

REDACTED

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

Docket No. DG 22-XXX

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
2022–2023 Local Distribution Adjustment Charge (LDAC)

**DIRECT TESTIMONY
OF
CATHERINE A. MCNAMARA**

August 2, 2022



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1 **I. INTRODUCTION**

2 **Q. Please state your full name and business address.**

3 A. My name is Catherine A. McNamara. My business address is 15 Buttrick Road,
4 Londonderry, New Hampshire.

5 **Q. Please state by whom you are employed.**

6 A. I am employed by Liberty Utilities Service Corp. (“LUSC”) as Analyst II, Rates and
7 Regulatory Affairs. LUSC provides local utility management, shared services, and
8 support to Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty (“Liberty” or
9 “the Company”) and its regulated water, wastewater, natural gas, and electric utility
10 affiliates.

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

13 A. I graduated from the University of Massachusetts, Boston, in 1993 with a Bachelor of
14 Science in Management with a concentration in accounting. In November 2017, I joined
15 Liberty as an Analyst in Rates and Regulatory Affairs. Prior to my employment at
16 LUSC, I was employed by Eversource as a Senior Analyst in the Investment Planning
17 group from 2015 to 2017. From 2008 to 2015, I was a Supervisor in the Plant
18 Accounting department. Prior to my position in Plant Accounting, I was a Financial
19 Analyst/General Ledger System Administrator within the Accounting group from 2000 to
20 2008.

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

3 A. Yes. I have testified on multiple occasions before the Commission.

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

5 A. The purpose of my testimony is to explain the Company’s proposed 2022/2023 Local
6 Delivery Adjustment Charge, effective November 1, 2022.

7 **II. LOCAL DELIVERY ADJUSTMENT CHARGE (“LDAC”)**

8 **Q. What is the purpose of the LDAC?**

9 A. As described on page 33 of the Company’s tariff, the purpose of the LDAC is to adjust,
10 on an annual basis, the Company’s delivery charges in order to recover Conservation
11 Charges (“CC”), which includes the Energy Efficiency Charge (“EEC”), Revenue
12 Decoupling Adjustment Factor (“RDAF”), Property Tax Adjustment Mechanism
13 (“PTAM”), Environmental Surcharges (“ES”) including the Relief Holder Surcharge
14 (“RHS”) and the Manufactured Gas Program Surcharge (“MGP”), rate case expenses and
15 recoupment (“RCE”), and Gas Assistance Program costs (“GAP”).

16 **Q. What are the surcharges that will be billed under the LDAC?**

17 A. As shown on proposed Sixth Revised Page 101, the Company is submitting for approval
18 an LDAC of \$0.1398 per therm for residential customers, and \$0.0797per therm for the
19 commercial/industrial customers effective November 1, 2022, in accordance with HB549,
20 which I will discuss later in this testimony.

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1 **Q. Which customers are billed an LDAC?**

2 A. All EnergyNorth customers, including those in Keene, are billed an LDAC. When
3 calculating the LDAC, the November 1, 2022, through October 31, 2023, forecasted
4 Keene therm sales of 5,774,961 are added to the EnergyNorth therm sales forecast of
5 180,494,423, for a total therm sales forecast of 186,269,384.

6 **Q. Please explain the Energy Efficiency Charge (“EEC”).**

7 A. The EEC is designed to recover the projected expenses associated with the Company’s
8 energy efficiency programs for the November 2022 through October 2023 period. In
9 February 2022, the New Hampshire Legislature enacted HB549 which set the rate for
10 residential and commercial customers for a calendar year, versus the LDAC period of
11 November through October. The rate calculation provides that the rate for residential
12 customers was set at \$0.0664 and \$0.0442 for commercial customers with an annual
13 adjustment of an additional 0.25% of the CPI for Urban Wage Earners and Clerical
14 workers, to be calculated by the Department of Energy annually for rates effective
15 January 1. The enactment of the legislation is unclear on how to handle over- and under-
16 collections and as such, the Company is not requesting to include its over-collection in
17 the rate from the 2022 program year at this time.

18 As shown on Schedule 2, the proposed EEC is \$0.0664 per therm for residential
19 customers and \$0.0442 per therm for commercial and industrial customers.

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1 **Q. Please describe the Environmental Surcharge (“ES”)?**

2 A. The ES recovers environmental costs associated with investigation, testing, remediation,
3 litigation expenses, and other liabilities relating to manufactured gas program sites,
4 disposal sites, or other sites onto which material may have migrated, as a result of the
5 operating or decommissioning of New Hampshire gas manufacturing facilities. These
6 costs include the costs of the closure of the Relief Holder and pond at Gas Street,
7 Concord, NH. The ES also includes the expenses incurred by the Company in pursuing
8 insurance and third-party claims and any recoveries or other benefits received by the
9 Company as a result. The costs submitted for recovery through the ES cost recovery
10 mechanism, as well as the third-party recoveries, are included in Schedule 3 of this filing.
11 The environmental investigation and remediation costs that underlie these expenses are
12 the result of efforts by the Company to respond to its legal obligations with regard to
13 these sites, as described by Ms. Casey in her pre-filed direct testimony in this proceeding
14 and as outlined in the MGP site summaries included in this filing under Schedule 3. Any
15 prior period reconciliation adjustments are also incorporated into the environmental
16 surcharge rate calculation.

17 **Q. Please describe how the Company calculated the ES rate component of the LDAC**
18 **included in this filing.**

19 A. The ES rate calculated annually consists of one-seventh of actual environmental response
20 costs incurred by the Company in the twelve-month period ending June 30 of each year
21 until fully amortized (over seven years). Any insurance and third-party recoveries or
22 other benefits for the twelve-month period ending June 30 is applied to reduce the

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1 unamortized balance, shortening the amortization period. The sum of these amounts plus
2 any prior period reconciliation is then divided by the Company's forecast of total firm
3 sales and delivery throughput for the upcoming twelve months of November 1 through
4 October 31. The Summary included in Schedule 3 provides the components that make up
5 the MGP rate component of the LDAC as follows:

- 6 • Prior period reconciliation of an estimated under recovery of \$2,833,284 for the
7 LDAC reconciliation period ending October 2022.
- 8 • An annual amortization amount of \$341,389 representing the third and final year
9 of a three-year amortization of \$1,024,167 related to a prior period reconciliation
10 of actual to forecast true-up through June 2019 as recommended by then NH
11 Public Utilities Commission Audit Staff in the Docket No. DG 19-145 Final
12 Audit Report dated April 9, 2020, and incorporated into the LDAC rates and
13 approved in Order No. 26,419 in Docket No. DG 20-141.
- 14 • \$1,324,603 associated with a seven-year amortization of remediation cost pools
15 for the Concord Pond, Concord MGP (excluding the Relief Holder), Manchester
16 MGP, Nashua MGP, and Laconia/Liberty Hill sites, and a General Pool for costs
17 that cannot be directly assigned to a specific site.

18 The resulting proposed MGP rate for the period beginning November 1, 2022, and ending
19 October 31, 2023, is \$0.0071 per therm. A summary sheet and detailed backup
20 spreadsheets that support the 2021/2022 costs are provided in Schedule 3 of this filing.
21 Ms. Casey's testimony describes the Company's activities.

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1 New to this ES surcharge is the inclusion of the Relief Holder and pond at Gas Street in
2 Concord, NH. As described in more detail in Ms. Casey's testimony, the work associated
3 with the stabilization of the holder house was completed in July 2022. Liberty's
4 contribution portion of the costs of the stabilization work is \$486,596. The Company is
5 proposing a specific rate associated with the Relief Holder and pond as part of the ES
6 component of the LDAC rate of \$0.0004 per therm.

7 The overall ES surcharge rate combining the MGP and Relief Holder components is
8 \$0.0075 per therm.

9 **Q. Please explain the Revenue Decoupling Adjustment Factor ("RDAF").**

10 A. The purpose of the RDAF is to recover or refund, on an annual basis, the difference
11 between the Actual Base Revenue per Customer and the Benchmark Base Revenue per
12 Customer. Schedule 4 shows the prior period difference (September 2021 through
13 August 2022) between the proposed Actual Base Revenue per Customer and the
14 Benchmark Base Revenue per Customer calculation of a total under-collection of
15 \$3,563,691. Schedule 4 also includes a reconciliation of the amount of prior refunds
16 (accumulated through October 2021 and refunded from November 2021 through October
17 2022) of \$799,553 remaining to be refunded. As shown on Schedule 4, the proposed
18 RDAF charge is \$0.0409 per therm for residential customers and \$0.0030 per therm for
19 commercial and industrial customers.

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1 **Q. Has the Company included the \$4,024,830 related to improperly refunded revenue**
2 **decoupling reconciliation revenues that is the subject of Docket No. DG 22-041 in**
3 **this RDAF calculation?**

4 A. No. The Company has removed the \$4,024,830 as this is the subject of a separate
5 proceeding, Docket No. DG 22-041.

6 **Q. Please describe the Property Tax Adjustment Mechanism (“PTAM”) charge.**

7 A. The PTAM reconciles the Company’s actual property tax expense during some period
8 with the revenue collected through customer rates.

9 **Q. What period is covered by the PTAM adjustment proposed in your testimony?**

10 A. The PTAM adjustment proposed here covers the period April 1, 2021, through March 31,
11 2022 (“Property Tax Year 2021”).

12 **Q. Did you perform your reconciliation in a manner that is consistent with the**
13 **processes and procedures described in the approved Settlement Agreement in**
14 **Docket No. DG 20-105?**

15 A. Yes.

16 **Q. Please describe the results of your analysis.**

17 A. In Order No. 26,505, the Commission approved the calculated amount of municipal
18 property taxes included in distribution rates as of March 31, 2021, totaling \$8,924,897.
19 The total amount of municipal property tax bills for the 2020 Property Tax year that the
20 Company received during the calendar year 2020 was \$10,897,564. The Company has
21 summed the municipal 2021 Property Tax year bills in the amount of \$10,938,366. The

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1 Company is proposing to recover the difference between what is currently in rates
2 (\$10,897,564) and the 2021 total bills (\$10,938,366), or \$40,802. This calculation is
3 provided in Schedule 5, Page 3, of my testimony. Details of the property tax invoice
4 amounts by municipality and by parcel totaling \$10,938,366 are included in Schedule 5,
5 Page 4.

6 **Q. Has the Company reconciled the 2020 Property Tax year?**

7 A. Yes. Schedule 5, Page 2, provides the reconciliation for the period of January 1, 2022,
8 through October 31, 2022, resulting in an under collection of \$227,872, for a total
9 collection of \$268,674. The Company is requesting to include this amount in the rate for
10 November 1, 2022, spread over 186.269,384 therms. The rate resulting from this
11 calculation is \$0.0014 per therm.

12 **Q. Did the Company include a Rate Case Expense (RCE) surcharge in this filing?**

13 A. Yes. The Company requested to collect rate case expenses in DG 21-130, but the
14 Commission required a recommendation by the Department of Energy on the audit of the
15 expenses before approving the expenses in rates. As of the date of this filing, the
16 Company has not received that recommendation but anticipates by the time these rates
17 are approved that recommendation will be filed so the expenses may be included in rates
18 effective November 1, 2022.

1 **Q. Has the Company fully recovered the previously allowed Rate Case Expense**
2 **recoupment?**

3 A. No. As of June 30, 2022, the Company will have recovered \$1,019,372.82 of the
4 \$1,329,067 that was previously allowed for recoupment.

5 **Q. Has the Company included expenses that were not part of the audit?**

6 A. Yes. After the audit was completed, the Company received \$152,428.94 in additional
7 rate case expenses and is including those costs in this rate request.

8 **Q. Has the Company removed all rate case expenses associated with Granite Bridge in**
9 **its request?**

10 A. Yes.

11 **Q. Has the Company calculated a rate associated with these expenses?**

12 A. Yes. As shown on Schedule 6, the Company is proposing to collect \$874,718 in
13 uncollected rate case and recoupment expense consistent with Order No. 26,505 (July 30,
14 2021) in Docket No. DG 20-105. The RCE rate of \$0.0036 per therm is determined by
15 dividing the \$664,928 by the estimated November 2022 through October 2023 sales
16 volumes of 186,269,384 therms.

17 **Q. What is the proposed Gas Assistance Program (“GAP”) charge?**

18 A. As shown on Schedule 7, the proposed GAP charge is \$0.0200 per therm. It is designed
19 to recover administrative costs, revenue shortfall, and the prior period reconciliation
20 adjustment relating to this program. For the 2022/2023 winter period, the Company is
21 providing a 45% base rate and cost of gas discount, consistent with the settlement

1 agreement approved by the Commission in Order No. 26,397 (August 27, 2020) in
 2 Docket No. DG 20-013. The proposed Residential Gas Assistance Program charge is
 3 designed to recover \$3,720,397, of which \$1,212,534 is for the revenue shortfall resulting
 4 from 6,097 customers receiving a 45% discount off their base and cost of gas rates, and
 5 \$483,503 for the prior year reconciling adjustment.

6 **III. CUSTOMER BILL IMPACTS**

7 **Q. What are the estimated impacts of the proposed LDAC on an average heating**
 8 **customer’s winter bill as compared to the winter rates in effect last year?**

9 A. The detailed bill impact analysis is presented in Schedule 8 of this filing. Please see the
 10 table below for a summary of the total LDAC bill impact, for residential and commercial
 11 customers.

LDAC Bill Impacts	Winter 2022–2023	Summer 2023	Total
Residential R-3	\$4.98 or 6.1%	\$1.13 or 6.1%	\$6.11 or 6.1%
Commercial/Industrial G-41	\$(37.56) or (19.50%)	\$(6.01) or (19.5%)	\$(43.57) or (19.5%)
Commercial/Industrial G-42	\$(345.60) or (19.5%)	\$(48.62) or (19.5%)	\$(394.22) or (19.5%)
Commercial/Industrial G-52	\$(209.10) or (19.5%)	\$(282.69) or (19.5%)	\$(491.79) or (19.5%)

12

13 **Q. Is the Company providing a redlined tariff as part of the LDAC reconciliation**
 14 **filing?**

15 A. Yes, the Company is providing both a clean and redlined version of proposed tariff Page
 16 101, as part of the LDAC reconciliation filing.

1 IV. **CONCLUSION**

2 Q. Does this conclude your testimony?

3 A. Yes, it does.

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BEFORE THE
PUBLIC UTILITIES COMMISSION**

Docket No. DG 22-XXX

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Winter 2022/2023 Cost of Gas
Summer 2023 Cost of Gas

DIRECT TESTIMONY

OF

MARY E. CASEY

August 2, 2022



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1 **I. INTRODUCTION**

2 **Q. Please state your name, job title, and job description.**

3 A. My name is Mary E. Casey. I am the Senior Manager, Environment, for Liberty Utilities
4 Service Corp. (“LUSC”). I am responsible for overseeing the management, investigation,
5 and remediation of manufactured gas plant (“MGP”) sites for Liberty Utilities
6 (EnergyNorth Natural Gas) Corp. d/b/a Liberty (“Liberty” or “the “Company”), as well
7 as operational environmental compliance, including air and waste permitting, wetlands
8 permitting, and protection and spill response.

9 **Q. Please describe your educational and professional background.**

10 A. I hold a Bachelor of Science in Chemical Engineering from the Polytechnic Institute of
11 New York, and a Master of Science in Civil/Environmental Engineering from
12 Polytechnic University. I have been employed by LUSC since July 3, 2012, managing
13 the investigation and remediation of Liberty’s MGP sites. Prior to my employment at
14 LUSC, I held the position of Principal Environmental Engineer for National Grid and
15 KeySpan Energy, with responsibility for operational environmental compliance.

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

17 A. The purpose of my testimony is to discuss the status of Liberty’s site investigation and
18 remediation efforts at various MGP sites in New Hampshire, to briefly describe the
19 MGP-related activities performed by the various contractors and consultants, to discuss
20 the costs for which the Company is seeking rate recovery, and to describe the status of
21 the Company’s efforts to seek reimbursement for MGP-related liabilities from third

1 parties. My testimony is intended to update the information provided by the Company in
2 prior cost of gas proceedings. The costs associated with these investigations and
3 remediation efforts and certain of the amounts recovered from third parties are included
4 in the schedules and other data prepared by Ms. McNamara as part of the Local
5 Distribution Adjustment Charge (“LDAC”) portion of the Company’s cost of gas filing.

6 **II. STATUS OF INVESTIGATION AND REMEDIATION ACTIVITIES**

7 **Q. Please briefly describe the status of each of the Company’s MGP sites.**

8 A. Consistent with past practice, the description of the status of investigation and
9 remediation efforts at each site, as well as the various efforts to recover the site
10 investigation and remediation costs from third parties, are summarized in materials
11 included in the Company’s filing at Schedule 20.

12 **Q. Please briefly describe the current status of the Company's remediation efforts at**
13 **the Lower Liberty Hill site in Gilford and any significant events over the past year**
14 **at that site.**

15 A. The project has been completed since December 2015. The site is stable, and the grass is
16 mowed twice a year. The Notice of Activity and Use Restriction (“AUR”) was approved
17 by the New Hampshire Department of Environmental Services (“NHDES”) and recorded
18 at the Belknap Registry of Deeds in February 2017. The groundwater wells are
19 monitored and sampled once a year per the Groundwater Management Permit that was
20 obtained from NHDES in May 2017 and renewed in 2022.

1 **Q. Please briefly describe the current status of the Company's remediation work at the**
2 **Manchester MGP.**

3 A. On-site activities in the past year were minimal due to COVID-19 access limitations.
4 Some costs were incurred relative to handling MGP-impacted media that resulted from
5 the repair of a sink hole within the LNG tank area, and utility pole and corrosion
6 protection groundbed replacements on site. Groundwater monitoring is ongoing twice a
7 year pursuant to the Groundwater Management Permit for this site.

8 **Q. Please briefly describe the current status of the Company's remediation work at the**
9 **Concord MGP.**

10 A. The Company continues to move toward a remedy for the MGP-impacted “Concord
11 Pond” site on the parcel known as Healy Park. In 2020, the City and the Company
12 finalized an access agreement that gives Liberty access to the pre-design investigation
13 fieldwork, the construction of the remedy, and subsequent maintenance of the capped
14 area after its completion. Pre-design field investigations commenced in 2021 to develop
15 the final design of a wetland and subaqueous cap, per the Remedial Action Plan approved
16 by NHDES. The construction of the remedy is now planned to take place in late summer
17 2023.

18 In 2017, the Company received approval from NHDES on a near-bank sediment
19 sampling program in the Merrimack River, or Monitored Natural Recovery (“MNR”).
20 This program involves annual sediment sampling for contaminants and river bathymetry
21 studies to monitor both the chemical and physical behavior of sediments that may have

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1 been impacted by coal tar wastes. The plan involved five annual samplings, the last of
2 which was conducted in October 2021. NHDES accepted the results of the MNR
3 program, along with the recommendation to undergo a confirmatory sampling in October
4 2023 to determine if any additional future sample events in the river are needed.

5 As for the Gasholder site, the City of Concord and the Company jointly prepared a report
6 in 2019 that details various use options for the Gasholder site on the east side of the
7 highway, including costs for various scenarios ranging from cleaning and fortifying the
8 holder structure for public entry to the demolition of the structure. In response to
9 Liberty's communication that the gasholder needed to be demolished, as the condition of
10 the structure raised safety concerns, the City Council established a working group in
11 2020, comprised of representatives of the City Council, City Staff, Liberty, and the New
12 Hampshire Preservation Alliance ("NHPA"), and charged with exploring the viability of
13 a plan to stabilize and preserve the holder house structure.

14 The working group discussions resulted in a plan for the NHPA to raise funds to stabilize
15 the holder house and manage the relevant construction, and for Liberty to seek
16 Commission approval to contribute up to the estimated costs of demolition and
17 remediation beneath the holder house, as the least cost option for customers. The City,
18 the NHPA, and Liberty met with Commission Staff in February 2021 and obtained
19 Staff's preliminary support for the plan, provided Liberty can demonstrate that the
20 Company's contribution toward the stabilization of the holder house is less than the
21 estimated costs of demolition and remediation that would otherwise have been incurred.

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Winter 2022/2023 Cost of Gas & Summer 2023 Cost of Gas
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1 In October 2021, the NHPA and Liberty signed a formal Emergency Stabilization
2 License Agreement to provide for the repairs to the holder house (the “Agreement”).
3 Under the Agreement, NHPA is responsible for the engineering and construction of the
4 stabilization work. Under the Agreement, Liberty agreed to allow NHPA access to the
5 site to perform the work and to contribute one-half of the stabilization costs, capped by
6 the amount Liberty would otherwise have spent to demolish the gasholder, investigate
7 beneath the gasholder for further contamination, and remedy any contamination found.
8 That is, absent the stabilization work that NHPA completed in the summer of 2022,
9 Liberty would have incurred those demolition-related costs. The NHPA completed the
10 stabilization work in July 2022. Liberty has substantially completed the estimate to
11 demolish the holder house and investigate and remedy any contamination beneath the
12 holder footprint, which estimate will serve as the cap of Liberty’s contribution toward
13 stabilization.

14 In this docket, Liberty is seeking recovery of the costs Liberty contributed toward the
15 stabilization work that was performed in 2022 and is seeking approval to contribute
16 toward the further stabilization costs up to the amount of the demolition estimate.

17 **Q. Please briefly describe the current status of the Company's remediation work at the**
18 **Nashua MGP site.**

19 A. In May 2019, the NHDES accepted details of a cap design for the central portion of the
20 property, and construction was planned for 2020, in conjunction with a capital paving
21 project for this property. However, this cap and pave project had been moved to the 2021

1 construction season due to the COVID-19 pandemic. Since August 2021, the Facilities
2 Management team has been leading the project at the site to remove defunct subsurface
3 and aboveground infrastructure in preparation to pave the entire property. The plan is to
4 install an engineered cap approved by the NH Department of Environmental Services
5 (NHDES) Waste Site Bureau over approximately one-third of the site beneath the newly
6 paved surface where old Holder #2 is situated, as a remedy for the MGP site. (It has been
7 determined that it is technically infeasible to remove the contents of the holder as a
8 critical high-pressure gas main passes through it.) Soil management at this site is
9 challenging as MGP waste and asbestos-containing soil exist on site, further complicated
10 by an NHDES-permitted stormwater handling system installation and the installation of a
11 new impoundment for the propane day tank. The infrastructure improvements and
12 engineered cap are nearly complete in the MGP remedy area, and the installation of the
13 stormwater leaching system is underway.

14 **Q. What other MGP investigation and remediation activity has the Company**
15 **undertaken in the last year?**

16 A. No other MGP investigation and remediation activity has occurred in the last year.

17 **III. STATUS OF INSURANCE COVERAGE LITIGATION**

18 **Q. Have there been any recent significant developments in the Company's efforts to**
19 **seek contribution from its insurance carriers in the past year?**

20 A. No. Insurance recovery efforts are complete with respect to all the Company's former
21 MGP sites.

1 **Q. What environmental remediation efforts do you anticipate for the remainder of**
2 **2022 and 2023?**

3 A. At the Manchester MGP site, the Company will continue remediation of localized areas
4 of contamination on-site as well as work on the storm drain improvement for a
5 deteriorated drainage pipe along the western boundary of the property. The Company
6 anticipates hearing more details of a plan to build a flyover bridge creating another
7 accessway from the riverside condominium communities to the Elm Street commercial
8 district before the Company's design for the storm drainage design is finalized. At the
9 Concord MGP site, as described above, Liberty is working with other parties to stabilize
10 the gasholder house to preserve its function as a cap over its footprint; Liberty will
11 continue environmental site monitoring. For the Concord Pond site, the Company will
12 continue to develop the final design of a wetland and subaqueous cap, with the
13 construction of the remedy expected to occur in the late summer of 2023. The
14 monitoring of near-bank sediments will resume in October 2023 per the NHDES-
15 approved Monitored Natural Recovery plan. At the Nashua MGP site, the Company will
16 continue construction of the engineered cap remedy in conjunction with the facility
17 improvements and final paving. All sites are also now in the monitoring phase, so
18 groundwater monitoring will occur at all of them under their respective Groundwater
19 Management Permits.

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

21 A. Yes, it does.

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November 2022 – October 2023 LDAC
Factor Summary (EnergyNorth & Keene Service Area)
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Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
November 2022 – October 2023 LDAC
Factor Summary (EnergyNorth & Keene Service Area)
(\$/Therm)

Line No.	Rate Schedule	Energy Efficiency Charge	Demand Side Management Charge	Conservation Charge (CCx)	Relief Holder and pond at Gas Street, Concord, NH	Manufactured Gas Plants	Environmental Surcharge (ES)	Revenue Decoupling Factor (RDAF)	Property Tax Adjustment Mechanism (PTAM)	Rate Case Expense Factor (RCEF)	Gas Assistance Program (GAP)	Total
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(K)
	Reference	Schedule 2	N/A	(B)+(C)	Schedule 3	Schedule 3	(E)+(F)	Schedule 4	Schedule 5	Schedule 6	Schedule 7	(D)+(G)+(H)+(I)+(J)+(K)
<u>Residential Customers</u>												
1	R-1 Non-Heating	\$0.0664	\$0.0000	\$0.0664	\$0.0004	\$0.0071	\$0.0075	\$0.0409	\$0.0014	\$0.0036	\$0.0200	\$0.1398
2	R-5 Non-Heating (MEP)	\$0.0664	\$0.0000	\$0.0664	\$0.0004	\$0.0071	\$0.0075	\$0.0409	\$0.0014	\$0.0036	\$0.0200	\$0.1398
3	R-3 Heating	\$0.0664	\$0.0000	\$0.0664	\$0.0004	\$0.0071	\$0.0075	\$0.0409	\$0.0014	\$0.0036	\$0.0200	\$0.1398
4	R-6 Heating (MEP)	\$0.0664	\$0.0000	\$0.0664	\$0.0004	\$0.0071	\$0.0075	\$0.0409	\$0.0014	\$0.0036	\$0.0200	\$0.1398
5	R-4 Heating Gas Assistance Program	\$0.0664	\$0.0000	\$0.0664	\$0.0004	\$0.0071	\$0.0075	\$0.0409	\$0.0014	\$0.0036	\$0.0200	\$0.1398
6	R-7 Heating Gas Assistance Program (MEP)	\$0.0664	\$0.0000	\$0.0664	\$0.0004	\$0.0071	\$0.0075	\$0.0409	\$0.0014	\$0.0036	\$0.0200	\$0.1398
<u>Commercial/Industrial Sales Customers</u>												
7	G-41 Low Annual/High Winter Use	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
8	G-44 Low Annual/High Winter Use (MEP)	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
9	G-51 Low Annual/Low Winter Use	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
10	G-55 Low Annual/Low Winter Use (MEP)	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
11	G-42 Medium Annual/High Winter Use	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
12	G-45 Medium Annual/High Winter Use (MEP)	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
13	G-52 Medium Annual/Low Winter Use	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
14	G-56 Medium Annual/Low Winter Use (MEP)	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
15	G-43 High Annual/High Winter Use	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
16	G-46 High Annual/High Winter Use (MEP)	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
17	G-53 High Annual/Load Factor < 90%	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
18	G-57 High Annual/Load Factor < 90% (MEP)	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
19	G-54 High Annual/Load Factor > 90%	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
20	G-58 High Annual/Load Factor > 90% (MEP)	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
<u>Commercial/Industrial Transportation Customers</u>												
21	G-41 Low Annual/High Winter Use	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
22	G-44 Low Annual/High Winter Use (MEP)	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
23	G-51 Low Annual/Low Winter Use	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
24	G-55 Low Annual/Low Winter Use (MEP)	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
25	G-42 Medium Annual/High Winter Use	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
26	G-45 Medium Annual/High Winter Use (MEP)	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
27	G-52 Medium Annual/Low Winter Use	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
28	G-56 Medium Annual/Low Winter Use (MEP)	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
29	G-43 High Annual/High Winter Use	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
30	G-46 High Annual/High Winter Use (MEP)	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
31	G-53 High Annual/Load Factor < 90%	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
32	G-57 High Annual/Load Factor < 90% (MEP)	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
33	G-54 High Annual/Load Factor > 90%	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
34	G-58 High Annual/Load Factor > 90% (MEP)	\$0.0442	\$0.0000	\$0.0442	\$0.0004	\$0.0071	\$0.0075	\$0.0030	\$0.0014	\$0.0036	\$0.0200	\$0.0797
35	The application of the CC, RDAF, ES, RCE, and GAP applies to all terms and therefore the application to all customers, including Managed Expansion Program											

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
November 2022 – October 2023 LDAC
Energy Efficiency Charge

<u>Line No.</u>	<u>Description</u> (A)	<u>Residential</u> (B)	<u>Commercial & Industrial</u> (C)	<u>Total</u> (D)	<u>Reference</u> (E)
<u>2022 - 2023 EEC Rate Calculation</u>					
1	EEC Reconciliation Balance November 1, 2022 (Over)/Under-collection	\$ (362,258)	(1,056,545)	\$ (1,418,803)	Per HB549 No Longer Applies to This Filing
2	2023 EE Program Costs excl. Low Income and PI	\$ 3,380,344	\$ 3,380,344	\$ 6,760,688	January 2023 - October 2023
3	EE Performance Incentive	\$ 229,022	264,531		
4	2023 Low Income Program Costs	\$ 554,669	\$ 690,661	\$ 1,434,784	Allocated to Residential & C/I on Volumes from Line 1
5	2023 Interest Expense	12,493	14,748	27,241	Sch. 2, pg. 3, col (j), line 21, Sch. 2, pg 4 col (J), line 21
6	Total Program Costs	\$ 3,814,270	\$ 3,293,739	\$ 6,803,910	
7	Energy Efficiency Charge Factor (\$/Therm) per HB549	<u>\$0.0664</u>	<u>\$0.0442</u>		HB549

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
November 2022 – October 2023 LDAC
Energy Efficiency Budget

Energy Efficiency Budget with Low-Income Costs Allocated

Line No.	Period	Commercial &			Total
		Residential	Low-Income	Industrial	
1	July-22	\$54,132	\$48,881	\$141,393	\$244,407
2	August-22	\$55,230	\$50,504	\$146,786	\$252,520
3	September-22	\$91,096	\$65,662	\$171,550	\$328,308
4	October-22	\$215,296	\$116,906	\$252,328	\$584,530
5	November-22	\$330,526	\$172,985	\$361,415	\$864,927
6	December-22	\$496,144	\$247,694	\$494,632	\$1,238,471
7	2022 Total	\$1,242,425	\$702,632	\$1,568,105	\$3,513,162
8	January-23	\$602,645	\$298,318	\$590,629	\$1,491,592
9	February-23	\$509,907	\$251,090	\$494,453	\$1,255,450
10	March-23	\$429,833	\$219,588	\$448,517	\$1,097,938
11	April-23	\$261,737	\$140,569	\$300,540	\$702,846
12	May-23	\$148,826	\$91,586	\$217,518	\$457,930
13	June-23	\$73,040	\$57,242	\$155,929	\$286,212
14	July-23	\$56,827	\$51,121	\$147,659	\$255,607
15	August-23	\$57,989	\$52,783	\$153,143	\$263,915
16	September-23	\$95,649	\$68,691	\$179,114	\$343,454
17	October-23	\$226,042	\$122,475	\$263,860	\$612,377
18	November-23	\$347,380	\$181,402	\$378,228	\$907,010
19	December-23	\$521,353	\$259,872	\$518,134	\$1,299,359
20	Total	\$3,331,228	\$1,794,738	\$3,847,725	\$8,973,691

Energy Efficiency Budget without Low-Income Costs Allocated

Line No.	Period	Commercial &			Total
		Residential	Low-Income	Industrial	
1	July-22	\$67,665	\$0	\$176,741	\$244,407
2	August-22	\$69,038	\$0	\$183,482	\$252,520
3	September-22	\$113,870	\$0	\$214,438	\$328,308
4	October-22	\$269,120	\$0	\$315,410	\$584,530
5	November-22	\$413,158	\$0	\$451,769	\$864,927
6	December-22	\$620,180	\$0	\$618,290.62	\$1,238,471
7	2022 Total	\$1,553,031	\$0	\$1,960,131	\$3,513,162
8	January-23	\$753,306	\$0	\$738,286	\$1,491,592
9	February-23	\$637,384	\$0	\$618,066	\$1,255,450
10	March-23	\$537,292	\$0	\$560,647	\$1,097,938
11	April-23	\$327,171	\$0	\$375,675	\$702,846
12	May-23	\$186,033	\$0	\$271,897	\$457,930
13	June-23	\$91,300	\$0	\$194,912	\$286,212
14	July-23	\$71,033	\$0	\$184,574	\$255,607
15	August-23	\$72,486	\$0	\$191,429	\$263,915
16	September-23	\$119,561	\$0	\$223,893	\$343,454
17	October-23	\$282,552	\$0	\$329,825	\$612,377
18	November-23	\$434,225	\$0	\$472,785	\$907,010
19	December-23	\$651,691	\$0	\$647,667	\$1,299,359
	Total	\$4,164,035	\$0	\$4,809,656	\$8,973,691

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Residential Non-Heating and Heating Classes
November 2022 – October 2023 LDAC
Energy Efficiency Charge

Line No.	(A)	(B)	(C) B*L	(D)	(E)	(F)	(G) A-C+D+E+F	(H) (A+G)/2	(I)	(J) H*I*M/365	(K) G+J	(L)	(M)		
	Actual or Forecast	Beginning Balance (Over)/Under	Residential EEC Rate Per Therm	Residential EEC Collections	Program Budget EEC Costs	Residential EEC PI	Allocated Low-Income Costs	Ending Balance (Over)/Under	Average Balance (Over)/Under	Interest Monthly Federal Prime Rate	Interest @ Fed Reserve Bank Loan Rate	Ending Bal. Plus Interest (Over)/Under	Residential Therm Sales	# of Days	
1	May 22	Actual	(830,686)	\$0.0640	255,095	177,328	9,753	13,533	(885,167)	(857,927)	3.50%	(3,178)	(888,345)	3,985,853	31
2	June 22	Actual	(888,345)	\$0.0640	113,472	86,995	4,785	13,808	(896,230)	(892,287)	4.00%	(2,775)	(899,004)	1,773,005	30
3	July 22	Forecast	(899,004)	\$0.0640	71,829	67,665	3,722	22,774	(876,672)	(887,838)	4.75%	(3,582)	(880,254)	1,122,324	31
4	August 22	Forecast	(880,254)	\$0.0640	73,283	69,038	3,797	53,824	(826,878)	(853,566)	4.75%	(3,443)	(830,322)	1,145,049	31
5	September 22	Forecast	(830,322)	\$0.0640	120,671	113,870	6,263	82,632	(748,228)	(789,275)	4.75%	(3,081)	(751,310)	1,885,486	30
6	October 22	Forecast	(751,310)	\$0.0640	285,084	269,120	14,802	124,036	(628,436)	(689,873)	4.75%	(2,783)	(631,219)	4,454,434	31
7	November 22	Forecast	(631,219)	\$0.0640	437,980	413,158	22,724	150,661	(482,656)	(556,938)	4.75%	(2,174)	(484,830)	6,843,437	30
8	December 22	Forecast	(484,830)	\$0.0640	657,489	620,180	34,110	127,477	(360,553)	(422,692)	4.75%	(1,705)	(362,258)	10,273,270	31
			2022 Total		2,014,903	1,817,354	99,954	588,744				(22,722)			
9	January 23	Forecast	0	\$0.0664	799,387	753,306	41,432	107,458	102,809	51,404	4.75%	207	103,016	12,038,963	31
10	February 23	Forecast	103,016	\$0.0664	676,503	637,384	35,056	65,434	164,388	133,702	4.75%	487	164,875	10,188,292	28
11	March 23	Forecast	164,875	\$0.0664	570,099	537,292	29,551	37,207	198,826	181,850	4.75%	734	199,559	8,585,826	31
12	April 23	Forecast	199,559	\$0.0664	346,892	327,171	17,994	18,260	166,093	207,826	4.75%	811	216,904	5,224,275	30
13	May 23	Forecast	216,904	\$0.0664	215,987	186,033	10,232	14,207	211,389	214,146	4.75%	864	212,253	3,252,811	31
14	June 23	Forecast	212,253	\$0.0664	106,001	91,300	5,022	14,497	217,071	214,662	4.75%	838	217,909	1,596,399	30
15	July 23	Forecast	217,909	\$0.0664	82,471	71,033	3,907	23,912	234,290	226,100	4.75%	912	235,203	1,242,030	31
16	August 23	Forecast	235,203	\$0.0664	84,158	72,486	3,987	56,510	284,028	259,615	4.75%	1,047	285,076	1,267,434	31
17	September 23	Forecast	285,076	\$0.0664	138,813	119,561	6,576	86,845	359,245	322,161	4.75%	1,258	360,503	2,090,551	30
18	October 23	Forecast	360,503	\$0.0664	328,047	282,552	15,540	130,338	460,887	410,695	4.75%	1,657	462,543	4,940,470	31
19	November 23	Forecast	462,543	\$0.0664	458,310	434,225	23,882	0	462,340	462,442	4.75%	1,805	464,146	6,902,261	30
20	December 23	Forecast	464,146	\$0.0664	687,839	651,691	35,843	0	463,841	463,993	4.75%	1,872	465,713	10,359,028	31
21			2023 Total		\$4,494,506	\$4,164,035	\$229,022	\$554,669				12,493			

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Energy Efficiency Programs
For Commercial/Industrial Classes
November 2022 – October 2023 LDAC
Energy Efficiency Charge

Schedule 2
Energy Efficiency
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		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	
				B*L				A-C+D+E+F	(A+G)/2		H*I*M/365	G+J			
Line No.	Month	Actual or Forecast	Beginning Balance (Over)/Under	Rate Per Therm	Commercial EEC Collections	Program Budget EEC Costs	Commercial EEC PI	Allocated Low-Income Costs	Ending Balance (Over)/Under	Average Balance (Over)/Under	Interest Fed Reserve Prime Rate	Interest @ Bank Loan Rate	Ending Bal. Plus Interest (Over)/Under	Commercial/Industrial Therm Sales	# of Days
1	May 22	Actual	(1,542,703)	\$0.0426	359,896	259,368	14,265	35,348	(1,593,618)	(1,568,161)	3.50%	(2,945)	(1,596,563)	8,448,270	31
2	June 22	Actual	(1,596,563)	\$0.0426	230,290	186,356	10,250	36,696	(1,593,551)	(1,595,057)	4.00%	(2,572)	(1,596,123)	5,405,862	30
3	July 22	Forecast	(1,596,123)	\$0.0426	187,936	176,741	9,721	42,888	(1,554,709)	(1,575,416)	4.75%	(6,356)	(1,561,065)	4,411,649	31
4	August 22	Forecast	(1,561,065)	\$0.0426	195,109	183,482	10,092	63,082	(1,499,518)	(1,530,291)	4.75%	(6,174)	(1,505,691)	4,580,025	31
5	September 22	Forecast	(1,505,691)	\$0.0426	227,984	214,438	11,794	90,354	(1,417,090)	(1,461,391)	4.75%	(5,705)	(1,422,795)	5,351,748	30
6	October 22	Forecast	(1,422,795)	\$0.0426	335,645	315,410	17,348	123,658	(1,302,025)	(1,362,410)	4.75%	(5,496)	(1,307,522)	7,878,992	31
7	November 22	Forecast	(1,307,522)	\$0.0426	480,989	451,769	24,847	147,657	(1,164,237)	(1,235,879)	4.75%	(4,825)	(1,169,062)	11,290,814	30
8	December 22	Forecast	(1,169,062)	\$0.0426	658,913	618,291	34,006	123,613	(1,052,064)	(1,110,563)	4.75%	(4,480)	(1,056,545)	15,467,433	31
			2022 Total		2,676,762	2,405,855	132,322	663,297				(38,553)			
9	January 23	Forecast	0	\$0.0442	788,055	738,286	40,606	112,129	102,966	51,483	4.75%	208	103,173	17,829,308	31
10	February 23	Forecast	103,173	\$0.0442	659,770	618,066	33,994	75,135	170,598	136,886	4.75%	499	171,097	14,926,925	28
11	March 23	Forecast	171,097	\$0.0442	597,835	560,647	30,836	54,379	219,124	195,110	4.75%	787	219,911	13,525,672	31
12	April 23	Forecast	219,911	\$0.0442	400,090	375,675	20,662	38,982	255,141	237,526	4.75%	927	256,068	9,051,810	30
13	May 23	Forecast	256,068	\$0.0442	315,600	271,897	14,954	36,915	264,235	260,152	4.75%	1,050	265,284	7,140,264	31
14	June 23	Forecast	265,284	\$0.0442	226,224	194,912	10,720	38,286	282,978	274,131	4.75%	1,070	284,049	5,118,184	30
15	July 23	Forecast	284,049	\$0.0442	214,305	184,574	10,152	44,779	309,247	296,648	4.75%	1,197	310,444	4,848,527	31
16	August 23	Forecast	310,444	\$0.0442	222,178	191,429	10,529	65,965	356,188	333,316	4.75%	1,345	357,533	5,026,661	31
17	September 23	Forecast	357,533	\$0.0442	259,084	223,893	12,314	94,557	429,213	393,373	4.75%	1,536	430,749	5,861,631	30
18	October 23	Forecast	430,749	\$0.0442	381,902	329,825	18,140	129,533	526,345	478,547	4.75%	1,931	528,276	8,640,325	31

**Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
November 2022 – October 2023 LDAC
Environmental Surcharge**

Schedule 3
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Manufactured Gas Plants

1		
2	Required Annual Environmental Increase	\$983,214
3	DG 19-145 Audit adjustment of \$1,024,167 amortized over 3 years,	
4	approved by Order No. 26,419 in Docket No. DG 20-141	<u>\$341,389</u>
5	Environmental Subtotal	\$1,324,603
6	Total Revenues July 2021-June 2022	\$190,244,890
7	* 5% cap	\$9,512,244
8	Overall Annual Net Increase to Rates	\$1,324,603
9	Estimated weather normalized firm therms billed for the	
10	twelve months ended 10/31/2023 - sales and transportation	186,269,384 therms
11	MGP Surcharge per therm	<u>\$0.0071 per therm</u>

Gasholder and pond at Gas Street, Concord, NH

1	Required Annual Environmental Increase	\$69,514
2	Estimated weather normalized firm therms billed for the	
3	twelve months ended 10/31/2023 - sales and transportation	186,269,384 therms
4	Gasholder and pond at Gas Street, Concord, NH Surcharge per therm	<u>\$0.0004 per therm</u>

1	<u>Total Environmental Surcharge</u>	<u>\$0.0075</u>
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Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
November 2022 - October 2023
Environmental Collections Reconciliation

	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Estimate)	(Estimate)	(Estimate)	(Estimate)
1	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
2	30	31	31	28	31	30	31	30	31	31	30	31
3	\$ 2,833,284	\$ 2,656,186	\$ 2,354,611	\$ 1,967,918	\$ 1,526,129	\$ 1,131,620	\$ 853,408	\$ 660,155	\$ 548,839	\$ 460,072	\$ 368,322	\$ 253,081
4												
5	(177,098)	(301,575)	(386,693)	(441,789)	(394,508)	(278,213)	(193,253)	(111,316)	(88,767)	(91,750)	(115,241)	(194,853)
6												
7	\$ 2,656,186	\$ 2,354,611	\$ 1,967,918	\$ 1,526,129	\$ 1,131,620	\$ 853,408	\$ 660,155	\$ 548,839	\$ 460,072	\$ 368,322	\$ 253,081	\$ 58,228

LIBERTY UTILITIES (ENERGY NORTH NATURAL GAS) CORP.
d/b/a LIBERTY

CONCORD FORMER MGP

LINE
NO.

1. SITE LOCATION: One Gas Street, Concord, New Hampshire.
2. DATE SITE WAS FIRST INVESTIGATED: EnergyNorth Natural Gas, Inc. (ENGI)¹ received a Notice Letter from the New Hampshire Department of Environmental Services (NHDES) in September 1992. The Notice related primarily to contamination identified in the pond adjacent to Exit 13 off Interstate 93, although it was broad enough to also include the former manufactured gas plant (MGP) site itself.
3. NATURE AND SCOPE OF SITE CONTAMINATION: Residual materials from the historic operation of the MGP were discovered in the area of the Exit 13 pond, as the NHDOT began site preparation work for the reconfiguration of that interchange. Subsequent investigations by ENGI and others indicate that contaminants originating from the MGP on Gas Street are present in soil and groundwater between the MGP and the Merrimack River, including within the Exit 13 pond.
4. SUMMARY OF MATERIAL DEVELOPMENTS AND INTERACTIONS WITH ENVIRONMENTAL AUTHORITIES:

Concord MGP: The New Hampshire Department of Transportation (NHDOT) contacted ENGI in August 2001 and February 2002 regarding possible coal tar-related impacts in a sewer line on a parcel adjacent to the former gas plant. NHDOT is currently conducting groundwater monitoring as part of a Groundwater Management Zone Permit on this parcel. ENGI met with NHDOT and NHDES in January 2003 to review the results of its 2002 site investigation. Limited coal tar impacts were observed in groundwater and subsurface soils at select locations.

On July 15, 2003, NHDES issued a letter to ENGI requesting submission of a schedule and scope of work for a site investigation of the MGP site by mid-September 2003. ENGI proposed a May 2005 date for submission of a Site Investigation Report for the MGP site on Gas Street to NHDES by way of a letter dated October 6, 2003. NHDES agreed to the proposed schedule in their response letter dated October 31, 2003.

ENGI submitted the work plan for the MGP site investigation to NHDES on May 20, 2004. NHDES accepted the work plan on June 16, 2004. The investigation took place between

¹ In July 2012, EnergyNorth was acquired by Liberty Utilities and its legal name changed to Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty. For consistency purposes, the acronym ENGI will be used throughout this document.

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September 2004 and March 2005, and the Site Investigation Report was submitted to NHDES on June 6, 2005. The report indicated that subsurface impacts are present at the MGP, and additional investigation as well as limited remediation will be required. NHDES accepted the report on August 12, 2005, and requested ENGI submit a supplemental scope of work to complete the delineation of MGP-related impacts on and off Site. The document was submitted in November 2005. Site investigation activities at and downgradient of the MGP were conducted in 2006. ENGI submitted an additional supplemental scope of work to further delineate MGP impacts on May 31, 2007 and NHDES subsequently approved the scope on June 5, 2007. ENGI bid the NHDES-approved scope of work in June 2008 and awarded the contract in late July 2008. ENGI met with NHDES at the site in August 2008 to discuss the additional supplemental site investigation activities. The field work took place during October through December 2008, during which time 8 groundwater monitoring wells were installed at 4 off-site locations. The Additional Supplemental Site Investigation Report was submitted to NHDES in September 2009. ENGI met with NHDES to discuss the report findings and strategy for moving forward in October 2009. NHDES issued an approval letter for the Supplemental Site Investigation Report on February 9, 2010. The correspondence approved the report and requested that certain additional activities be completed by ENGI. These requested activities include the following: a) preparation and submission of an Initial Response Action Work Plan to remove approximately 3,500 gallons of liquid and sludge from historic subsurface drip pots and tar wells at the MGP property on Gas Street; b) evaluation of the groundwater conditions in the vicinity of the "Tar Pond" which is depicted on a referenced NHDOT site plan; and c) evaluation of potential indoor air impacts at select locations identified during the additional SSI work.

ENGI submitted the Initial Response Work Plan to NHDES in July 2010 to remove approximately 3,500 gallons of liquid and sludge from historic subsurface drip pots. NHDES issued an approval letter for this Work Plan on August 3, 2010 and the work was completed in June 2011. In addition, ENGI submitted a Supplemental Data Collection Work Plan for the additional off-ENGI-owned property investigation activities (items b and c above) to NHDES in August 2010. NHDES approved of the Work Plan on September 16, 2010. ENGI obtained access to 4 properties in the vicinity of the site in order to conduct the supplemental investigation activities, which included soil, ground water and soil vapor sampling, along with further investigation of the brick tar sewer. ENGI submitted a revised Work Plan with revised sampling locations to NHDES in November 2011; the revision was necessary because site access was not granted by the property owners for some of the originally proposed locations. The investigation work was completed in July 2012, and summarized in a Supplement Data Collection Report that was submitted in August 2013, in preparation for submittal of the Remedial Action Plan. This Supplement Data Collection Report was accepted by NHDES on October 24, 2013, and ENGI was authorized to prepare a RAP and Groundwater Management Permit (GMP) application. The GMP application was submitted on September 4, 2014, and the permit was received on December 1, 2014.

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On June 16, 2013, wind during a thunderstorm caused a tree to fall on the northern side of the roof of the Holder House located on the former Concord MGP property. Damage to the slate roof and brick was sustained. In a letter dated February 24, 2014, NHDES stated that the holder structure "...serves as a physical barrier to prevent infiltration of precipitation into the foundation and thereby limits the amount of MGP byproducts that may be released to the environment."

On March 31, 2015, ENGI submitted a proposed Remedial Action Plan involving removal of shallow soils displaying MGP-related residual impacts, investigation and remediation of remaining known subsurface structures, capping of components of the local storm water drainage system, site capping design, and continued monitoring of groundwater on the site. NHDES approved the RAP on May 29, 2015, with the condition that roof of the brick gasholder either be restored, or the holder be razed and the soils beneath it remediated. Soil vapor monitoring; soil vapor probe installation; and remedial design investigations including subsurface structure location and inspection, shallow tar-saturated soil delineation, and site storm drain system inspections, as approved by the RAP, were performed in December 2015. A Remedial Design Report (RDR) was submitted to NHDES on March 16, 2016 summarizing the above remedial design investigations. The remediation activities, required to be completed prior to site capping, include tar-impacted material removals and plugging of the on-site drain system, took place in 2017.

A developer approached the Company during 2016 and into 2017 regarding potential purchase of the property, there has been no movement or activity on a transfer of the holder site with regard to that developer. In 2020, further deterioration of the holder structure was observed. In addition, fencing was repaired and added to the areas around the deteriorated areas near the vestibule and the outside scaffolding where the tree fell in 2013.

In 2019, the City of Concord, and the Company jointly prepared a report that details various use options for the Gasholder site on the east side of the highway, including high level cost estimates for various scenarios ranging from cleaning and fortifying the holder structure for public entry to demolition of the structure. In response to Liberty's communication that the gasholder needed to be demolished, as the condition of the structure raised safety concerns, the Concord City Council established a working group in 2020, comprised of representatives of the City Council, City Staff, Liberty, and the New Hampshire Preservation Alliance ("NHPA"), and charged with exploring a plan and assigning responsibilities to stabilize and preserve the holder house structure. The working group discussions resulted in a plan for the NHPA to raise funds to stabilize the holder house and to manage the relevant construction, and for Liberty to seek Commission approval to contribute up to the estimated costs of demolition, investigation, and remediation beneath the holder house, as the least cost option for customers.

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The City, the NHPA, and Liberty met with Commission Staff in February 2021 and obtained Staff's preliminary support for the plan, provided Liberty can demonstrate that the Company's contribution toward the stabilization of the holder house is less than the estimated costs of demolition and remediation that would otherwise have been incurred. In April 2021, the City, the NHPA, and Liberty signed an MOU documenting the above understanding as the parties worked toward a formal agreement. The parties later signed a formal Emergency Stabilization License Agreement to govern the repairs to the holder house and each party's contribution toward the costs to stabilize the holder house. The NHPA completed the engineering for the stabilization work and obtained a contractor to complete the work. The contractor completed the stabilization activities in July 2022. Liberty's share of the 2021-2022 costs to stabilize the holder house, for which Liberty seeks recovery in the 2022-2023 cost of gas proceeding, is approximately \$500,000 (final invoices have not been received as of the date this summary was filed).

Liberty and NHPA are finalizing the detailed estimate of costs that would have been incurred to demolish the holder house, to investigate the footprint of the holder house for additional contamination, and to remedy any contamination likely to be found, which estimate will serve as the cap of Liberty's contribution toward stabilization under the terms of the License Agreement. Liberty and NHPA expect to present that estimate to the Commission during the course of the 2022-2023 LDAC proceeding.

On January 21, 2020, NHDES issued a renewed GMP for the site and ENGI continues to monitor wells in the groundwater monitoring system on site every June and October under this permit. ENGI requested that soil vapor monitoring be ceased and NHDES removed this requirement from the new permit. The last GMP Annual Summary Report, submitted to NHDES in February 2021, summarized the results of the 2020 GMP sampling rounds and also described various small source remediation activities undertaken on site in late 2020.

Concord Pond: ENGI has continued to monitor groundwater semi-annually at the Exit 13 pond, in May and November, as required by the Groundwater Management Zone Permit that was issued in 1999 as part of the overall remedy following the remediation of the southern end of the Exit 13 pond. The permit was renewed in 2003, 2007, 2012, 2017, **and in 2022**, and NHDES specified semiannual collection of surface water samples from the pond as an additional condition of the permit.

When the Exit 13 pond was remediated in 1999, NHDES required that the northern portion remained untouched, allowing for storm water input to the pond, with the knowledge that some contamination remained and may require remediation in the future. In 2006, NHDES requested ENGI address the residual contamination in the pond, and in response, ENGI submitted an Interim Data Collection Report and Scope of Work in May 2006, which was approved in July 2006. This Scope of Work was implemented in 2006

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and the results were to be used to prepare the Remedial Action Plan (RAP) which NHDES requested be submitted by August 31, 2006. In July 2006, NHDES extended the deadline for submittal of the RAP to June 30, 2007, to allow ENGI additional time for data collection and design. ENGI submitted an Interim Data Collection Report to NHDES in September 2006, and a Conceptual Remedial Design in March 2007. On March 25, 2009, ENGI submitted a Presumptive Remedy Approval Request to NHDES, in order to allow for the design and implementation of an engineered cap without the need to prepare a RAP. On May 4, 2009, NHDES granted the Presumptive Remedy Approval, and the project moved into the remedial design phase.

The proposed remedial work is to be performed on city-owned land and within a NHDOT right-of-way; therefore ENGI is working with these parties to come to agreement on the design features, negotiate access and clarify the responsibilities of the three parties. In April 2010, ENGI met with representatives from NHDES, the City of Concord, and NHDOT to present the proposed remedy, and ENGI submitted the draft design plans to the parties in June 2010. ENGI met with the regulatory permitting agencies in October 2010. The agencies requested that ENGI modify the remedial design to include an upland cap versus a wetland cap to minimize the impacts of the project. The cap was redesigned and ENGI met with the stakeholders in December 2010. At a subsequent meeting in January 2011, the City of Concord requested that the design be further modified to relocate the City's storm water outfall location.

ENGI met with the City in March 2011 to present the feasibility evaluation that was conducted for several alternatives, and concluded that the original design was the appropriate design. Contact was reconvened with the City in 2013, and adjustments to the original design were made to address outfall maintenance and access concerns of the City and NHDOT, respectively. The design was presented to the City on January 26, 2016. A rigorous schedule toward construction in late summer 2017 was agreed to by ENGI and the City in February 2016. The City did not meet an early deadline to determine and communicate details regarding access to their storm water system. Communication was again resumed in July 2016 by the City, however the City remained unresponsive to ENGI on implementation of the joint remedial design.

In March 2018, discussions with the new City Engineer took place and the City's engagement level has increased to come to a design solution on outfall maintenance. These discussions are frequent and ongoing.

Semiannual groundwater monitoring at the pond is ongoing, as is recovery of separate phase coal tar from a monitoring well in the vicinity of the pond. In May 2017, the NHDES requested by letter that all active hazardous waste sites managed by the Hazardous Waste Remediation Bureau include sampling for Per- and Polyfluoroalkyl Substances (PFAS) in one of their groundwater sampling rounds, as part of a statewide study of these compounds. ENGI fulfilled this request during regularly scheduled sampling in 2018.

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During May 19 through May 22, 2009, ENGI implemented a NHDES-approved sediment sampling program in the Merrimack River to evaluate potential MGP-related impacts. ENGI met with NHDES in October 2009 to present the results of the sediment investigation, and submitted the sediment sampling data report to NHDES in October 2009. The investigation indicated limited site-related impacts to the shallow near-shore sediments of the Merrimack River. Based upon the results of the sediment investigation, it is unlikely that remedial actions will be necessary in the river. ENGI met with NHDES on February 20, 2013 to discuss all sampling activities to date, summarized in an SIR Addendum Report, submitted in June 2013.

In May 2016, ENGI submitted a proposed plan for monitoring the near-bank sediments to the pond area in the Merrimack River. After discussions regarding frequency, duration of the Monitored Natural Recovery (MNR) program, and methodologies to be used in determining the contaminant trending in the river sediment, NHDES approved a revised MNR Plan in a letter dated July 2017. The 5-year sampling plan began in 2017 with the first of 5 annual samplings. Subsequent rounds of sediment sampling were conducted in October of 2018, 2019, 2020 and 2021. NHDES has accepted the MNR reports submitted by ENGI summarizing the sediment sampling results. Upon completion of the five rounds of MNR sampling, NHDES has agreed with the Company's recommendation to take confirmatory samples in the river in Fall of 2023.

5. NEW HAMPSHIRE SITE REMEDIATION PROGRAM PHASE:

Concord MGP: In July 2003, NHDES requested that ENGI submit a schedule and scope of work for completion of a site investigation of the MGP site. ENGI submitted the scope to NHDES in May 2004 and implemented the work between September 2004 and March 2005. The results of the investigation were documented in the Site Investigation Report, dated June 6, 2005, which was subsequently approved by NHDES. Supplemental investigation activities were performed in 2006. Additional investigation activities were performed in 2008. The additional SSI report was submitted to NHDES in September 2009. In addition, ENGI submitted the Initial Response Work Plan to NHDES in July 2010 to remove approximately 3,500 gallons of liquid and sludge from historic subsurface drip pots. NHDES issued an approval letter for this Work Plan on August 3, 2010 and the work was completed in June 2011. The Supplemental Data Collection report summarizing the investigation activities was accepted in October 2013, authorizing ENGI to prepare a RAP and GMP Application. The GMP application was submitted on September 4, 2014, and the permit was received on December 1, 2014. On March 31, 2015, ENGI submitted a proposed RAP, and NHDES approved the RAP with conditions. A Remedial Design Report, summarizing pre-design investigations, was provided to NHDES in March 2016.

Outstanding remedial activities including the investigation for decommissioning of the deep well (historic water supply well), closure of the "old tar separator" and a small drip pot, closure of the on-site storm drain, and removal of an area of soil containing hardened

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tar were completed in late 2020, and results of these activities were reported to NHDES in the 2020 Annual Summary Report submitted in February 2021 as a requirement of the GMP.

Concord Pond: ENGI submitted an application for a five-year Groundwater Management Zone Permit to the NHDES in April 2002 for the Exit 13 pond. The permit was renewed in October 2007, with the collection of pond surface water samples as an additional condition. Under that permit, groundwater monitoring is expected to be required for the foreseeable future. In addition, as requested by NHDES, ENGI undertook a review of remedial technologies to address the residual contamination remaining in the pond. A conceptual remedial design was submitted to NHDES in March 2007, a Presumptive Remedy Approval was granted by NHDES in May 2009, and the engineered cap design has been drafted. The work will be undertaken pending agreement between the City, NHDOT, and ENGI. ENGI met with these parties on several occasions in 2010 and 2011. The Company reinitiated discussion with the City in July 2014 regarding access to the site to implement the approved design of the wetland cap. The design was adjusted to accommodate the City's desire to simplify maintenance of the storm water system. ENGI has altered the design of the construction to provide temporary access through the wetland area and a permanent access road that does not encroach on the NHDOT right-of-way.

In 2020, ENGI obtained the access agreement from the City to the property to allow access for the wetland cap remedy construction. ENGI has commenced the pre-design investigation in 2021. ENGI is designing the wetland cap remedy and is preparing associated NHDES permit applications, with plans to construct the remedy in late summer 2023.

A renewal application for the Groundwater Management Permit was submitted on August 24, 2017, and the renewed permit was granted by NHDES on November 22, 2017. Groundwater and surface water monitoring continues under this permit every May and November. The 5-year sediment sampling plan to monitor natural attenuation of MGP residuals in the river began in autumn 2017 **continued each October, and the fifth and final sampling occurred in October 2021.**

6. HISTORY AND CURRENT STATUS OF USE AND OWNERSHIP: The Concord MGP operated from approximately 1850 to 1952, when the natural gas pipeline was extended to Concord. The plant was constructed and operated by predecessors of the Concord Gas Company, which later became known as the Concord Natural Gas Company. By virtue of a merger, ENGI acquired Concord Natural Gas. As has been reported previously by ENGI, it filed a contribution claim in the United States District Court for the District of New Hampshire against the successor to the United Gas Improvement Company. In that claim, ENGI alleged that under the federal Superfund statute, the United Gas Improvement Company exercised control over the operations of the Concord Gas Plant

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to the extent that the United Gas Improvement Company should be considered an "operator" under the statute. That matter was settled in 1997.

7. LISTING AND STATUS OF INSURANCE AND 3RD PARTY LAWSUITS AND SETTLEMENTS: Numerous confidential settlements with insurance carriers and with one private party have been entered into. *Insurance recovery efforts at the Concord Site are complete.*

Note: This summary is an overview only and is not intended to be a comprehensive recitation of all relevant information relating to the site and the associated liability.

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LACONIA FORMER MGP AND LIBERTY HILL DISPOSAL AREA

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1. **SITE LOCATION:** The former MGP was located on Messer Street in Laconia. Sometime in the early 1950s, during decommissioning of the MGP, wastes from the MGP were disposed of at a location on Liberty Hill Road in Gilford. At the time of the disposal, the property was utilized as a gravel pit, and the disposal reportedly occurred with the permission of the gravel pit owner. The property currently comprises part of a residential neighborhood.
2. **DATE SITE WAS FIRST INVESTIGATED:** In 1994 and 1995, Public Service Company of New Hampshire (PSNH), one of the former owners and operators of the Laconia Manufactured Gas Plant (MGP), conducted limited site investigations at the plant. In 1996, the New Hampshire Department of Environmental Services (NHDES) sent a "Notification of Site Listing and Request for Site Investigation" for the former Laconia MGP to PSNH and its parent company, Northeast Utilities Services Company (NU), and to EnergyNorth Natural Gas, Inc. (ENGI)¹, another former owner. NHDES designated the site DES #199312038. ENGI and PSNH reached a settlement, reported previously to the New Hampshire Public Utilities Commission (NHPUC), in September 1999. As a result of that settlement, PSNH has had responsibility for the MGP site remediation and interactions with NHDES.

Per the aforementioned settlement, ENGI retained responsibility for any decommissioning-related liabilities, including off-site disposal. Therefore, in October 2004, ENGI notified NHDES of the possibility that wastes from the MGP were disposed of at a location on Liberty Hill Road sometime in the early 1950s during decommissioning of the plant. Drinking water samples were collected from two residential properties in the vicinity in December 2004, and from three additional properties in June and July 2005 by the NHDES; no MGP-related contaminants were detected. At the request of NHDES, ENGI began preliminary site investigations in July 2005 that culminated in the submission of a Site Investigation Report to NHDES in June 2006. As detailed in the report, MGP-related constituents have been detected in soil and shallow groundwater on four residential properties, and in the abutting brook. The report concluded that further investigations were necessary to determine the extent of the contamination. Additional investigation activities were completed between 2006 and 2009.

3. **NATURE AND SCOPE OF SITE CONTAMINATION:** Residual materials from the former MGP have been identified at the Laconia MGP site and in the adjacent Winnepesaukee River. Please contact PSNH and refer to PSNH filings with NHDES for complete information on the nature and extent of site contamination at

¹ In July 2012, EnergyNorth was acquired by Liberty Utilities and its legal name changed to Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty. For consistency purposes, the acronym ENGI will be used throughout this document.

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the MGP. Residual materials from the former MGP were disposed of at the Liberty Hill disposal area, and MGP-related constituents have been detected in soil and ground water.

4. **SUMMARY OF MATERIAL DEVELOPMENTS AND INTERACTIONS WITH ENVIRONMENTAL AUTHORITIES:** Based on the settlement with PSNH that has previously been reported to the Commission, ENGI has had no further involvement with the MGP site since the summer of 1999, except with regard to the Liberty Hill disposal area. Please contact PSNH and refer to PSNH filings with NHDES for complete information on material developments and interactions with environmental authorities.

With respect to the Liberty Hill disposal area, in October 2004, ENGI notified NHDES of the possible existence of this disposal site; the site was assigned disposal site number 200411113 by NHDES. NHDES collected drinking water samples from two residential wells in the vicinity in December 2004 and from three additional residential wells in June and July 2005; no MGP-related contaminants were detected. In January 2005, NHDES requested that ENGI conduct a preliminary site investigation on the two residential properties. ENGI submitted a scope of work for the investigation to NHDES on March 2, 2005. The investigation began in July 2005 and was completed in June 2006 with the submission of the Site Investigation Report.

Additional site investigations were conducted in 2006 and summarized in the December 20, 2006, Interim Data Report #2 submitted to NHDES. Based upon the results of the investigations, remediation is required at the site. In response, a Remedial Action Plan (RAP) was submitted to NHDES on February 28, 2007. The RAP presented NHDES with several remedial alternatives to address soil and groundwater contamination at the site. The February 2007 RAP identified soil excavation (to a depth of 3 feet), construction of a containment wall and impermeable cap on the four residential properties purchased by ENGI as the recommended alternative. In September 2007, NHDES responded to the February 2007 RAP and required that ENGI evaluate additional remedial alternatives that included further soil removal. In November 2007, a RAP Addendum was submitted to NHDES. The revised RAP recommended a remedial alternative that included removal of tar-saturated soils to a depth of approximately 45 feet, construction of a containment wall and impermeable cap on the four residential properties owned by ENGI. On February 29, 2008, NHDES issued a letter to ENGI indicating that NHDES had reached a preliminary determination that the remedy recommended in the November 2007 RAP met the NHDES

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requirements and that a final decision would be reached following a public meeting and comment period.

On March 24, 2008, NHDES held a public comment meeting to discuss the recommended alternative and began 30-day public comment period. In April 2008, NHDES received a request to extend the public comment period closing date to May 8, 2008, to allow the Town time to provide technical comment. On June 26, 2008, NHDES issued a letter deferring its final decision on the recommended remedial alternative for the Liberty Hill site pending further data analysis following the development of a scope prepared collaboratively between the Town of Gilford and ENGI. In July and August 2008, technical representatives from ENGI, the Town of Gilford, the Liberty Hill neighborhood and NHDES met twice to discuss the comments provided to NHDES during the public comment period and discuss the scope for additional groundwater modeling activities and limited additional site data collection. The Company submitted Scopes of Work for additional data collection and groundwater modeling to NHDES in September and October 2008, respectively. The field activities were completed between November 2008 and January 2009. Modeling efforts began in late 2008 and were completed in May 2009. In March and May 2009, technical representatives from ENGI, the Town of Gilford, the Liberty Hill neighborhood and NHDES met to discuss the results of the field investigations and the modeling activities. One topic discussed with the technical team was that the modelling results indicate that low-flow pumping would need to be added to the selected remedy meet the remedial goals for the site. On June 30, 2009, NHDES issued a letter to ENGI requesting that a second RAP Addendum be prepared for the site to evaluate the technical changes (mainly the addition of low-flow pumping) to the proposed remedy that resulted from the modeling effort. ENGI submitted the second RAP Addendum to NHDES on August 17, 2009 and presented the findings at a public meeting held in Gilford on September 10, 2009. In October 2009, NHDES hired a third party consultant to review the RAP cost estimates and the results were presented in a report to NHDES in April 2010. In October 2010, NHDES issued a Preliminary Decision on RAP Addendum No. 2, in which NHDES indicated that it did not concur with ENGI's recommended remedial alternative and further recommended the complete removal of coal tar-impacted soils at the site. On January 28, 2011, ENGI submitted a comment letter to NHDES further explaining its rationale for the remedial alternative recommended in RAP Addendum No. 2. On November 2, 2011, NHDES announced a Final Decision indicating that it did not concur with ENGI's recommended remedial approach and selecting the full removal option as the remedy for the site. On December 2, 2011, ENGI filed an appeal of the NHDES Final Decision with the New Hampshire Waste Management Council. In March 2012, ENGI attended the Pre-Conference Hearing with the Council related to the

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appeal. Hearings on the matter were scheduled for October 18 and November 15, 2012. On July 26, 2012, the Hearing Officer granted an Assented to Motion to Continue the hearing until a date after January 3, 2013.

During the period of time the appeal was subject to the continuance, the company, the New Hampshire Department of Justice and NHDES engaged in settlement discussions on a confidential basis. At the conclusion of those negotiations, NHDES and the company agreed on a final remedy for the site, which was approved by NHDES. That approval allowed ENGI to withdraw its appeal as of December 19, 2012, and proceed with implementation of the remedy. The town of Gilford was briefed on the agreed-upon remedy concurrently with NHDES approval and ENGI's withdrawal of the appeal.

ENGI has also performed numerous other activities requested by NHDES between 2008 and 2011, including remediation of the groundwater seep area near Jewett Brook in accordance with NHDES-approved September 2008 Initial Response Action Plan; evaluation of options for providing financial assurances to NHDES for the site remediation activities; coal tar recovery; semi-annual groundwater and surface water sampling activities; and drinking water well sampling. Groundwater sampling is reported to the NHDES in semi-annual reports. In addition, ENGI developed a Liberty Hill Road site website to assist in updating interested parties.

In conjunction with the Site Investigation work, ENGI has acquired 4 properties on Liberty Hill Road to facilitate remediation activities, and eliminate any potential risk to residents associated with a significant remediation and construction project. The properties were obtained based upon arms-length negotiations, and in one instance to settle potential litigation.

The site was remediated in 2014-2015 construction seasons, and was restored to a grass field by December 2015. NHDES approved the Notice of Activity and Use Restriction (AUR) in February 2017. In May 2017, ENGI received the post-construction groundwater monitoring permit, requiring annual groundwater sampling. **In 2022, the groundwater monitoring permit renewal application was submitted to NHDES on its five year cycle, with no substantive recommended changes. The Company has not received the renewed permit as of the date of this report.**

5. NEW HAMPSHIRE SITE REMEDIATION PROGRAM PHASE: On December 10, 2012, ENGI submitted a Conceptual Remedial Design Report to NHDES describing the approach for full removal. NHDES approved this Conceptual RAP Addendum design on December 18, 2012, and ENGI withdrew their appeal before

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the New Hampshire Waste Management Council on December 19, 2012. A public meeting was held in the Town of Gilford to present the approved Conceptual Remedial Design on January 23, 2013. The pre-design investigation to confirm extent and depth of contamination commenced on February 20, 2013 and was completed first week in April 2013. A public meeting was held on September 25, 2013 to present the design to the Town. The Remedial Design Report was finalized and approved by NHDES in December 2013. Plans and Specifications were developed concurrently, and the bidding process commenced in September 2013 with a Request for Information to ten (10) prospective contractors. On October 28, six (6) contractors were selected to participate in the bidding for the construction, with bids due back on December 6, 2013. On January 9, 2014, three (3) of the bidders were interviewed and Charter Environmental of Boston, MA (the Contractor) was selected for the project. A public meeting took place on February 12, 2014 to further explain details of the anticipated construction and to introduce the project team to the community.

The Contractor mobilized to the site and began set-up in May 2014, with the first load of soil being hauled from the site on June 6, 2014. Construction began to remove tar-impacted soil on the south side of the site in the first season, with little to no impact to the surrounding community. In 2014, approximately 65% of the impacted soil was removed for treatment. On April 8, 2015, ENGI presented the results of the first season of construction at a Gilford Town Select Board meeting, and presented expectations for the second season to the community. Starting on April 13, 2015, the north side of the site was remediated, with the removal of all tar-impacted soil completed on August 3, 2015. The entire project was completed on September 24, 2015 with 2,662 truckloads hauling 93,502 tons of tar-impacted soil removed for thermal treatment. Some additional site restoration work was needed in October 2015 and another seeding in April 2016 to repair damage to the original restoration caused by a heavy rainstorm that occurred on September 30, 2015. Throughout the course of the project there was no disruption to the neighboring community and no safety incidents, logging 26,975 safe working hours. The project was completed within budget parameters.

The only activities on this site during the past year and ongoing are mowing and groundwater and surface sampling, per the new post-remedial Groundwater Management Permit received on May 10, 2017. In May 2017, the NHDES requested by letter that all active hazardous waste sites managed by the Hazardous Waste Remediation Bureau include sampling for Per- and Polyfluoroalkyl Substances (PFAS) in one of their groundwater sampling rounds, as part of a statewide study of these compounds. ENGI fulfilled this request during regularly scheduled sampling in 2018. **ENGI continues to mow the site twice a**

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LACONIA FORMER MGP AND LIBERTY HILL DISPOSAL AREA

LINE
NO.

year and sample the groundwater per the Groundwater Management Permit each September.

6. HISTORY AND CURRENT STATUS OF USE AND OWNERSHIP: ENGI is the successor by merger to Gas Service, Inc. (GSI). In 1945, GSI acquired the gas manufacturing assets of PSNH. The Laconia MGP, which began operating in 1894, was included in that transaction. Gas manufacturing took place at the property until 1952, when the MGP was converted to propane. Half of the property is now owned by Robert Irwin and maintained as an open field, and the other half is owned by PSNH, which operates an electric substation on the parcel.

The Liberty Hill Road parcel on which disposal was believed to have occurred was utilized as a gravel pit at the time of the disposal. It was subdivided in May 1970, and currently constitutes part of a residential subdivision.

7. LISTING AND STATUS OF INSURANCE AND 3RD PARTY LAWSUITS AND SETTLEMENTS: ENGI and PSNH entered into a confidential settlement in 1999. Under this agreement, PSNH took the lead on the MGP site investigation and remediation and all communications with NHDES. ENGI retained responsibility for any decommissioning-related liabilities, including off-site disposal.

Insurance recovery efforts are complete with respect to the MGP, and numerous confidential settlements have been entered into. In 2003, the United States District Court certified a question to the New Hampshire Supreme Court asking what “trigger of coverage” should be applied to the insurance policies issued by Lloyds of London to ENGI’s predecessor, Gas Service, Inc. In May 2004, the Supreme Court responded that a “continuous injury-in-fact” trigger should be applied. The federal court conducted a jury trial against Lloyds of London - the only remaining defendant – in October 5, 2004. At the end of that trial the jury returned a verdict in favor of ENGI. Subsequent to the verdict, ENGI and Lloyds of London entered into a confidential settlement.

With respect to Liberty Hill, insurance carriers have been placed on notice of a potential claim, but no litigation has been initiated. The Company does not expect to pursue any insurance litigation.

Note: This summary is an overview only and is not intended to be a comprehensive recitation of all relevant information relating to the site and the associated liability.

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MANCHESTER FORMER MGP

LINE
NO.

1. SITE LOCATION: 130 Elm Street, Manchester, New Hampshire.
2. DATE SITE WAS FIRST INVESTIGATED: The New Hampshire Department of Environmental Services (NHDES) compiled a list of all former Manufactured Gas Plants (MGPs) in New Hampshire that were not already subject to a site investigation or remediation. In March of 2000, NHDES sent out notice letters to all parties it deemed responsible for the sites. EnergyNorth Natural Gas, Inc. (ENGI)¹ received a "Notification of Site Listing and Request for Site Investigation" for the former Manchester MGP from NHDES, which designated the site DES #200003011.
3. NATURE AND SCOPE OF SITE CONTAMINATION: Residual materials from the former MGP have been identified at the site. These residuals, which include tars and oils, have been found mainly in subsurface soil at discrete locations and in groundwater at the former MGP, as well as in the downgradient Singer Park and river sediment.
4. SUMMARY OF MATERIAL DEVELOPMENTS AND INTERACTIONS WITH ENVIRONMENTAL AUTHORITIES:
 - On behalf of ENGI, Harding ESE, Inc. (Harding ESE), submitted a Scoping Phase Field Investigation Scope of Work to NHDES in March 2000.
 - NHDES approved the Scoping Phase Field Investigation Scope of Work in June 2000.
 - During the summer and fall of 2000, ENGI and Harding ESE conducted the Scoping Phase Field Investigation, collecting site background information and soil, groundwater, surface water and sediment samples from the former Manchester MGP and the nearby Merrimack River.
 - On August 31, 2000, an underground tank containing MGP residuals was discovered at the site. As required by NHDES regulations, the tank contents were removed and disposed of subject to a permit from NHDES. Harding ESE, on behalf of ENGI, submitted a summary report to NHDES in January 2001 documenting the response action.

¹ In July 2012, EnergyNorth was acquired by Liberty Utilities and its legal name changed to Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty. For consistency purposes, the acronym ENGI will be used throughout this document.

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NO.

- ENGI and Harding ESE submitted the Scoping Phase Field Investigation Report to NHDES in February 2001.
- NHDES provided comments to ENGI and Harding ESE in April 2001 on the Scoping Phase Field Investigation Report and requested a Phase II Investigation Scope of Work.
- ENGI responded to NHDES' comments on the Scoping Phase Investigation Report and indicated that ENGI planned to solicit bids for the Phase II Scope of Work.
- In July 2001, on behalf of ENGI, Harding ESE submitted a Scope of Work to NHDES to fence the ravine near the former Manchester MGP to prevent access to impacted sediments. In October 2001, NHDES accepted ENGI's fence installation plan, but requested clarification on the fence location and signage. In correspondence dated April 3, 2002, ENGI provided proposed language to NHDES for the signs to be attached to the ravine fence. NHDES approved the ravine sign language in April 2002.
- On May 1, 2002, ENGI issued a Request for Proposals to eight environmental consultants for the Phase II Site Investigation and Risk Characterization. ENGI received six proposals for the Phase II work in June 2002.
- In June 2002, the City of Manchester approved the ravine fence location and granted access to City property to install. The work was completed in August 2002.
- URS Consultants were awarded the contract to undertake the next phase of work. A Phase II Site Investigation Scope of Work was submitted in September 2002.
- Phase II field investigations began in the fall of 2002.
- In June 2003, the City of Manchester approved a proposal to construct a minor league ballpark, retail shops, parking garage, hotel and high-rise condominium complex on the Singer Park site, in the same general areas that MGP impacts were detected in ongoing Phase II investigations. Following supplemental ravine investigations during the spring and summer of 2003, the Drainage Ravine Engineering Evaluation was submitted to

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MANCHESTER FORMER MGP

LINE
NO.

NHDES in January 2004, and presented four potential remedial alternatives for the ravine, which is located on a portion of Singer Park.

- ENGI had been a regular participant in monthly Singer Park redevelopment meetings with NHDES, the City of Manchester and the various developers from April 2003 until the regular meetings ended on November 15, 2004. ENGI had attended these coordination meetings to ensure that the environmental and construction aspects of the redevelopment were being addressed concurrently and that ENGI avoided incurring costs associated with another entity's contamination.
- ENGI entered into confidential agreements with Manchester Parkside Place (the owner of the ravine property) for access and cleanup of MGP byproducts in the ravine in January 2005.
- In January 2005, ENGI submitted a Remedial Design Report to NHDES selecting excavation and off-site disposal of source material and impacted soils as the remedial alternative for the ravine. NHDES approved of this alternative via a letter dated February 7, 2005. Eleven contractors were invited to bid on the ravine remediation in January 2005. The contract was awarded to the low bidder (ENTACT) in February 2005. Remediation of the ravine began in March and was completed in July 2005. A remedial completion report was submitted to NHDES on September 2, 2005.
- ENGI submitted a Phase II Site Investigation Report to NHDES in March 2004. The report concluded that MGP impacts (including impacted soil and groundwater and separate phase coal tar) were present in the subsurface beneath the 130 Elm Street property, portions of Singer Park at depth and the Merrimack River sediment. Further investigations were recommended by ENGI to further assess the nature and extent of this contamination and a work plan proposing those investigations was submitted to NHDES in May 2004 and approved in July 2004. These supplemental investigations were completed and documented in the Supplemental Phase II Investigation Report and the Stage I Ecological Screening Report for the Merrimack River, submitted to NHDES in February and March 2005, respectively. The reports concluded that Remedial Action Plans for the upland and Merrimack River portions of the site were required. On September 15, 2005, NHDES issued a letter accepting the reports and requested ENGI prepare a Remedial Action Plan (RAP) to address impacted sediments in the Merrimack River, as well as MGP-related impacts on the upland portion of the site. Preparation of the RAPs began in August 2006.

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MANCHESTER FORMER MGP

LINE
NO.

- Additional Merrimack River investigations were completed in 2007 and the Remedial Design Report for dredging approximately 9,000 cubic yards of coal tar-impacted sediments from the river was submitted to NHDES on May 11, 2007. ENGI applied for, and was granted, a Dredge and Fill Permit for the remedial dredging from NHDES and the United States Army Corps of Engineers on May 18, 2007. Dredging of the river commenced in June 2007 and was substantially completed by the end of the year. Final site restoration activities associated with the sediment remediation were complete in May 2008. A Remedial Action Implementation Report documenting the sediment remediation activities was submitted to NHDES in May 2008.
- Certain pre-design investigations were completed on the upland portion of the site in 2008/2009. ENGI also completed interim Phase I Corrective Actions at the site, including pilot scale light non-aqueous phase liquid (LNAPL) recovery, pilot scale dense non-aqueous phase (DNAPL) recovery, and design for repair/replacement of a deteriorated portion of the site drainage system located within a known LNAPL area of the site. Limited surface soil removal activities were conducted during the summer/fall of 2008 in an area with detected Upper Concentration Limit exceedances in shallow soils.
- ENGI was issued a Groundwater Management Zone (GMZ) permit No. GWP-200003011-M-001 for the former MGP site on June 15, 2009. The permit establishes a groundwater management zone in the vicinity of the former MGP site with associated notification/groundwater monitoring requirements. Groundwater monitoring events to support this GMZ permit have been ongoing, every April and October.
- ENGI submitted an RAP for the upland portion of the site to NHDES on June 30, 2010. The remedial objectives for the site include control of mobile DNAPL, reduction in contaminant mass (where practicable), and management of residual contamination through the use of administrative controls. The recommended remedial alternative includes removal of the contents of certain subsurface structures where removal is anticipated to provide a reduction in the potential for the further release of DNAPL to the subsurface; NAPL recovery from the subsurface; construction of a barrier wall proximate to the Merrimack River to mitigate potential DNAPL migration; and use of administrative controls to address potential human exposure to residual soil and groundwater contamination. Additional investigation activities were recommended to support the preparation of

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MANCHESTER FORMER MGP

LINE
NO.

Design Plans and Construction Specifications following NHDES approval of the RAP and to confirm the appropriateness of certain remedial alternatives recommended in the RAP.

- In Fall 2010, ENGI performed storm drain rehabilitation activities on a deteriorated portion of the site drainage system that is located within a known LNAPL area. This work was performed to mitigate the migration of LNAPL to the Merrimack River via the storm drain system. These activities were mainly completed in late 2010.
- In April 2011, NHDES approved of the upland RAP and requested that ENGI proceed with the additional investigation activities recommended in the June 2010 RAP. In addition, ENGI was contacted by both the developer and condominium association associated with the property directly downgradient of the site regarding potential impacts to the property, as well as the proposed remedy; ENGI met with both parties in early and mid-2011.
- After meeting with the developer of the property directly downgradient of the site at the potential location of the barrier wall regarding potential impacts to the property in September/October 2011, access was obtained to conduct certain approved pre-design off-site investigation activities as recommended in the June 2010 RAP. The off-property investigations were substantially completed in December 2011. A meeting was held with NHDES in December 2011 to discuss the results. A Remedial Design Report for the off-site property is currently being finalized.
- On-site pre-design investigation activities were conducted during the spring and summer of 2012 including: additional groundwater quality monitoring, former gas holder foundation test pit excavations, supplemental LNAPL delineation, cyanide source investigation test pit excavations, cyanide delineation and source investigation monitoring well installation, and storm drain inspection.
- Further storm drain inspections occurred during July and August 2013. The remedial design and construction specifications report was drafted including a summary of the design investigation activities and findings. The remedial design includes the monitoring and practicable recovery of NAPL at strategic on-site and off-site locations, as well as excavation of subsurface structures with concurrent source removal if encountered. The Remedial Design Report drafted, also summarizes the results of cyanide source

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LINE
NO.

investigation and delineation work, with further source delineation work anticipated.

- In addition to routine Groundwater Management Permit (GMP) sampling and reporting, an application for GMP renewal was also submitted to NHDES in July 2014, with the Annual Summary Report for the 2013/2014 groundwater Monitoring year. The Remedial Design Report was submitted to NHDES on December 19, 2014. On July 15, 2015, NHDES accepted the proposed remedial design with exceptions involving further remediation of historical Holder 3, and further investigation of the storm drain system beneath and downstream of the site. ENGI responded to NHDES' comments and requests on May 12, 2017.
- Per the 2010 Remedial Action Plan and the 2014 Remedial Design Report ENGI removed material from a tar separator, tar well and other subsurface structures, dug four test pits, and installed three new monitoring wells and an extraction well on-site, prior to property paving in Fall 2017. Further removals from subsurface structures were planned and completed in 2019.
- During 2017, NHDES required active hazardous waste sites managed by the NHDES Hazardous Waste Remediation Bureau to include Per- and Polyfluoroalkyl Substances (PFAS) in one of their sampling rounds.
- In 2019, ENGI continued to address potential site impacts per the 2014 Remedial Design Report by removing approximately 9,000 gallons of contaminated liquids and sludge from a subsurface tar liquor decanter structure in the gas plant area. After removal, ENGI cleaned the structure and filled it with inert fill. The details of these activities were reported to NHDES in the 2018/2019 Annual Summary Report dated July 24, 2019.
- In June 2019, three extraction wells were also installed at the western boundary of the site where an existing well in that area was detecting recoverable product. These wells will be used to remove free product on an ongoing basis. Three additional groundwater monitoring wells were installed in the Holder #3 area to monitor potential impacts detected during previous test pit excavation.
- A pump-down of an existing well on the east side of the property, installed in 2017 to recover oil from a known historical oil tank impact in that area, took place in June 2019. The test succeeded to return recoverable product to the well and it will be used to remove free product on an ongoing basis.

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MANCHESTER FORMER MGP

LINE
NO.

- In addition to routine Groundwater Management Permit (GMP) sampling and reporting, an application for GMP renewal was submitted to NHDES in May 2020 with requests to reduce the frequency of sampling of two wells and adding sampling of the 6 new wells installed in 2017-18. Annual Summary Reports detailing the results of groundwater monitoring at the site continue to be submitted.
 - ENGI reconstructed a water supply line near the entrance to the plant generating a substantial amount of soil that required disposal at ESMI, Loudon, NH.
 - ENGI received the renewed GMP on February 26, 2021, effective until 2026, covering the monitoring of 42 groundwater monitoring wells each April and October.
 - A sinkhole in the LNG Area over Holder #3 was discovered in October 2020. Fill materials were excavated and the sinkhole was repaired. A new sinkhole reappeared in the same area in May 2021, and the process was repeated to stabilize the area. This area was historically filled with soil and debris when the old holder was decommissioned.
5. NEW HAMPSHIRE SITE REMEDIATION PHASE: Phase I Site Investigation complete. Phase II Site Investigation complete and supplemental report submitted to NHDES in February 2005. Remedial Action Plan (RAP) for the ravine submitted and approved by NHDES in 2005; remediation of ravine completed in July 2005. Remediation of the river sediment was completed in 2007. A RAP for the upland portion of the site was submitted to NHDES for review on June 30, 2010. NHDES issued its approval of the RAP for the upland portion of the site in a letter dated April 11, 2011. The Remedial Design Report summarizing the activities for addressing on-site and off-site impacts was submitted on December 19, 2014. On July 15, 2015, NHDES accepted the proposed remedial design with exceptions. ENGI addressed these concerns and implemented the remedial activities on-site and off-site in 2017.

In 2019, ENGI continued to address potential site impacts per the Remedial Design Report by removing approximately 9,000 gallons of contaminated liquids and sludge from a subsurface structure in the gas plant area, installing three extraction wells at the western boundary of the site, and installing three groundwater monitoring wells in one of the gas holder footprints. Also in 2019, needed

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MANCHESTER FORMER MGP

LINE
NO.

reconstruction of a major water supply line near the entrance to the property resulted in the removal of a substantial amount of MGP-impacted soil.

Costs for the repair of a sink hole in the LNG area, and soil management related to the installation of new corrosion protection ground beds are included in the 2022 filing. The design for the upgrade of the storm drainage line along the western boundary of the property are on hold pending receipt of the City of Manchester's design for the new bridge spanning over the railroad from the riverside condominium communities and directed toward Elm Street.

6. HISTORY AND CURRENT STATUS OF USE AND OWNERSHIP: The former Manchester MGP is believed to have started producing coal gas in 1852. Gas was produced at the site by the Manchester Gas Company and its predecessors until the MGP was shut down in 1952 when natural gas was supplied to the city via pipeline. ENGI is the successor by merger to the Manchester Gas Company. ENGI continues to own and operate the 130 Elm Street property as an operations center.
7. LISTING AND STATUS OF INSURANCE AND 3RD PARTY LAWSUITS AND SETTLEMENTS: In late 2000, ENGI filed suit against UGI Utilities, Inc. in the United States District Court for the District of New Hampshire, alleging that during much of the early part of the 20th century, a predecessor to that entity "operated" the Manchester Gas Plant, as defined by the Comprehensive Environmental Response, Compensation and Liability Act (commonly referred to as "CERCLA" or "Superfund"). This claim was similar to a claim litigated and ultimately settled by the parties in the late 1990s, related to the former gas plant in Concord, NH. The case went to trial in June 2003 and was settled after 8 days of trial.

Insurance recovery efforts are complete, and confidential settlements have been entered into with all insurance company defendants. An agreement with the last remaining insurance carrier was negotiated in August 2008, under which that carrier paid ENGI's legal fees incurred in the litigation. That settlement came about after a ruling from the New Hampshire Supreme Court, in response to a question certified by the United States District Court, on allocation of coverage, and the scope and meaning of NH RSA 491:22-a, as it relates to awards of attorneys' fees. EnergyNorth Natural Gas, Inc. v. Certain Underwriters at Lloyds, 156 N.H. 333 (2007). As to allocation, the Court ruled as proposed by the carrier that insurance coverage should be allocated on a *pro rata* basis when multiple policies are triggered by an ongoing event. ENGI had argued for an "all sums" allocation approach in which the insured could choose the policy years from which to obtain

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MANCHESTER FORMER MGP

LINE
NO.

indemnity. With respect to legal fees, the Court held that "[i]f the insured has obtained rulings that require the excess insurer to indemnify it, the insured has prevailed within the meaning of RSA 491:22-b, and is immediately entitled to recover its reasonable attorneys' fees and costs. Recovery of these fees and costs does not depend on whether, after all is said and done; the excess insurer actually has to pay any indemnification. The insured becomes entitled to the fees and costs once it obtains rulings that demonstrate there is coverage under the excess insurance policy." Under that finding, the insurance carrier was obligated to reimburse legal fees even if the *pro rata* allocation analysis resulted in the carrier owning no indemnity.

Note: This summary is an overview and is not intended to be a comprehensive recitation of all relevant information relating to the site and the associated liability.

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NASHUA FORMER MGP

LINE
NO.

1. SITE LOCATION: 38 Bridge Street, Nashua, New Hampshire.
2. DATE SITE WAS FIRST INVESTIGATED: At the end of 1998, the New Hampshire Department of Environmental Services (NHDES) sent a “Notification of Site Listing and Request for Site Investigation” for the former Nashua Manufactured Gas Plant (MGP) to the former plant owners/operators: EnergyNorth Natural Gas, Inc. d/b/a National Grid (ENGI)¹, and Public Service Company of New Hampshire (PSNH) and its parent company, Northeast Utilities Services Company (NU). NHDES designated the site DES #199810022.
3. NATURE AND SCOPE OF SITE CONTAMINATION: Residual materials from the former MGP have been identified at the site and in the adjacent Nashua River. These residuals, which include tars and oils, have been found mainly in subsurface soil at discrete locations, in groundwater, and in localized river sediments.
4. SUMMARY OF MATERIAL DEVELOPMENTS AND INTERACTIONS WITH ENVIRONMENTAL AUTHORITIES:
 - Prior to the time NHDES issued its notice letter to ENGI, the US Environmental Protection Agency (EPA) was remediating contamination (asbestos) at the former Johns Manville plant located adjacent to, and downstream from the 38 Bridge Street property. In the course of that work, EPA detected what it determined to be MGP related residuals in Nashua River sediments containing asbestos. EPA sought reimbursement from ENGI and PSNH of only those incremental additional costs it incurred to dispose of sediments containing MGP related wastes in addition to asbestos. ENGI and PSNH entered into a settlement agreement with the EPA at the end of September 2000. Under the terms of the agreement, each company received a release from liability associated with the so-called Nashua River Superfund Site and contribution protection against future claims associated with that site. The settlement agreement made it clear that EPA does not contend that ENGI or PSNH contributed any asbestos to the Nashua River.
 - In response to the 1998 notice from NHDES, QST Environmental, Inc. (QST, subsequently Environmental Science and Engineering, Inc. (ESE), and later Harding ESE, Inc. (Harding ESE)), submitted a Scoping Phase

¹ In July 2012, EnergyNorth was acquired by Liberty Utilities and its legal name changed to Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty. For consistency purposes, the acronym ENGI will be used throughout this document.

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NASHUA FORMER MGP

LINE
NO.

Field Investigation Scope of Work to NHDES on behalf of ENGI in February 1999.

- In response to comments from NHDES, QST and ENGI refined the Scope of Work for the Scoping Phase Field Investigation and resubmitted to NHDES in April 1999.
- NHDES approved the refined Scoping Phase Field Investigation Scope of Work in May 1999.
- During the summer of 1999, ENGI and QST conducted the Scoping Phase Field Investigation, collecting site background information and soil, groundwater, surface water and sediment samples from the former Nashua MGP and the adjacent Nashua River.
- ENGI and ESE submitted the Scoping Phase Field Investigation Report to NHDES in December 1999.
- NHDES provided comments to ENGI and ESE in February 2000 on the Scoping Phase Field Investigation Report and requested a Phase II Investigation Scope of Work.
- On behalf of ENGI, ESE submitted a Draft Phase II Investigation Work Plan to NHDES in April 2000.
- ENGI and ESE met with the NHDES site manager in April 2000 to discuss the Draft Phase II Investigation Work Plan.
- NHDES provided written comments on the Draft Phase II Investigation Work Plan in June 2000.
- ENGI and ESE met with NHDES in August 2000 to discuss NHDES' comments on the Phase II Work Plan.
- ENGI submitted a letter to NHDES in August 2000 discussing revisions to the Draft Phase II Investigation Work Plan in response to comments from NHDES and PSNH/NU, along with a proposed schedule for implementation of the work.
- NHDES approved the Revised Phase II Work Plan for the site at the end of August 2000.

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NASHUA FORMER MGP

LINE
NO.

- NHDES provided comments to ENGI and Harding ESE on the proposed schedule for Phase II Work Plan implementation in September 2000.
- ENGI submitted an addendum to the Phase II Work Plan, including a proposed approach for risk evaluation, to NHDES in November 2000.
- Subsequent to meetings and discussions throughout 2000, ENGI and PSNH reached agreement in late 2000 regarding sharing of costs for the remediation work and transfer of management of the remediation work to ENGI.
- Harding ESE implemented the Phase II Work Plan during the fall and winter of 2000/2001. Work entailed a comprehensive field program that included the advancement of river borings and collection of sediment samples as well as the installation of borings and monitoring wells on and off the property.
- NHDES provided comments on the Phase II Work Plan addendum in February 2001.
- Harding ESE responded to NHDES comments on the Phase II Work Plan addendum in March 2001.
- In May 2001, ENGI submitted to NHDES a Draft Site Conceptual Model to assist with finalization of the Phase II Work Plan Addendum and met with NHDES to discuss.
- ENGI and Harding ESE revised the Draft Site Conceptual Model and outlined supplemental field activities to be included in the Phase II Work Plan Addendum and submitted to NHDES in June 2001.
- In July 2001, ENGI and Harding ESE met with NHDES to review the Site Conceptual Model and proposed Phase II supplemental investigation activities.
- ENGI and NHDES met in August 2001 to discuss the overall site objectives.
- In September 2001, Harding ESE, on behalf of ENGI, submitted a Phase IIB Supplemental Site Investigation (SI) Scope of Work to NHDES.

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NASHUA FORMER MGP

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NO.

- NHDES provided verbal approval for the Phase IIB Supplemental SI, and Harding ESE initiated the field program on behalf of ENGI in October 2001.
- NHDES provided written approval of the Phase IIB Supplemental SI in October 2001. A modification to the proposed scope of work relating to investigations adjacent to the gas lines was proposed and verbal approval was obtained from NHDES on November 19, 2001.
- Property owners north of the Nashua River did not provide access to install monitoring wells proposed in the Phase IIB SOW. Harding ESE completed all on-site work outlined in the Phase IIB SOW in February 2002.
- ENGI received access from PSNH to install Phase IIB monitoring wells west of the site in March 2002.
- Harding ESE installed additional groundwater monitoring wells west of the site in March and sampled all newly installed monitoring wells in April 2002. All work outlined in the Phase IIB SOW was completed except for the proposed monitoring wells north of the Nashua River where access was denied.
- The Phase II Report was submitted to NHDES in February 2003. The report was approved by NHDES in August 2003. At the time of approval, NHDES required ENGI to begin work on the Remedial Action Plan for the site, due in 2004.
- ENGI met with NHDES on November 3, 2003, to review the proposed remedial schedule, which called for the Remedial Action Plan to be submitted in July 2004, and remediation to occur in 2005. NHDES approved the schedule by letter dated December 1, 2003. In that letter they concurred with ENGI's request to divide the site into terrestrial and aquatic portions, to facilitate remediation of sediments concurrent with re-armoring of ENGI's gas mains crossing the river.
- By way of a May 5, 2004 letter, ENGI requested that NHDES waive the Remedial Action Plan (RAP) requirement for the aquatic portion of the site and allow ENGI to proceed with capping sediments in conjunction with gas main rearmoring, which was scheduled for completion in 2004. NHDES approved the request by letter dated May 14, 2004.
- ENGI held pre-application meetings with state and federal agencies (NHDES Wetlands Bureau, United States Army Corps of Engineers, United

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NO.

States Department of Fish and Wildlife, United States Environmental Protection Agency and National Oceanic and Atmospheric Administration) in June 2004. These meetings were held in advance of permit application submission for the capping/rearmoring project, to review the project and expedite the approval process. The application was submitted to these agencies as well as the City of Nashua on July 1, 2004. On July 6, 2004, NHDES deemed the permit application administratively complete. The hearing was closed on July 26, 2004 and the permit was issued in September 2004. The capping and re-armoring was completed in October 2004 and the Remedial Completion Report, submitted to NHDES in January 2005, was subsequently approved.

- In October 2005, ENGI submitted the Terrestrial Remedial Action Plan to NHDES, and the document was deemed complete by NHDES in March 2006. NHDES requested supplemental information to be submitted before ENGI proceeded with remediation, and in 2007 ENGI gathered the requested data.
- In November 2007, ENGI submitted a Workplan for DNAPL Recovery Pilot Test to NHDES and the document was approved by NHDES on November 14, 2007.
- ENGI applied for three permits required for the implementation of the NHDES-approved DNAPL pilot testing activities: Nashua Conservation Commission Permit, Nashua Zoning Board of Appeals Permit and NHDES Dredge and Fill Permit. ENGI attended numerous hearings related to obtaining the permits and obtained the three permits on April 21, 2008, April 23, 2008, and May 31, 2008, respectively.
- In June 2008, ENGI installed six extraction wells for DNAPL recovery pilot testing at the site. ENGI completed the construction of the coal tar recovery system trailer (i.e., the equipment that will be used to pump, collect and temporarily store the coal tar) in December 2008. Trenching for the subsurface piping and final system installation was delayed in late 2008 due to weather. ENGI performed manual DNAPL recovery throughout 2008 and the first three quarters of 2009.
- In Spring 2009, ENGI began trenching and final system installation activities for the DNAPL recovery pilot testing. The trenching, pump installations and system electrical work were completed in July 2009. Electrical service was

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NASHUA FORMER MGP

LINE
NO.

installed in late August 2009. The system was started up in November 2009 and has been operational since that time.

- In September 2010, ENGI submitted an Installation Summary and DNAPL Recovery Pilot test summary report to NHDES. This report recommended that DNAPL extraction activities continue. In October 2010, a work plan for an off-site groundwater investigation program to support the delineation of a Groundwater Management Zone was submitted to NHDES. This work plan was approved by NHDES in a letter dated November 5, 2010. Access negotiations and environmental permitting for the NHDES-approved investigation were completed in June 2011.
- The NHDES-approved subsurface soil and groundwater investigation program was initiated on September 26, 2011. The goal of this program was to delineate a Groundwater Management Zone for the site, and allow for the filing of a Groundwater Management Permit (GMP). Due to known asbestos in the off-site area to be investigated, ENGI submitted an "Inactive Asbestos Disposal Site (ADS) Work Plan"; NHDES approved the asbestos work plan in October 2011. Soil boring and well installation work was performed between October and December 2011. An In-active ADS Site Completion Report was submitted to and accepted by NHDES on May 4, 2012. Groundwater sampling events were conducted in February and May 2012. A meeting to discuss the preliminary results of the Groundwater Management Zone (GMZ) investigation program with NHDES took place on August 16, 2012. It was agreed that two more rounds of groundwater sampling should occur before a delineation of the GMZ is considered.
- On November 27, 2012 and December 6, 2012, 8.25 feet and 10.83 feet of DNAPL appeared in MW-106, situated in the foot print of historical Holder #2. A weekly monitoring and removal plan was initiated at this time and is ongoing as of July 2013. To date, 109 gallons of DNAPL has been removed manually, in addition to the system removal discussed above.
- In January 2013, a Supplemental Investigation Report (SIR) and DNAPL Recovery System Pilot Test Progress report was submitted to NHDES reporting on additional investigation activities, including the installation of sixteen additional wells in 2011, and the May and September 2012 (second and third of three) rounds of sampling to define groundwater quality and hydrogeologic conditions at the site, so that the GMZ can be delineated. Additionally, the report includes information regarding DNAPL recovery system O&M activities and DNAPL recovery rates demonstrating that the

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP.
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NASHUA FORMER MGP

LINE
NO.

system still effectively recovers DNAPL. A meeting with NHDES took place on March 22, 2013, to discuss these results and next steps.

- NHDES responded to the January 2013 submittal via letter dated May 21, 2013, accepting the SI Report and authorizing ENGI to proceed with the delineation of the GMZ in order to submit a Groundwater Management Permit (GMP) application, and the preparation of a revised Remedial Action Plan (RAP) for the terrestrial portion of the site. NHDES allows ENGI to utilize manual removal of DNAPL as these methods are more effective than the automated recovery system.
- ENGI responded to the NHDES letter on June 19 with a schedule targeting December 31, 2013, for submittal of the GMP application and revised RAP.
- In December 2013, ENGI submitted a request to revise the RAP. The purpose of the request was to summarize activities conducted since submittal of the 2013 Supplemental Investigation Report and to propose a revision to the approved RAP for the area on site known as "Holder # 2."
- The RAP submitted in 2005 selected asphalt capping in the area of Holder #2. The entire area of the Holder was not designated to be capped with asphalt. At the time of the preparation of the RAP, separate phase NAPL was not considered to be present in recoverable quantities in Holder #2. In order to address what appears to be a limited area and quantity of NAPL in a monitoring well in Holder #2, continued manual NAPL recovery from two additional wells in the Holder #2 area was proposed as part of the GMP monitoring program.
- In addition to the NAPL recovery activity, the area of asphalt capping was proposed to be expanded to include all of former Holder #2. This expansion of paving will also address the asbestos contaminated material (ACM) present in this area of the site. The asphalt cap detail presented in the proposed RAP revision will be modified (as necessary) to address the relevant solid waste regulations for ACM in soil.
- On June 4, 2014, the NHDES approved of the requested RAP revision and required that a RAP Summary Report, with the necessary engineering details for the selected remedies, be provided. ENGI plans to submit this RAP Summary Report by December 31, 2014.

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- The GMP Application was submitted in March 2014. The GMP proposed a list of monitoring wells and analytical methods in order to monitor the Groundwater Management Zone.
- On June 5, 2014, the NHDES approved the GMP application. This Permit was issued for a period of five years requiring the monitoring of groundwater quality, assessing and recovering any free product found, and visually inspecting the Nashua River sediment cap area. During the first year of the Permit, monitoring events will be conducted in October 2014 and April 2015, and each successive April and October. Annual summary reports are submitted to the NHDES in January of each year.
- The first groundwater monitoring annual summary report was submitted to NHDES in February 2015, and included the groundwater data from the first GMP round of sampling on October 27, 2014.
- ENGI submitted the draft Activity and Use Restriction (AUR) and RAP Engineering Design details for the cap on September 14, 2015. ENGI received comments from NHDES on December 15, 2016. NHDES altered the design to include an impermeable capping layer, and incorporation of standards in the Waste Management Bureau's Asbestos Disposal Site rules. As ENGI is planning to pave the Nashua property in 2018, the cap will be installed in conjunction with this capital project.
- In May 2017, the NHDES requested by letter that all active hazardous waste sites managed by the Hazardous Waste Remediation Bureau include sampling for Per- and Polyfluoroalkyl Substances (PFAS) in one of their groundwater sampling rounds, as part of a statewide study of these compounds. ENGI fulfilled this request during regularly scheduled sampling in 2018.
- The capping remedy was planned for 2018 in conjunction with an overall paving of the property, however a portion of the City's sewer pipe that transects the property collapsed in early February 2018 prompting the City to plan a lining upgrade to it during summer 2018. This event, coupled with further delays caused by the COVID-19 pandemic, has caused the remedy construction to be pushed out to 2021.
- In a letter dated May 2, 2019, NHDES approved ENGI's 5-year Groundwater Management Permit (GMP) renewal application decreasing the frequency of sampling for all but two wells in the perimeter groundwater

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LINE
NO.

management zone. Additionally, NHDES required that a second confirmatory round of PFAS samples be taken in the 2019 GMP monitoring round.

- In the same May 2, 2019 letter, NHDES approved GZA GeoEnvironmental, Inc's (GZA) proposed cap design transmitted to them on January 30, 2019. The cap design was altered to require an impermeable barrier only under "non-paved" surfaces.
- The cap installation and subsequent paving of the entire property had been pushed out to 2021, due to delays in permitting and the COVID-19 pandemic. **During the 2020-21 period, ENGI worked with the City of Nashua to assess the condition of subsurface stormwater and sewer lines, and prepared applications for NHDES Alteration of Terrain permitting for the property paving. The Alteration of Terrain permit for the project was received on February 11, 2022.**
- **In August 2021, groundwork began in the area of the yard labeled the Phase 1 area, where the engineered cap is to be installed. All work is being done under a NHDES-approved Asbestos Disposal Site Work Plan, and is ongoing .**
- **NEW HAMPSHIRE SITE REMEDIATION PROGRAM PHASE: All Supplemental Phase II Site Investigation Work that could be performed (based on property access) has been completed. Phase II Report was submitted to NHDES in February 2003, and approved by NHDES on August 28, 2003. Remediation of the Nashua River sediments was completed in the fall of 2004. A Remedial Action Plan (RAP) for the upland and groundwater was submitted in October 2005, and approved by NHDES in March 2006. DNAPL recovery is on-going. A Groundwater Management Permit was granted on June 5, 2014. A RAP Summary, involving the asphalt capping of the area over Holder #2 and continued groundwater monitoring, was submitted on April 2, 2015. A Monitoring Summary and Progress Report was submitted by ENGI on February 7, 2015. NHDES accepted the RAP Summary on April 10, 2015, with the provisions that ENGI submit the draft Activity and Use Restriction (AUR) and final engineering design plan for the cap by September 15, 2015. ENGI submitted the draft Activity and Use Restriction (AUR) and RAP Engineering Design details for the cap on September 14, 2015. NHDES responded to ENGI with their comments on December 15, 2016. **Design for the engineered cap remedy is complete and approved by NHDES. ENGI received the Alteration of****

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LINE
NO.

Terrain permit from NHDES in early 2022. The work to prepare the site for capping and paving began in August 2021.

- **The existing subsurface propane piping was located and removed or retired in preparation to install an overhead piping system for conveyance of propane to the plant.**
- **Additional subsurface preparation work included installation of piers for supports for the overhead propane piping, installation of a new containment berm around the propane day tank, and installation of portions of the new drainage system leading to the retention forebay in the Phase 2 area. The geotextile liner material installation was begun over completed portions of the Phase 1 area, to date.**
- **As of the writing of this summary, work continues on site with the installation of the cap and building of the stormwater detention leach field. The project should be complete and the site completely paved by Fall 2022.**

5. **HISTORY AND CURRENT STATUS OF USE AND OWNERSHIP:** The Nashua Gas Light Company built the original coal gas facility in 1852 or 1853. In 1889, the Nashua Gas Light Company merged with the Nashua Electric Company to form the Nashua Light, Heat and Power Company (NHLPC). In 1914, the NHLPC merged with the Manchester Traction Light & Power Company, and PSNH acquired the facility in 1926. The MGP facility was upgraded and expanded. In 1945, PSNH divested the gas operations to Gas Service, Inc. Gas production was eliminated in 1952 when natural gas was supplied to the city via pipeline. In 1981, Gas Service, Inc. merged with Manchester Gas Company to form ENGI. ENGI currently owns the majority of the former gas plant property.

6. **LISTING AND STATUS OF INSURANCE AND 3RD PARTY LAWSUITS AND SETTLEMENTS:** The EPA made a claim against ENGI and PSNH related to the so-called Nashua River Asbestos Site located adjacent to the former MGP. EPA was removing asbestos from the Nashua River, when some was found to be mixed with wastes allegedly from the MGP. Without admitting any facts or liability, by agreement effective December 21, 2000, ENGI resolved EPA's claim in exchange for a payment of \$387,371.46, plus interest accrued between settlement and final approval of an administrative consent order by EPA.

ENGI and PSNH have entered into a confidential Site Responsibility and Indemnity Agreement effective as of September 15, 2000, which governs the financial and

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NASHUA FORMER MGP

LINE
NO.

decision-making responsibilities of the two companies through the remainder of site study and remediation. Under this agreement, ENGI will take the lead on site investigation and remediation.

Numerous, confidential insurance settlements have been entered into. A jury trial commenced against the London Market Insurers and Century Indemnity on November 1, 2005. On November 14, 2005, the jury returned a verdict in favor of EnergyNorth finding that the defendants were obligated to indemnify EnergyNorth for response costs incurred at the site. The Court then awarded ENGI its reasonable costs and attorneys fees to be paid by the defendants. Subsequent to the verdict, the London Market and ENGI entered into a confidential settlement. Century appealed to the First Circuit Court of Appeals in the summer of 2006. However, on the day its brief was due at the First Circuit, Century withdrew its appeal. Because the site has not yet been remediated, the jury was not asked to make a damage determination. Future proceedings will take place after the remedy has been approved by the NHDES to determine the indemnification amounts to be paid by Century. The New Hampshire Supreme Court's ruling and guidance on the proper manner in which costs are to be allocated among insurers (discussed in more detail in the Manchester MGP summary) will be used in the calculation of that figure.

Note: This summary is an overview only and is not intended to be a comprehensive recitation of all relevant information relating to the site and the associated liability.

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. d/b/a LIBERTY
MANUFACTURED GAS PLANT ENVIRONMENTAL COSTS

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2022 SUMMARY BY SITE

		1101	1102	1105	1106	1107		1108	1109		
							100 %	INSURANCE	INSURANCE		
LINE			LEGAL	CONSULTING	REMEDATION	SETTLEMENT	RECOVERABLE	& THIRD	& THIRD	TOTAL	
NO.	SITE	REF NO.	EXPENSES	EXPENSES	EXPENSES	EXPENSES	EXPENSES	PARTY	PARTY		
								EXPENSES	RECOVERIES		
1	Concord Pond	DEF056	0.00	371,194.82	0.00	0.00	9,888.99	381,083.81		302,532.29	
2	Concord MGP (excludes Relief Holder)	DEF077	0.00	81,185.19	0.00	0.00	27,222.25	108,407.44		38,415.91	
3	Concord MGP (Relief Holder)	DEF077	37,199.00	157,345.37	0.00	0.00	36.26	194,580.63		486,595.63	
4	Laconia/Liberty Hill	DEF086	0.00	46,580.03	0.00	0.00	2,304.75	48,884.78		48,884.78	
5	Manchester MGP	DEF057	0.00	139,492.16	0.00	0.00	33,180.09	172,672.25		120,888.65	
6	Nashua MGP	DEF054	1,101.00	248,518.41	1,105.00	1,106.00	183,817.49	430,126.90		339,064.67	
7	General Expenses	DEF064	0.00	0.00	0.00	0.00	8,345.91	8,345.91		8,345.91	
										0.00	
Total Pool Activity			38,300.00	1,044,315.98	1,105.00	1,106.00	264,795.74	1,344,101.72	293,123.00	(298,017.88)	1,344,727.84

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LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. d/b/a LIBERTY
MANUFACTURED GAS PLANT ENVIRONMENTAL COSTS
NASHUA - REMEDIATION
PROJECT DEF054

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Schedule 3 2
MGP Sites
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LINE NO.	VENDOR	REF NO.	1101	1102	1105	1106	1107	SUBTOTAL EXPENSES	1108	1109	TOTAL SUBMITTED
			LEGAL EXPENSES	CONSULTING EXPENSES	REMEDIATION EXPENSES	SETTLEMENT EXPENSES	OTHER EXPENSES		INSURANCE & THIRD PARTY EXPENSE	INSURANCE & THIRD PARTY RECOVERIES	
1	GZA GEOENVIRONMENTAL INC	0815089		3,065.00				3,065.00			3,065.00
2	GZA GEOENVIRONMENTAL INC	0816668		1,182.90				1,182.90			1,182.90
3	NNOVATIVE ENG NEERING SOLUTIONS, INC.	13882		2,058.64				2,058.64			2,058.64
4	NNOVATIVE ENG NEERING SOLUTIONS, INC.	13914		3,457.67				3,457.67			3,457.67
5	CLEAN HARBORS	1003857553					9,973.81	9,973.81			9,973.81
6	CLEAN HARBORS	1003857551					1,006.07	1,006.07			1,006.07
7	CASEY MARY	EXP0801-091021					50.52	50.52			50.52
9	NNOVATIVE ENG NEERING SOLUTIONS, INC.	13943		20,467.15				20,467.15			20,467.15
10	ANDREW MILLS	EXP0802-083121					60.48	60.48			60.48
11	ANDERSON WELD NG LLC	596					7,185.00	7,185.00			7,185.00
12	NNOVATIVE ENG NEERING SOLUTIONS, INC.	13969		6,405.06				6,405.06			6,405.06
13	NH DEPT OF ENVIRONMENTAL SERVICES	199810022 8323 A					313.68	313.68			313.68
14	NNOVATIVE ENG NEERING SOLUTIONS, INC.	13943		20,467.15				20,467.15			20,467.15
15	ANDREW MILLS	EXP09-103121					20.16	20.16			20.16
17	NNOVATIVE ENG NEERING SOLUTIONS, INC.	13996		5,580.00				5,580.00			5,580.00
18	ANDERSON WELD NG LLC	610		2,275.00				2,275.00			2,275.00
19	NNOVATIVE ENG NEERING SOLUTIONS, INC.	14023		4,976.49				4,976.49			4,976.49
20	ANDREW MILLS	EXP1101-122121					20.16	20.16			20.16
21	GZA GEOENVIRONMENTAL INC	0827823		20,298.36				20,298.36			20,298.36
22	GZA GEOENVIRONMENTAL INC	0827307		48,324.46				48,324.46			48,324.46
23	NH DEPT OF ENVIRONMENTAL SERVICES	199810022 012722					90.68	90.68			90.68
24	NNOVATIVE ENG NEERING SOLUTIONS, INC.	14054		16,544.55				16,544.55			16,544.55
25	NNOVATIVE ENG NEERING SOLUTIONS, INC.	14081		7,377.50				7,377.50			7,377.50
26	GZA GEOENVIRONMENTAL INC	0830818		14,231.80				14,231.80			14,231.80
28	CLEAN HARBORS	1004068680					1,626.34	1,626.34			1,626.34
29	ESMI OF NH	424890					2,123.30	2,123.30			2,123.30
30	NNOVATIVE ENG NEERING SOLUTIONS, INC.	14104		5,102.72				5,102.72			5,102.72
31	ESMI OF NH	425786					3,086.10	3,086.10			3,086.10
32	ESMI OF NH	425786					175.92	175.92			175.92
33	ESMI OF NH	426111					2,064.60	2,064.60			2,064.60
34	ESMI OF NH	426111					117.68	117.68			117.68
35	ESMI OF NH	427055					4,833.90	4,833.90			4,833.90
36	ESMI OF NH	427055					275.53	275.53			275.53
37	ESMI OF NH	428087					997.20	997.20			997.20

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. d/b/a LIBERTY
MANUFACTURED GAS PLANT ENVIRONMENTAL COSTS
NASHUA - REMEDIATION
PROJECT DEF054

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MGP Sites
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LINE NO.	VENDOR	REF NO.	1101 LEGAL EXPENSES	1102 CONSULTING EXPENSES	1105 REMEDATION EXPENSES	1106 SETTLEMENT EXPENSES	1107 OTHER EXPENSES	SUBTOTAL EXPENSES	1108 INSURANCE & THIRD PARTY EXPENSE	1109 INSURANCE & THIRD PARTY RECOVERIES	TOTAL SUBMITTED
38	ESMI OF NH	428087					56.85	56.85			56.85
39	NNOVATIVE ENG NEERING SOLUTIONS, INC.	14135		11,358.10				11,358.10			11,358.10
40	ESMI OF NH	429270					476.38	476.38			476.38
41	ESMI OF NH	429250					4,136.85	4,136.85			4,136.85
42	ESMI OF NH	429250					235.80	235.80			235.80
43	ESMI OF NH	429266					1,393.20	1,393.20			1,393.20
44	ESMI OF NH	429270					8,357.85	8,357.85			8,357.85
45	ESMI OF NH	430161					581.15	581.15			581.15
46	ESMI OF NH	430161					10,195.65	10,195.65			10,195.65
47	NH DEPT OF ENVIRONMENTAL SERVICES	199810022 042822					154.95	154.95			154.95
48	ESMI OF NH	431318					7,938.45	7,938.45			7,938.45
49	ESMI OF NH	431318					452.50	452.50			452.50
50	GZA GEOENVIRONMENTAL INC	0835263		27,218.46				27,218.46			27,218.46
51	ESMI OF NH	432120					5,043.15	5,043.15			5,043.15
52	ESMI OF NH	432120					287.45	287.45			287.45
53	ESMI OF NH	432893					50.17	50.17			50.17
54	ESMI OF NH	432893					880.20	880.20			880.20
55	ESMI OF NH	433522					4,360.05	4,360.05			4,360.05
56	ESMI OF NH	433522					196.76	196.76			196.76
57	ESMI OF NH	434619					1,004.10	1,004.10			1,004.10
58	LEIGHTON A. WHITE INC.	23024					57,653.27	57,653.27			57,653.27
59	LEIGHTON A. WHITE INC.	23082					18,752.47	18,752.47			18,752.47
60	NNOVATIVE ENG NEERING SOLUTIONS, INC.	14188		19,524.50				19,524.50			19,524.50
61	ESMI OF NH	437288					4,050.90	4,050.90			4,050.90
62	ESMI OF NH	437288					230.91	230.91			230.91
64	ESMI OF NH	437876					19,180.35	19,180.35			19,180.35
65	ESMI OF NH	437876					1,093.28	1,093.28			1,093.28
66	NNOVATIVE ENG NEERING SOLUTIONS, INC.	14163		7,500.90				7,500.90			7,500.90
67								0.00			0.00
68	Environmental Staff Time						1,926.67	1,926.67			1,926.67
Total Pool Activity			1,101.00	248,518.41	1,105.00	1,106.00	183,817.49	430,126.90	1,108.00	(97,691.23)	331,326.67

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LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. d/b/a LIBERTY
MANUFACTURED GAS PLANT ENVIRONMENTAL COSTS
CONCORD POND - REMEDIATION
PROJECT DEF056

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Schedule 3 2
MGP Sites
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LINE NO.	VENDOR	REF NO.	1101 LEGAL EXPENSES	1102.00 CONSULTING EXPENSES	1105 REMEDIAION EXPENSES	1106 SETTLEMENT EXPENSES	1107 OTHER EXPENSES	SUBTOTAL EXPENSES	1108 INSURANCE & THIRD PARTY EXPENSES	1109 INSURANCE & THIRD PARTY RECOVERIES	TOTAL SUBMITTED
1	ANCHOR QEA LLC	02955		48,037.20				48,037.20			48,037.20
2	GEI CONSULTANTS, INC.	3092954		6,182.42				6,182.42			6,182.42
3	CITY OF CONCORD	22000267					1,020.00	1,020.00			1,020.00
4	ANCHOR QEA LLC	03612		66,021.94				66,021.94			66,021.94
5	GEI CONSULTANTS, INC.	3094516		4,132.45				4,132.45			4,132.45
6	NH DEPT OF ENV RONMENTAL SERVICES	199212014 4042B					1,452.47	1,452.47			1,452.47
7	ANCHOR QEA LLC	04148		24,148.20				24,148.20			24,148.20
9	ANCHOR QEA LLC	04425		19,797.63				19,797.63			19,797.63
10	GEI CONSULTANTS, INC.	3096258		1,017.42				1,017.42			1,017.42
11	GEI CONSULTANTS, INC.	3097711		1,007.08				1,007.08			1,007.08
12	CLEAN HARBORS	1003899569					1,646.51	1,646.51			1,646.51
14	ANCHOR QEA LLC	05119		51,443.85				51,443.85			51,443.85
15	ANCHOR QEA LLC	05659		31,461.32				31,461.32			31,461.32
16	GEI CONSULTANTS, INC.	3100642		223.18				223.18			223.18
17	ANCHOR QEA LLC	06332		28,984.48				28,984.48			28,984.48
18	GEI CONSULTANTS, INC.	3099637		973.83				973.83			973.83
19	GEI CONSULTANTS, INC.	3102182		2,182.09				2,182.09			2,182.09
20	NH DEPT OF ENV RONMENTAL SERVICES	199212014 012722					979.76	979.76			979.76
21	CLEAN HARBORS	1004036917					2,892.94	2,892.94			2,892.94
22	ANCHOR QEA LLC	06944		31,527.44				31,527.44			31,527.44
23	GEI CONSULTANTS, INC.	3104287		1,853.93				1,853.93			1,853.93
24	ANCHOR QEA LLC	07407		19,944.50				19,944.50			19,944.50
26	GEI CONSULTANTS, INC.	3105662		2,635.65				2,635.65			2,635.65
27	ANCHOR QEA LLC	08072		8,715.22				8,715.22			8,715.22
28	ANCHOR QEA LLC	08380		5,995.25				5,995.25			5,995.25
29	NH DEPT OF ENV RONMENTAL SERVICES	199212014 042822					54.43	54.43			54.43
30	CLEAN HARBORS	1004068680					1,626.34	1,626.34			1,626.34
31	ANCHOR QEA LLC	08984		4,043.50				4,043.50			4,043.50
33	GEI CONSULTANTS, INC.	3111045		8,535.29				8,535.29			8,535.29
34	GEI CONSULTANTS, INC.	3109033		2,330.95				2,330.95			2,330.95
35								-			0.00
36	Environmental Staff Time						216.54	216.54			216.54
	Total Pool Activity		0.00	371,194.82	0.00	0.00	9,888.99	381,083.81	0.00	(78,551.52)	302,532.29

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LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. d/b/a LIBERTY
MANUFACTURED GAS PLANT ENVIRONMENTAL COSTS
MANCHESTER - REMEDIATION
PROJECT DEF057

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Schedule 3 2
MGP Sites
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LINE NO.	VENDOR	REF NO.	1101 LEGAL EXPENSES	1102 CONSULTING EXPENSES	1105 REMEDIAION EXPENSES	1106 SETTLEMENT EXPENSES	1107 OTHER EXPENSES	SUBTOTAL EXPENSES	1108 INSURANCE & THIRD PARTY EXPENSE	1109 INSURANCE & THIRD PARTY RECOVERIES	TOTAL SUBMITTED
2	GZA GEOENVIRONMENTAL INC	0818690		22,733.68				22,733.68			22,733.68
3	GZA GEOENVIRONMENTAL INC	0807134		15,469.92				15,469.92			15,469.92
4	ESMI OF NH	398407					783.84	783.84			783.84
5	CLEAN HARBORS	1003857554					2,712.91	2,712.91			2,712.91
6	CLEAN HARBORS	1003857552					4,135.74	4,135.74			4,135.74
7	GZA GEOENVIRONMENTAL INC	0820374		12,363.69				12,363.69			12,363.69
9	CLEAN HARBORS	1003899586					6,764.09	6,764.09			6,764.09
10	CLEAN HARBORS	1003899580					125.95	125.95			125.95
11	CLEAN HARBORS	1003926677					220.99	220.99			220.99
14	GZA GEOENVIRONMENTAL INC	0825914		28,248.14				28,248.14			28,248.14
15	GZA GEOENVIRONMENTAL INC	0827858		7,723.30				7,723.30			7,723.30
16	CLEAN HARBORS	1004036920					948.88	948.88			948.88
19	CLEAN HARBORS	1004102481					5,777.31	5,777.31			5,777.31
20	NH DEPT OF ENVIRONMENTAL SERVICES	2000003011 042822					581.87	581.87			581.87
21	CLEAN HARBORS	1004148869					10,981.62	10,981.62			10,981.62
23	GZA GEOENVIRONMENTAL INC	0832766		8,282.41				8,282.41			8,282.41
24	GZA GEOENVIRONMENTAL INC	0837385		44,671.02				44,671.02			44,671.02
26								0.00			0.00
27	Environmental Staff Time						146.89	146.89			146.89
Total Pool Activity			0.00	139,492.16	0.00	0.00	33,180.09	172,672.25	0.00	(51,783.60)	120,888.65

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LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. d/b/a LIBERTY
MANUFACTURED GAS PLANT ENVIRONMENTAL COSTS
GENERAL EXPENSES
PROJECT DEF064

Schedule 3.2
MGP Sites
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LINE NO.	VENDOR	REF NO.	1101 LEGAL EXPENSES	1102 CONSULTING EXPENSES	1105 REMEDIATION EXPENSES	1106 SETTLEMENT EXPENSES	1107 OTHER EXPENSES	SUBTOTAL EXPENSES	1108 INSURANCE & THIRD PARTY EXPENSE	1109 INSURANCE & THIRD PARTY RECOVERIES	TOTAL SUBMITTED
1	CASEY MARY	EXP0801-091021					7.42	7.42			7.42
2								0.00			0.00
3	Environmental Staff Time						8,338.49	8,338.49			8,338.49
Total Pool Activity			0.00	0.00	0.00	0.00	8,345.91	8,345.91	0.00	0.00	8,345.91

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. d/b/a LIBERTY
MANUFACTURED GAS PLANT ENVIRONMENTAL COSTS
CONCORD MGP - REMEDIATION
PROJECT DEF077

REDACTED
Schedule 3.2
MGP Sites
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LINE NO.	VENDOR	REF NO.	1101 LEGAL EXPENSES	1102 CONSULTING EXPENSES	1105 REMEDIATION EXPENSES	1106 SETTLEMENT EXPENSES	1107 OTHER EXPENSES	SUBTOTAL EXPENSES	1108 INSURANCE & THIRD PARTY EXPENSE	1109 INSURANCE & THIRD PARTY RECOVERIES	TOTAL SUBMITTED
1	JOE GAUCI LANDSCAP NG LLC	2021-5A-3576					585.00	585.00			585.00
2	JOE GAUCI LANDSCAP NG LLC	2021-6-3576					660.00	660.00			660.00
3	CITY OF CONCORD	22000267					1,020.00	1,020.00			1,020.00
4	GZA GEOENVIRONMENTAL INC	0818976		11,426.25				11,426.25			11,426.25
5	GZA GEOENVIRONMENTAL INC	0807135		24,782.95				24,782.95			24,782.95
6	CASEY MARY	EXP0701-073121					39.09	39.09			39.09
7	JOE GAUCI LANDSCAP NG LLC	2021-7-3576					700.00	700.00			700.00
8	CITY OF CONCORD GSD	410184-001 083021					10.20	10.20			10.20
9	NH DEPT OF ENV RONMENTAL SERVICES	198904063 1479B					2,369.54	2,369.54			2,369.54
11	GZA GEOENVIRONMENTAL INC	0821673		8,996.49				8,996.49			8,996.49
12	CITY OF CONCORD GSD	410184-001 0921					10.20	10.20			10.20
13	CITY OF CONCORD GSD	410184-001 0721					10.50	10.50			10.50
14	NH DEPT OF ENV RONMENTAL SERVICES	198904063 1479 A					1,829.05	1,829.05			1,829.05
15	CITY OF CONCORD GSD	410184-001 1021					10.20	10.20			10.20
16	JOE GAUCI LANDSCAP NG LLC	2021-8-3576 REVISED					1,715.00	1,715.00			1,715.00
18	JOE GAUCI LANDSCAP NG LLC	2021-9-3576					525.00	525.00			525.00
19	CITY OF CONCORD GSD	410184-001 113021					10.20	10.20			10.20
20	JOE GAUCI LANDSCAP NG LLC	2021-10-3576					467.00	467.00			467.00
21	CLEAN HARBORS	1003968358					7,545.36	7,545.36			7,545.36
22	GZA GEOENVIRONMENTAL INC	0825959		16,215.59				16,215.59			16,215.59
23	JOE GAUCI LANDSCAP NG LLC	2021-11-3576					245.00	245.00			245.00
24	CITY OF CONCORD	410184-001 NOV 2021					10.20	10.20			10.20
25	CLEAN HARBORS	1003899595					506.09	506.09			506.09
26	GZA GEOENVIRONMENTAL INC	0828847		10,685.71				10,685.71			10,685.71
27	CLEAN HARBORS	1004024891					245.25	245.25			245.25
28	NH DEPT OF ENV RONMENTAL SERVICES	198904063 012722					3,211.43	3,211.43			3,211.43
29	CITY OF CONCORD GSD	410184-001 0122					10.20	10.20			10.20
30	CLEAN HARBORS	1004036917					2,892.93	2,892.93			2,892.93
31	NH DEPT OF ENV RONMENTAL SERVICES	015477748FLE Q1 2021					1,296.00	1,296.00			1,296.00
32	CITY OF CONCORD GSD	410184-001 030122					10.20	10.20			10.20
34	CITY OF CONCORD GSD	410184-001 0422					10.20	10.20			10.20
35	CITY OF CONCORD GSD	410184-001 0522					10.20	10.20			10.20
37	GZA GEOENVIRONMENTAL INC	0837477		9,078.20				9,078.20			9,078.20
38								0.00			0.00
39	Environmental Staff Time						1,268.21	1,268.21			1,268.21
40	Total Pool Activity		0.00	81,185.19	0.00	0.00	27,222.25	108,407.44	0.00	(69,991.53)	38,415.91

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LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. d/b/a LIBERTY
MANUFACTURED GAS PLANT ENVIRONMENTAL COSTS
CONCORD GAS HOLDER
PROJECT DEF077

Schedule 3.2
MGP Sites
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LINE NO.	VENDOR	REF NO.	1101 LEGAL EXPENSES	1102 CONSULTING EXPENSES	1105 REMEDIATION EXPENSES	1106 SETTLEMENT EXPENSES	1107 OTHER EXPENSES	SUBTOTAL EXPENSES	1108 INSURANCE & THIRD PARTY EXPENSE	1109 INSURANCE & THIRD PARTY RECOVERIES	TOTAL SUBMITTED
1	ORR & RENO, P.A.	129019	8,359.00					8,359.00			8,359.00
2	ORR & RENO, P.A.	129341	546.00					546.00			546.00
3	ORR & RENO, P.A.	129824	468.00					468.00			468.00
4	ORR & RENO, P.A.	130445	546.00					546.00			546.00
5	GZA GEOENVIRONMENTAL INC	0820439		9,471.98				9,471.98			9,471.98
6	ORR & RENO, P.A.	131917	3,315.00					3,315.00			3,315.00
7	ORR & RENO, P.A.	131081	13,152.00					13,152.00			13,152.00
8	ORR & RENO, P.A.	131223	7,520.50					7,520.50			7,520.50
9	GZA GEOENVIRONMENTAL INC	0825957		15,357.31				15,357.31			15,357.31
10	HISTORIC PRESERVATION REDEVELOPMENT, LLC	APP #1						0.00	84,745.00		84,745.00
11	ORR & RENO, P.A.	132501	702.00					702.00			702.00
12	ORR & RENO, P.A.	133029	1,245.50					1,245.50			1,245.50
13	GZA GEOENVIRONMENTAL INC	0818835		32,123.49				32,123.49			32,123.49
14	ORR & RENO, P.A.	133570	156.00					156.00			156.00
15	CASEY MARY	EXP0118-011822					36.26	36.26			36.26
16	ORR & RENO, P.A.	014684-0126	369.00					369.00			369.00
17	ORR & RENO, P.A.	134689	656.00					656.00			656.00
18	ORR & RENO, P.A.	135704	164.00					164.00			164.00
19	HISTORIC PRESERVATION REDEVELOPMENT, LLC	APPLICATION #2						0.00	33,750.00		33,750.00
20	HISTORIC PRESERVATION REDEVELOPMENT, LLC	APP# 3						0.00	173,520.00		173,520.00
21	GZA GEOENVIRONMENTAL INC	0836284		10,380.43				10,380.43			10,380.43
22	GZA GEOENVIRONMENTAL INC	0836285		12,807.97				12,807.97			12,807.97
23	GZA GEOENVIRONMENTAL INC	0837392		77,204.19				77,204.19			77,204.19
24	Total Pool Activity		37,199.00	157,345.37	0.00	0.00	36.26	194,580.63	292,015.00	0.00	486,595.63

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. d/b/a LIBERTY
MANUFACTURED GAS PLANT ENVIRONMENTAL COSTS
LIBERTY HILL - REMEDIATION
PROJECT DEF086

Schedule 3.2
MGP Sites
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LINE NO.	VENDOR	REF NO.	1101 LEGAL EXPENSES	1102 CONSULTING EXPENSES	1105 REMEDATION EXPENSES	1106 SETTLEMENT EXPENSES	1107 OTHER EXPENSES	SUB-TOTAL EXPENSES	1108 INSURANCE & THIRD PARTY EXPENSES	1109 INSURANCE & THIRD PARTY RECOVERIES	TOTAL SUBMITTED
1	MULLER'S LAWN & LANDSCAPING, LLC	5711					800.00	800.00			800.00
2	GEI CONSULTANTS, INC.	3096256		912.45				912.45			912.45
3	MULLER'S LAWN & LANDSCAPING, LLC	5755					800.00	800.00			800.00
4	GEI CONSULTANTS, INC.	3097710		14,013.37				14,013.37			14,013.37
5	CLEAN HARBORS	1003926676					704.75	704.75			704.75
6	GEI CONSULTANTS, INC.	3100640		7,625.60				7,625.60			7,625.60
7	GEI CONSULTANTS, INC.	3099043		11,904.23				11,904.23			11,904.23
8	GEI CONSULTANTS, INC.	3102181		263.84				263.84			263.84
9	GEI CONSULTANTS, INC.	3104286		957.58				957.58			957.58
10	GEI CONSULTANTS, INC.	3105660		1,105.68				1,105.68			1,105.68
11	GEI CONSULTANTS, INC.	3107208		7,100.94				7,100.94			7,100.94
12	GEI CONSULTANTS, INC.	3109032		2,696.34				2,696.34			2,696.34
13								0.00			0.00
14	Environmental Staff Time						0.00	0.00			0.00
Total Pool Activity			0.00	46,580.03	0.00	0.00	2,304.75	48,884.78			48,884.78

Filed under the following protective orders:
Order No. 22,853 dated February 18, 1998, in Docket No. DR 97-130
Order No. 23,316 dated October 11, 1999, in Docket No. DG 99-132

Schedule 3.3
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Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Environmental Remediation - MGPs
Tariff page 99

		Concord Pond														DEF056		
		(thru - 9/07)	(9/07 - 9/08)	(9/08 - 9/09)	(9/09 - 9/10)	(9/10 - 9/11)	(9/11 - 9/12)	(9/12 - 6/13)	(7/13 - 6/14)	(7/14 - 6/15)	(7/15 - 6/16)	(7/16 - 6/17)	(7/17 - 6/18)	(7/18 - 6/19)	(7/19 - 6/20)	(7/20 - 6/21)	(7/21 - 6/22)	subtotal
		pool #1 - #6	pool #9	pool #10	pool #11	pool #12	pool #13	pool #14	pool #15	pool #16	pool #17	pool #18	pool #19	pool #20	pool #21	pool #22	pool #23	
1	1 Remediation costs (i.o. 500061)	5,883,850	95,374	128,187	143,000	249,160	86,412	78,387	40,314	89,626	43,204	102,196	138,701	87,282	187,358	362,700	381,084	8,096,832
2	2 Remediation costs (i.o. 500005)																	0
3	A Subtotal - remediation costs	5,883,850	95,374	128,187	143,000	249,160	86,412	78,387	40,314	89,626	43,204	102,196	138,701	87,282	187,358	362,700	381,084	8,096,832
4	4 Cash recoveries (i.o. 500061)	-2,075,704	0	-12,808	-6,064	-32,417	-5,173	-19,318	-7,990	-11,392	-8,614	-14,047	-11,345	-14,998	-14,594	-49,657	-78,552	-2,362,471
5	5 Cash recoveries (i.o. 500004)	-445,985																-445,985
6	6 Recovery costs (i.o. 500004)	623,784	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	623,784
7	7 Transfer Credit from Gas Restructuring																	0
8	B Subtotal - net recoveries	-1,897,905	0	-12,808	-6,064	-32,417	-5,173	-19,318	-7,990	-11,392	-8,614	-14,047	-11,345	-14,998	-14,594	-49,657	-78,552	-2,194,672
9	9 A-B Total net expenses to recover	3,985,944	95,374	115,579	136,936	216,743	81,238	59,069	32,324	78,235	34,590	88,148	127,356	72,283	172,764	313,043	302,532	5,912,160
10	10 Surcharge revenue:																	
11	11 Act June 1998 - October 1998	-54,889																-54,889
12	12 Act November 1998 - October 1999	-538,143																-538,143
13	13 Act November 1999 - October 2000	-760,871																-760,871
14	14 Act November 2000 - October 2001	-640,539																-640,539
15	15 Act November 2001 - October 2002	-625,114																-625,114
16	16 Act November 2002 - October 2003	-607,874																-607,874
17	17 Act November 2003 - October 2004	-305,907																-305,907
18	18 Act November 2004 - October 2005	-85,078																-85,078
19	19 Act November 2005 - October 2006	-13,750																-13,750
20	20 Act November 2006 - October 2007	-14,091	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-14,091
21	21 Act November 2007 - October 2008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	22 Act November 2013 - October 2013	0				-5,002	-5,002											-10,003
23	23 Act November 2013 - October 2014	0				-12,749	-12,749											-25,497
24	24 Act Nov 2009-Oct 2010 Base Rate Rev	0				-4,423												-4,423
25	25 Act Nov 2010-Oct 2011 Base Rate Rev	0				-32,310												-32,310
26	26 Act Nov 2011-Oct 2012 Base Rate Rev	0				-28,448												-28,448
27	27 Act Nov 2012-Oct 2013 Base Rate Rev	0				-2,143	-2,143											-4,286
28	28 Act Nov 2013-Oct 2014 Base Rate Rev	0				0												0
29	29 Act Nov 2014-Oct 2015 Base Rate Rev	0				0												0
30	30 AES collections	-69,391	-12,620	-12,904	-13,145	-13,221	-13,738	-13,725	-13,948	-14,173	-14,405	-14,664	-14,858	-14,999	-15,312	-15,468	-15,468	-282,039
31	31 Gas Street overcollection	-23,511																-23,511
32	32 Prior Period Pool under/overcollection	332,837	38,548	45,088	50,734	155,409	60,721	116,708	0	0	0	0	0	0	0	0	0	0
33	C Surcharge Subtotal	-3,739,158	-12,620	-12,904	-13,145	-98,295	-33,631	-13,725	-13,948	-14,173	-14,405	-14,664	-14,858	-14,999	-15,312	-15,468	-15,468	-4,056,773
34	D Net balance to be recovered (A-B+C)	246,787	82,753	102,675	123,791	118,448	47,608	45,345	18,376	64,062	20,185	73,484	112,498	57,284	157,451	297,575	287,064	1,855,387
35	E Allocation of Litigated Recovery		-329,540	-102,675	-123,791	-48,569	0	0	0	0	0	0	0	0	0	0	0	-604,575
36	36 Surcharge calculation																	
37	37 Unrecovered costs (D+E)	0	-246,787	0	0	0	0	0	0	0	5,767	31,493	64,285	40,917	134,958	297,575	287,064	615,274
38	38 remaining life	168	72	84	84	84	12	12	12	12	12	24	36	48	60	72	84	
39	39 one year	48	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
40	F amortization	0	0	0	0	0	0	0	0	0	5,767	15,747	21,428	10,229	26,992	49,596	41,009	170,788
41	41 Required annual increase in rates:																	
42	42 smaller of D or F	0	0	0	0	0	0	0	0	0	5,767	15,747	21,428	10,229	26,992	49,596	41,009	170,788
43	43 forecasted therm sales	1,456,394,990	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	186,269,384	186,269,384	186,269,384
44	44 surcharge per therm	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0001	\$0.0001	\$0.0001	\$0.0002	\$0.0003	\$0.0002	\$0.0009

1. While the recoveries are displayed on the Summary, Cash Recoveries by site, are not exclusive to a particular site.

Filed under the following protective orders:
 Order No. 22,853 dated February 18, 1998, in Docket No. DR 97 130
 Order No. 23,316 dated October 11, 1999, in Docket No. DG 99 132

REDACTED
 Schedule 3.3
 Page 2 of 9

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
 Environmental Remediation MGPs
 Tariff page 99

		Laconia & Liberty Hill																
		I.o. no. 500005																
	(thru - 9/07)	(9/07 - 9/08)	(9/08 - 9/09)	(9/09 - 9/10)	(9/10 - 9/11)	(9/11 - 9/12)	(9/12 - 6/13)	(7/13 - 6/14)	(7/14 - 6/15)	(7/15 - 6/16)	(7/16 - 6/17)	(7/17 - 6/18)	(7/18 - 6/19)	(7/19 - 6/20)	(7/20 - 6/21)	(7/21 - 6/22)	subtotal	
	pool #1 - #6	pool #7	pool #8	pool #9	pool #10	pool #11	pool #12	pool #13	pool #14	pool #15	pool #16	pool #17	pool #18	pool #18	pool #19	pool #20		
		Incl. Audit Corr	Incl. Audit Corr															
1	1 Remediation costs (i.o. 500061)	0															0	
2	Remediation costs (i.o. 500005)	9,670,488	428,225	607,876	262,678	210,532	269,281	642,986									24,800,244	
3	A Subtotal - remediation costs	9,670,488	428,225	607,876	262,678	210,532	269,281	642,986									24,800,244	
4	Cash recoveries (i.o. 500061)	0	0	0													0	
5	Cash recoveries (i.o. 500004)	0	0	0													0	
6	Recovery costs (i.o. 500004)	11,643	21,729	0	0												33,372	
7	Transfer Credit from Gas Restructuring	0	0	0													0	
8	B Subtotal - net recoveries	11,643	21,729	0	0	0	0	0									33,372	
9	A-B Total net expenses to recover	9,682,131	449,954	607,876	262,678	210,532	269,281	642,986									24,833,616	
10	Surcharge revenue																	
11	Act June 1998 - October 1998	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	0	
12	Act November 1998 - October 1999	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	0	
13	Act November 1999 - October 2000	-151,933	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-151,933	
14	Act November 2000 - October 2001	-696,237	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-696,237	
15	Act November 2001 - October 2002	-796,714	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-796,714	
16	Act November 2002 - October 2003	-805,434	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-805,434	
17	Act November 2003 - October 2004	-699,215															-699,215	
18	Act November 2004 - October 2005	-652,264															-652,264	
19	Act November 2005 - October 2006	-691,159	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-691,159	
20	Act November 2006 - October 2007	-958,171	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-958,171	
21	Act November 2007 - October 2008	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	0	
22	Act November 2012 - October 2013	0					-20,006										-20,006	
23	Act November 2013 - October 2014	0					-25,497	-76,491									-101,988	
24	Act Nov 2009-Oct 2010 Base Rate Rev	0				-4,296											-4,296	
25	Act Nov 2010-Oct 2011 Base Rate Rev	0				-31,384											-31,384	
26	Act Nov 2011-Oct 2012 Base Rate Rev	0				-27,632											-27,632	
27	Act Nov 2012-Oct 2013 Base Rate Rev	0				0	-14,208										-14,208	
28	Act Nov 2013-Oct 2014 Base Rate Rev	0					-26,433	-28,433	(28,433)								-85,298	
29	Act Nov 2014-Oct 2015 Base Rate Rev	0					-21,639	-21,639	(21,639)	(21,639)							-86,554	
30	AES collections	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	0	
31	Gas Street overcollection	0															0	
32	Prior Period Pool under/overcollection	2,395,362	4,242,438	0	0	0	-87,311	0	-	-	-	-	-	-	-	-	0	
33	C Surcharge Subtotal	-3,055,765	4,242,438	0	0	-63,313	-197,093	-126,563	(50,071)	(21,639)	-	-	-	-	-	-	-5,822,494	
34	D Net balance to be recovered (A-B+C)	6,626,365	4,692,393	607,876	262,678	147,219	72,188	516,424									19,011,122	
35	E Allocation of Litigated Recovery	0	-4,692,393	-607,876	-262,678	-234,530	0	0									-5,797,476	
36	Surcharge calculation																	
37	Unrecovered costs (D+E)	0	0	0	0	0	0	0									588,128	
38	remaining life	144	72	84	84	48	12	12										
39	one year	36	12	12	12	12	12	12										
40	F amortization	0	0	0	0	0	0	0									488,967	
41	Required annual increase in rates smaller of D or F	0	0	0	0	0	0	0									488,967	
43	forecasted therm sales	1,104,849,639	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	186,269,384	186,269,384	186,269,384	
44	surcharge per therm	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0026	

1. While the recoveries are displayed on the Summary, Cash Recoveries by site, are not exclusive to a particular site.

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Filed under the following protective orders:
 Order No. 22,853 dated February 18, 1998, in Docket No. DR 97-130
 Order No. 23,316 dated October 11, 1999, in Docket No. DG 99-132

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Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
 Environmental Remediation - MGPs
 Tariff page 99

		Manchester																
		(9/00 - 9/07)	(9/07 - 9/08)	(9/08 - 9/09)	(9/09 - 9/10)	(9/10 - 9/11)	(9/11 - 9/12)	(9/12 - 6/13)	(7/13 - 6/14)	(7/14 - 6/15)	(7/15 - 6/16)	(7/16 - 6/17)	(7/17 - 6/18)	(7/18 - 6/19)	(7/19 - 6/20)	(7/20 - 6/21)	(7/21 - 6/22)	subtotal
		pool #1 - #7	pool #8	pool #9	pool #10	pool #11	pool #12	pool #13	pool #14	pool #15	pool #16	pool #17	pool #18	pool #19	pool #20	pool #22	pool #23	
1	1 Remediation costs (i.o. 500061)	3,762,097	4,387,645	312,185	369,037	372,237	507,622	82,113	92,900	116,496	71,011	54,333	470,725	182,093	312,433	44,476	172,672	11,310,076
2	2 Remediation costs (i.o. 500005)	825,092																825,092
3	A Subtotal - remediation costs	4,587,189	4,387,645	312,185	369,037	372,237	507,622	82,113	92,900	116,496	71,011	54,333	470,725	182,093	312,433	44,476	172,672	12,135,168
4	4 Cash recoveries (i.o. 500061)	-765,892	-1,127,436		-40,359	-234,648	-65,324	-270,732	-31,690	-41,057	-48,322	-3,810	-124,681	-144,074	-157,401	-39,395	-51,784	-3,146,805
5	5 Cash recoveries (i.o. 500004)	0																0
6	6 Recovery costs (i.o. 500004)	1,244,872	0															1,244,872
7	7 Transfer Credit from Gas Restructuring	0	0															0
8	B Subtotal - net recoveries	478,979	-1,127,436	0	-40,359	-234,648	-65,324	-270,732	-31,690	-41,057	-48,322	-3,810	-124,681	-144,074	-157,401	-39,395	-51,784	-1,901,734
9	A-B Total net expenses to recover	5,066,169	3,260,209	312,185	328,678	137,589	442,298	-188,619	61,210	75,440	22,690	50,523	346,043	38,019	155,032	5,080	120,889	10,233,434
10	10 Surcharge revenue																	0
11	11 Act June 1998 - October 1998	0																0
12	12 Act November 1998 - October 1999	0																0
13	13 Act November 1999 - October 2000	0																0
14	14 Act November 2000 - October 2001	0																0
15	15 Act November 2001 - October 2002	-73,543																-73,543
16	16 Act November 2002 - October 2003	-75,984																-75,984
17	17 Act November 2003 - October 2004	-138,576																-138,576
18	18 Act November 2004 - October 2005	-326,132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-326,132
19	19 Act November 2005 - October 2006	-563,732	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-563,732
20	20 Act November 2006 - October 2007	-662,265	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-662,265
21	21 Act November 2007 - October 2008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	22 Act November 2012 - October 2013	0																-40,012
23	23 Act November 2013 - October 2014	0																-50,994
24	24 Act Nov 2009-Oct 2010 Base Rate Rev	0																0
25	25 Act Nov 2010-Oct 2011 Base Rate Rev	0																0
26	26 Act Nov 2011-Oct 2012 Base Rate Rev	0																0
27	27 Act Nov 2012-Oct 2013 Base Rate Rev	0																0
28	28 Act Nov 2013-Oct 2014 Base Rate Rev	0																-23,337
29	29 Act Nov 2014-Oct 2015 Base Rate Rev	0																0
30	30 AES collections	0																0
31	31 Gas Street overcollection	0																0
32	32 Prior Period Pool under/overcollection	7,525,691	3,302,330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	C Surcharge Subtotal	5,685,459	3,302,330	0	0	0	-114,343	0	0	0	0	0	0	0	0	0	0	-1,954,576
34	D Net balance to be recovered (A-B+C)	10,751,628	6,562,539	312,185	328,678	137,589	327,955	-188,619	61,210	75,440	22,690	50,523	346,043	38,019	155,032	5,080	120,889	8,278,858
35	35 E Allocation of Litigated Recovery	0	-6,562,539	-312,185	-328,678	-94,340	0	0	0	0	0	0	0	0	0	0	0	-7,297,742
36	36 Surcharge calculation	0																0
37	37 Unrecovered costs (D+E)	0	0	0	0	0	0	0	0	0	3,241	14,435	148,304	21,725	110,737	4,355	120,889	423,687
38	38 remaining life	168	70	84	84	12	12	12	12	12	12	24	36	48	60	72	84	0
39	39 one year	48	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	0
40	40 F amortization	0	0	0	0	0	0	0	0	0	3,241	7,218	49,435	5,431	22,147	726	17,270	0
41	41 Required annual increase in rates:																	
42	42 smaller of D or F	0	0	0	0	0	0	0	0	0	3,241	7,218	49,435	5,431	22,147	726	17,270	105,468
43	43 forecasted therm sales	1,284,424,318	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	186,269,384	186,269,384	186,269,384
44	44 surcharge per therm	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0003	\$0.0000	\$0.0001	\$0.0000	\$0.0001	\$0.0006
45	45 1. While the recoveries are displayed on the Summary, Cash Recoveries by site, are not exclusive to a particular site.																	

Filed under the following protective orders:
Order No. 22,853 dated February 18, 1998, in Docket No. DR 97-130
Order No. 23,316 dated October 11, 1999, in Docket No. DG 99-132

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Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Environmental Remediation - MGPs
Tariff page 99

		Nashua																	
		(9/00 - 9/07)	(9/07 - 9/08)	(9/08 - 9/09)	(9/09 - 9/10)	(9/10 - 9/11)	per 2/08 Audit		(9/12 - 6/13)	(7/13 - 6/14)	(7/14 - 6/15)	(7/15 - 6/16)	(7/16 - 6/17)	(7/17 - 6/18)	(7/18 - 6/19)	(7/19 - 6/20)	(7/20 - 6/21)	(7/21 - 6/22)	Subtotal
		pool #1 - #7	pool #8	pool #9	pool #10	pool #11	(9/11 - 9/12)	pool #12	pool #13	pool #14	pool #15	pool #16	pool #17	pool #18	pool #19	pool #20	pool #21	pool #22	
1	1 Remediation costs (i.o. 500061)	250,299	107,605	78,535	162,729	65,118	399,400	119,095	63,397	105,917	106,129	100,342	61,478	128,071	39,533	96,864	430,127	2,314,640	
2	2 Remediation costs (i.o. 500005)	1,771,567																	1,771,567
3	A Subtotal - remediation costs	2,021,866	107,605	78,535	162,729	65,118	399,400	119,095	63,397	105,917	106,129	100,342	61,478	128,071	39,533	96,864	430,127	4,086,206	
4	4 Cash recoveries (i.o. 500061)	-22,732	-10,414	-62,246	-63,753	-31,767	-2,990	-199,336	-27,447	-40,699	-43,694	-15,029	-45,955	-46,103	-28,062	-35,848	-97,691	-773,766	
5	5 Cash recoveries (i.o. 500004)	0																0	
6	6 Recovery costs (i.o. 500004)	18,388	0	0														18,388	
7	7 Transfer Credit from Gas Restructuring	0	0	0														0	
8	B Subtotal - net recoveries	-4,344	-10,414	-62,246	-63,753	-31,767	-2,990	-199,336	-27,447	-40,699	-43,694	-15,029	-45,955	-46,103	-28,062	-35,848	-97,691	-755,378	
9	A-B Total net expenses to recover	2,017,521	97,191	16,289	98,975	33,351	396,411	-80,241	35,950	65,217	62,435	85,314	15,523	81,969	11,472	61,016	332,436	3,330,828	
10	10 Surcharge revenue:																		
11	11 Act June 1998 - October 1998	0																0	
12	12 Act November 1998 - October 1999	0																0	
13	13 Act November 1999 - October 2000	0																0	
14	14 Act November 2000 - October 2001	0																0	
15	15 Act November 2001 - October 2002	-183,857																-183,857	
16	16 Act November 2002 - October 2003	-243,150																-243,150	
17	17 Act November 2003 - October 2004	-247,639																-247,639	
18	18 Act November 2004 - October 2005	-241,054																-241,054	
19	19 Act November 2005 - October 2006	-274,991	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-274,991	
20	20 Act November 2006 - October 2007	-281,815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-281,815	
21	21 Act November 2007 - October 2008	0																0	
22	22 Act November 2012 - October 2013	0						-40,012										-40,012	
23	23 Act November 2013 - October 2014	0						-38,246										-38,246	
24	24 Act Nov 2009-Oct 2010 Base Rate Rev	0				0												0	
25	25 Act Nov 2010-Oct 2011 Base Rate Rev	0				0												0	
26	26 Act Nov 2011-Oct 2012 Base Rate Rev	0				0												0	
27	27 Act Nov 2012-Oct 2013 Base Rate Rev	0				0												0	
28	28 Act Nov 2013-Oct 2014 Base Rate Rev	0				0		-20,916										-20,916	
29	29 Act Nov 2014-Oct 2015 Base Rate Rev	0				0												0	
30	30 AES collections	0				0												0	
31	31 Gas Street overcollection	0				0												0	
32	32 Prior Period Pool under/overcollection	3,186,601	733,479	0	0	0	0	5,616	0	0	0	0	0	0	0	0	0	0	
33	C Surcharge Subtotal	1,714,096	733,479	0	0	0		-93,558	0	0	0	0	0	0	0	0	0	-1,571,680	
34	D Net balance to be recovered (A-B+C)	3,731,617	830,669	16,289	98,975	33,351	302,853	-80,241	35,950	65,217	62,435	85,314	15,523	81,969	11,472	61,016	332,436	1,759,149	
35	E Allocation of Litigated Recovery	0	-830,669	-16,289	-98,975	-27,735	0	0	0	0	0	0	0	0	0	0	0	-973,668	
36	36 Surcharge calculation																		
37	37 Unrecovered costs (D+E)	0	0	0	0	0	0	0	0	0	8,919	24,375	6,653	46,839	8,194	52,300	332,436	479,716	
38	38 remaining life	36	72	84	84	72	12	12	12	12	12	24	36	48	60	72	84	84	
39	39 one year	36	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
40	F amortization	0	0	0	0	0	0	0	0	0	8,919	12,188	2,218	11,710	1,639	8,717	47,491		
41	41 Required annual increase in rates: smaller of D or F	0	0	0	0	0	0	0	0	0	8,919	12,188	2,218	11,710	1,639	8,717	47,491	92,881	
43	43 forecasted therm sales	738,096,274	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	186,269,384	186,269,384	
44	44 surcharge per therm	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0001	\$0.0000	\$0.0001	\$0.0000	\$0.0000	\$0.0003	\$0.0005	

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particular site.

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 Order No. 22,853 dated February 18, 1998, in Docket No. DR 97-130
 Order No. 23,316 dated October 11, 1999, in Docket No. DG 99-132

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Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Environmental Remediation - MGPs
Tariff page 99

Dover													
	(9/02 - 9/03)	(9/04 - 9/05)	(9/05 - 9/06)	(9/06 - 9/07)	(9/07 - 9/08)	(9/08 - 9/09)	(9/09 - 9/10)	(9/10 - 9/11)	(9/11 - 9/12)	(9/12 - 6/13)	(7/13 - 6/14)	(7/14 - 6/15)	subtotal
	pool #1	pool #2	pool #3	pool #4	pool #5	pool #6	pool #7	pool #8	pool #9	pool #10	pool #11	pool #12	
1	1	18,854	2,288	0	0	0	0	0	0	0	0	0	21,142
2	Remediation costs (i.o. 500061)												
2	Remediation costs (i.o. 500005)	181,066											181,066
3	A Subtotal - remediation costs	181,066	18,854	2,288	0	0	0	0	0	0	0	0	202,208
4	Cash recoveries (i.o. 500061)	0											0
5	Cash recoveries (i.o. 500004)	0											0
6	Recovery costs (i.o. 500004)	0											0
7	Transfer Credit from Gas Restructuring												0
8	B Subtotal - net recoveries	0	0	0	0	0	0	0	0	0	0	0	0
9	A-B Total net expenses to recover	181,066	18,854	2,288	0	0	0	0	0	0	0	0	202,208
10	Surcharge revenue:												
11	Act June 1998 - October 1998	0											0
12	Act November 1998 - October 1999	0											0
13	Act November 1999 - October 2000	0											0
14	Act November 2000 - October 2001	0											0
15	Act November 2001 - October 2002	0											0
16	Act November 2002 - October 2003	0											0
17	Act November 2003 - October 2004	-29,134											-29,134
18	Act November 2004- October 2005	-28,359											-28,359
19	Act November 2005- October 2006	-27,499	0			0	0	0	0	0	0	0	-27,499
20	Act November 2006- October 2007	-28,181	0	0	0	0	0	0	0	0	0	0	-28,181
21	Act November 2007- October 2008	0	0	0	0	0	0	0	0	0	0	0	0
22	Act November 2012- October 2013												0
23	Act November 2013- October 2014												0
24	Act Nov 2009-Oct 2010 Base Rate Rev												0
25	Act Nov 2010-Oct 2011 Base Rate Rev												0
26	Act Nov 2011-Oct 2012 Base Rate Rev												0
27	Act Nov 2012-Oct 2013 Base Rate Rev												0
28	Act Nov 2013-Oct 2014 Base Rate Rev												0
29	Act Nov 2014-Oct 2015 Base Rate Rev												0
30	AES collections												0
31	Gas Street overcollection												0
32	Prior Period Pool under/overcollection		67,892	86,746	89,034	89,034	0	0	0	0	0	0	0
33	C Surcharge Subtotal	-113,174	67,892	86,746	89,034	89,034	0	0	0	0	0	0	-113,174
34	D Net balance to be recovered (A-B+C)	67,892	86,746	89,034	89,034	89,034	0	0	0	0	0	0	89,034
35	E Allocation of Litigated Recovery		0		0	-89,034	0	0	0	0	0	0	-89,034
36	Surcharge calculation												
37	Unrecovered costs (D+E)	0	0	0	0	0	0	0	0	0	0	0	0
38	remaining life	24	36	48	60	72	84	84	84	84	84	84	84
39	one year	12	12	12	12	12	12	12	12	12	12	12	12
40	F amortization	0	0	0	0	0	0	0	0	0	0	0	0
41	Required annual increase in rates:												
42	smaller of D or F	0	0	0	0	0	0	0	0	0	0	0	0
43	forecasted therm sales	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	186,269,384
44	surcharge per therm	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000

1. While the recoveries are displayed on the Summary, Cash Recoveries by site, are not exclusive to a particular site.

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Order No. 23,316 dated October 11, 1999, in Docket No. DG 99-132

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Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Environmental Remediation - MGPs
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Keene													
	(9/03 - 9/04)	(9/04 - 9/05)	(9/05 - 9/06)	(9/06 - 9/07)	(9/07 - 9/08)	(9/08 - 9/09)	(9/09 - 9/10)	(9/10 - 9/11)	(9/11 - 9/12)	(9/12 - 6/13)	(7/13 - 6/14)	(7/14 - 6/15)	subtotal
	pool #1	pool #2	pool #3	pool #4	pool #5	pool #6	pool #7	pool #8	pool #9	pool #10	pool #11	pool #12	
1	1	Remediation costs (i.o. 500061)	0										
2		Remediation costs (i.o. 500005)	10,165	6,606	35,111	8,766	32	269	0	0	488	1,400	
3	A	Subtotal - remediation costs	10,165	6,606	35,111	8,766	32	269	0	0	488	1,400	
4		Cash recoveries (i.o. 500061)	0										
5		Cash recoveries (i.o. 500004)	0										
6		Recovery costs (i.o. 500004)			18,831	823	0	0	0	0			
7		Transfer Credit from Gas Restructuring			0	0	0	0					
8	B	Subtotal - net recoveries	0	0	18,831	823	0	0	0	0	0	0	
9	A-B	Total net expenses to recover	10,165	6,606	53,942	9,589	32	269	0	0	488	1,400	
10		Surcharge revenue:											
11		Act June 1998 - October 1998	0										-
12		Act November 1998 - October 1999	0										-
13		Act November 1999 - October 2000	0										-
14		Act November 2000 - October 2001	0										-
15		Act November 2001 - October 2002	0										-
16		Act November 2002 - October 2003	0										-
17		Act November 2003 - October 2004	0										-
18		Act November 2004- October 2005	0	0			0	0	0	0	0	-	-
19		Act November 2005- October 2006	0	0			0	0	0	0	0	-	-
20		Act November 2006- October 2007	0	0	-14,091								(14,091)
21		Act November 2007- October 2008	0	0	0	0	0	0	0	0	0	-	-
22		Act November 2012- October 2013											-
23		Act November 2013- October 2014											-
24		Act Nov 2009-Oct 2010 Base Rate Rev											-
25		Act Nov 2010-Oct 2011 Base Rate Rev											-
26		Act Nov 2011-Oct 2012 Base Rate Rev											-
27		Act Nov 2012-Oct 2013 Base Rate Rev											-
28		Act Nov 2013-Oct 2014 Base Rate Rev											-
29		Act Nov 2014-Oct 2015 Base Rate Rev											-
30		AES collections											-
31		Gas Street overcollection											-
32		Prior Period Pool under/overcollection		10,165	16,771	56,622	66,211	0	0	0	0	0	-
33	C	Surcharge Subtotal	0	10,165	2,680	56,622	66,211	0	0	0	0	0	(14,091)
34	D	Net balance to be recovered (A-B+C)	10,165	16,771	56,622	66,211	66,244	269	0	0	488	1,400	
35	E	Allocation of Litigated Recovery	0	0	0	0	-66,244	-269	0	0	0	0	
36		Surcharge calculation											
37		Unrecovered costs (D+E)	0	0	0			0	0	0	0	0	
38		remaining life	24	36	48	60	72	84	84	84	12	12	
39		one year	12	12	12	12	12	12	12	12	12	12	
40	F	amortization	0	0	0	0	0	0	0	0	0	0	
41		Required annual increase in rates:											
42		smaller of D or F	0	0	0	0	0	0	0	0	0	0	
43		forecasted therm sales	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	186,269,384
44		surcharge per therm	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	

1. While the recoveries are displayed on the Summary, Cash Recoveries by site, are not exclusive to a particular site.

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Filed under the following protective orders:
 Order No. 22,853 dated February 18, 1998, in Docket No. DR 97 130
 Order No. 23,316 dated October 11, 1999, in Docket No. DG 99 132

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Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
 Environmental Remediation MGPs
 Tariff page 99

		Concord (Excluding Gas Holder)														Excluding Gas Holder	
		per 2/08 Audit															
(9/03 - 9/07)	(9/07 - 9/08)	(9/08 - 9/09)	(9/09 - 9/10)	(9/10 - 9/11)	(9/11 - 9/12)	(9/12 - 6/13)	(7/13 - 6/14)	(7/14 - 6/15)	(7/15 - 6/16)	(7/16 - 6/17)	(7/17 - 6/18)	(7/18 - 6/19)	(7/19 - 6/20)	(7/20 - 6/21)	(7/21 - 6/22)	subtotal	
pool #1 - #4	pool #5	pool #6	pool #7	pool #8	pool #9	pool #10	pool #11	pool #12	pool #13	pool #14	pool #15	pool #16	pool #17	pool #18	pool #19		
1	1	Remediation costs (i.o. 500061)	0														
2	2	Remediation costs (i.o. 500005)	397,110	8,006	77,063	49,403	179,732	289,103	84,256	135,673	192,525	114,749					
3	A	Subtotal - remediation costs	397,110	8,006	77,063	49,403	179,732	289,103	84,256	135,673	192,525	114,749					
4	4	Cash recoveries (i.o. 500061)	-70,215	-12,601	16,623	-3,213	-11,394	-31,575	-38,871	-12,319	-28,742	-19,197					
5	5	Cash recoveries (i.o. 500004)	0														
6	6	Recovery costs (i.o. 500004)		1,432	-1,007												
7	7	Transfer Cred t from Gas Restructuring	0														
8	B	Subtotal - net recoveries	-70,215	-11,169	15,616	-3,213	-11,394	-31,575	-38,871	-12,319	-28,742	-19,197					
9	A-B	Total net expenses to recover	326,894	-3,163	92,679	46,190	168,338	257,528	45,384	123,355	163,783	95,553					
10		Surcharge revenue															
11		Act June 1998 - October 1998	0														
12		Act November 1998 - October 1999	0														
13		Act November 1999 - October 2000	0														
14		Act November 2000 - October 2001	0														
15		Act November 2001 - October 2002	0														
16		Act November 2002 - October 2003	0														
17		Act November 2003 - October 2004	0														
18		Act November 2004- October 2005	0														
19		Act November 2005- October 2006	-27,499	0	0	0	0	0	0	0	0	-	-	-	-	-	(27,499)
20		Act November 2006- October 2007	-28,181	0	0	0	0	0	0	0	0	-	-	-	-	-	(28,181)
21		Act November 2007- October 2008	0														
22		Act November 2012- October 2013	0				-20,006	-20,006									(40,012)
23		Act November 2013- October 2014	0				-12,749	-25,497									(38,246)
24		Act Nov 2009-Oct 2010 Base Rate Rev	0				-1,891										(1,891)
25		Act Nov 2010-Oct 2011 Base Rate Rev	0				-13,816										(13,816)
26		Act Nov 2011-Oct 2012 Base Rate Rev	0				-12,164										(12,164)
27		Act Nov 2012-Oct 2013 Base Rate Rev	0				-6,794										(13,588)
28		Act Nov 2013-Oct 2014 Base Rate Rev	0														-
29		Act Nov 2014-Oct 2015 Base Rate Rev	0														-
30		AES collections	0														-
31		Gas Street overcollection	0														-
32		Prior Period Pool under/overcollection	419,182	271,214	0	0	0	0	0	0	0	0	-	-	-	-	-
33	C	Surcharge Subtotal	363,501	271,214	0	0	-67,420	-52,297	0	0	0	0	-	-	-	-	(175,398)
34	D	Net balance to be recovered (A-B+C)	690,395	268,051	92,679	46,190	100,919	205,231	45,384	123,355	163,783	95,553					
35	E	Allocation of Litigated Recovery	0	-268,051	-92,679	-46,190	-14,702	0	0	0	0	0					
36		Surcharge calculation															
37		Unrecovered costs (D+E)	0	0	0	0	0	0	0	0	0	13,650					
38		remaining life	144	72	84	84	12	12	12	12	12	12					
39		one year	36	12	12	12	12	12	12	12	12	12					
40	F	amortization	0	0	0	0	0	0	0	0	0	13,650					
41		Required annual increase in rates smaller of D or F	0	0	0	0	0	0	0	0	0	13,650					
42																	
43		forecasted therm sales	553,964,622	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	179,574,679	186,269,384	186,269,384
44		surcharge per therm	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0001					

1. While the recoveries are displayed on the Summary, Cash Recoveries by site, are not exclusive to a particular site.

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Order No 22 853 dated February 18 1998 in Docket No DR 97 130
Order No 23 316 dated October 11 1999 in Docket No DG 99 132

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

Environmental Remediation MGPs

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		General															MGP			
		(9/02 - 9/07)	(9/07 - 9/08)	(9/08 - 9/09)	(9/09 - 9/10)	(9/10 - 9/11)	(9/11 - 9/12)	(9/12 - 6/13)	(7/13 - 6/1)	(7/1 - 6/15)	(7/15 - 6/16)	(7/16 - 6/17)	(7/17 - 6/18)	(7/18 - 6/19)	(7/19 - 6/20)	(7/20 - 6/21)	(7/21 - 6/22)	subtotal	Remedial on subtotal	
		pool #1 - #6	pool #6	pool #7	pool #8	pool #9	pool #10	pool #11	pool #12	pool #13	pool #1	pool #15	pool #16	pool #17	pool #18	pool #19	pool #20			
1	1 Remediation costs (i.o. 500061)																		0	
2	2 Remediation costs (i.o. 500005)	806,611	-181,000	-26,88	.199	69,286	93,03	75,20	13,139	16,612	11,879	6,5 7	10,799	6,868	7,111	5,6 6	8,3 6	927,397		
3	A Subtotal - remediat on costs	806,611	-181,000	-26,88	.199	69,286	93,03	75,20	13,139	16,612	11,879	6,5 7	10,799	6,868	7,111	5,6 6	8,3 6	927,397		
	Cash recoveries (i.o. 500061)	0	0	0														0		
5	5 Cash recoveries (i.o. 50000)																	0		
6	6 Recovery costs (i.o. 50000)		16,012	23,953	0	0	-1,068	-1,358	0	-2,250	0	0	0	0	0	0	0	288		
7	7 Transfer Credit from Gas Restructuring		-3,331															-3,331		
8	B Subtotal - net recoveries	0	12,681	23,953	0	0	-1,068	-1,358	0	-2,250	0	0	0	0	0	0	0	-3,0 3		
9	A-B Total net expenses o recover	806,611	-168,319	-2,931	.199	69,286	78,967	73,8 6	13,139	-7,638	11,879	6,5 7	10,799	6,868	7,111	5,6 6	8,3 6	92 355		
10	Surcharge revenue:																			
11	Act June 1998 - October 1998																	0	(5,889)	
12	Act November 1998 - October 1999																	0	(538,1 3)	
13	Act November 1999 - October 2000																	0	(912,80)	
1	Act November 2000 - October 2001																	0	(1,336,776)	
15	Act November 2001 - October 2002																	0	(1,679,228)	
16	Act November 2002 - October 2003																	0	(1,732, 2)	
17	Act November 2003 - October 200		-8,265															-8,265	(1, 28,735)	
18	Act November 200 - October 2005		-70,898															-70,898	(1, 03,787)	
19	Act November 2005- October 2006		-96,2 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-96,2 7	(1,69 ,877)	
20	Act November 2006- October 2007		- 9,318	0	0	0	0	0	0	0	0	0	0	0	0	0	0	- 9,318	(2,036,113)	
21	Act November 2007- October 2008		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
22	Act November 2012- October 2013		0	0	0	-5,002	-5,002	0	0	0	0	0	0	0	0	0	0	-10,003	(160,0 8)	
23	Act November 2013- October 201					-12,7 9	-12,7 9	-12,7 9										-38,2 6	(293,217)	
2	Act Nov 2009-Oct 2010 Base Rate Rev																	0	(10,611)	
25	Act Nov 2010-Oct 2011 Base Rate Rev																	0	(77,509)	
26	Act Nov 2011-Oct 2012 Base Rate Rev																	0	(68,2)	
27	Act Nov 2012-Oct 2013 Base Rate Rev																	0	(76,335)	
28	Act Nov 2013-Oct 201 Base Rate Rev																	0	(85,298)	
29	Act Nov 201 -Oct 2015 Base Rate Rev																	0	(86,55)	
30	AES col ections																	0	(282,039)	
31	Gas Street overcollec ion																	0	(23,511)	
32	Pr or Period Pool under/overcol ection	1, 86,6	2,068,527	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
33	C Surcharge Subtotal	1,261,916	2,068,527	0	0	-17,750	-17,750	-12,7 9	0	0	0	0	0	0	0	0	0	-272,977	(13,981,161)	
3	D Net balance to be recovered (A-B C)	2,068,527	1,900,208	-2,931	.199	51,536	61,217	61,098	13,139	-7,638	11,879	6,5 7	10,799	6,868	7,111	5,6 6	8,3 6	651,378		
35	E Allocation of Litigated Recovery	0	-1,900,208	2,931	- .199	-8,562	0	0	0	0	0	0	0	0	0	0	0	-1,910,037		
36	Surcharge calculation																			
37	Unrecovered costs (D E)		0	0	0	0	0	0	0	1,697	1,870	.628	3,925	5,079	.839	8,3 6	30,38			
38	remaining life	72	8	8	8	12	12	12	12	12	2	36	8	60	72	8				
39	one year	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12			
0	F amortizat on	0	0	0	0	0	0	0	0	1,697	935	1,5 3	981	1,016	807	1,192				
1	Required annual increase in rates:																			
2	smaller of D or F	0	0	0	0	0	0	0	0	1,697	935	1,5 3	981	1,016	807	1,192	8,171			
3	forecasted them sales	179,57 ,679	179,57 ,679	179,57 ,679	179,57 ,679	179,57 ,679	179,57 ,679	179,57 ,679	179,57 ,679	179,57 ,679	179,57 ,679	179,57 ,679	179,57 ,679	179,57 ,679	179,57 ,679	186,269,38	186,269,38	186,269,38	186,269,384	
	surcharge per them	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0053	

1. While the recover es are disp ayed on the Summary, Cash Recoveries by site, are not exclusive to a particular site.

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Order No. 23,316 dated October 11, 1999, in Docket No. DG 99 132

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Liberty Utilities (Energy/Natural Gas) Corp. d/b/a Liberty
Environmental Remediation MGPs
Tariff page 99

		Expense and Collection Summary per Year															
		(thru - 9/07)	(9/07 - 9/08)	(9/08 - 9/09)	(9/09 - 9/10)	(9/10 - 9/11)	(9/11 - 9/12)	(7/13 - 6/14)	(7/14 - 6/15)	(7/15 - 6/16)	(7/16 - 6/17)	(7/17 - 6/18)	(7/18 - 6/19)	(7/19 - 6/20)	(7/20 - 6/21)	(7/20 - 6/21)	Total
1	1 Remediation costs (i.o. 500061)	9,917,388	4,590,624	518,907	674,766	686,515	993,434	476,206	312,039	220,344	256,871	670,904	397,446	539,324	504,039	983,883	
2	2 Remediation costs (i.o. 500005)	13,712,581	255,263	658,324	316,280	459,550	651,906	2,605,250	7,975,394	3,307,910	260,380	115,841	69,261	114,228	448,499	165,638	
3	A Subtotal - remediation costs	23,629,969	4,845,887	1,177,231	991,045	1,146,065	1,645,340	3,081,456	8,287,433	3,528,254	517,250	786,745	466,707	653,552	952,538	1,149,521	
4	4 Cash recoveries (i.o. 500061)	-2,934,544	-1,150,452	-58,231	-113,390	-310,226	-105,062	-607,704	-121,889	-119,826	-53,116	-195,423	-208,544	-212,660	-169,140	-298,018	
5	5 Cash recoveries (i.o. 500004)	-445,985	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	6 Recovery costs (i.o. 500004)	1,918,340	39,173	22,946	0	0	-14,068	2,500,000	2,475,750	0	0	0	0	0	0	0	
7	7 Transfer Credit from Gas Restructuring	0	-3,331	0	0	0	0	0	0	0	0	0	0	0	0	0	
8	B Subtotal - net recoveries	-1,462,188	-1,114,609	-35,285	-113,390	-310,226	-119,129	1,892,296	2,353,861	-119,826	-53,116	-195,423	-208,544	-212,660	-169,140	-298,018	
9	A-B Total net expenses to recover	22,167,780	3,731,277	1,141,946	877,655	835,839	1,526,211	4,973,753	10,641,294	3,408,428	464,134	591,322	258,163	440,892	783,398	851,503	
10	10 Surcharge revenue																
11	11 Act June 1998 - October 1998	-54,889	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(54,889)
12	12 Act November 1998 - October 1999	-538,143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(538,143)
13	13 Act November 1999 - October 2000	-912,804	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(912,804)
14	14 Act November 2000 - October 2001	-1,336,776	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(1,336,776)
15	15 Act November 2001 - October 2002	-1,679,228	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(1,679,228)
16	16 Act November 2002 - October 2003	-1,732,442	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(1,732,442)
17	17 Act November 2003 - October 2004	-1,428,735	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(1,428,735)
18	18 Act November 2004 - October 2005	-1,403,787	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(1,403,787)
19	19 Act November 2005 - October 2006	-1,694,877	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(1,694,877)
20	20 Act November 2006 - October 2007	-2,036,113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(2,036,113)
21	21 Act November 2007 - October 2008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
22	22 Act November 2012 - October 2013	0	0	0	0	-30,009	-130,039	0	0	0	0	0	0	0	0	0	(160,048)
23	23 Act November 2013 - October 2014	0	0	0	0	-38,246	-165,731	-89,240	0	0	0	0	0	0	0	0	(293,217)
24	24 Act Nov 2009-Oct 2010 Base Rate Rev	0	0	0	0	-10,611	0	0	0	0	0	0	0	0	0	0	(10,611)
25	25 Act Nov 2010-Oct 2011 Base Rate Rev	0	0	0	0	-77,509	0	0	0	0	0	0	0	0	0	0	(77,509)
26	26 Act Nov 2011-Oct 2012 Base Rate Rev	0	0	0	0	-68,244	0	0	0	0	0	0	0	0	0	0	(68,244)
27	27 Act Nov 2012-Oct 2013 Base Rate Rev	0	0	0	0	-8,937	-67,398	0	0	0	0	0	0	0	0	0	(76,335)
28	28 Act Nov 2013-Oct 2014 Base Rate Rev	0	0	0	0	0	-28,433	-56,865	0	0	0	0	0	0	0	0	(85,298)
29	29 Act Nov 2014-Oct 2015 Base Rate Rev	0	0	0	0	0	-21,639	-43,277	-21,639	0	0	0	0	0	0	0	(86,554)
30	30 AES collections	-69,391	-12,620	-12,904	-13,145	-13,221	-13,738	-27,673	-14,173	-14,405	-14,664	-14,858	-14,999	-15,312	-15,468	-15,468	(282,039)
31	31 Gas Street overcollection	-23,511	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(23,511)
32	32 Prior Period Pool under/overcollection	15,673,547															
33	C Surcharge Subtotal	2,762,851	-12,620	-12,904	-13,145	-246,777	-426,978	-217,055	-35,811	-14,405	-14,664	-14,858	-14,999	-15,312	-15,468	-15,468	1,692,386
34	D Net balance to be recovered (A-B+C)	24,930,631	3,718,657	1,129,042	864,510	589,062	1,099,233	4,756,698	10,605,483	3,394,023	449,470	576,464	243,165	425,579	767,930	836,035	
35	E Allocation of Litigated Recovery																

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LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. d/b/a LIBERTY
ENVIRONMENTAL OVER/UNDER CALCULATION

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Schedule 3.4
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	Spend Period		Jul 13 - Jun 14		Jul 14 - Jun 15		Jul 15 - Jun 16		Jul 16 - Jun 17		Jul 17 - Jun 18		Jul 18 - Jun 19		Jul 19 - Jun 20		Jul 20 - Jun 21		Jul 21 - Jun 22	
	Jul 11 - Jun 12	Jul 12 - Jun 13	Jul 13 - Jun 14	Jul 14 - Jun 15	Jul 15 - Jun 16	Jul 16 - Jun 17	Jul 17 - Jun 18	Jul 18 - Jun 19	Jul 19 - Jun 20	Jul 20 - Jun 21	Jul 21 - Jun 22	Jul 22 - Jun 20	Jul 19 - Jun 20	Jul 20 - Jun 21	Jul 21 - Jun 22	Jul 22 - Jun 20	Jul 21 - Jun 22	Jul 22 - Jun 20	Jul 21 - Jun 22	Jul 22 - Jun 20
1 BEGINNING BALANCE	\$ (364,633)	\$ 942,575	\$ 1,123,799	\$ 4,619,174	\$ 13,369,967	\$ 14,299,456	\$ 12,011,196	\$ 9,615,113	\$ 7,352,013	\$ 4,692,809	\$ 2,830,563									
2 SPEND / THIRD PARTY RECOVERIES																				
3 Concord Pond	81,238	59,069	32,324	78,235	34,590	88,148	127,356	72,283	172,764	313,043	302,532									
4 Liberty Hill																				
5 Manchester	442,298	(188,619)	61,210	75,440	22,690	50,523	346,043	38,019	155,032	5,080	120,889									
6 Nashua	396,411	(80,241)	35,950	65,217	62,435	85,314	15,523	81,969	11,472	61,016	331,327									
7 Keene																				
8 Concord																				
9 General	78,967	73,846	13,139	(7,638)	11,879	6,547	10,799	6,868	7,111	5,646	8,346									
10 Difference between the GL and Filing	-	9,545	(10,312)	(921)	(2,506)	(783)	(84,532)	811	16,776	78,185	(192,396)									
11 TOTAL SPEND	\$ 1,526,211	\$ 563,370	\$ 4,408,258	\$ 10,640,893	\$ 3,405,922	\$ 463,352	\$ 506,790	\$ 258,974	\$ 457,668	\$ 861,583	\$ 1,144,594									
12 ENVIRONMENTAL COSTS RECOVERED IN BASE RATES (DG 10-017)	\$ (78,892)	\$ (78,892)	\$ (78,892)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -									
13 ACTUAL ENVIROMENTAL COLLECTIONS PER GL	\$ (140,111)	\$ (303,254)	\$ (833,991)	\$ (1,890,100)	\$ (2,476,432)	\$ (2,751,612)	\$ (2,902,873)	\$ (2,522,075)	\$ (3,116,872)	\$ (2,723,828)	\$ -									
14 Current Pool Under (Over) Collection	\$ 942,575	\$ 181,224	\$ 3,495,375	\$ 8,750,793	\$ 929,490	\$ (2,288,261)	\$ (2,396,083)	\$ (2,263,100)	\$ (2,659,204)	\$ (1,862,246)	\$ 1,144,594									
15 ENDING BALANCE - UNDER (OVER) COLLECTION	\$ 942,575	\$ 1,123,799	\$ 4,619,174	\$ 13,369,967	\$ 14,299,456	\$ 12,011,196	\$ 9,615,113	\$ 7,352,013	\$ 4,692,809	\$ 2,830,563	\$ 3,975,157									
16 Regulatory Filing Reconciliation (Balance through June 2019)																				
17 Balance in GL	\$ 9,874,087																			
18 Actual Balance per Filing	\$ 8,844,611																			
19 Adjustment to Tie to Audit Report dated April 9, 2020	\$ 5,309																			
20 Adjustment Necessary to Filing	\$ 1,024,167																			

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
November 2022 – October 2023 LDAC
Revenue Decoupling Adjustment Factor (RDAF)

Schedule 4
 RDAF
 Page 1 of 3

Residential

Residential Projected September 1, 2022 Reconciliation Balance of Prior Recoveries / (Ref)	(\$799,553)
Residential Revenue Decoupling Deficiency / (Excess) - Current Period	<u>\$3,563,691</u>
Total Residential Revenue Decoupling Deficiency / (Excess) - September 1, 2022	\$2,764,138
Estimated Residential November 2022 - October 2023 Sales (therms)	67,543,760
Residential Revenue Decoupling rate per therm November 2022 - October 2023	\$0.0409

Commercial

Commercial Projected September 1, 2022 Reconciliation Balance of Prior Recoveries / (Ref)	(\$484,007)
Residential Revenue Decoupling Deficiency / (Excess) - Current Period	<u>\$841,320</u>
Total Commercial Revenue Decoupling Deficiency / (Excess) - September 1, 2022	\$357,314
Estimated Commercial November 2022 - October 2023 Sales (therms)	118,725,624
Commercial Revenue Decoupling rate per therm November 2022 - October 2023	\$0.0030

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
September 2021 through August 2022
Revenue Decoupling - Collections by Sector

RESIDENTIAL		(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Estimate)	(Estimate)
1	FOR THE MONTH OF:	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22
2	DAYS IN MONTH	30	31	30	31	31	28	31	30	31	30	31	31
3	Over / Under Beginning Balance	\$ 3,810,143	\$ (146,437)	\$ (69,953)	\$ 8,734	\$ (89,944)	\$ (227,042)	\$ (408,084)	\$ (559,489)	\$ (664,545)	\$ (725,901)	\$ (755,348)	\$ (778,675)
4	2019 Filing - November 2018 - October 2019	\$ (1,932,224)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	2020 Filing - November 2019 - October 2020	\$ (2,092,605)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	Adjusted Beginning Balance	\$ (214,687)	\$ (146,437)	\$ (69,953)	\$ 8,734	\$ (89,944)	\$ (227,042)	\$ (408,084)	\$ (559,489)	\$ (664,545)	\$ (725,901)	\$ (755,348)	\$ (778,675)
7	Monthly billing activity	\$ 63,363	\$ 76,782	\$ 78,768	\$ (98,567)	\$ (136,661)	\$ (180,251)	\$ (150,071)	\$ (103,298)	\$ (59,292)	\$ (27,016)	\$ (20,240)	\$ (17,700)
8	Ending Balance Pre-Interest	\$ (151,324)	\$ (69,654)	\$ 8,816	\$ (89,832)	\$ (226,605)	\$ (407,294)	\$ (558,155)	\$ (662,787)	\$ (723,837)	\$ (752,917)	\$ (775,587)	\$ (796,376)
9	Month's Average Balance	\$ 1,829,410	\$ (108,046)	\$ (30,568)	\$ (40,549)	\$ (158,275)	\$ (317,168)	\$ (483,120)	\$ (611,138)	\$ (694,191)	\$ (739,409)	\$ (765,467)	\$ (787,525)
10	Interest Rate	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.50%	3.50%	4.00%	4.75%	4.75%
11	Interest Applied	\$ 4,887	\$ (298)	\$ (82)	\$ (112)	\$ (437)	\$ (791)	\$ (1,334)	\$ (1,758)	\$ (2,064)	\$ (2,431)	\$ (3,088)	\$ (3,177)
12	Ending Balance	\$ (146,437)	\$ (69,953)	\$ 8,734	\$ (89,944)	\$ -227,042.2201	\$ (408,084)	\$ (559,489)	\$ (664,545)	\$ (725,901)	\$ (755,348)	\$ (778,675)	\$ (799,553)
COMMERCIAL & INDUSTRIAL		(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Estimate)	(Estimate)
13	FOR THE MONTH OF:	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22
14	DAYS IN MONTH	30	31	30	31	31	28	31	30	31	30	31	31
15	Over / Under Beginning Balance	\$ (266,020)	\$ (179,137)	\$ (83,561)	\$ 23,041	\$ (23,690)	\$ (83,129)	\$ (149,295)	\$ (210,545)	\$ (253,479)	\$ (286,275)	\$ (308,334)	\$ (326,657)
16	Monthly billing activity	\$ 87,476	\$ 95,938	\$ 106,683	\$ (46,730)	\$ (59,292)	\$ (65,877)	\$ (60,754)	\$ (42,268)	\$ (31,995)	\$ (21,083)	\$ (17,045)	\$ (155,718)
17	Ending Balance Pre-Interest	\$ (178,544)	\$ (83,199)	\$ 23,122	\$ (23,689)	\$ (82,982)	\$ (149,006)	\$ (210,049)	\$ (252,813)	\$ (285,474)	\$ (307,358)	\$ (325,379)	\$ (482,375)
18	Month's Average Balance	\$ (222,282)	\$ (131,168)	\$ (30,220)	\$ (324)	\$ (53,336)	\$ (116,067)	\$ (179,672)	\$ (231,679)	\$ (269,477)	\$ (296,817)	\$ (316,856)	\$ (404,516)
19	Interest Rate	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.50%	3.50%	4.00%	4.75%	4.75%
20	Interest Applied	\$ (594)	\$ (362)	\$ (81)	\$ (1)	\$ (147)	\$ (289)	\$ (496)	\$ (666)	\$ (801)	\$ (976)	\$ (1,278)	\$ (1,632)
21	Ending Balance	\$ (179,137)	\$ (83,561)	\$ 23,041	\$ (23,690)	\$ (83,129)	\$ (149,295)	\$ (210,545)	\$ (253,479)	\$ (286,275)	\$ (308,334)	\$ (326,657)	\$ (484,007)
22	Total Ending Balance	\$ (325,574)	\$ (153,514)	\$ 31,775	\$ (113,634)	\$ (310,171)	\$ (557,379)	\$ (770,034)	\$ (918,024)	\$ (1,012,176)	\$ (1,063,682)	\$ (1,105,332)	\$ (1,283,559)

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
September 2021 through August 2022
Revenue Decoupling Activity by Sector

RESIDENTIAL		(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Estimate)	(Estimate)	(Estimate)	(Estimate)	(Estimate)	(Estimate)
FOR THE MONTH OF:		Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22
DAYS IN MONTH		30	31	30	31	31	28	31	30	31	30	31	31
3	Over Under Beginning Balance	\$ 1,156,969	\$ 1,347,628	\$ 2,084,603	\$ 2,695,831	\$ 3,121,411	\$ 3,106,793	\$ 3,528,013	\$ 3,626,828	\$ 3,516,592	\$ 3,518,450	\$ 3,639,377	\$ 3,542,167
4	Monthly revenue difference Inc/(Dec) revenue	\$ 170,543	\$ 695,995	\$ 602,442	\$ 288,165	\$ (52,190)	\$ 276,867	\$ (263,559)	\$ (180,617)	\$ (103,419)	\$ 59,549	\$ (186,059)	\$ (72,360)
5	True up	\$ 16,775	\$ 36,250	\$ 2,410	\$ 129,397	\$ 28,989	\$ 136,093	\$ 352,512	\$ 60,121	\$ 94,837	\$ 49,631	\$ 74,392	\$ 79,580
6	Ending Balance Pre-Interest	\$ 1,344,287	\$ 2,079,873	\$ 2,689,455	\$ 3,113,393	\$ 3,098,209	\$ 3,519,753	\$ 3,616,967	\$ 3,506,331	\$ 3,508,009	\$ 3,627,630	\$ 3,527,710	\$ 3,549,386
7	Month's Average Balance	\$ 1,250,628	\$ 1,713,750	\$ 2,387,029	\$ 2,904,612	\$ 3,109,810	\$ 3,313,273	\$ 3,572,490	\$ 3,566,580	\$ 3,512,300	\$ 3,573,040	\$ 3,583,543	\$ 3,545,776
8	Interest Rate	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.50%	3.50%	4.00%	4.75%	4.75%
9	Interest Applied	\$ 3,341	\$ 4,730	\$ 6,376	\$ 8,018	\$ 8,584	\$ 8,260	\$ 9,861	\$ 10,260	\$ 10,441	\$ 11,747	\$ 14,457	\$ 14,305
10	Ending Balance	\$ 1,347,628	\$ 2,084,603	\$ 2,695,831	\$ 3,121,411	\$ 3,106,793	\$ 3,528,013	\$ 3,626,828	\$ 3,516,592	\$ 3,518,450	\$ 3,639,377	\$ 3,542,167	\$ 3,563,691
COMMERCIAL & INDUSTRIAL		(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Estimate)	(Estimate)	(Estimate)	(Estimate)	(Estimate)	(Estimate)
FOR THE MONTH OF:		Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22
DAYS IN MONTH		30	31	30	31	31	28	31	30	31	30	31	31
13	Over Under Beginning Balance	\$ 736,980	\$ 785,300	\$ 556,178	\$ (412,215)	\$ (282,714)	\$ (1,294,898)	\$ 535,354	\$ 830,694	\$ 441,871	\$ 881,705	\$ 889,420	\$ 800,999
14	Monthly revenue difference Inc/(Dec) revenue	\$ 43,875	\$ (239,968)	\$ (949,941)	\$ 25,392	\$ (1,055,358)	\$ 1,765,498	\$ 9,429	\$ (364,478)	\$ 249,240	\$ (59,661)	\$ (124,518)	\$ (12,210)
15	True up	\$ 2,414	\$ 8,997	\$ (18,644)	\$ 105,067	\$ 45,348	\$ 65,699	\$ 284,028	\$ (26,173)	\$ 188,630	\$ 64,469	\$ 32,693	\$ 49,226
16	Ending Balance Pre-Interest	\$ 783,270	\$ 554,329	\$ (412,407)	\$ (281,756)	\$ (1,292,724)	\$ 536,300	\$ 828,812	\$ 440,043	\$ 879,741	\$ 886,513	\$ 797,596	\$ 838,014
17	Month's Average Balance	\$ 760,125	\$ 669,815	\$ 71,886	\$ (346,985)	\$ (787,719)	\$ (379,299)	\$ 682,083	\$ 635,369	\$ 660,806	\$ 884,109	\$ 843,508	\$ 819,507
18	Interest Rate	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.50%	3.50%	4.00%	4.75%	4.75%
19	Interest Applied	\$ 2,030	\$ 1,849	\$ 192	\$ (958)	\$ (2,174)	\$ (946)	\$ 1,883	\$ 1,828	\$ 1,964	\$ 2,907	\$ 3,403	\$ 3,306
20	Ending Balance	\$ 785,300	\$ 556,178	\$ (412,215)	\$ (282,714)	\$ (1,294,898)	\$ 535,354	\$ 830,694	\$ 441,871	\$ 881,705	\$ 889,420	\$ 800,999	\$ 841,320
21	Total Ending Balance	\$ 2,132,927.97	\$ 2,640,781.40	\$ 2,283,616.52	\$ 2,838,697.04	\$ 1,811,895.13	\$ 4,063,367.21	\$ 4,457,521.81	\$ 3,958,462.60	\$ 4,400,155.47	\$ 4,528,797.36	\$ 4,343,165.23	\$ 4,405,011.03

**Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Property Tax Adjustment Mechanism
Summary**

<u>Line</u>	<u>Property Tax Reconciliation</u>	
1	Projected (Over)/Under Balance	\$227,872
2	Undercollection of Municipal Property Taxes for 2021	\$40,802
3	Total Estimated Recovery	\$268,674
4	Estimated November 2022 - October 2023 Sales (therms)	186,269,384
5	PTAM LDAC rate per therm December 2021 - October 2022	\$0.0014
1	Schedule 5 page 2	
2	Schedule 5 page 3	
3	Lines 2 plus 3	
4	Company Forecast	
5	Line 4 divided by Line 5	

**Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Property Tax Adjustment Mechanism
Reconciliation of Previous Period January 2022 – October 2022**

1	Month	Property Tax Beginning Balance	Collections	(Over)/Under Ending Balance	Balance Subject to Interest	Interest Rate	Interest	Cumulative Interest
2		(a)	(b)	(c)	(d)	(e.)	(f)	(g)
3	Jan-22	\$1,972,667	(\$100,243)	\$1,872,424	\$1,922,545	3.25%	\$5,207	\$5,207
4	Feb-22	\$1,877,631	(\$400,615)	\$1,477,015	\$1,677,323	3.25%	\$4,543	\$9,750
5	Mar-22	\$1,481,558	(\$358,370)	\$1,123,187	\$1,302,373	3.25%	\$3,527	\$13,277
6	Apr-22	\$1,126,715	(\$247,648)	\$879,067	\$1,002,891	3.50%	\$2,925	\$16,202
7	May-22	\$881,992	(\$170,017)	\$711,975	\$796,983	3.50%	\$2,325	\$18,527
8	Jun-22	\$714,299	(\$97,945)	\$616,355	\$665,327	4.00%	\$2,218	\$20,744
* 9	Jul-22	\$618,573	(\$66,408)	\$552,165	\$585,369	4.75%	\$2,317	\$23,061
* 10	Aug-22	\$554,482	(\$68,701)	\$485,781	\$520,132	4.75%	\$2,059	\$25,120
* 11	Sep-22	\$487,840	(\$86,847)	\$400,993	\$444,417	4.75%	\$1,759	\$26,879
* 12	Oct-22	\$402,752	(\$148,001)	\$254,751	\$328,752	4.75%	\$1,301	\$28,181
13			(\$1,744,795)					
14			Projected Cumulative Collection		(\$1,744,795)			
15			Total Approved Collection		\$1,972,667			
16			Difference to be Included in LDAC Rate		\$227,872			

- (a) Schedule 5 Page 1 line 3
- (b) Company financials
- (c) Column (a) - Column (b)
- (d) [Column (a) + Column (e)] ÷ 2
- (e) Interest rate effective first of the month
- (f) Column (d) x [Column (e) ÷ 12]
- (g) Column (g) + Prior Month Column (f)
- * Projected

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Property Tax Adjustment Mechanism
Calculation of 2021 Municipal Property Taxes

<u>Line</u>	<u>Amount</u>	<u>Reference</u>	<u>Source</u>
1	\$8,924,897	Calculated Municipal Property Taxes Included in Rates through 12/31/2021	Settlement Agreement - DG 20-105 Bates 32
2	\$10,897,564	Adjusted Municipal Property Taxes Billed April 2020 – March 2021	Filed in DG 21-128
3	<u>\$1,972,667</u>	Increase To Rates Due To Municipal Property Tax Reconciliation	Line 2 minus Line 1, Approved DG 21-128
4	\$10,897,564	Municipal Property Taxes Approved in Rates in DG 21-128	Approved in DG 21-128
5	<u>\$10,938,366</u>	Municipal Property Taxes Billed April 2021 – March 2022	Schedule 5 page 4
6	<u>\$40,802</u>	Increase to Rates Due to Municipal Property Tax Reconciliation	Line 5 minus Line 4

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Property Tax Adjustment Mechanism
Municipal Property Tax 2021 Invoices

Tax Year 2021							
Line	Municipality	Parcel	Installment #1	Installment #2	Installment #3	Installment #4	Total Due
1	Allenstown	000400-000001-000000	31,268.00	25,077.00	-	-	56,345.00
2	Amherst	002-033-008	69,909.00	41,932.00	-	-	111,841.00
3	Amherst	002-033-007	3,592.00	1,829.00	-	-	5,421.00
4	Auburn	000001/000001/000UTL	687.00	918.00	-	-	1,605.00
5	Bedford	1-1-A	68,725.58	87,658.02	-	-	156,383.60
6	Belmont	999-000-000-001	20,581.07	21,482.20	-	-	42,063.27
7	Berlin	000404-000051.0000L1	9,747.00	9,491.00	-	-	19,238.00
8	Boscawen	000099-000002-000000	13,058.00	15,109.00	-	-	28,167.00
9	Bow	0-9-99	74,046.00	66,330.00	-	-	140,376.00
10	Canterbury	000000-000002-000000	3,450.00	1,916.00	-	-	5,366.00
11	Derry	35-102	46,778.41	61,748.78	-	-	108,527.19
12	Franklin	000-001-00	52,458.91	54,519.08	-	-	106,977.99
13	Gilford	200-003.000	3,886.00	2,411.00	-	-	6,297.00
14	Goffstown	99-4-3	46,701.04	46,537.41	-	-	93,238.45
15	Goffstown	99-4-2	1,381.22	1,376.37	-	-	2,757.59
16	Goffstown	99-4-1	N/A	N/A	-	-	-
17	Hollis	056-027-001	2,381.00	1,753.00	-	-	4,134.00
18	Hooksett	0GAS-0001	152,381.00	145,397.00	-	-	297,778.00
19	Hooksett	0036-0041-0001	3,095.00	2,953.00	-	-	6,048.00
20	Hudson	100-006-000	205,572.02	179,499.88	-	-	385,071.90
21	Hudson	167-030-000	846.31	875.24	-	-	1,721.55
22	Hudson	167-029-000	807.71	1,304.48	-	-	2,112.19
23	Laconia	425/44/83/1	156,290.00	161,711.00	-	-	318,001.00
24	Litchfield	000UTL-000UTL-000001	10,444.00	19,150.00	-	-	29,594.00
25	Londonderry	81-7-0	55,967.00	37,246.00	-	-	93,213.00
26	Londonderry	81-7-1	237,336.00	245,313.00	-	-	482,649.00
27	Londonderry	81-14-0	19,151.30	14,104.30	-	-	33,255.60
28	Londonderry	81-14-0	1,815.10	21,268.80	-	-	23,083.90
29	Loudon	000070-000004-000000	102,350.00	60,796.00	-	-	163,146.00
30	Manchester	0999A-0075	1,175,690.57	1,175,515.66	-	-	2,351,206.23
31	Manchester	0752-0001	24,155.36	17,292.84	-	-	41,448.20
32	Manchester	0508-0002A	74.71	50.48	-	-	125.19
33	Manchester	0394-0004	323.35	209.51	-	-	532.86
34	Manchester	0471-0008	551.93	361.32	-	-	913.25
35	Merrimack	006D-3-000000-000000	191,500.00	78,677.00	-	-	270,177.00
36	Milford	036-183-000-000	767.66	968.62	-	-	1,736.28
37	Milford	055-007-000-000	75,708.86	44,120.43	-	-	119,829.29
38	Nashua	0039-00026	1,544.88	1,630.67	-	-	3,175.55
39	Nashua	0038-00063	94.44	99.68	-	-	194.12
40	Nashua	0038-00020	148.84	157.11	-	-	305.95
41	Nashua	0041-00011	39,779.95	40,925.44	-	-	80,705.39
42	Nashua	0000PC-00005	1,284,551.84	1,342,094.32	-	-	2,626,646.16
43	Northfield	000999-000001-000001	30,147.00	21,438.00	-	-	51,585.00
44	Pembroke	999-11	77,788.00	76,893.00	-	-	154,681.00
45	Sanborton	00.003.000.000	2,664.00	1,673.00	-	-	4,337.00
46	Tilton	000R23-000013-000000	129,478.00	120,987.00	-	-	250,465.00
47	Tilton	000R23-000014-000000	11,634.00	8,984.00	-	-	20,618.00
48	7 DELTA DRIVE, LLC	2021P01001303	14,659.00	13,709.00	-	-	28,368.00
49	Concord	77Z/12	8,106.05	8,106.05	7,174.62	7,832.47	31,219.19
50	Concord	77Z/11	573.67	573.68	503.35	550.18	2,200.88
51	Concord	77Z/10	6,644.38	6,644.40	5,880.91	6,420.15	25,589.84
52	Concord	77Z/9	322.95	322.94	285.84	312.06	1,243.79
53	Concord	77Z/7	591.76	591.76	523.76	571.78	2,279.06
54	Concord	77Z/6	933.99	934.61	827.23	903.08	3,598.91
55	Concord	77Z/6/A	5.69	5.68	4.99	5.47	21.83
56	Concord	NO00/1/13	11,744.34	11,744.35	13,628.82	22,179.03	59,296.54
57	Concord	P000/1/6	933.91	933.93	785.38	1,635.83	4,289.05
58	Concord	792Z/2/1	424.99	425.01	262.39	125.68	1,238.07
59	Concord	P000/1/3	31,122.34	31,122.32	26,182.08	28,405.53	116,832.27
60	Concord	NO00/1/2	391,483.61	391,483.60	454,308.04	437,962.67	1,675,237.92
61	Concord	202Z/2/1	263.83	263.84	233.52	254.94	1,016.13
62	Concord	743Z/19	1,834.39	1,834.40	1,623.61	1,780.19	7,072.59
63	Concord	494Z/3	300.54	300.56	266.02	290.38	1,157.50
64	Keene	583038000001000	122,879.38	115,131.72	-	-	238,011.10
65	Keene	116039000000000	8080.69	10733.51	-	-	18,814.20
66	R&M REALTY	582014000000000	5301.22	4902.31	-	-	10,203.53
67	Keene Propane	047020020000	3549.06	4033.21	-	-	7,582.27
68	Total		5,051,064.85	4,865,581.52	512,490.56	509,229.44	10,938,366.37

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
November 2022 – October 2023 LDAC
Local Delivery Adjustment Charge (LDAC) - Recovery of Rate Case Expense and Recoupment

<u>Line No.</u>	<u>Description</u> (A)	<u>Total</u> (B)	<u>Reference</u> (C)
<u>2022 - 2023 Rate Case Expense and Recoupment Factor Calculation</u>			
1	Rate Case Expense DG 17-048	\$ (4,836)	Company actuals
2	Rate Case Expense DG 20-105	879,555	Company actuals
3	RCE Reconciliation Balance July 1, 2022 (Over)/Under-collection	<u>874,718</u>	Ln 1 + Ln 2
4	Interest Expense: July 2022 - October 2022	12,535	Sch. 6 Line 18
5	Less Revenues July 2022 - October 2022	<u>234,227</u>	Sch. 6 Line 5
6	RCE Reconciliation Balance November 1, 2022 (Over)/Under-collection	653,026	Ln 3 + Ln 4 - Ln 5
7	Interest Expense: November 2022 – October 2023	<u>11,902</u>	Sch. 6 Line 18
8	Total Rate Case Expense and Recoupment	<u>\$ 664,928</u>	Ln 6 + Ln 7
9	Forecast Throughput	186,269,384	Company forecast
10	RCE Factor (\$/Therm)	\$0.0036	Ln 8 / Ln 9

Liberty Utilities (Energy/North Natural Gas) Corp. d/b/a Liberty
JULY 2022 THROUGH OCTOBER 2023
RATE CASE EXPENSE AND RECOUPMENT PROJECTION

	(Estimate)	Total																
1 FOR THE MONTH OF:	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23		
2 DAYS IN MONTH	31	31	30	31	30	31	31	28	31	30	31	31	31	30	31	30		
3 Beginning Balance (Over)/Under-recovery	\$ 874,718	\$ 835,783	\$ 795,263	\$ 743,242	\$ 653,026	\$ 590,715	\$ 501,026	\$ 396,211	\$ 307,837	\$ 229,988	\$ 179,852	\$ 143,381	\$ 119,942	\$ 98,648	\$ 76,521	\$ 48,385		
4 Collected Revenue	42,379	43,803	55,018	93,026	64,734	91,887	106,621	89,654	78,932	50,962	37,100	23,969	21,735	22,468	28,387	48,480		664,928
5 Remaining recoupment recovery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
6 Rate Case Expense DG 17-048	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
7 Rate Case Expense DG 20-105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
8 Ending Balance (Over)/Under-recovery Pre-Interest	\$ 832,339	\$ 791,980	\$ 740,245	\$ 650,216	\$ 588,292	\$ 498,828	\$ 394,405	\$ 306,557	\$ 228,906	\$ 179,027	\$ 142,752	\$ 119,412	\$ 98,208	\$ 76,180	\$ 48,134	\$ (94)		
9 Average Balance	\$ 853,529	\$ 813,881	\$ 767,754	\$ 696,729	\$ 620,659	\$ 544,772	\$ 447,716	\$ 351,384	\$ 268,372	\$ 204,508	\$ 161,302	\$ 131,397	\$ 109,075	\$ 87,414	\$ 62,327	\$ 24,146		
10 Interest Rate	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%		4.75%
11 Interest Applied	\$ 3,443	\$ 3,283	\$ 2,997	\$ 2,811	\$ 2,423	\$ 2,198	\$ 1,806	\$ 1,280	\$ 1,083	\$ 825	\$ 630	\$ 530	\$ 440	\$ 341	\$ 251	\$ 94		11,902
12 Ending Balance (Over)/Under-recovery	\$ 835,783	\$ 795,263	\$ 743,242	\$ 653,026	\$ 590,715	\$ 501,026	\$ 396,211	\$ 307,837	\$ 229,988	\$ 179,852	\$ 143,381	\$ 119,942	\$ 98,648	\$ 76,521	\$ 48,385	\$ 0		

Liberty Utilities (Energy/Natural Gas) Corp. d/b/a Liberty
JULY 2022 THROUGH OCTOBER 2023
RATE CASE EXPENSE AND RECOVERY RECONCILIATION

1 2	FOR THE MONTH OF: DAYS IN MONTH	(Actual)	(Estimate)	(Estimate)	(Estimate)	(Estimate)	Total Nov-21 - Oct-22											
		Jul-21 31	Aug-21 31	Sep-21 30	Oct-21 31	Nov-21 30	Dec-21 31	Jan-22 31	Feb-22 28	Mar-22 31	Apr-22 30	May-22 31	Jun-22 30	Jul-22 31	Aug-22 31	Sep-22 30	Oct-22 31	
3	Beginning Balance (Over)/Under-recovery	\$ 773,228	\$ 800,649	\$ 804,765	\$ 811,398	\$ 812,604	\$ 807,791	\$ 838,787	\$ 836,020	\$ 864,877	\$ 871,455	\$ 873,962	\$ 925,805	\$ 874,718	\$ 835,783	\$ 795,263	\$ 743,242	\$ 812,604
4	Collected Revenue	1,029	841	945	1,098	20,125	139,641	276,768	606,584	465,194	136,453	91,521	55,291	42,379	43,803	55,018	93,026	2,025,803
5	Remaining recoupment recovery	26,287	2,750	5,422	66	13,151	168,367	174,014	236,231	469,379	136,453	140,693	1,249	-	-	-	-	1,339,536
6	PTAM Adjustment to reclass activity to the PTAM account	-	-	-	-	-	-	97,679	397,093	-	-	-	-	-	-	-	-	494,772
7																		-
8	Ending Balance (Over)/Under-recovery Pre-Interest	\$ 798,486	\$ 802,558	\$ 809,242	\$ 810,366	\$ 805,630	\$ 836,517	\$ 833,711	\$ 862,759	\$ 869,062	\$ 871,455	\$ 923,134	\$ 871,763	\$ 832,339	\$ 791,980	\$ 740,245	\$ 650,216	\$ 621,109
9	Average Balance	\$ 785,857	\$ 801,604	\$ 807,003	\$ 810,882	\$ 809,117	\$ 822,154	\$ 836,249	\$ 849,389	\$ 866,969	\$ 871,455	\$ 898,548	\$ 898,784	\$ 853,529	\$ 813,881	\$ 767,754	\$ 696,729	\$ 716,856
10	Interest Rate	4.75%	4.75%	4.75%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.50%	3.50%	4.00%	4.75%	4.75%	4.75%	4.75%	
11	Interest Applied	\$ 2,163	\$ 2,207	\$ 2,156	\$ 2,238	\$ 2,161	\$ 2,269	\$ 2,308	\$ 2,118	\$ 2,393	\$ 2,507	\$ 2,671	\$ 2,955	\$ 3,443	\$ 3,283	\$ 2,997	\$ 2,811	31,918
12	Ending Balance (Over)/Under-recovery	\$ 800,649	\$ 804,765	\$ 811,398	\$ 812,604	\$ 807,791	\$ 838,787	\$ 836,020	\$ 864,877	\$ 871,455	\$ 873,962	\$ 925,805	\$ 874,718	\$ 835,783	\$ 795,263	\$ 743,242	\$ 653,026	\$ 653,026

800,649.35 804,764.57 811,397.61 812,604.08 807,791.42 838,786.69 836,019.57 864,876.83 871,455.10 873,962.03 925,804.99 874,718.37

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

	Customer Charge	Block	Total
1 Distribution			
2 R-3 Base Rates	\$ 15.39	\$ 0.5632	
3 R-4 Base Rates at 55% of R-3	\$ 8.47	\$ 0.3098	
4 Program Distribution Subsidy	\$ 6.9260	\$ 0.2534	
5 Normal Winter Therms			621
6 Estimated Winter 2022/2023 Distribution Subsidy	\$ 41.56	\$ 157.32	\$ 198.87
7			
8 Number of Estimated 2022/2023 Participants	6,032	65	6,097 (a)
9 COG	ENNG	Keene	Total
10 R-3 COG Rates	\$ 1.1747	\$ 2.4835	
11 R-4 COG Rates at 55% of R-3	\$ 0.6461	\$ 1.3659	
12 Program COG Subsidy	\$ 0.5286	\$ 1.1176	
13 Estimated Winter 2022/2023 COG Subsidy (Ln 5 * Ln 14)	\$ 328.13	\$ 693.71	\$ 1,021.84
14 Winter Distribution Subsidy times Number of Participants (Ln 7 * Ln 9)			\$ 1,212,534
15 Winter COG Subsidy times Number of Participants (Ln 9 * Ln 16)			\$ 2,024,359
16 Prior Year Ending Balance - Gas Assistance Page 2			\$ 483,503
17 Estimated Annual Administrative Costs			-
18 Total Program Costs			\$ 3,720,397
19 Estimated weather normalized firm therms billed for the			
20 Twelve months ended 10/31/22 sales and transportation			186,269,384
21 Total Gas Assistance Program Charge			\$ 0.0200

(a) Estimated number of participants for 2022/2023 is based on the actual number

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
November 2021 through October 2022
Residential Gas Assistance Program Reconciliation
Account 175.6

	(Actual)	(Estimate)	(Estimate)	(Estimate)	(Estimate)	Total							
1 FOR THE MONTH OF:	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	
2 DAYS IN MONTH	30	31	31	28	31	30	31	30	31	31	30	31	
3 Beginning Balance	\$ 318,947	\$ 252,743	\$ 367,814	\$ 472,282	\$ 549,335	\$ 641,439	\$ 773,225	\$ 839,851	\$ 741,214	\$ 675,596	\$ 615,877	\$ 553,678	\$ 318,947
4 Add: Actual Costs	56,232.0	412,301.2	485,497.5	516,893.4	484,054.4	407,554.0	256,657.9	9,968.5	-	-	-	-	2,629,159
5 Less: Collected Revenue	(123,198.4)	(298,085.1)	(382,187.5)	(441,112.0)	(393,591.4)	(277,800.2)	(192,426.4)	(111,199.4)	(68,470.9)	(62,318.6)	(64,477.2)	(72,263.2)	(2,487,130)
6 Add: Administrative and Start Up Costs	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Ending Balance Pre-Interest	\$ 251,980	\$ 366,959	\$ 471,124	\$ 548,063	\$ 639,798	\$ 771,193	\$ 837,457	\$ 738,620	\$ 672,744	\$ 613,277	\$ 551,400	\$ 481,415	\$ 460,975
8 Month's Average Balance	\$ 285,464	\$ 309,851	\$ 419,469	\$ 510,173	\$ 594,567	\$ 706,316	\$ 805,341	\$ 789,235	\$ 706,979	\$ 644,436	\$ 583,638	\$ 517,547	
9 Interest Rate	3.25%	3.25%	3.25%	3.25%	3.25%	3.50%	3.50%	4.00%	4.75%	4.75%	4.75%	4.75%	
10 Interest Applied	\$ 763	\$ 855	\$ 1,158	\$ 1,272	\$ 1,641	\$ 2,032	\$ 2,394	\$ 2,595	\$ 2,852	\$ 2,600	\$ 2,279	\$ 2,088	22,528
11 Ending Balance	\$ 252,743	\$ 367,814	\$ 472,282	\$ 549,335	\$ 641,439	\$ 773,225	\$ 839,851	\$ 741,214	\$ 675,596	\$ 615,877	\$ 553,678	\$ 483,503	\$ 483,503

Liberty Utilities (Energy/Natural Gas) Corp d/b/a Liberty
Quarterly Report
Gas Assistance Program (GAP)
2021-22 Discounted 45%

Schedule 7
RGAP
Page 3 of 3

Customer Count													Summary		
	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Actual/ Projected Total To Date (1)	Original Projection (2)	Variance
Actual / Projected No. of Customers	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Projected	Projected	Projected	Projected	Average		
LIHEAP	4,186	4,333	4,375	4,427	4,563	4,645	4,693	4,580	4,563	4,563	4,563	4,563	4,422	5,320	899
Non-LIHEAP	1,508	1,422	1,413	1,433	1,423	1,452	1,502	1,497	1,423	1,423	1,423	1,423	1,442	743	(699)
Total	(a) 5,694	5,755	5,788	5,860	5,986	6,097	6,195	6,077	5,986	5,986	5,986	5,986	5,863	6,063	200
GAP Recoveries															
Actual / Projected															
Therm Sales	9,552,677	19,373,741	24,840,510	28,516,452	25,446,880	17,948,293	12,446,101	7,178,867	0	0	0	0	145,303,521	182,829,872	37,526,351
GAP Rate Per Therm	\$0.0156	\$0.0156	\$0.0156	\$0.0156	\$0.0156	\$0.0156	\$0.0156	\$0.0156	\$0.0156	\$0.0156	\$0.0156	\$0.0156	\$0.0156	\$0.0156	\$610,487
Total	(e) \$123,946	\$302,230	\$387,512	\$444,857	\$396,971.33	\$279,993.37	\$194,159.18	\$111,990.33	\$0.00	\$0.00	\$0.00	\$0.00	\$2,241,659	\$2,852,146	\$610,487
Adjustment	\$854	-\$1,110	-\$1,390	\$134	-\$88	-\$14	-\$356	-\$36	\$0	\$0	\$0	\$0	-\$2,005	\$0	
Total Adjusted Recoveries (3)	\$124,800	\$301,121	\$386,122	\$444,991	\$396,883	\$279,980	\$193,804	\$111,955	\$0	\$0	\$0	\$0	\$2,239,654	\$2,852,146	\$612,492
Program Costs															
Actual / Projected Costs															
Prior Period Ending Balance	(c) 322,341	0	0	0	0	0	0	0	0	0	0	0	322,341	208,239	(114,101)
IT	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Admin.	(b) 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Education	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other (incl. Reporting Costs)	773	871.67	1,185	1,309	1,699	2,109	2,691	0	0	0	0	0	10,638	0	(10,638)
Fixed Discount	7,364	44,048.77	41,747	41,552	46,657	46,145	34,020	1,290	41,459	41,459	41,459	41,459	428,658	221,076	(207,582)
Variable Discount	15,251	133,633.50	175,701	203,060	204,119	154,189	75,833	3,337	18,920	23,371	49,774	107,896	1,165,085	802,374	(362,711)
COG Discount	35,996	241,168.52	276,420	281,311	243,951	213,535	148,748	5,366	14,533	17,951	38,231	82,875	1,600,085	1,617,433	17,349
Total Monthly Costs (3)	(d) \$59,384.53	\$419,722	\$495,052	\$527,231	\$496,427	\$415,978	\$258,601	\$12,684	\$74,912	\$82,781	\$129,464	\$232,230	\$3,204,466	\$2,640,884	(\$563,582)
Avg Monthly Residential Customer Bill	\$ 129.67	\$ 218.05	\$ 241.99	\$ 288.03	\$ 258.56	\$ 184.91	\$ 79.73	\$ 50.71	\$ 35.58	\$ 33.05	\$ 33.05	\$ 41.88	\$1,595.22	\$3,060.78	\$1,465.56
Avg Monthly Residential Low Income Customer Bill	\$ 57.51	\$ 90.04	\$ 92.71	\$ 105.24	\$ 101.93	\$ 80.26	\$ 75.57	\$ 47.72	\$ 33.84	\$ 31.52	\$ 31.99	\$ 40.81	\$789.13	\$274.01	(\$515.12)
Avg Monthly GAP Customer Discount	\$72.16	\$128.02	\$149.28	\$182.78	\$156.64	\$104.65	\$4.16	\$3.00	\$1.74	\$1.53	\$1.07	\$1.08	\$806.10	\$2,786.77	\$1,980.67
Avg Monthly GAP Customer Discount as a % to Avg Monthly Residential Customer Bill	55.65%	58.71%	61.69%	63.46%	60.58%	56.59%	5.22%	5.91%	4.89%	4.63%	3.23%	2.57%	50.53%	91.05%	
Gross Monthly Revenues	\$9,747,498	\$26,119,602	\$30,570,568	\$31,130,776	\$27,291,640	\$22,365,746	\$15,576,461	\$7,847,069	\$4,997,762	\$6,467,910	\$5,113,368	\$8,930,712	\$196,159,110	\$161,677,049	(\$34,482,061)
Total Costs as a percent of Gross Monthly Revenues	0.61%	1.61%	1.62%	1.69%	1.82%	1.86%	1.66%	0.16%	1.50%	1.28%	2.53%	2.60%	1.63%	1.63%	

(1) This column represents actual data for the months in which such data is available plus projected data for the remaining months in the 12-month program year.
(2) GAP Projection on Bates 135 of the 2021-22 Cost of Gas Filing, DG 21-130.
(3) Ties to the Company's GAP deferral accounts 8840-2-0000-10-1169-1756 & 8843-2-0000-10-1169-1756.

(a) The actual number of customers provided for this report are the number of registered customers that were billed during the month.
(b) Actual administrative costs consists of bill inserts and advertising.
(c) The Prior Year 2020-21 under/(over) ending balance.
(d) The total discount is calculated from the actual Residential Low Income R-4 & R-7 bills for the month plus interest.
(e) The Total GAP recoveries for Nov-21 has an estimated volume split between Peak and Off Peak of 25/75 respectively.

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
LDAC 2022-2023 Filing
LDAC Bill Comparisons, Proposed LDAC Rates November 1, 2022 – October 31, 2023 vs. Current LDAC Rates

1 Proposed LDAC Rates November 1, 2022 – October 31, 2023								
2 Residential Customers (Rate Codes R-3)								
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter Nov-Apr	
	45	92	117	148	130	88	621	
3								
4								
5	Typical Usage (Therms)							
6	Energy Efficiency	\$ 0.0664	\$ 0.0664	\$ 0.0664	\$ 0.0664	\$ 0.0664	\$ 0.0664	
7	Energy Efficiency Amount	\$ 2.98	\$ 6.14	\$ 7.78	\$ 9.83	\$ 8.66	\$ 5.83	
8	Gas Holder	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	
9	Gas Holder Amount	\$ 0.02	\$ 0.03	\$ 0.04	\$ 0.06	\$ 0.05	\$ 0.03	
10	MGP	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	
11	MGP Amount	\$ 0.3188	\$ 0.6572	\$ 0.8335	\$ 1.0525	\$ 0.9274	\$ 6.248	
12	Environmental	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	
13	Total Environmental	\$ 0.34	\$ 0.69	\$ 0.88	\$ 1.11	\$ 0.98	\$ 6.6	
14	RDAF	\$ 0.0409	\$ 0.0409	\$ 0.0409	\$ 0.0409	\$ 0.0409	\$ 0.0409	
15	RDAF amount	\$ 1.83	\$ 3.78	\$ 4.79	\$ 6.05	\$ 5.33	\$ 35.9	
16	PTAM	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	
17	PTAM amount	\$ 0.06	\$ 0.13	\$ 0.17	\$ 0.21	\$ 0.19	\$ 0.13	
18	RCE	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	
19	RCE Amount	\$ 0.16	\$ 0.33	\$ 0.42	\$ 0.53	\$ 0.47	\$ 0.32	
20	GAP	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	
21	GAP Amount	\$ 0.90	\$ 1.85	\$ 2.34	\$ 2.96	\$ 2.61	\$ 1.76	
22	LDAC	\$ 0.1398	\$ 0.1398	\$ 0.1398	\$ 0.1398	\$ 0.1398	\$ 0.1398	
23	LDAC Amount	\$ 6.27	\$ 12.92	\$ 16.39	\$ 20.70	\$ 18.24	\$ 12.28	

	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Summer May-Oct	Total Nov-Oct
	55	24	15	14	13	19	141	762
	\$ 0.0664	\$ 0.0664	\$ 0.0664	\$ 0.0664	\$ 0.0664	\$ 0.0664	\$ 0.0664	\$ 0.0664
	\$ 3.65	\$ 1.60	\$ 1.03	\$ 0.93	\$ 0.89	\$ 1.28	\$ 9.35	\$ 50.57
	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004
	\$ 0.02	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.05	\$ 0.28
	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071
	\$ 0.3906	\$ 0.1712	\$ 0.1099	\$ 0.0998	\$ 0.0953	\$ 0.1346	\$ 1.00	\$ 5.42
	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075
	\$ 0.41	\$ 0.18	\$ 0.12	\$ 0.11	\$ 0.10	\$ 0.14	\$ 1.05	\$ 5.70
	\$ 0.0409	\$ 0.0409	\$ 0.0409	\$ 0.0409	\$ 0.0409	\$ 0.0409	\$ 0.0409	\$ 0.0409
	\$ 2.25	\$ 0.98	\$ 0.63	\$ 0.57	\$ 0.55	\$ 0.77	\$ 5.76	\$ 31.15
	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014
	\$ 0.08	\$ 0.03	\$ 0.02	\$ 0.02	\$ 0.02	\$ 0.03	\$ 0.20	\$ 1.10
	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036
	\$ 0.20	\$ 0.09	\$ 0.06	\$ 0.05	\$ 0.05	\$ 0.07	\$ 0.51	\$ 2.74
	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200
	\$ 1.10	\$ 0.48	\$ 0.31	\$ 0.28	\$ 0.27	\$ 0.38	\$ 2.82	\$ 15.23
	\$ 0.1398	\$ 0.1398	\$ 0.1398	\$ 0.1398	\$ 0.1398	\$ 0.1398	\$ 0.1398	\$ 0.1398
	\$ 7.68	\$ 3.37	\$ 2.16	\$ 1.96	\$ 1.87	\$ 2.65	\$ 19.69	\$ 106.49

24 Current LDAC Rates								
25 Residential Customers (Rate Codes R-3)								
	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	Winter Nov-Apr	
	45	92	117	148	130	88	621	
26								
27	Typical Usage (Therms)							
28	Energy Efficiency	\$ 0.0640	\$ 0.0640	\$ 0.0640	\$ 0.0640	\$ 0.0640	\$ 0.0640	
29	Energy Efficiency Amount	\$ 2.87	\$ 5.91	\$ 4.99	\$ 4.99	\$ 4.99	\$ 4.99	
30	Gas Holder	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
31	Gas Holder Amount	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
32	MGP	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	
33	MGP Amount	\$ 0.6926	\$ 1.4279	\$ 1.2045	\$ 1.2045	\$ 1.2045	\$ 1.2045	
34	Environmental	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	
35	Total Environmental	\$ 0.69	\$ 1.43	\$ 1.20	\$ 1.20	\$ 1.20	\$ 1.20	
36	RDAF	\$ 0.0152	\$ 0.0152	\$ 0.0152	\$ 0.0152	\$ 0.0152	\$ 0.0152	
37	RDAF amount	\$ 0.68	\$ 1.40	\$ 1.18	\$ 1.18	\$ 1.18	\$ 1.18	
38	PTAM	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	
39	PTAM amount	\$ 0.64	\$ 1.31	\$ 1.11	\$ 1.11	\$ 1.11	\$ 1.11	
40	RCE	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	
41	RCE Amount	\$ 0.33	\$ 0.68	\$ 0.58	\$ 0.58	\$ 0.58	\$ 0.58	
42	GAP	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	
43	GAP Amount	\$ 0.70	\$ 1.44	\$ 1.22	\$ 1.22	\$ 1.22	\$ 1.22	
44	Total LDAC	\$ 0.1318	\$ 0.1318	\$ 0.1318	\$ 0.1318	\$ 0.1318	\$ 0.1318	
45	Total LDAC Amount	\$ 5.91	\$ 12.18	\$ 15.45	\$ 19.51	\$ 17.19	\$ 11.58	

	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Summer May-Oct	Total Nov-Oct
	55	24	15	14	13	19	141	762
	\$ 0.0640	\$ 0.0640	\$ 0.0640	\$ 0.0640	\$ 0.0640	\$ 0.0640	\$ 0.0640	\$ 0.0640
	\$ 3.51	\$ 1.54	\$ 0.99	\$ 0.90	\$ 0.86	\$ 1.21	\$ 9.01	\$ 37.72
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155
	\$ 0.8487	\$ 0.3720	\$ 0.2387	\$ 0.2168	\$ 0.2071	\$ 0.2925	\$ 2.18	\$ 9.11
	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155
	\$ 0.85	\$ 0.37	\$ 0.24	\$ 0.22	\$ 0.21	\$ 0.29	\$ 2.18	\$ 9.11
	\$ 0.0152	\$ 0.0152	\$ 0.0152	\$ 0.0152	\$ 0.0152	\$ 0.0152	\$ 0.0152	\$ 0.0152
	\$ 0.83	\$ 0.37	\$ 0.23	\$ 0.21	\$ 0.20	\$ 0.29	\$ 2.14	\$ 8.97
	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142
	\$ 0.78	\$ 0.34	\$ 0.22	\$ 0.20	\$ 0.19	\$ 0.27	\$ 2.00	\$ 8.38
	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074
	\$ 0.41	\$ 0.18	\$ 0.11	\$ 0.10	\$ 0.10	\$ 0.14	\$ 1.04	\$ 4.37
	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156
	\$ 0.86	\$ 0.38	\$ 0.24	\$ 0.22	\$ 0.21	\$ 0.30	\$ 2.20	\$ 9.20
	\$ 0.1318	\$ 0.1318	\$ 0.1318	\$ 0.1318	\$ 0.1318	\$ 0.1318	\$ 0.1318	\$ 0.1318
	\$ 7.24	\$ 3.17	\$ 2.04	\$ 1.85	\$ 1.77	\$ 2.50	\$ 18.56	\$ 100.37

46 LDAC Bill Impact : Residential Customers (Rate Codes R-3)								
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter Nov-Apr	
	45	92	117	148	130	88	621	
47								
48								
49	Energy Efficiency	\$ (0.11)	\$ (0.23)	\$ (2.80)	\$ (4.84)	\$ (3.67)	\$ (8.85)	
50	Energy Efficiency Amount	\$ -3.8%	\$ -3.8%	\$ -56.1%	\$ -97.1%	\$ -73.7%	\$ -17.0%	
51	Environmental	\$ (0.02)	\$ (0.03)	\$ (0.04)	\$ (0.06)	\$ (0.05)	\$ (0.03)	
52	Total Environmental	\$ -2.4%	\$ -2.4%	\$ -3.6%	\$ -4.6%	\$ -4.0%	\$ -2.7%	
53	RDAF	\$ 0.37	\$ 0.77	\$ 0.37	\$ 0.15	\$ 0.28	\$ 0.58	
54	RDAF amount	\$ 54.9%	\$ 54.9%	\$ 31.3%	\$ 12.8%	\$ 23.4%	\$ 48.9%	
55	PTAM	\$ 0.36	\$ 0.74	\$ 0.33	\$ 0.10	\$ 0.23	\$ 0.55	
56	PTAM amount	\$ 56.1%	\$ 56.1%	\$ 29.6%	\$ 8.7%	\$ 20.6%	\$ 49.4%	
57	RCE	\$ (1.15)	\$ (2.38)	\$ (3.61)	\$ (4.87)	\$ (4.15)	\$ (2.41)	
58	RCE Amount	\$ -347.3%	\$ -347.3%	\$ -625.5%	\$ -843.9%	\$ -719.2%	\$ -417.5%	
59	GAP	\$ 0.57	\$ 1.18	\$ 0.94	\$ 0.89	\$ 0.92	\$ 0.98	
60	GAP Amount	\$ 9.7%	\$ 9.7%	\$ 6.1%	\$ 4.6%	\$ 5.3%	\$ 8.5%	
61	Total LDAC	\$ 0.36	\$ 0.74	\$ 0.94	\$ 1.19	\$ 1.05	\$ 0.71	
62	Total LDAC Amount	\$ 6.1%	\$ 6.1%	\$ 6.1%	\$ 6.1%	\$ 6.1%	\$ 6.1%	

	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Summer May-Oct	Total Nov-Oct
	55	24	15	14	13	19	141	762
	\$ (0.13)	\$ (0.06)	\$ (0.04)	\$ (0.03)	\$ (0.03)	\$ (0.05)	\$ (0.35)	\$ (12.84)
	\$ -3.8%	\$ -4%	\$ -4%	\$ -4%	\$ -4%	\$ -4%	\$ (0.04)	\$ (0.34)
	\$ (0.02)	\$ (0.01)	\$ (0.01)	\$ (0.01)	\$ (0.01)	\$ (0.01)	\$ (0.05)	\$ (0.28)
	\$ -2.4%	\$ -2.4%	\$ -2.4%	\$ -2.4%	\$ -2.4%	\$ -2.4%	\$ -2.4%	\$ -3.1%
	\$ 0.46	\$ 0.20	\$ 0.13	\$ 0.12	\$ 0.11	\$ 0.16	\$ 1.17	\$ 3.70
	\$ 54.9%	\$ 54.9%	\$ 54.9%	\$ 54.9%	\$ 54.9%	\$ 54.9%	\$ 54.9%	\$ 41.2%
	\$ 0.44	\$ 0.19	\$ 0.12	\$ 0.11	\$ 0.11	\$ 0.15	\$ 1.12	\$ 3.41
	\$ 56.1%	\$ 56.1%	\$ 56.1%	\$ 56.1%	\$ 56.1%	\$ 56.1%	\$ 56.1%	\$ 40.8%
	\$ (1.41)	\$ (0.62)	\$ (0.40)	\$ (0.36)	\$ (0.34)	\$ (0.49)	\$ (3.62)	\$ (22.18)
	\$ -347.3%	\$ -347.3%	\$ -347.3%	\$ -347.3%	\$ -347.3%	\$ -347.3%	\$ -347.3%	\$ -508.1%
	\$ 0.70	\$ 0.31	\$ 0.20	\$ 0.18	\$ 0.17	\$ 0.24	\$ 1.80	\$ 7.28
	\$ 9.7%	\$ 9.7%	\$ 9.7%	\$ 9.7%	\$ 9.7%	\$ 9.7%	\$ 9.7%	\$ 7.3%
	\$ 0.44	\$ 0.19	\$ 0.12	\$ 0.11	\$ 0.11	\$ 0.15	\$ 1.13	\$ 6.11
	\$ 6.1%	\$ 6.1%	\$ 6.1%	\$ 6.1%	\$ 6.1%	\$ 6.1%	\$ 6.1%	\$ 6.1%

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
LDAC 2022-2023 Filing
LDAC Bill Comparisons, Proposed LDAC Rates November 1, 2022 – October 31, 2023 vs. Current LDAC Rates

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1 Proposed LDAC Rates November 1, 2022 – October 31, 2023							
2 Commercial/Industrial Sales Customers and Commercial/Industrial Transportation Customers (Rate Codes G-41)							
3	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter Nov-Apr
4	111	274	376	483	425	270	1,939
5 Typical Usage (Therms)							
6 Energy Efficiency	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442
7 Energy Efficiency Amount	\$ 4.93	\$ 12.11	\$ 16.61	\$ 21.37	\$ 18.76	\$ 11.93	\$ 85.70
8 Gas Holder	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004
9 Gas Holder Amount	\$ 0.04	\$ 0.10	\$ 0.14	\$ 0.18	\$ 0.16	\$ 0.10	\$ 0.72
10 MGP	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071
11 MGP Amount	\$ 0.79	\$ 1.9480	\$ 2.6719	\$ 3.4378	\$ 3.0187	\$ 1.9196	\$ 13.79
12 Environmental	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075
13 Total Environmental	\$ 0.83	\$ 2.05	\$ 2.81	\$ 3.62	\$ 3.18	\$ 2.02	\$ 14.51
14 RDAF	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030
15 RDAF amount	\$ 0.33	\$ 0.82	\$ 1.13	\$ 1.45	\$ 1.27	\$ 0.81	\$ 5.82
16 PTAM	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014
17 PTAM amount	\$ 0.16	\$ 0.40	\$ 0.54	\$ 0.70	\$ 0.61	\$ 0.39	\$ 2.80
18 RCE	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036
19 RCE Amount	\$ 0.40	\$ 0.99	\$ 1.35	\$ 1.74	\$ 1.53	\$ 0.97	\$ 6.98
20 GAP	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200
21 GAP Amount	\$ 2.23	\$ 5.48	\$ 7.51	\$ 9.67	\$ 8.49	\$ 5.40	\$ 38.78
22 LDAC	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797
23 LDAC Amount	\$ 8.89	\$ 21.84	\$ 29.96	\$ 38.54	\$ 33.84	\$ 21.52	\$ 154.59

May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Summer May-Oct	Total Nov-Oct
154	55	24	21	13	44	310	2,249
\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442
\$ 6.81	\$ 2.42	\$ 1.07	\$ 0.91	\$ 0.57	\$ 1.93	\$ 13.71	\$ 99.41
\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004
\$ 0.06	\$ 0.02	\$ 0.01	\$ 0.01	\$ 0.00	\$ 0.02	\$ 0.12	\$ 0.84
\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071
\$ 1.0950	\$ 0.3896	\$ 0.1728	\$ 0.1459	\$ 0.0915	\$ 0.3105	\$ 2.21	\$ 15.99
\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075
\$ 1.15	\$ 0.41	\$ 0.18	\$ 0.15	\$ 0.10	\$ 0.33	\$ 2.32	\$ 16.83
\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030
\$ 0.46	\$ 0.16	\$ 0.07	\$ 0.06	\$ 0.04	\$ 0.13	\$ 0.93	\$ 6.75
\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014
\$ 0.22	\$ 0.08	\$ 0.04	\$ 0.03	\$ 0.02	\$ 0.06	\$ 0.45	\$ 3.24
\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036
\$ 0.55	\$ 0.20	\$ 0.09	\$ 0.07	\$ 0.05	\$ 0.16	\$ 1.12	\$ 8.10
\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200
\$ 3.08	\$ 1.10	\$ 0.49	\$ 0.41	\$ 0.26	\$ 0.87	\$ 6.20	\$ 44.98
\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797
\$ 12.28	\$ 4.37	\$ 1.94	\$ 1.64	\$ 1.03	\$ 3.48	\$ 24.72	\$ 179.31

24 Current LDAC Rates November 1, 2022 – October 31, 2023							
25 Commercial/Industrial Sales Customers and Commercial/Industrial Transportation Customers (Rate Codes G-41)							
27	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	Winter Nov-Apr
28	111	274	376	483	425	270	1,939
29 Energy Efficiency	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426
30 Energy Efficiency Amount	\$ 4.74	\$ 11.66	\$ 15.99	\$ 20.57	\$ 18.06	\$ 11.49	\$ 82.50
31 Gas Holder	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
32 Gas Holder Amount	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
33 MGP	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155
34 MGP Amount	\$ 1.7218	\$ 4.2323	\$ 5.8051	\$ 7.4690	\$ 6.5586	\$ 4.1705	\$ 29.96
35 Environmental	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155
36 Total Environmental	\$ 1.72	\$ 4.23	\$ 5.81	\$ 7.47	\$ 6.56	\$ 4.17	\$ 29.96
37 RDAF	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039
38 RDAF amount	\$ 0.43	\$ 1.07	\$ 1.47	\$ 1.89	\$ 1.66	\$ 1.05	\$ 7.56
39 PTAM	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142
40 PTAM amount	\$ 1.58	\$ 3.89	\$ 5.34	\$ 6.86	\$ 6.03	\$ 3.83	\$ 27.53
41 RCE	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074
42 RCE Amount	\$ 0.82	\$ 2.03	\$ 2.78	\$ 3.58	\$ 3.14	\$ 2.00	\$ 14.35
43 GAP	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156
44 GAP Amount	\$ 1.74	\$ 4.27	\$ 5.86	\$ 7.54	\$ 6.62	\$ 4.21	\$ 30.25
45 Total LDAC	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991
46 Total LDAC Amount	\$ 11.04	\$ 27.15	\$ 37.24	\$ 47.91	\$ 42.07	\$ 26.75	\$ 192.15

May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Summer May-Oct	Total Nov-Oct
154	55	24	21	13	44	310	2,249
\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426
\$ 6.55	\$ 2.33	\$ 1.03	\$ 0.87	\$ 0.55	\$ 1.86	\$ 13.20	\$ 95.70
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155
\$ 2.3791	\$ 0.8465	\$ 0.3755	\$ 0.3169	\$ 0.1988	\$ 0.6745	\$ 4.79	\$ 34.75
\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155
\$ 2.38	\$ 0.85	\$ 0.38	\$ 0.32	\$ 0.20	\$ 0.67	\$ 4.79	\$ 34.75
\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039
\$ 0.60	\$ 0.21	\$ 0.09	\$ 0.08	\$ 0.05	\$ 0.17	\$ 1.21	\$ 8.77
\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142
\$ 2.19	\$ 0.78	\$ 0.35	\$ 0.29	\$ 0.18	\$ 0.62	\$ 4.40	\$ 31.94
\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074
\$ 1.14	\$ 0.41	\$ 0.18	\$ 0.15	\$ 0.10	\$ 0.32	\$ 2.29	\$ 16.64
\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156
\$ 2.40	\$ 0.85	\$ 0.38	\$ 0.32	\$ 0.20	\$ 0.68	\$ 4.84	\$ 35.09
\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991
\$ 15.26	\$ 5.43	\$ 2.41	\$ 2.03	\$ 1.28	\$ 4.33	\$ 30.73	\$ 222.89

47 LDAC Bill Impact : Commercial/Industrial Sales Customers and Commercial/Industrial Transportation Customers (Rate Codes G-41)							
48	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter Nov-Apr
49	111	274	376	483	425	270	1,939
50 Energy Efficiency Amount	\$ 4.74	\$ 11.66	\$ 15.99	\$ 20.57	\$ 18.06	\$ 11.49	\$ 82.50
51 Energy Efficiency %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
52 Environmental Amount	\$ (0.89)	\$ (2.18)	\$ (2.99)	\$ (3.85)	\$ (3.38)	\$ (2.15)	\$ (15.45)
53 Environmental %	-51.6%	-51.6%	-51.6%	-51.6%	-51.6%	-51.6%	-51.6%
54 RDAF amount	\$ (0.10)	\$ (0.25)	\$ (0.34)	\$ (0.44)	\$ (0.38)	\$ (0.24)	\$ (1.75)
55 RDAF %	-23.1%	-23.1%	-23.1%	-23.1%	-23.1%	-23.1%	-23.1%
56 PTAM amount	\$ (1.42)	\$ (3.49)	\$ (4.79)	\$ (6.17)	\$ (5.42)	\$ (3.44)	\$ (24.74)
57 PTAM %	-89.8%	-89.8%	-89.8%	-89.8%	-89.8%	-89.8%	-89.8%
58 RCE Amount	\$ (0.42)	\$ (1.04)	\$ (1.43)	\$ (1.84)	\$ (1.61)	\$ (1.03)	\$ (7.37)
59 RCE %	-51.4%	-51.4%	-51.4%	-51.4%	-51.4%	-51.4%	-51.4%
60 GAP Amount	\$ 0.49	\$ 1.21	\$ 1.65	\$ 2.13	\$ 1.87	\$ 1.19	\$ 8.53
61 GAP %	28.2%	28.2%	28.2%	28.2%	28.2%	28.2%	28.2%
62 Total LDAC Amount	\$ (2.16)	\$ (5.31)	\$ (7.28)	\$ (9.37)	\$ (8.22)	\$ (5.23)	\$ (37.56)
63 Total LDAC %	-19.5%	-19.5%	-19.5%	-19.5%	-19.5%	-19.5%	-19.5%

May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Summer May-Oct	Total Nov-Oct
154	55	24	21	13	44	310	2,249
\$ 6.55	\$ 2.33	\$ 1.03	\$ 0.87	\$ 0.55	\$ 1.86	\$ 13.20	\$ 95.70
100.0%	100%	100%	100%	100%	100%	1.00	1.00
\$ (1.23)	\$ (0.44)	\$ (0.19)	\$ (0.16)	\$ (0.10)	\$ (0.35)	\$ (2.47)	\$ (17.92)
-51.6%	-51.6%	-51.6%	-51.6%	-51.6%	-51.6%	-51.6%	-51.6%
\$ (0.14)	\$ (0.05)	\$ (0.02)	\$ (0.02)	\$ (0.01)	\$ (0.04)	\$ (0.28)	\$ (2.02)
-23.1%	-23.1%	-23.1%	-23.1%	-23.1%	-23.1%	-23.1%	-23.1%
\$ (1.96)	\$ (0.70)	\$ (0.31)	\$ (0.26)	\$ (0.16)	\$ (0.56)	\$ (3.96)	\$ (28.69)
-89.8%	-89.8%	-89.8%	-89.8%	-89.8%	-89.8%	-89.8%	-89.8%
\$ (0.59)	\$ (0.21)	\$ (0.09)	\$ (0.08)	\$ (0.05)	\$ (0.17)	\$ (1.18)	\$ (8.55)
-51.4%	-51.4%	-51.4%	-51.4%	-51.4%	-51.4%	-51.4%	-51.4%
\$ 0.68	\$ 0.24	\$ 0.11	\$ 0.09	\$ 0.06	\$ 0.19	\$ 1.36	\$ 9.90
28.2%	28.2%	28.2%	28.2%	28.2%	28.2%	28.2%	28.2%
\$ (2.98)	\$ (1.06)	\$ (0.47)	\$ (0.40)	\$ (0.25)	\$ (0.85)	\$ (6.01)	\$ (43.57)
-19.5%	-19.5%	-19.5%	-19.5%	-19.5%	-19.5%	-19.5%	-19.5%

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
LDAC 2022-2023 Filing
LDAC Bill Comparisons, Proposed LDAC Rates November 1, 2022 – October 31, 2023 vs. Current LDAC Rates

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1 Proposed LDAC Rates November 1, 2022 – October 31, 2023							
2 Commercial/Industrial Sales Customers and Commercial/Industrial Transportation Customers (Rate Codes G-42)							
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter Nov-Apr
3							17,839
4							
5	1,369	2,729	3,456	4,165	3,658	2,463	
6	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	
7	\$ 60.50	\$ 120.61	\$ 152.76	\$ 184.07	\$ 161.67	\$ 108.88	\$ 788.48
8	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	
9	\$ 0.51	\$ 1.02	\$ 1.29	\$ 1.55	\$ 1.36	\$ 0.92	\$ 6.66
10	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	
11	\$ 9.73	\$ 19.4040	\$ 24.5765	\$ 29.6149	\$ 26.0102	\$ 17.5170	\$ 126.86
12	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	
13	\$ 10.25	\$ 20.42	\$ 25.87	\$ 31.17	\$ 27.38	\$ 18.44	\$ 133.51
14	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	
15	\$ 4.11	\$ 8.19	\$ 10.37	\$ 12.49	\$ 10.97	\$ 7.39	\$ 53.52
16	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	
17	\$ 1.97	\$ 3.94	\$ 4.98	\$ 6.01	\$ 5.28	\$ 3.55	\$ 25.73
18	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	
19	\$ 4.93	\$ 9.82	\$ 12.44	\$ 14.99	\$ 13.17	\$ 8.87	\$ 64.22
20	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	
21	\$ 27.38	\$ 54.57	\$ 69.12	\$ 83.29	\$ 73.15	\$ 49.27	\$ 356.78
22	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	
23	\$ 109.14	\$ 217.55	\$ 275.54	\$ 332.02	\$ 291.61	\$ 196.39	\$ 1,422.24

	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Summer May-Oct	Total Nov-Oct
	1,201	1,412	257	100	(1,437)	978	2,510	20,349
\$	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 110.93	\$ 899.41
\$	\$ 53.08	\$ 62.41	\$ 11.34	\$ 4.40	\$ (63.53)	\$ 43.23	\$	\$
\$	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.94	\$ 7.59
\$	\$ 0.45	\$ 0.53	\$ 0.10	\$ 0.04	\$ (0.54)	\$ 0.36	\$	\$
\$	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 17.85	\$ 144.70
\$	\$ 8.5392	\$ 10.0413	\$ 1.8241	\$ 0.7081	\$ (10.2207)	\$ 6.9549	\$	\$
\$	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 18.78	\$ 152.30
\$	\$ 8.99	\$ 10.57	\$ 1.92	\$ 0.75	\$ (10.76)	\$ 7.32	\$	\$
\$	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 7.53	\$ 61.05
\$	\$ 3.60	\$ 4.24	\$ 0.77	\$ 0.30	\$ (4.31)	\$ 2.93	\$	\$
\$	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 3.62	\$ 29.35
\$	\$ 1.73	\$ 2.04	\$ 0.37	\$ 0.14	\$ (2.07)	\$ 1.41	\$	\$
\$	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 9.03	\$ 73.26
\$	\$ 4.32	\$ 5.08	\$ 0.92	\$ 0.36	\$ (5.17)	\$ 3.52	\$	\$
\$	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 50.19	\$ 406.97
\$	\$ 24.02	\$ 28.24	\$ 5.13	\$ 1.99	\$ (28.75)	\$ 19.56	\$	\$
\$	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 200.09	\$ 1,622.33
\$	\$ 95.74	\$ 112.58	\$ 20.45	\$ 7.94	\$ (114.59)	\$ 77.97	\$	\$

24 Current LDAC Rates November 1, 2022 – October 31, 2023							
25 Commercial/Industrial Sales Customers and Commercial/Industrial Transportation Customers (Rate Codes G-42)							
	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	Winter Nov-Apr
26							17,839
27	1,369	2,729	3,456	4,165	3,658	2,463	
28	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	
29	\$ 58.25	\$ 116.10	\$ 147.05	\$ 177.20	\$ 155.63	\$ 104.81	\$ 759.05
30	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
31	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
32	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	
33	\$ 21.1490	\$ 42.1576	\$ 53.3954	\$ 64.3419	\$ 56.5103	\$ 38.0577	\$ 275.61
34	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	
35	\$ 21.15	\$ 42.16	\$ 53.40	\$ 64.34	\$ 56.51	\$ 38.06	\$ 275.61
36	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	
37	\$ 5.34	\$ 10.64	\$ 13.48	\$ 16.24	\$ 14.26	\$ 9.61	\$ 69.57
38	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	
39	\$ 19.44	\$ 38.75	\$ 49.08	\$ 59.14	\$ 51.94	\$ 34.98	\$ 253.31
40	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	
41	\$ 10.13	\$ 20.19	\$ 25.57	\$ 30.82	\$ 27.07	\$ 18.23	\$ 132.01
42	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	
43	\$ 21.35	\$ 42.57	\$ 53.91	\$ 64.97	\$ 57.06	\$ 38.43	\$ 278.29
44	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	
45	\$ 135.65	\$ 270.41	\$ 342.49	\$ 412.70	\$ 362.47	\$ 244.11	\$ 1,767.84

	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Summer May-Oct	Total Nov-Oct
	1,201	1,412	257	100	(1,437)	978	2,510	20,349
\$	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 106.79	\$ 865.84
\$	\$ 51.09	\$ 60.08	\$ 10.91	\$ 4.24	\$ (61.16)	\$ 41.61	\$	\$
\$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 38.77	\$ 314.39
\$	\$ 18.5526	\$ 21.8159	\$ 3.9632	\$ 1.5385	\$ (22.2058)	\$ 15.1103	\$	\$
\$	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 38.77	\$ 314.39
\$	\$ 18.55	\$ 21.82	\$ 3.96	\$ 1.54	\$ (22.21)	\$ 15.11	\$	\$
\$	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 9.79	\$ 79.36
\$	\$ 4.68	\$ 5.51	\$ 1.00	\$ 0.39	\$ (5.61)	\$ 3.81	\$	\$
\$	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 35.64	\$ 288.95
\$	\$ 17.05	\$ 20.05	\$ 3.64	\$ 1.41	\$ (20.41)	\$ 13.89	\$	\$
\$	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 18.57	\$ 150.58
\$	\$ 8.89	\$ 10.45	\$ 1.90	\$ 0.74	\$ (10.64)	\$ 7.24	\$	\$
\$	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 39.15	\$ 317.44
\$	\$ 18.73	\$ 22.03	\$ 4.00	\$ 1.55	\$ (22.42)	\$ 15.26	\$	\$
\$	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 248.71	\$ 2,016.55
\$	\$ 119.00	\$ 139.93	\$ 25.42	\$ 9.87	\$ (142.43)	\$ 96.92	\$	\$

46 LDAC Bill Impact : Commercial/Industrial Sales Customers and Commercial/Industrial Transportation Customers (Rate Codes G-42)							
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter Nov-Apr
47							29,434.3
48	\$ 2.26	\$ 4,502.3	\$ 5,702.4	\$ 6,871.5	\$ 6,035.1	\$ 4,064.4	\$ 29,434.3
49	\$ 3.9%	\$ 3.9%	\$ 3.9%	\$ 3.9%	\$ 3.9%	\$ 3.9%	\$ 3.9%
50	\$ (10.90)	\$ (21.7353)	\$ (27.5292)	\$ (33.1729)	\$ (29.1351)	\$ (19.6215)	\$ (142.0978)
51	\$ -51.6%	\$ -51.6%	\$ -51.6%	\$ -51.6%	\$ -51.6%	\$ -51.6%	\$ -51.6%
52	\$ (1.23)	\$ (2,455.8)	\$ (3,110.4)	\$ (3,748.1)	\$ (3,291.9)	\$ (2,217.0)	\$ (16,055.1)
53	\$ -23.1%	\$ -23.1%	\$ -23.1%	\$ -23.1%	\$ -23.1%	\$ -23.1%	\$ -23.1%
54	\$ (17.46)	\$ (34,811.0)	\$ (44,090.5)	\$ (53,129.4)	\$ (46,662.5)	\$ (31,425.6)	\$ (227,582.5)
55	\$ -89.8%	\$ -89.8%	\$ -89.8%	\$ -89.8%	\$ -89.8%	\$ -89.8%	\$ -89.8%
56	\$ (5.20)	\$ (10,368.9)	\$ (13,132.9)	\$ (15,825.2)	\$ (13,899.0)	\$ (9,360.5)	\$ (67,788.1)
57	\$ -51.4%	\$ -51.4%	\$ -51.4%	\$ -51.4%	\$ -51.4%	\$ -51.4%	\$ -51.4%
58	\$ 6.02	\$ 12,006.0	\$ 15,206.5	\$ 18,323.9	\$ 16,093.6	\$ 10,838.4	\$ 78,491.4
59	\$ 28.2%	\$ 28.2%	\$ 28.2%	\$ 28.2%	\$ 28.2%	\$ 28.2%	\$ 28.2%
60	\$ (26.52)	\$ (52.86)	\$ (66.95)	\$ (80.68)	\$ (70.86)	\$ (47.72)	\$ (345.60)
61	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%
62	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%

	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Summer May-Oct	Total Nov-Oct
	1,981.3	2,329.9	4,233.3	1,643.3	(2,371.5)	1,613.7	4,141.0	33,575.3
\$	\$ 1.9813	\$ 2.3299	\$ 4.2333	\$ 1.6433	\$ (2.3715)	\$ 1.6137	\$ 4.1410	\$ 33.5753
\$	\$ 3.9%	\$ 3.9%	\$ 3.9%	\$ 3.9%	\$ 3.9%	\$ 3.9%	\$ 3.9%	\$ 3.9%
\$	\$ (9.5652)	\$ (11.2477)	\$ (2.0433)	\$ (0.7932)	\$ 11.4487	\$ (7.7904)	\$ (19.9911)	\$ (162.0890)
\$	\$ -51.6%	\$ -51.6%	\$ -51.6%	\$ -51.6%	\$ -51.6%	\$ -51.6%	\$ -51.6%	\$ -51.6%
\$	\$ (1.0807)	\$ (1.2708)	\$ (0.2309)	\$ (0.0896)	\$ 1.2935	\$ (0.8802)	\$ (2.2587)	\$ (18.3138)
\$	\$ -23.1%	\$ -23.1%	\$ -23.1%	\$ -23.1%	\$ -23.1%	\$ -23.1%	\$ -23.1%	\$ -23.1%
\$	\$ (15.3195)	\$ (18.0141)	\$ (3,272.5)	\$ (1,270.4)	\$ 18,336.1	\$ (12,477.1)	\$ (32,017.6)	\$ (259,600.1)
\$	\$ -89.8%	\$ -89.8%	\$ -89.8%	\$ -89.8%	\$ -89.8%	\$ -89.8%	\$ -89.8%	\$ -89.8%
\$	\$ (4.5631)	\$ (5.3657)	\$ (0.9748)	\$ (0.3784)	\$ 5.4616	\$ (3.7164)	\$ (9.5368)	\$ (77.3249)
\$	\$ -51.4%	\$ -51.4%	\$ -51.4%	\$ -51.4%	\$ -51.4%	\$ -51.4%	\$ -51.4%	\$ -51.4%
\$	\$ 5.2836	\$ 6.2129	\$ 1,128.7	\$ 0.4382	\$ (6,324.0)	\$ 4,303.3	\$ 11,042.6	\$ 89,534.1
\$	\$ 28.2%	\$ 28.2%	\$ 28.2%	\$ 28.2%	\$ 28.2%	\$ 28.2%	\$ 28.2%	\$ 28.2%
\$	\$ (23.26)	\$ (27.36)	\$ (4.97)	\$ (1.93)	\$ 27.84	\$ (18.95)	\$ (48.62)	\$ (394.22)
\$	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%

Liberty Utilities (Energy/Natural Gas) Corp. d/b/a Liberty
LDAC 2022-2023 Filing
LDAC Bill Comparisons, Proposed LDAC Rates November 1, 2022 – October 31, 2023 vs. Current LDAC Rates

Schedule 8
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21 Proposed LDAC Rates November 1, 2022 – October 31, 2023							
22 Commercial/Industrial Sales Customers and Commercial/Industrial Transportation Customers (Rate Codes G-52)							
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter Nov-Apr
23 Typical Usage (Therms)	1,340	1,718	1,891	2,207	1,964	1,672	10,793
6 Energy Efficiency	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 477.05
7 Energy Efficiency Amount	\$ 59.23	\$ 75.96	\$ 83.60	\$ 97.55	\$ 86.81	\$ 73.91	\$ -
8 Gas Holder	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ -
9 Gas Holder Amount	\$ 0.50	\$ 0.64	\$ 0.71	\$ 0.82	\$ 0.73	\$ 0.62	\$ 4.03
10 MGP	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ -
11 MGP Amount	\$ 9.53	\$ 12.2202	\$ 13.4499	\$ 15.6949	\$ 13.9668	\$ 11.8916	\$ 76.75
12 Environmental	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ -
13 Total Environmental	\$ 10.03	\$ 12.86	\$ 14.16	\$ 16.52	\$ 14.70	\$ 12.52	\$ 80.78
14 RDAF	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ -
15 RDAF amount	\$ 4.02	\$ 5.16	\$ 5.67	\$ 6.62	\$ 5.89	\$ 5.02	\$ 32.38
16 PTAM	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ -
17 PTAM amount	\$ 1.93	\$ 2.48	\$ 2.73	\$ 3.18	\$ 2.83	\$ 2.41	\$ 15.57
18 RCE	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ -
19 RCE Amount	\$ 4.82	\$ 6.19	\$ 6.81	\$ 7.95	\$ 7.07	\$ 6.02	\$ 38.86
20 GAP	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ -
21 GAP Amount	\$ 26.80	\$ 34.37	\$ 37.83	\$ 44.14	\$ 39.28	\$ 33.44	\$ 215.86
22 LDAC	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ -
23 LDAC Amount	\$ 106.83	\$ 137.01	\$ 150.79	\$ 175.96	\$ 156.59	\$ 133.32	\$ 860.50

	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Summer May-Oct	Total Nov-Oct
	1,339	1,123	1,070	1,088	8,875	1,097	14,592	25,385
	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 0.0442	\$ 644.97	\$ 1,122.02
	\$ 59.20	\$ 49.62	\$ 47.31	\$ 48.09	\$ 392.29	\$ 48.47	\$ 5.45	\$ 9.47
	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ 0.0004	\$ -	\$ -
	\$ 0.50	\$ 0.42	\$ 0.40	\$ 0.41	\$ 3.31	\$ 0.41	\$ 103.77	\$ 180.52
	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 0.0071	\$ 210.5	\$ 366.2
	\$ 9.5239	\$ 7.9832	\$ 7.6118	\$ 7.7363	\$ 63.1145	\$ 7.7977	\$ 52.53	\$ 91.39
	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 0.0075	\$ 291.84	\$ 507.70
	\$ 10.02	\$ 8.40	\$ 8.01	\$ 8.14	\$ 66.43	\$ 8.21	\$ 1,163.38	\$ 2,023.88
	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ 0.0030	\$ -	\$ -
	\$ 4.02	\$ 3.37	\$ 3.21	\$ 3.26	\$ 26.63	\$ 3.29	\$ 43.78	\$ 76.16
	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 0.0014	\$ 21.05	\$ 36.62
	\$ 1.93	\$ 1.62	\$ 1.54	\$ 1.57	\$ 12.80	\$ 1.58	\$ 52.53	\$ 91.39
	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ 0.0036	\$ -	\$ -
	\$ 4.82	\$ 4.04	\$ 3.85	\$ 3.92	\$ 31.95	\$ 3.95	\$ 291.84	\$ 507.70
	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ 0.0200	\$ -	\$ -
	\$ 26.79	\$ 22.45	\$ 21.41	\$ 21.76	\$ 177.51	\$ 21.93	\$ 1,163.38	\$ 2,023.88
	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ 0.0797	\$ -	\$ -
	\$ 106.78	\$ 89.50	\$ 85.34	\$ 86.73	\$ 707.60	\$ 87.42	\$ -	\$ -

24 Current LDAC Rates November 1, 2022 – October 31, 2023							
25 Commercial/Industrial Sales Customers and Commercial/Industrial Transportation Customers (Rate Codes G-52)							
	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	Winter Nov-Apr
26 Typical Usage (Therms)	1,340	1,718	1,891	2,207	1,964	1,672	10,793
29 Energy Efficiency	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 459.25
30 Energy Efficiency Amount	\$ 57.01	\$ 73.12	\$ 80.48	\$ 93.91	\$ 83.57	\$ 71.15	\$ -
31 Gas Holder	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
32 Gas Holder Amount	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
33 MGP	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ -
34 MGP Amount	\$ 20.7021	\$ 26.5499	\$ 29.2214	\$ 34.0991	\$ 30.3446	\$ 25.8360	\$ 166.75
35 Environmental	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ -
36 Total Environmental	\$ 20.70	\$ 26.55	\$ 29.22	\$ 34.10	\$ 30.34	\$ 25.84	\$ 166.75
37 RDAF	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ -
38 RDAF amount	\$ 5.23	\$ 6.70	\$ 7.38	\$ 8.61	\$ 7.66	\$ 6.52	\$ 42.09
39 PTAM	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ -
40 PTAM amount	\$ 19.03	\$ 24.40	\$ 26.86	\$ 31.34	\$ 27.89	\$ 23.75	\$ 153.26
41 RCE	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ -
42 RCE Amount	\$ 9.92	\$ 12.72	\$ 14.00	\$ 16.33	\$ 14.53	\$ 12.37	\$ 79.87
43 GAP	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ -
44 GAP Amount	\$ 20.90	\$ 26.81	\$ 29.51	\$ 34.43	\$ 30.64	\$ 26.09	\$ 168.37
45 Total LDAC	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ -
46 Total LDAC Amount	\$ 132.79	\$ 170.30	\$ 187.43	\$ 218.72	\$ 194.64	\$ 165.72	\$ 1,069.59

	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Summer May-Oct	Total Nov-Oct
	1,339	1,123	1,070	1,088	8,875	1,097	14,592	25,385
	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 0.0426	\$ 620.89	\$ 1,080.14
	\$ 56.99	\$ 47.77	\$ 45.55	\$ 46.29	\$ 377.65	\$ 46.66	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 225.45	\$ 392.20
	\$ 20.6919	\$ 17.3444	\$ 16.5376	\$ 16.8081	\$ 137.1240	\$ 16.9415	\$ 225.45	\$ 392.20
	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 0.0155	\$ 225.45	\$ 392.20
	\$ 20.69	\$ 17.34	\$ 16.54	\$ 16.81	\$ 137.12	\$ 16.94	\$ 225.45	\$ 392.20
	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 0.0039	\$ 56.91	\$ 99.00
	\$ 5.22	\$ 4.38	\$ 4.17	\$ 4.24	\$ 34.61	\$ 4.28	\$ 207.21	\$ 360.47
	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 0.0142	\$ 107.98	\$ 187.85
	\$ 19.02	\$ 15.94	\$ 15.20	\$ 15.45	\$ 126.03	\$ 15.57	\$ 227.64	\$ 396.01
	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 0.0074	\$ 107.98	\$ 187.85
	\$ 9.91	\$ 8.31	\$ 7.92	\$ 8.05	\$ 65.68	\$ 8.11	\$ 227.64	\$ 396.01
	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ 0.0156	\$ -	\$ -
	\$ 20.89	\$ 17.51	\$ 16.70	\$ 16.97	\$ 138.46	\$ 17.11	\$ 1,446.07	\$ 2,515.67
	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ 0.0991	\$ -	\$ -
	\$ 132.72	\$ 111.25	\$ 106.08	\$ 107.81	\$ 879.55	\$ 108.67	\$ -	\$ -

47 LDAC Bill Impact : Commercial/Industrial Sales Customers and Commercial/Industrial Transportation Customers (Rate Codes G-52)							
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter Nov-Apr
50 Energy Efficiency	\$ 2.21	\$ 2.8354	\$ 3.1207	\$ 3.6417	\$ 3.2407	\$ 2.7592	\$ 0.23
51 Energy Efficiency Amount	\$ 3.9%	\$ 0.04	\$ 0.04	\$ 0.04	\$ 0.04	\$ 0.04	\$ -
52 Environmental	\$ (10.67)	\$ (13.6884)	\$ (15.0658)	\$ (17.5805)	\$ (15.6448)	\$ (13.3203)	\$ (3.09)
53 Total Environmental	\$ (51.6%)	\$ (0.52)	\$ (0.52)	\$ (0.52)	\$ (0.52)	\$ (0.52)	\$ (3.09)
54 RDAF	\$ (1.21)	\$ (1.5466)	\$ (1.7022)	\$ (1.9864)	\$ (1.7676)	\$ (1.5050)	\$ (1.38)
55 RDAF amount	\$ -23.1%	\$ (0.23)	\$ (0.23)	\$ (0.23)	\$ (0.23)	\$ (0.23)	\$ (1.38)
56 PTAM	\$ (17.09)	\$ (21.9232)	\$ (24.1292)	\$ (28.1568)	\$ (25.0566)	\$ (21.3337)	\$ (5.39)
57 PTAM amount	\$ -89.8%	\$ (0.90)	\$ (0.90)	\$ (0.90)	\$ (0.90)	\$ (0.90)	\$ (5.39)
58 RCE	\$ (5.09)	\$ (6.5301)	\$ (7.1872)	\$ (8.3868)	\$ (7.4634)	\$ (6.3545)	\$ (3.08)
59 RCE Amount	\$ -51.4%	\$ (0.51)	\$ (0.51)	\$ (0.51)	\$ (0.51)	\$ (0.51)	\$ (3.08)
60 GAP	\$ 5.90	\$ 7.5611	\$ 8.3220	\$ 9.7111	\$ 8.6418	\$ 7.3578	\$ 1.69
61 GAP Amount	\$ 28.2%	\$ 0.28	\$ 0.28	\$ 0.28	\$ 0.28	\$ 0.28	\$ 1.69
62 Total LDAC	\$ (25.96)	\$ (33.2917)	\$ (36.6416)	\$ (42.7578)	\$ (38.0499)	\$ (32.3965)	\$ (209.10)
63 Total LDAC Amount	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%

	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Summer May-Oct	Total Nov-Oct
	\$ 2.2098	\$ 1.8523	\$ 1.7661	\$ 1.7950	\$ 14.6443	\$ 1.8093	\$ 0.23	\$ 0.47
	\$ 0.04	\$ 0.04	\$ 0.04	\$ 0.04	\$ 0.04	\$ 0.04	\$ -	\$ -
	\$ (10.6682)	\$ (8.9423)	\$ (8.5263)	\$ (8.6658)	\$ (70.6973)	\$ (8.7346)	\$ (3.09)	\$ (6.19)
	\$ (0.52)	\$ (0.52)	\$ (0.52)	\$ (0.52)	\$ (0.52)	\$ (0.52)	\$ (3.09)	\$ (6.19)
	\$ (1.2054)	\$ (1.0104)	\$ (0.9634)	\$ (0.9791)	\$ (7.9878)	\$ (0.9869)	\$ (1.38)	\$ (2.77)
	\$ (0.23)	\$ (0.23)	\$ (0.23)	\$ (0.23)	\$ (0.23)	\$ (0.23)	\$ (5.39)	\$ (10.78)
	\$ (17.0860)	\$ (14.3219)	\$ (13.6556)	\$ (13.8790)	\$ (113.2280)	\$ (13.9892)	\$ (5.39)	\$ (10.78)
	\$ (0.90)	\$ (0.90)	\$ (0.90)	\$ (0.90)	\$ (0.90)	\$ (0.90)	\$ (5.39)	\$ (10.78)
	\$ (5.0893)	\$ (4.2659)	\$ (4.0675)	\$ (4.1340)	\$ (33.7263)	\$ (4.1668)	\$ (3.08)	\$ (6.16)
	\$ (0.51)	\$ (0.51)	\$ (0.51)	\$ (0.51)	\$ (0.51)	\$ (0.51)	\$ (3.08)	\$ (6.16)
	\$ 5.8928	\$ 4.9395	\$ 4.7097	\$ 4.7868	\$ 39.0515	\$ 4.8248	\$ 1.69	\$ 3.38
	\$ 0.28	\$ 0.28	\$ 0.28	\$ 0.28	\$ 0.28	\$ 0.28	\$ 1.69	\$ 3.38
	\$ (25.96)	\$ (21.75)	\$ (20.74)	\$ (21.08)	\$ (171.94)	\$ (21.24)	\$ (282.69)	\$ (491.79)
	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%	\$ -19.5%

36 LOCAL DISTRIBUTION ADJUSTMENT CHARGE CALCULATION

Local Delivery Adjustment Charge Calculation

	<u>Sales</u>	<u>Transportation</u>
	<u>Customers</u>	<u>Customers</u>
<u>Residential Non Heating Rates - R-1</u>		
Energy Efficiency Charge	0.0664	
Demand Side Management Charge	0.0000	
Conservation Charge (CCx)		0.0664
Relief Holder and pond at Gas Street, Concord, NH	0.0004	
Manufactured Gas Plants	<u>0.0071</u>	
Environmental Surcharge (ES)		0.0075
Revenue Decoupling Adjustment Factor (RDAF)		0.0409
Property Tax Adjustment Mechanism (PTAM)		0.0014
Rate Case Expense Factor (RCEF)		0.0036
Gas Assistance Program (GAP)		<u>0.0200</u>
LDAC	0.1398	per therm
<u>Residential Heating Rates - R-3, R-4, R-6, R-7</u>		
Energy Efficiency Charge	0.0664	
Demand Side Management Charge	<u>0.0000</u>	
Conservation Charge (CCx)		0.0664
Relief Holder and pond at Gas Street, Concord, NH	0.0004	
Manufactured Gas Plants	<u>0.0071</u>	
Environmental Surcharge (ES)		0.0075
Revenue Decoupling Adjustment Factor (RDAF)		0.0409
Property Tax Adjustment Mechanism (PTAM)		0.0014
Rate Case Expense Factor (RCEF)		0.0036
Gas Assistance Program (GAP)		<u>0.0200</u>
LDAC	0.1398	per therm
<u>Commercial/Industrial Low Annual Use Rates - G-41, G-51, G-44, G-55</u>		
Energy Efficiency Charge	0.0442	
Demand Side Management Charge	<u>0.0000</u>	
Conservation Charge (CCx)		0.0442
Relief Holder and pond at Gas Street, Concord, NH	0.0004	
Manufactured Gas Plants	<u>0.0071</u>	
Environmental Surcharge (ES)		0.0075
Revenue Decoupling Adjustment Factor (RDAF)		0.0030
Property Tax Adjustment Mechanism (PTAM)		0.0014
Rate Case Expense Factor (RCEF)		0.0036
Gas Assistance Program (GAP)		<u>0.0200</u>
LDAC	0.0797	0.0797 per therm
<u>Commercial/Industrial Medium Annual Use Rates - G-42, G-52, G-45, G-56</u>		
Energy Efficiency Charge	0.0442	
Demand Side Management Charge	<u>0.0000</u>	
Conservation Charge (CCx)		0.0442
Relief Holder and pond at Gas Street, Concord, NH	0.0004	
Manufactured Gas Plants	<u>0.0071</u>	
Environmental Surcharge (ES)		0.0075
Revenue Decoupling Adjustment Factor (RDAF)		0.0030
Property Tax Adjustment Mechanism (PTAM)		0.0014
Rate Case Expense Factor (RCEF)		0.0036
Gas Assistance Program (GAP)		<u>0.0200</u>
LDAC	0.0797	0.0797 per therm
<u>Commercial/Industrial Large Annual Use Rates - G-43, G-53, G-54, G-46, G-56, G-57, G-58</u>		
Energy Efficiency Charge	0.0442	
Demand Side Management Charge	<u>0.0000</u>	
Conservation Charge (CCx)		0.0442
Relief Holder and pond at Gas Street, Concord, NH	0.0004	
Manufactured Gas Plants	<u>0.0071</u>	
Environmental Surcharge (ES)		0.0075
Revenue Decoupling Adjustment Factor (RDAF)		0.0030
Property Tax Adjustment Mechanism (PTAM)		0.0014
Rate Case Expense Factor (RCEF)		0.0036
Gas Assistance Program (GAP)		<u>0.0200</u>
LDAC	0.0797	0.0797 per therm

DATED: XXXX XX, 2022

EFFECTIVE: November 1, 2022

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

Authorized by NHPUC Order No. XX,XXX dated XXXX XX, 2022, in Docket No. DG 22-XXX

36 LOCAL DISTRIBUTION ADJUSTMENT ~~CLAUSE CHARGE~~ CALCULATION

Local Delivery Adjustment Charge Calculation

			Sales Customers	Transportation Customers	
<u>Residential Non Heating Rates - R-1</u>					
Energy Efficiency Charge	0.064		0.0664		
Demand Side Management Charge	0		0.0000		
Conservation Charge (CCx)		0.064		0.0664	
Relief Holder and pond at Gas Street, Concord, NH	0		0.0004		
Manufactured Gas Plants	0.0156		0.0071		
Environmental Surcharge (ES)		0.0156		0.0075	
Revenue Decoupling Adjustment Factor (RDAF)		0.0152		0.0409	
Property Tax Adjustment Mechanism (PTAM)		0.0142		0.0014	
Rate Case Expense Factor (RCEF)		0.0074		0.0036	
Gas Assistance Program (GAP)		0.0156		0.0200	
LDAC		0.1318		0.1398	per therm
<u>Residential Heating Rates - R-3, R-4, R-6, R-7</u>					
Energy Efficiency Charge	0.064		0.0664		
Demand Side Management Charge	0		0.0000		
Conservation Charge (CCx)		0.064		0.0664	
Relief Holder and pond at Gas Street, Concord, NH	0		0.0004		
Manufactured Gas Plants	0.0156		0.0071		
Environmental Surcharge (ES)		0.0156		0.0075	
Revenue Decoupling Adjustment Factor (RDAF)		0.0152		0.0409	
Property Tax Adjustment Mechanism (PTAM)		0.0142		0.0014	
Rate Case Expense Factor (RCEF)		0.0074		0.0036	
Gas Assistance Program (GAP)		0.0156		0.0200	
LDAC		0.1318		0.1398	per therm
<u>Commercial/Industrial Low Annual Use Rates - G-41, G-51, G-44, G-55</u>					
Energy Efficiency Charge	0.04255		0.0442		
Demand Side Management Charge	0		0.0000		
Conservation Charge (CCx)		0.04255		0.0442	0.0442
Relief Holder and pond at Gas Street, Concord, NH	0		0.0004		
Manufactured Gas Plants	0.01545		0.0071		
Environmental Surcharge (ES)		0.01545		0.0075	0.0075
Revenue Decoupling Adjustment Factor (RDAF)		0.0039		0.0030	0.0030
Property Tax Adjustment Mechanism (PTAM)		0.0142		0.0014	0.0014
Rate Case Expense Factor (RCEF)		0.0074		0.0036	0.0036
Gas Assistance Program (GAP)		0.0156		0.0200	0.0200
LDAC		0.0991		0.0797	0.0991 0.0797 per therm
<u>Commercial/Industrial Medium Annual Use Rates - G-42, G-52, G-45, G-56</u>					
Energy Efficiency Charge	0.04255		0.0442		
Demand Side Management Charge	0		0.0000		
Conservation Charge (CCx)		0.04255		0.0442	0.0442
Relief Holder and pond at Gas Street, Concord, NH	0		0.0004		
Manufactured Gas Plants	0.01545		0.0071		
Environmental Surcharge (ES)		0.01545		0.0075	0.0075
Revenue Decoupling Adjustment Factor (RDAF)		0.0039		0.0030	0.0030
Property Tax Adjustment Mechanism (PTAM)		0.0142		0.0014	0.0014
Rate Case Expense Factor (RCEF)		0.0074		0.0036	0.0036
Gas Assistance Program (GAP)		0.0156		0.0200	0.0200
LDAC		0.0991		0.0797	0.0991 0.0797 per therm
<u>Commercial/Industrial Large Annual Use Rates - G-43, G-53, G-54, G-46, G-56, G-57, G-58</u>					
Energy Efficiency Charge	0.04255		0.0442		
Demand Side Management Charge	0		0.0000		
Conservation Charge (CCx)		0.04255		0.0442	0.0442
Relief Holder and pond at Gas Street, Concord, NH	0		0.0004		
Manufactured Gas Plants	0.01545		0.0071		
Environmental Surcharge (ES)		0.01545		0.0075	0.0075
Revenue Decoupling Adjustment Factor (RDAF)		0.0039		0.0030	0.0030
Property Tax Adjustment Mechanism (PTAM)		0.0142		0.0014	0.0014
Rate Case Expense Factor (RCEF)		0.0074		0.0036	0.0036
Gas Assistance Program (GAP)		0.0156		0.0200	0.0200
LDAC		0.0991		0.0797	0.0991 0.0797 per therm

DATED: ~~March XXXX 23XX~~, 2022

EFFECTIVE: ~~March November~~ 1, 2022

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

~~Authorized by NHPUC Order No. XX,XXX dated XXXX XX, 2022, in Docket No. DG 22-XXX~~
~~Authorized by House Bill #549 signed February 24, 2022~~