
9,200	\$0.1030	\$947.60	33.00%	\$312.71	\$1,260.31	\$0.1370
9,200	\$0.1030	\$947.60	33.50%	\$317.45	\$1,265.05	\$0.1375
9,200	\$0.1030	\$947.60	34.00%	\$322.18	\$1,269.78	\$0.1380
9,200	\$0.1030	\$947.60	34.50%	\$326.92	\$1,274.52	\$0.1385
9,200	\$0.1030	\$947.60	35.00%	\$331.66	\$1,279.26	\$0.1391
9,200	\$0.1030	\$947.60	35.50%	\$336.40	\$1,284.00	\$0.1396
9,200	\$0.1030	\$947.60	36.00%	\$341.14	\$1,288.74	\$0.1401
9,200	\$0.1030	\$947.60	36.50%	\$345.87	\$1,293.47	\$0.1406
9,200	\$0.1030	\$947.60	37.00%	\$350.61	\$1,298.21	\$0.1411
9,200	\$0.1030	\$947.60	37.50%	\$355.35	\$1,302.95	\$0.1416
9,200	\$0.1030	\$947.60	38.00%	\$360.09	\$1,307.69	\$0.1421
9,200	\$0.1030	\$947.60	38.50%	\$364.83	\$1,312.43	\$0.1427
9,200	\$0.1030	\$947.60	39.00%	\$369.56	\$1,317.16	\$0.1432
9,200	\$0.1030	\$947.60	39.50%	\$374.30	\$1,321.90	\$0.1437
9,200	\$0.1030	\$947.60	40.00%	\$379.04	\$1,326.64	\$0.1442