

REDACTED

STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION

Docket No. DG 23-xxx

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
2023–2024 Local Distribution Adjustment Charge (LDAC)

DIRECT TESTIMONY

OF

TYLER J CULBERTSON

AND

ADAM R.M. YUSUF

August 21, 2023



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1 **I. INTRODUCTION**

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

3 A. My name is Tyler J Culbertson. I am the Director of Rates and Regulatory Affairs for
4 Liberty Utilities Service Corp. (“LUSC”), which provides service to Liberty Utilities
5 (EnergyNorth Natural Gas) Corp. d/b/a Liberty (“Liberty” or the “Company”). My
6 business address is 15 Buttrick Road, Londonderry, New Hampshire.

7 **Q. On whose behalf are you submitting this testimony?**

8 A. I am submitting testimony in this proceeding before the New Hampshire Public Utilities
9 Commission (“Commission”) on behalf of Liberty.

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

11 A. I graduated from the University of Iowa in 2009 with a Bachelor of Science degree in
12 Accounting, and I have held an active Certified Public Accountant (“CPA”) license since
13 2012. I joined LUSC in May 2023. Prior to my employment at LUSC, I was employed by
14 DCP Midstream as the Senior Manager of Regulatory Affairs from 2015 to 2023. My
15 responsibility at DCP Midstream was to ensure company-wide compliance with the
16 economic regulations of the Federal Energy Regulatory Commission and various state
17 regulatory agencies. From 2014 to 2015, I was a Senior Rate Analyst for Tallgrass
18 Energy, and from 2010 to 2014, I was a Rate Analyst for SourceGas (now Black Hills
19 Energy).

1 **Q. Please describe your duties at LUSC.**

2 A. As Director of Rates and Regulatory Affairs, I am primarily responsible for rates
3 regulatory affairs for Liberty and Liberty Utilities (Granite State Electric) Corp.

4 **Q. Have you previously testified in regulatory proceedings before the Commission?**

5 A. Yes. I testified in a regulatory proceeding before the Commission in Docket No. DE 23-
6 044 in support of Liberty Utilities (Granite State Electric) Corp.’s Default Energy Service
7 rates.

8 **Q. Mr. Yusuf, please state your full name, business address, and position.**

9 A. My name is Adam R.M. Yusuf. I am an Analyst I for Rates and Regulatory Affairs for
10 LUSC, which provides service Liberty. My business address is 15 Buttrick Road,
11 Londonderry, New Hampshire.

12 **Q. Please describe your business and educational background.**

13 A. I graduated from the University of New Hampshire, Durham, in 2009 with a Bachelor of
14 Science in Psychology with a minor in Kinesiology: Sports Studies. I received an
15 Associate Degree in Human Services from New Hampshire Technical Institute in
16 Concord, in 2014. I received a Master of Business Administration from Southern New
17 Hampshire University in 2022. I joined Liberty in April 2019, where I held positions as a
18 Customer Service Representative and Billing Representative before joining the Rates and
19 Regulatory Affairs Department.

1 **Q. Please describe your duties at LUSC.**

2 A. As Analyst I of Rates and Regulatory Affairs, I am responsible for providing rate-related
3 services for Liberty and Liberty Utilities (Granite State Electric) Corp.

4 **Q. Have you testified before the New Hampshire Public Utilities Commission**
5 **(“Commission”)?**

6 A. No, this is my first testimony before the Commission.

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

8 A. The purpose of my testimony is to explain the Company’s proposed 2023/2024 Local
9 Delivery Adjustment Charge, effective November 1, 2023.

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

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

12 A. As described on pages 33–34 of the Company’s tariff, the purpose of the LDAC is to
13 adjust, on an annual basis, the Company’s delivery charges in order to recover
14 Conservation Charges (“CC”)¹, Revenue Decoupling Adjustment Factor (“RDAF”),
15 Property Tax Adjustment Mechanism (“PTAM”), Environmental Surcharges (“ES”), rate
16 case expenses and recoupment (“RCE”), and Gas Assistance Program costs (“GAP”).

17 **Q. What surcharges will be billed under the LDAC?**

18 A. As shown on proposed Tenth Revised Page 101, the Company is submitting for approval
19 an LDAC of \$0.1974 per therm for residential customers, and \$0.0887 per therm for the

¹ The CC only includes the Energy Efficiency Charge (“EEC”), as the Demand Side Management Charge is no longer applicable.

1 commercial/industrial customers effective November 1, 2023. In compliance with
2 HB549, the LDAC rate effective January 1, 2024, upon approval, will be \$0.2006 per
3 therm for residential customers, and \$0.0909 per therm for the commercial/industrial
4 customers.

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

6 A. All Liberty customers, including those in the Keene Division, are billed an LDAC charge.
7 When calculating the LDAC for the November 1, 2023, through October 31, 2024,
8 Recovery Period, forecasted Keene therm sales of 1,445,482 are added to all other
9 Liberty therm sales forecast of 183,480,749, for a total therm sales forecast of
10 184,926,232 (“Forecasted Throughput”).

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

12 A. The EEC is designed to recover the projected expenses associated with the Company’s
13 energy efficiency programs for the November 2023 through October 2024 period. The
14 new legislation set funding for Energy Efficiency based on 2020 levels with subsequent
15 adjustments beginning January 1, 2023, based on the inflationary data of the most
16 recently available 3-year average of the consumer price index for wage earners (CPI-W²)
17 as published by the United States Department of Labor, Bureau of Labor Statistics, all as
18 calculated by the New Hampshire Department of Energy. HB 549 also established a
19 mechanism to reconcile over- and under-collections that requires New Hampshire utilities
20 to submit a filing to the Commission each December in which they summarize their

² https://www.bls.gov/opub/btn/volume-3/why-does-bls-provide-both-the-cpi-w-and-cpi-u.htm#_edn1

1 variances and propose rate changes to reconcile the differences. The Joint Utilities will
2 submit tariff amendments December 1 altering solely the gas utilities' LDAC reconciled
3 for over- and under-collections already occurred, for effect each January 1 for the
4 following year. HB549 sets the rate for residential and commercial customers for a
5 calendar year, versus the LDAC period of November through October used for other
6 LDAC components. The EEC rate is calculated using the most recently available 3-year
7 average of the consumer price index ("CPI-W") as published by the Bureau of Labor
8 Statistics of the United States Department of Labor [to account for inflation] as calculated
9 by the DOE, both in accordance with HB 549. The estimated rates for effect January 1,
10 2024, will be updated by December 1, 2023, to account for any over or under collections
11 and to incorporate the inflation adjustment in accordance with HB 549.

12 As shown on Schedule 2, the proposed EEC effective January 1, 2024, is \$0.0699 per
13 therm for residential customers and \$0.0466 per therm for commercial and industrial
14 customers.

15 **Q. Please describe the Environmental Surcharge ("ES")?**

16 A. The ES recovers environmental costs associated with investigation, testing, remediation,
17 litigation expenses, and other liabilities relating to manufactured gas program sites,
18 disposal sites, or other sites onto which material may have migrated, as a result of the
19 operating or decommissioning of New Hampshire gas manufacturing facilities. These
20 costs include the costs of the closure of the Relief Holder and pond at Gas Street,
21 Concord, NH. The ES also includes the expenses incurred by the Company in pursuing

1 insurance and third-party claims and any recoveries or other benefits received by the
2 Company as a result. The costs submitted for recovery through the ES cost recovery
3 mechanism, as well as the third-party recoveries, are included in Schedule 3 of this filing.
4 The environmental investigation and remediation costs that underlie these expenses are
5 the result of efforts by the Company to respond to its legal obligations regarding these
6 sites, as described by Mr. Sanborn in his pre-filed direct testimony in this proceeding and
7 as outlined in the Manufactured Gas Plant (MGP) site summaries included in this filing
8 under Schedule 3. Any prior period reconciliation adjustments are also incorporated into
9 the environmental surcharge rate calculation.

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

12 A. The ES rate calculated annually consists of one-seventh of the net actual environmental
13 response costs incurred by the Company in the twelve-month period ending June 30 of
14 each year until fully amortized over seven years. The net costs, inclusive of any insurance
15 and third-party recoveries or other benefits, plus any prior period reconciliation is divided
16 by the Company's Forecasted Throughput for the upcoming twelve months of November
17 1 through October 31. Schedule 3 provides the support and calculations that make up the
18 MGP and Relief Holder rate components of the LDAC.

19 As shown on Schedule 3, page 1, overall ES rate for the period beginning November 1,
20 2023, and ending October 31, 2024, is \$0.0020 per therm. This combined rate includes

1 the proposed MGP rate of \$0.0018 per therm and the Relief Holder and pond at Gas
2 Street rate of \$0.0002 per therm.

3 As described in more detail in Mr. Sanborn’s testimony, the first stage of the work
4 associated with the stabilization of the holder house was completed in July 2022. Liberty
5 EnergyNorth’s continuing contribution portion of the costs of the stabilization work to
6 the Relief Holder and pond at Gas Street in Concord, NH, is \$245,080.

7 **Q. Please explain why there is a considerable decrease in in the Environmental**
8 **Surcharge (“ES”) compared to previous years?**

9 A. The decrease in the ES rates is due to the full amortization of 2015–2016 costs which
10 were a significant portion of the annual costs. Additionally, a miscalculation of the
11 amortization of remediation cost pools in the 2022/2023 filing was found during the
12 preparation of the current filing. Corrections were made in Schedule 3.3 (lines 37–44) of
13 the current filing to correct the amortization in the prior year and reverse any over
14 amortization.

15 **Q. Please explain the Revenue Decoupling Adjustment Factor (“RDAF”).**

16 A. The purpose of the RDAF is to recover or refund, on an annual basis, the difference
17 between the Actual Base Revenue per Customer and the Benchmark Base Revenue per
18 Customer. In 2022, the Company proposed to recover \$3,733,697 in under recoveries for
19 the 2021–2022 RDAF year. In Order No. 26,692 the Commission ordered the Company
20 to remove the RDAF and gas holder costs from the October 2022 hearing in DG 22-045,

1 to be addressed in a later hearing³. As such, the Company has not begun collection of the
2 under-collection for the 2021–2022 period. At this time, the Company is requesting to
3 recover the 2021–2022 under-collection in addition to the under-collection for the 2022–
4 2023 period. The total request for recovery is \$9,175,597 (includes residential,
5 commercial and industrial). The summary of the under-collections is shown on Schedule
6 4, Page 1. The calculation of the 2021–2022 under-collection is shown on Schedule 4,
7 Page 2. The calculation of the 2022–2023 under-collection is shown on Schedule 4, Page
8 3. As shown on Schedule 4, the proposed RDAF charge is \$0.1041 per therm for
9 residential customers and \$0.0177 per therm for commercial and industrial customers.

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

13 A. No. The Company has excluded the \$4,024,830, which arises from the first two years of
14 the decoupling mechanism (2018–2019 and 2019–2020) as this is the subject of a
15 separate proceeding, Docket No. DG 22-041. The parties addressed the dispute over these
16 revenues at the June 22, 2023, hearing in that docket. Post hearing briefs have been filed,
17 and the matter is before the Commission for resolution. Once the issue is resolved, the
18 Company will make the appropriate filing to implement the Commission’s order.

³ The Commission scheduled an August 30, 2023, hearing in Docket No. DG 22-045, to rule on the 2021–2022 RDAF reconciliation and the Concord gas holder costs that were removed from the hearing in the fall of 2022.

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

2 A. The PTAM reconciles the Company’s actual property tax expense incurred with the
3 revenue collected through customer rates.

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

5 A. The PTAM adjustment proposed here covers the period April 1, 2022, through March 31,
6 2023 (“Municipal Property Tax Year 2022”).

7 **Q. Has the Company reconciled the 2022 Property Tax year?**

8 A. Yes. To calculate the total property tax variance to be collected or refunded, the
9 Company first reconciled the previous period collections for property tax year 2021. For
10 the current Recovery Period, the total actual and estimated collections is \$277,517 plus
11 interest of \$81,322, for a total under-collection of \$358,839 as shown on Schedule 5,
12 Page 2, line 20. Next, the Company summed the actual tax expense for the Municipal
13 Property Tax Year 2022 to \$11,470,227 and removed \$8,924,897 which is included in
14 base rates (see Schedule 5, Page 3). The difference between the Property Taxes Billed for
15 2022 and the approved municipal Property Taxes of \$8,924,897 set in Order No. 26,505
16 is \$2,545,330.

17 The Company is proposing to recover the property taxes in excess of what is currently in
18 rates (\$8,924,897) and the 2022 total bills (\$11,470,227), or \$2,545,330, in addition to
19 the under-collected amount of \$358,839, per above. This calculation is provided in
20 Schedule 5, Page 3. The Company is requesting to include this amount in the rate for

November 1, 2023, spread over 184,926,232 therms. The rate resulting from this calculation is \$0.0157 per therm.

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

A. Yes, the surcharge includes rate case expenses that previously approved for recovery per the Settlement Agreement and Order No. 26,808 (April 28, 2023) where the Company will be allowed to recover the amount of \$123,519.25 while forgoing recovery of \$37,996.91 for a depreciation study. The information is included in Schedule 6, Page 3.

Q. Does the Company anticipate full recovery of the previously allowed Rate Case Expense recoupment?

A. Yes. The Company expects to fully recovery all Rate Case Expense by November 1, 2023.

Q. Has the Company included expenses that were not part of the Settlement Agreement of Order No. 26,808?

A. No.

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

A. Yes. As shown on Schedule 6, the Company is anticipating an over-recovery balance of \$73,721, resulting from the overcollection of rate case expenses previously approved in Order No. 26,808 (April 28, 2023) in Docket No. DG 20-105. The RCE rate of (\$0.0004) per therm is determined by dividing the (\$73,721) by the estimated November 2023 through October 2024 sales volumes of 184,926,232 therms.

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

2 A. As shown on Schedule 7, the proposed GAP charge is \$0.0093 per therm. It is designed
3 to recover administrative costs, revenue shortfall, and the prior period reconciliation
4 adjustment relating to this program. For the 2023/2024 winter period, the Company is
5 providing a 45% base rate and cost of gas discount, consistent with the settlement
6 agreement approved by the Commission in Order No. 26,397 (August 27, 2020) in
7 Docket No. DG 20-013. The proposed Residential Gas Assistance Program charge is
8 designed to recover \$1,715,939, of which \$1,336,221 is for the revenue shortfall resulting
9 from 6,097 projected customers receiving a 45% discount off their base and cost of gas
10 rates, and \$99,724 for the prior year reconciling adjustment.

11 **III. CUSTOMER BILL IMPACTS**

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

14 A. The detailed bill impact analysis by month is presented in Schedule 8 of this filing. Please
15 see the table below for the total LDAC bill impact on an annual basis, for residential and
16 commercial customers.

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Docket No. DG 23-xxx
2023–2024 Local Distribution Adjustment Charge (LDAC)
Direct Testimony of Tyler J. Culbertson and Adam R.M. Yusuf
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LDAC-Bill Impacts ⁴	Winter 2023–2024	Summer 2024	Annual Total
Residential R-3	\$57.04 or 80.7%	\$13.09 or 72.3%	\$70.13 or 79.0%
Commercial/Industrial G-41	\$3.74 or 2.0%	\$(1.24) or (3.4%)	\$2.51 or 1.1%
Commercial/Industrial G-42	\$32.15 or 1.9%	\$(15.69) or (3.6%)	\$16.46 or 0.8%
Commercial/Industrial G-52	\$23.57 or 2.0%	\$(30.05) or (3.8%)	\$(6.48) or (-0.3%)

1

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

4 A. Yes, the Company is providing both a clean and redlined version of proposed tariff Page
5 99, 100, and 101, as part of the LDAC reconciliation filing.

6 **IV. CONCLUSION**

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

8 A. Yes, it does

⁴ The dollar amounts in the table will identify an increase/(decrease) in the LDAC portion of a customer's bill. The percentage will represent an increase/(decrease) in the LDAC portion.

STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION

Docket No. DG 23-xxx

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Winter 2023–2024 Cost of Gas and Summer 2024 Cost of Gas

DIRECT TESTIMONY

OF

LUKE W. SANBORN

August 21, 2023



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1 **I. INTRODUCTION**

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

3 A. My name is Luke W. Sanborn. I am the 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 as
7 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 Environmental Engineering from the University of New
11 Hampshire, and a Master of Liberal Arts in Sustainability and Environmental
12 Management from the Harvard University Extension. I am a Professional Engineer
13 registered in the State of New Hampshire. I have been employed by LUSC since August
14 29, 2022, managing the investigation and remediation of Liberty’s MGP sites. Prior to
15 my employment at LUSC, I had been a consultant for 17 years assisting clients with
16 various environmental compliance and environmental remediation projects. In addition, I
17 worked at a power generating facility with the responsibility of environmental
18 compliance for 1.5 years.

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

20 A. The purpose of my testimony is to discuss the status of Liberty’s site investigation and
21 remediation efforts at various MGP sites in New Hampshire, to briefly describe the

1 MGP-related activities performed by the various contractors and consultants, to discuss
2 the costs for which the Company is seeking rate recovery, and to describe the status of
3 the Company's efforts to seek reimbursement for MGP-related liabilities from third
4 parties. My testimony is intended to update the information provided by the Company in
5 prior cost of gas proceedings. The costs associated with these investigations and
6 remediation efforts and certain of the amounts recovered from third parties are included
7 in the schedules and other data prepared by Mr. Culbertson and Mr. Yusuf as part of the
8 Local Distribution Adjustment Charge ("LDAC") portion of the Company's cost of gas
9 filing.

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

11 **Q. Please briefly describe the status of each of the Company's MGP sites.**

12 A. Consistent with past practice, the description of the status of investigation and
13 remediation efforts at each site, as well as the various efforts to recover the site
14 investigation and remediation costs from third parties, are summarized in materials
15 included in the Company's filing in Schedule 3.

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

18 A. The project has been completed since December 2015. The site is stable, and the grass is
19 mowed twice a year. The Notice of Activity and Use Restriction ("AUR") was approved
20 by the New Hampshire Department of Environmental Services ("NHDES") and recorded
21 at the Belknap Registry of Deeds in February 2017. The groundwater wells are

1 monitored and sampled once a year per the Groundwater Management Permit that was
2 obtained from NHDES in May 2017 and renewed in 2023.

3 **Q. Please briefly describe the status of the Company's remediation work at the**
4 **Manchester MGP.**

5 A. Groundwater monitoring is ongoing twice a year pursuant to the Groundwater
6 Management Permit for this site. Two dense non-aqueous phase liquid (DNAPL)
7 monitoring and recovery wells were installed at the site in November 2022 to further
8 evaluate the potential presence of recoverable DNAPL. The next phase of DNAPL
9 monitoring and recovery is proposed to include installation of wells downgradient from
10 the site. In addition, excavation and management of MGP-impacted soil was performed
11 in July 2022 associated with a sinkhole repair located outside of the northeastern corner
12 of the LNG area. Pavement was removed in the vicinity of the sinkhole, and
13 approximately 12 tons of soil was excavated and shipped offsite for proper disposal.

14 **Q. Please briefly describe the status of the Company's remediation work at the**
15 **Concord MGP.**

16 A. The Company continues to move toward a remedy for the MGP-impacted “Concord
17 Pond” site on the parcel known as Healy Park. In 2020, the City and the Company
18 finalized an access agreement that gives Liberty access for the pre-design investigation
19 (PDI) fieldwork, the construction of the remedy, and subsequent maintenance of the
20 capped area after its completion. Pre-design field investigations commenced in 2021 to
21 develop the final design of a wetland and subaqueous cap, per the Remedial Action Plan

1 approved by NHDES. Based on the results of the PDI, additional data collection tasks
2 are warranted the evaluate the source and nature of NAPL discharges to the pond in
3 relation to the stormwater drainage system. The additional data will be used to inform
4 the final design remedy. Construction of the design remedy is likely to occur in 2025.

5 In 2017, the Company received approval from NHDES on a near-bank sediment
6 sampling program in the Merrimack River, or Monitored Natural Recovery (“MNR”).
7 This program involves annual sediment sampling for contaminants and river bathymetry
8 studies to monitor both the chemical and physical behavior of sediments that may have
9 been impacted by coal tar wastes. The plan involved five annual samplings, the last of
10 which was conducted in October 2021. NHDES accepted the results of the MNR
11 program, along with the recommendation to undergo a confirmatory sampling in October
12 2023 to determine if any additional future sample events in the river are needed.

13 As for the Gasholder site, the City of Concord and the Company jointly prepared a report
14 in 2019 that details various use options for the Gasholder site on the east side of the
15 highway, including costs for various scenarios ranging from cleaning and fortifying the
16 holder structure for public entry to the demolition of the structure. In response to
17 Liberty’s communication that the gasholder needed to be demolished, as the condition of
18 the structure raised safety concerns, the City Council established a working group in
19 2020, comprised of representatives of the City Council, City Staff, Liberty, and the New
20 Hampshire Preservation Alliance (“NHPA”), and charged with exploring the viability of
21 a plan to stabilize and preserve the holder house structure.

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

9 In October 2021, the NHPA and Liberty signed a formal Emergency Stabilization
10 License Agreement to provide for the repairs to the holder house (the "Agreement").
11 Under the Agreement, NHPA is responsible for the engineering and construction of the
12 stabilization work. Under the Agreement, Liberty agreed to allow NHPA access to the
13 site to perform the work and to contribute one-half of the stabilization costs, capped by
14 the amount Liberty would otherwise have spent to demolish the gasholder, investigate
15 beneath the gasholder for further contamination, and remedy any contamination found.
16 That is, absent the stabilization work that NHPA completed in the summer of 2022,
17 Liberty would have incurred those demolition-related costs. The NHPA completed the
18 stabilization work in July 2022. Liberty completed the estimate to demolish the holder
19 house and investigate and remedy any contamination beneath the holder footprint in
20 December 2022 to serve as the cap of Liberty's contribution toward stabilization. The
21 New Hampshire Department of Energy supported this approach in Direct Testimony of
22 Gas Director Faisal Deen Arif submitted in June 2023.

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

4 **Q. Please briefly describe the status of the Company's remediation work at the Nashua**
5 **MGP site.**

6 A. In May 2019, the NHDES accepted details of a cap design for the central portion of the
7 property, and construction was planned for 2020, in conjunction with a capital paving
8 project for this property. In August 2021, the Facilities Management team started the
9 project at the site to remove defunct subsurface and aboveground infrastructure in
10 preparation to pave the entire property. In fall 2022, installation was completed of an
11 engineered cap approved by the NH Department of Environmental Services (NHDES)
12 Waste Site Bureau over approximately one-third of the site beneath the newly paved
13 surface where old Holder #2 is situated, as a remedy for the MGP site. (It has been
14 determined that it is technically infeasible to remove the contents of the holder as a
15 critical high-pressure gas main passes through it). Soil management of excavated
16 materials was challenging as MGP waste and asbestos-containing soil exist onsite, further
17 complicated by an NHDES-permitted stormwater handling system installation and the
18 installation of a new impoundment for the propane day tank. Installation of these
19 improvements were also completed in fall 2022.

20

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

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

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

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

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

9 **Q. What environmental remediation efforts do you anticipate for the remainder of**
10 **2023 and 2024?**

11 A. At the Manchester MGP site, the Company will continue remediation of localized areas
12 of contamination on-site as well as install additional NAPL recovery and monitoring
13 wells downgradient from the site. Discussions will continue with the City regarding
14 storm drain improvements for a deteriorated drainage pipe along the western boundary of
15 the property. This work will be coordinated with the design for the railroad overpass that
16 is planned by the City as part of the "RAISE Manchester" project. At the Concord Pond
17 site, the Company will conduct additional investigation and assessment activities, and
18 continue to develop the final design of a subaqueous cap. Construction of the remedy is
19 estimated to occur in 2025. The monitoring of near-bank sediments will resume in
20 October 2023 per the NHDES-approved Monitored Natural Recovery plan. At the
21 Nashua MGP site and the Concord MGP site, activities are expected to consist of

1 groundwater monitoring. All sites are also now in the monitoring phase, so groundwater
2 monitoring will occur at all of them under their respective Groundwater Management
3 Permits.

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

5 A. Yes, it does.

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
November 2023 – October 2024 LDAC
Factor Summary (EnergyNorth & Keene Service Area)
Table of Schedules

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Docket No. DG 23-076
Exhibit 21

Schedule 1
LDAC Summary
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Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Factor Summary (EnergyNorth & Keene Service Area)
(\$/Therm)

Line No.	Rate Schedule	Energy Efficiency Charge ¹	Demand Side Management Charge	Conservation Charge (CCx)	Relief Holder and pond at Gas Street, Concord, NH ²	Manufactured Gas Plants	Environmental Surcharge (ES)	Revenue Decoupling Adjustment Factor ² (RDAF)	Property Tax Adjustment Mechanism (PTAM)	Rate Case Expense Factor (RCEF)	Gas Assistance Program (GAP)	Total (LDAC) ³
	(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	\$0.0667	\$0.0000	\$0.0667	\$0.0000	\$0.0022	\$0.0022	\$0.1041	\$0.0157	(\$0.0004)	\$0.0093	\$0.1976
2	R-5 Non-Heating (MEP)	\$0.0667	\$0.0000	\$0.0667	\$0.0000	\$0.0022	\$0.0022	\$0.1041	\$0.0157	(\$0.0004)	\$0.0093	\$0.1976
3	R-3 Heating	\$0.0667	\$0.0000	\$0.0667	\$0.0000	\$0.0022	\$0.0022	\$0.1041	\$0.0157	(\$0.0004)	\$0.0093	\$0.1976
4	R-6 Heating (MEP)	\$0.0667	\$0.0000	\$0.0667	\$0.0000	\$0.0022	\$0.0022	\$0.1041	\$0.0157	(\$0.0004)	\$0.0093	\$0.1976
5	R-4 Heating Gas Assistance Program	\$0.0667	\$0.0000	\$0.0667	\$0.0000	\$0.0022	\$0.0022	\$0.1041	\$0.0157	(\$0.0004)	\$0.0093	\$0.1976
6	R-7 Heating Gas Assistance Program (MEP)	\$0.0667	\$0.0000	\$0.0667	\$0.0000	\$0.0022	\$0.0022	\$0.1041	\$0.0157	(\$0.0004)	\$0.0093	\$0.1976
<u>Commercial/Industrial Sales Customers</u>												
7	G-41 Low Annual/High Winter Use	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
8	G-44 Low Annual/High Winter Use (MEP)	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
9	G-51 Low Annual/Low Winter Use	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
10	G-55 Low Annual/Low Winter Use (MEP)	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
11	G-42 Medium Annual/High Winter Use	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
12	G-45 Medium Annual/High Winter Use (MEP)	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
13	G-52 Medium Annual/Low Winter Use	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
14	G-56 Medium Annual/Low Winter Use (MEP)	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
15	G-43 High Annual/High Winter Use	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
16	G-46 High Annual/High Winter Use (MEP)	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
17	G-53 High Annual/Load Factor < 90%	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
18	G-57 High Annual/Load Factor < 90% (MEP)	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
19	G-54 High Annual/Load Factor > 90%	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
20	G-58 High Annual/Load Factor > 90% (MEP)	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
<u>Commercial/Industrial Transportation Customers</u>												
21	G-41 Low Annual/High Winter Use	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
22	G-44 Low Annual/High Winter Use (MEP)	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
23	G-51 Low Annual/Low Winter Use	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
24	G-55 Low Annual/Low Winter Use (MEP)	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
25	G-42 Medium Annual/High Winter Use	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
26	G-45 Medium Annual/High Winter Use (MEP)	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
27	G-52 Medium Annual/Low Winter Use	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
28	G-56 Medium Annual/Low Winter Use (MEP)	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
29	G-43 High Annual/High Winter Use	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
30	G-46 High Annual/High Winter Use (MEP)	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
31	G-53 High Annual/Load Factor < 90%	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
32	G-57 High Annual/Load Factor < 90% (MEP)	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
33	G-54 High Annual/Load Factor > 90%	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889
34	G-58 High Annual/Load Factor > 90% (MEP)	\$0.0444	\$0.0000	\$0.0444	\$0.0000	\$0.0022	\$0.0022	\$0.0177	\$0.0157	(\$0.0004)	\$0.0093	\$0.0889

Reference:

1- The Energy Efficiency Charges for both Residential and Commercial/Industrial customers will be amended on January 1, 2024 pursuant to HB 549. The current rate for the 2023 calendar year will still be applied for all Residential & Commercial/Industrial customers respectively through 12/31/2023. The anticipated rate effective during the 2024 calendar year is \$0.0699 for Residential customers and \$0.0466 for all Commercial/Industrial customers.

2- Per Order No. 26,692, Relief Holder and Pond at Gas Street, Concord and RDAF to be reviewed on a longer timeframe from rest of LDAC components effective November 1, 2022.

3- CCx, RDAF, ES, RCE, and GAP applies to all therms and all customers, including Managed Expansion ProgramCustomers, are at the same rate per therm as the corresponding non-Managed Expansion Program Customers.

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
November 1, 2023 - October 31, 2024 LDAC
Energy Efficiency Charge

<u>Line</u> <u>No.</u>	<u>Description</u> (A)	<u>Residential</u> (B)	<u>Commercial & Industrial</u> (C)	<u>Reference</u> (D)
<u>2023 and 2024 EEC Rates (as set by Statute in HB549)</u>				
1	Energy Efficiency Charge Factor (\$/Therm) Eff 1/1/23 - 12/31/23	\$0.0667	\$0.0444	HB549
2	Energy Efficiency Charge Factor (\$/Therm) Eff 1/1/24 - 12/31/24	\$0.0699	\$0.0466	HB549

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
November 2023 - October 2024
Environmental Surcharge

Manufactured Gas Plants

1	Required Annual Environmental Increase	\$578,817
2	Estimated Ending Balance on October 31, 2023	<u>-\$168,651</u>
3	Annual Net Increase to Rates	\$410,166
4	Estimated weather normalized firm therms billed for the	
5	twelve months ended 10/31/2024 - sales and transportation	<u>184,926,232</u> therms
6	MGP Surcharge per therm	\$0.0022 per therm

Gasholder and pond at Gas Street, Concord, NH

7	Required Annual Environmental Increase	\$0
8	Estimated weather normalized firm therms billed for the	
9	twelve months ended 10/31/2024 - sales and transportation	<u>184,926,232</u> therms
10	Gasholder and pond at Gas Street, Concord, NH Surcharge per therm	\$0.0000 per therm
11	Total Environmental Surcharge	<u>\$0.0022</u> per therm

Reference:

Line No. 1 - Schedule 3.3, Line 36, Column GO
Line No. 2 - Schedule 3, page 2, Line 5, Column L
Line No. 3 - Line 1 + Line 2
Line No. 4 & 5 - Company Forecast
Line No. 6 - Line 3 divided by Line 4 & 5
Line No. 7 - Schedule 3.2, page 8, Column Total
Line No. 8 & 9 - Company Forecast
Line No. 10 - Line 7 / Line 8 & 9
Line No. 11 - Line 6 + Line 10

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
November 2023 - October 2024
Environmental Collections Reconciliation

		(Actual) (a)	(Actual) (b)	(Actual) (c)	(Actual) (d)	(Actual) (e)	(Actual) (f)	(Actual) (g)	(Actual) (h)	(Estimate) (i)	(Estimate) (j)	(Estimate) (k)	(Estimate) (l)
1	FOR THE MONTH OF:	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	30	31	31	28	31	30	31	30	31	31	30	31
3	Beginning Balance*	\$ 1,244,084	\$ 1,132,580	\$ 990,689	\$ 753,485	\$ 578,313	\$ 391,666	\$ 254,746	\$ 172,935	\$ 119,159	\$ 41,184	\$ (29,822)	\$ (106,360)
4	Less: Collected Revenue	(111,503)	(141,891)	(237,204)	(175,172)	(186,646)	(136,921)	(81,811)	(53,775)	(77,975)	(71,006)	(76,538)	(62,291)
5	Ending Balance	\$ 1,132,580	\$ 990,689	\$ 753,485	\$ 578,313	\$ 391,666	\$ 254,746	\$ 172,935	\$ 119,159	\$ 41,184	\$ (29,822)	\$ (106,360)	\$ (168,651)

Prior Recovery Period (November 2022-October 2023) Updated with Actual Collections

		(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)
6	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
7	DAYS IN MONTH	30	31	31	28	31	30	31	30	31	31	30	31
8	Beginning Balance	\$ 2,833,284	\$ 2,656,186	\$ 2,354,611	\$ 1,967,918	\$ 1,526,129	\$ 1,131,620	\$ 853,408	\$ 660,155	\$ 548,839	\$ 470,864	\$ 399,857	\$ 323,319
9	Less: Collected Revenue	(177,098)	(301,575)	(386,693)	(441,789)	(394,508)	(278,213)	(193,253)	(111,316)	(77,975)	(71,006)	(76,538)	(62,291)
10	Ending Balance	\$ 2,656,186	\$ 2,354,611	\$ 1,967,918	\$ 1,526,129	\$ 1,131,620	\$ 853,408	\$ 660,155	\$ 548,839	\$ 470,864	\$ 399,857	\$ 323,319	\$ 261,028

*Beginning Balance for November, 2022 is equal to the October, 2022 ending plus the previously approved recovery amount of \$983,055.80

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.

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

CONCORD FORMER MGP

LINE
NO.

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, groundwater 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.

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

CONCORD FORMER MGP

LINE
NO.

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 regarding 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.

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

CONCORD FORMER MGP

LINE
NO.

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 and 2022-2023 costs to stabilize the holder house, for which Liberty seeks recovery in the 2022-2023 cost of gas proceeding, is approximately \$731,675.36.

Liberty and NHPA completed a detailed estimate of costs in December 2022, 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. The estimate is intended to serve as the cap of Liberty's contribution toward stabilization under the terms of the License Agreement. Liberty and NHPA presented that estimate to the Commission during the course of the 2021-2022 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 March 2023, summarized the results of the 2022 GMP sampling rounds and recent small source remediation activities undertaken at the site.

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 and the results were to be used to prepare the Remedial Action Plan (RAP) which NHDES

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d/b/a LIBERTY

CONCORD FORMER MGP

LINE
NO.

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 had increased to come to a design solution on outfall maintenance. However, there has been turnover at the City Engineer position and ENGI will need to restart these discussions with the City.

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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d/b/a LIBERTY

CONCORD FORMER MGP

LINE
NO.

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 on 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 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 pre-design investigation (PDI) activities and construction. ENGI commenced the PDI in 2021. Based on the results of the PDI, additional data collection tasks are warranted to evaluate the source and nature of NAPL discharges to the pond in relation to the stormwater drainage system. The additional data will be used to inform the final design remedy. Construction of the design remedy is likely to occur in 2025.

A renewal application for the Groundwater Management Permit was submitted on October 5, 2022, and the renewed permit was granted by NHDES on March 2, 2023. Groundwater and surface water monitoring continues under this permit annually in May. 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

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claim, ENGI alleged that under the federal Superfund statute, the United Gas Improvement Company exercised control over the operations of the Concord Gas Plant 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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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 April 2022, the Groundwater Management Permit (GMP) renewal application was submitted to NHDES on its five year cycle, with no substantive recommended changes. Subsequently, ENGI submitted a request for a GMP Amendment and Groundwater Management Zone (GMZ) Modification in November 2022 to request removal of a privately-owned parcel from the GMZ. This change was requested by the property owner, in coordination with the NHDES. The modification to the GMZ was approved as part of the renewed GMP that was issued in March 2023.**

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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 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

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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 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.

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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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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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- 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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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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- 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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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.

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

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- 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.
- In addition to routine Groundwater Management Permit (GMP) sampling and reporting, an application for GMP renewal was submitted to NHDES in

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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.
- A sinkhole outside the northeastern corner of the LNG area was repaired in July 2022. The repair involved the excavation and management of MGP-impacted materials.
- Two DNAPL monitoring and recovery wells were installed at the site in November 2022 to further evaluate the potential presence of recoverable DNAPL in the vicinity of Holder #3.

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

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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 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 were included in the 2022 filing. Costs for repair of the sink hole outside the northeastern corner of the LNG area are included in the 2023 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

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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 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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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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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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- 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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- 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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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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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 "In-active 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

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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, 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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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 was performed under a NHDES-approved Asbestos Disposal Site Work Plan, and was completed in fall 2022.**
- **In accordance with an NHDES request, additional PFAS sampling was performed during the April 2023 sampling event, and an updated receptor survey will be submitted in Summer 2023.**
- 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

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September 14, 2015. NHDES responded to ENGI with their comments on December 15, 2016. **Design for the engineered cap remedy was completed and approved by NHDES. ENGI received the Alteration of Terrain permit from NHDES in early 2022. The work to prepare the site for capping and paving began in August 2021.**

- **Construction of the engineered cap remedy was completed in fall 2022, which was performed in conjunction with various site improvements including, removal of existing subsurface propane piping to install an overhead piping system for conveyance of propane to the plant, installation of piers for supports for the overhead propane piping, installation of a new containment berm around the propane day tank, and installation of the new stormwater infiltration system in the Phase 2 area.**

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 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.

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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
For Recovery Period November 1, 2023 - October 31, 2024
Manufactured Gas Plant Environmental Costs
2023 Summary By Site

REDACTED
Schedule 3.2
MGP Sites
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			1101	1102	1105	1106	1107		1108	1109	
LINE NO.	SITE	REF NO.	LEGAL EXPENSES	CONSULTING EXPENSES	REMEDATION EXPENSES	SETTLEMENT EXPENSES	OTHER EXPENSES	100 % RECOVERABLE EXPENSES	INSURANCE & THIRD PARTY EXPENSES	INSURANCE & THIRD PARTY RECOVERIES	TOTAL
1	Concord Pond	DEF056	\$ -	\$ 50,164.62	\$ -	\$ -	\$ 6,066.84	\$ 56,231.46			\$ 47,459.39
2	Concord MGP (excludes Relief Holder)	DEF077	\$ -	\$ 51,388.19	\$ -	\$ -	\$ 11,157.95	\$ 62,546.14			\$ (27,027.99)
3	Concord MGP (Relief Holder)*	DEF077	\$ 246.00	\$ 82,833.73	\$ -	\$ -	\$ -	\$ 83,079.73			\$ 245,079.73
4	Laconia/Liberty Hill	DEF086	\$ -	\$ 26,751.89	\$ -	\$ -	\$ 3,163.00	\$ 29,914.89			\$ 29,914.89
5	Manchester MGP	DEF057	\$ -	\$ 102,819.77	\$ -	\$ -	\$ 13,046.30	\$ 115,866.07			\$ 40,976.47
6	Nashua MGP	DEF054	\$ -	\$ 544,029.21	\$ -	\$ -	\$ 144,734.02	\$ 688,763.23			\$ 310,768.13
7	General Expenses	DEF064	\$ -	\$ -	\$ -	\$ -	\$ 7,177.18	\$ 7,177.18			\$ 7,177.18
8											\$ -
9	Total Pool Activity		\$ 246.00	\$ 857,987.41	\$ -	\$ -	\$ 185,345.29	\$ 1,043,578.70	\$ 162,000.00	\$ (551,230.90)	\$ 654,347.80
10	Total Pool Activity Excluding Relief Holder		\$ -	\$ 775,153.68	\$ -	\$ -	\$ 185,345.29	\$ 960,498.97	\$ -	\$ (551,230.90)	\$ 409,268.07

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
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 7/2022 - 6/2023
1	CLEAN HARBORS	1004216091					\$ 3,105.87	\$ 3,105.87			\$ 3,105.87
2	ESMI OF NH	438898					\$ 6,813.21	\$ 6,813.21			\$ 6,813.21
3	LEIGHTON A. WHITE INC.	23203					\$ 50,350.34	\$ 50,350.34			\$ 50,350.34
4	ESMI OF NH	439641					\$ 1,588.68	\$ 1,588.68			\$ 1,588.68
5	GZA GEOENVIRONMENTAL INC	0839563		\$ 240,706.69			\$ 240,706.69	\$ 240,706.69			\$ 240,706.69
6	NH DEPT OF ENVIRONMENTAL SERVICES	199810022 072922					\$ 189.63	\$ 189.63			\$ 189.63
7	INNOVATIVE ENGINEERING SOLUTIONS, INC.	14221		\$ 7,053.27			\$ 7,053.27	\$ 7,053.27			\$ 7,053.27
8	INNOVATIVE ENGINEERING SOLUTIONS, INC.	14246		\$ 3,700.00			\$ 3,700.00	\$ 3,700.00			\$ 3,700.00
9	LEIGHTON A. WHITE INC.	23444					\$ 30,275.45	\$ 30,275.45			\$ 30,275.45
10	GZA GEOENVIRONMENTAL INC	0840377		\$ 97,416.23			\$ 97,416.23	\$ 97,416.23			\$ 97,416.23
11	ESMI OF NH	442451					\$ 752.00	\$ 752.00			\$ 752.00
12	ESMI OF NH	444343					\$ 947.97	\$ 947.97			\$ 947.97
13	ESMI OF NH	442058					\$ 1,491.17	\$ 1,491.17			\$ 1,491.17
14	ESMI OF NH	442093					\$ 1,423.62	\$ 1,423.62			\$ 1,423.62
15	ESMI OF NH	443228					\$ 2,732.60	\$ 2,732.60			\$ 2,732.60
17	INNOVATIVE ENGINEERING SOLUTIONS, INC.	14276		\$ 3,296.94				\$ 3,296.94			\$ 3,296.94
18	GZA GEOENVIRONMENTAL INC	0842535		\$ 97,593.23				\$ 97,593.23			\$ 97,593.23
19	ESMI OF NH	447264					\$ 4,764.12	\$ 4,764.12			\$ 4,764.12
20	ESMI OF NH	447630					\$ 3,230.61	\$ 3,230.61			\$ 3,230.61
21	ESMI OF NH	447298					\$ 3,209.20	\$ 3,209.20			\$ 3,209.20
22	ESMI OF NH	447415					\$ 2,340.19	\$ 2,340.19			\$ 2,340.19
23	ESMI OF NH	445105					\$ 1,961.58	\$ 1,961.58			\$ 1,961.58
25	CLEAN HARBORS	1004296997					\$ 1,373.12	\$ 1,373.12			\$ 1,373.12
26	BALANCE PROFESSIONAL INC	1070399					\$ 252.14	\$ 252.14			\$ 252.14
27	BALANCE PROFESSIONAL INC	1070458					\$ 112.06	\$ 112.06			\$ 112.06
28	CLEAN HARBORS	1004148867					\$ 553.00	\$ 553.00			\$ 553.00
29	GZA GEOENVIRONMENTAL INC	843498		\$ 6,292.50			\$ 6,292.50	\$ 6,292.50			\$ 6,292.50
30	LEIGHTON A. WHITE INC.	23936					\$ 4,860.00	\$ 4,860.00			\$ 4,860.00
31	INNOVATIVE ENGINEERING SOLUTIONS, INC.	14309		\$ 1,985.00			\$ 1,985.00	\$ 1,985.00			\$ 1,985.00
32	NH DEPT OF ENVIRONMENTAL SERVICES	Q2 INVOICE					\$ 237.04	\$ 237.04			\$ 237.04
33	LEIGHTON A. WHITE INC.	24206					\$ 7,305.00	\$ 7,305.00			\$ 7,305.00
34	INNOVATIVE ENGINEERING SOLUTIONS, INC.	14337		\$ 1,825.45			\$ 1,825.45	\$ 1,825.45			\$ 1,825.45
35	GZA GEOENVIRONMENTAL INC	845514		\$ 8,706.63			\$ 8,706.63	\$ 8,706.63			\$ 8,706.63
36	BALANCE PROFESSIONAL INC	1071715					\$ 168.09	\$ 168.09			\$ 168.09
37	GZA GEOENVIRONMENTAL INC	846923		\$ 17,943.85			\$ 17,943.85	\$ 17,943.85			\$ 17,943.85

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

REDACTED
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	SUBTOTAL EXPENSES	1108 INSURANCE & THIRD PARTY EXPENSE	1109 INSURANCE & THIRD PARTY RECOVERIES	TOTAL SUBMITTED
38	BALANCE PROFESSIONAL INC	1071840					\$ 252.14	\$ 252.14			\$ 252.14
40	INNOVATIVE ENGINEERING SOLUTIONS, INC.	14394		\$ 7,909.42				\$ 7,909.42			\$ 7,909.42
41	INNOVATIVE ENGINEERING SOLUTIONS, INC.	14417		\$ 7,737.50				\$ 7,737.50			\$ 7,737.50
42	INNOVATIVE ENGINEERING SOLUTIONS, INC.	14440		\$ 2,934.07				\$ 2,934.07			\$ 2,934.07
43	CLEAN HARBORS	1004527930					\$ 2,231.98	\$ 2,231.98			\$ 2,231.98
45	INNOVATIVE ENGINEERING SOLUTIONS, INC.	14465		\$ 5,917.85				\$ 5,917.85			\$ 5,917.85
46	INNOVATIVE ENGINEERING SOLUTIONS, INC.	14384A		\$ 2,835.52				\$ 2,835.52			\$ 2,835.52
47	INNOVATIVE ENGINEERING SOLUTIONS, INC.	14510		\$ 9,587.96				\$ 9,587.96			\$ 9,587.96
48	INNOVATIVE ENGINEERING SOLUTIONS, INC.	14501		\$ 20,587.10				\$ 20,587.10			\$ 20,587.10
50								\$ -			\$ -
51	Environmental Staff Time						\$ 338.21	\$ 338.21			\$ 338.21
52	Total Pool Activity		\$ -	\$ 544,029.21	\$ -	\$ -	\$ 144,734.02	\$ 688,763.23	\$ -	\$ (377,995.10)	\$ 310,768.13

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Manufactured Gas Plant Environmental Costs
PROJECT DEF056

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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 7/2022 - 6/2023
1	GEI CONSULTANTS, INC.	3112571		\$ 1,454.23				\$ 1,454.23			\$ 1,454.23
2	ANCHOR QEA LLC	10543		\$ 1,116.50				\$ 1,116.50			\$ 1,116.50
4	GEI CONSULTANTS, INC.	3115573		\$ 1,720.44				\$ 1,720.44			\$ 1,720.44
5	GEI CONSULTANTS, INC.	3116410		\$ 2,573.50				\$ 2,573.50			\$ 2,573.50
6	BALANCE PROFESSIONAL	1070908					\$ 168.09	\$ 168.09			\$ 168.09
7	BALANCE PROFESSIONAL INC	1071931					\$ 336.18	\$ 336.18			\$ 336.18
8	ANCHOR QEA LLC	11851		\$ 1,881.50				\$ 1,881.50			\$ 1,881.50
9	GEI CONSULTANTS, INC.	3117923		\$ 4,584.80				\$ 4,584.80			\$ 4,584.80
10	NH DEPT OF ENVIRONMENTAL SERVICES	Q2 Invoice					\$ 816.46	\$ 816.46			\$ 816.46
11	GEI CONSULTANTS, INC.	3119818		\$ 3,772.80				\$ 3,772.80			\$ 3,772.80
12	ANCHOR QEA LLC	12967		\$ 3,766.50				\$ 3,766.50			\$ 3,766.50
13	GEI CONSULTANTS, INC.	3121614		\$ 1,251.52				\$ 1,251.52			\$ 1,251.52
14	ANCHOR QEA LLC	13703		\$ 3,143.34				\$ 3,143.34			\$ 3,143.34
15	GEI CONSULTANTS, INC.	3123388		\$ 3,636.29				\$ 3,636.29			\$ 3,636.29
16	ANCHOR QEA LLC	14445		\$ 1,948.25				\$ 1,948.25			\$ 1,948.25
17	GEI CONSULTANTS, INC.	3125671		\$ 2,331.18				\$ 2,331.18			\$ 2,331.18
18	ANCHOR QEA LLC	14842		\$ 929.75				\$ 929.75			\$ 929.75
19	GEI CONSULTANTS, INC.	3126800		\$ 1,463.89				\$ 1,463.89			\$ 1,463.89
20	NH DEPT OF ENVIRONMENTAL SERVICES	Q3, 2022 INVOICE					\$ 110.13	\$ 110.13			\$ 110.13
21	CITY OF CONCORD, NH	23002877					\$ 2,040.00	\$ 2,040.00			\$ 2,040.00
23	GEI CONSULTANTS, INC.	3128693		\$ 917.01				\$ 917.01			\$ 917.01
24	GEI CONSULTANTS, INC.	3130668		\$ 912.76				\$ 912.76			\$ 912.76
25	ANCHOR QEA LLC	16912		\$ 8,352.25				\$ 8,352.25			\$ 8,352.25
26	GEI CONSULTANTS, INC.	3132452		\$ 4,408.11				\$ 4,408.11			\$ 4,408.11
27	NH DEPT OF ENVIRONMENTAL SERVICES	2022 Q4 Invoice					\$ 2,202.68	\$ 2,202.68			\$ 2,202.68
29								\$ -			\$ -
30	Environmental Staff Time						\$ 393.30	\$ 393.30			\$ 393.30
31	Total Pool Activity		\$ -	\$ 50,164.62	\$ -	\$ -	\$ 6,066.84	\$ 56,231.46	\$ -	\$ (8,772.07)	\$ 47,459.39

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
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 REMEDATION EXPENSES	1106 SETTLEMENT EXPENSES	1107 OTHER EXPENSES	SUBTOTAL EXPENSES	1108 INSURANCE & THIRD PARTY EXPENSE	1109 INSURANCE & THIRD PARTY RECOVERIES	TOTAL SUBMITTED 7/2022 - 6/2023
1	NH DEPT OF ENVIRONMENTAL SERVICES	200003011 072922					\$ 353.30	\$ 353.30			\$ 353.30
2	GZA GEOENVIRONMENTAL INC	0831255		\$ 10,950.96				\$ 10,950.96			\$ 10,950.96
3	GZA GEOENVIRONMENTAL INC	0840538		\$ 30,364.96				\$ 30,364.96			\$ 30,364.96
5	BALANCE PROFESSIONAL INC	1070458					\$ 392.21	\$ 392.21			\$ 392.21
6	BALANCE PROFESSIONAL INC	1070908					\$ 112.06	\$ 112.06			\$ 112.06
7	BALANCE PROFESSIONAL INC	1071380					\$ 168.09	\$ 168.09			\$ 168.09
8	CLEAN HARBORS	1004331723					\$ 3,070.94	\$ 3,070.94			\$ 3,070.94
7	GZA GEOENVIRONMENTAL INC	0843216		\$ 8,106.85				\$ 8,106.85			\$ 8,106.85
8	BALANCE PROFESSIONAL INC	1071125					\$ 56.03	\$ 56.03			\$ 56.03
9	CLEAN HARBORS	1004330973					\$ 263.29	\$ 263.29			\$ 263.29
10	BALANCE PROFESSIONAL INC	1070996					\$ 56.03	\$ 56.03			\$ 56.03
11	CLEAN HARBORS	1004356041					\$ 393.24	\$ 393.24			\$ 393.24
12	ESMI OF NH	452127					\$ 406.95	\$ 406.95			\$ 406.95
14	BALANCE PROFESSIONAL INC	1071840					\$ 84.05	\$ 84.05			\$ 84.05
15	NH DEPT OF ENVIRONMENTAL SERVICES	Q2 INVOICE					\$ 62.35	\$ 62.35			\$ 62.35
17	GZA GEOENVIRONMENTAL INC	0829519		\$ 21,715.47				\$ 21,715.47			\$ 21,715.47
18	GZA GEOENVIRONMENTAL INC	0848319		\$ 6,154.19				\$ 6,154.19			\$ 6,154.19
19	CLEAN HARBORS	1004458755					\$ 7,442.46	\$ 7,442.46			\$ 7,442.46
20	BALANCE PROFESSIONAL INC	1072130					\$ 84.05	\$ 84.05			\$ 84.05
23	GZA	858856		\$ 20,403.18				\$ 20,403.18			\$ 20,403.18
24	GZA	849998		\$ 5,124.16				\$ 5,124.16			\$ 5,124.16
28								\$ -			\$ -
29	Environmental Staff Time						\$ 101.25	\$ 101.25			\$ 101.25
30	Total Pool Activity		\$ -	\$ 102,819.77	\$ -	\$ -	\$ 13,046.30	\$ 115,866.07	\$ -	\$ (74,889.60)	\$ 40,976.47

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Manufactured Gas Plant Environmental Costs
General Expenses- Project DEF064

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MGP Sites
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LINE NO.	VENDOR	REF NO.	1101	1102	1105	1106	1107	SUBTOTAL EXPENSES	1108	1109	TOTAL SUBMITTED 7/2022 - 6/2023
			LEGAL EXPENSES	CONSULTING EXPENSES	REMEDATION EXPENSES	SETTLEMENT EXPENSES	OTHER EXPENSES		INSURANCE & THIRD PARTY EXPENSE	INSURANCE & THIRD PARTY RECOVERIES	
1	BALANCE PROFESSIONAL INC	1070281					\$ 168.09	\$ 168.09			\$ 168.09
2	BALANCE PROFESSIONAL INC	1070399					\$ 560.30	\$ 560.30			\$ 560.30
3	BALANCE PROFESSIONAL INC	1070458					\$ 224.12	\$ 224.12			\$ 224.12
4	BALANCE PROFESSIONAL INC	1070908					\$ 224.12	\$ 224.12			\$ 224.12
5	BALANCE PROFESSIONAL INC	1071380					\$ 1,176.63	\$ 1,176.63			\$ 1,176.63
6	BALANCE PROFESSIONAL INC	1071506					\$ 112.06	\$ 112.06			\$ 112.06
7	BALANCE PROFESSIONAL INC	1071233					\$ 280.15	\$ 280.15			\$ 280.15
8	BALANCE PROFESSIONAL INC	1071125					\$ 1,624.87	\$ 1,624.87			\$ 1,624.87
9								\$ -			\$ -
10	Environmental Staff Time						\$ 2,806.84	\$ 2,806.84			\$ 2,806.84
11	Total Pool Activity		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,177.18	\$ 7,177.18	\$ -	\$ 7,177.18

Docket No. DG 23-076
Exhibit 21

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
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 REMEDATION EXPENSES	1106 SETTLEMENT EXPENSES	1107 OTHER EXPENSES	SUBTOTAL EXPENSES	1108 INSURANCE & THIRD PARTY EXPENSE	1109 INSURANCE & THIRD PARTY RECOVERIES	TOTAL SUBMITTED 7/2022 - 6/2023
1	CITY OF CONCORD	25614					\$ 10.20	\$ 10.20			\$ 10.20
2	CITY OF CONCORD	38046					\$ 10.20	\$ 10.20			\$ 10.20
3	GZA GEOENVIRONMENTAL INC	0831256		\$ 8,724.38				\$ 8,724.38			\$ 8,724.38
4	GZA GEOENVIRONMENTAL INC	0840511		\$ 7,387.59				\$ 7,387.59			\$ 7,387.59
6	CITY OF CONCORD	50514					\$ 10.20	\$ 10.20			\$ 10.20
7	JOE GAUCI LANDSCAPING LLC	CI-1347					\$ 380.00	\$ 380.00			\$ 380.00
8	JOE GAUCI LANDSCAPING LLC	CI-1551					\$ 536.00	\$ 536.00			\$ 536.00
9	JOE GAUCI LANDSCAPING LLC	CI-1779					\$ 440.00	\$ 440.00			\$ 440.00
10	JOE GAUCI LANDSCAPING LLC	CI-1982					\$ 193.00	\$ 193.00			\$ 193.00
11	GZA GEOENVIRONMENTAL INC	842414		\$ 1,221.75				\$ 1,221.75			\$ 1,221.75
12	JOE GAUCI LANDSCAPING LLC	CI-2174					\$ 475.00	\$ 475.00			\$ 475.00
13	BALANCE PROFESSIONAL INC	1070996					\$ 112.06	\$ 112.06			\$ 112.06
14	BALANCE PROFESSIONAL INC	1071233					\$ 560.30	\$ 560.30			\$ 560.30
15	BALANCE PROFESSIONAL INC	1071313					\$ 896.48	\$ 896.48			\$ 896.48
16	NH DEPT OF ENVIRONMENTAL SERVICES	Q2 INVOICE					\$ 925.32	\$ 925.32			\$ 925.32
17	CITY OF CONCORD	75474					\$ 10.33	\$ 10.33			\$ 10.33
18	JOE GAUCI LANDSCAPING LLC	CI-2370					\$ 1,386.00	\$ 1,386.00			\$ 1,386.00
19	CITY OF CONCORD	87982					\$ 10.33	\$ 10.33			\$ 10.33
20	JOE GAUCI LANDSCAPING LLC	CI-2536					\$ 231.00	\$ 231.00			\$ 231.00
21	GZA GEOENVIRONMENTAL INC	848450		\$ 16,858.98				\$ 16,858.98			\$ 16,858.98
22	CLEAN HARBORS	1004458821					\$ 4,161.86	\$ 4,161.86			\$ 4,161.86
24	CITY OF CONCORD	100449					\$ 10.33	\$ 10.33			\$ 10.33
25	CITY OF CONCORD	112934					\$ 10.49	\$ 10.49			\$ 10.49
26	NH DEPT OF ENVIRONMENTAL SERVICES	Q3 INVOICE					\$ 165.20	\$ 165.20			\$ 165.20
27	CITY OF CONCORD	125420					\$ 10.81	\$ 10.81			\$ 10.81
29	GZA GEOENVIRONMENTAL INC	0858790		\$ 16,729.74				\$ 16,729.74			\$ 16,729.74
30	GZA GEOENVIRONMENTAL INC	0849994		\$ 465.75				\$ 465.75			\$ 465.75
31	CITY OF CONCORD	137911					\$ 10.81	\$ 10.81			\$ 10.81
32	CITY OF CONCORD	150399					\$ 10.49	\$ 10.49			\$ 10.49
33	NH DEPT OF ENVIRONMENTAL SERVICES	2022 Q4 Invoice					\$ 330.40	\$ 330.40			\$ 330.40
34	CITY OF CONCORD	162900					\$ 10.48	\$ 10.48			\$ 10.48
36								\$ -			\$ -
37	Environmental Staff Time						\$ 250.66	\$ 250.66			\$ 250.66
38	Total Pool Activity		\$ -	\$ 51,388.19	\$ -	\$ -	\$ 11,157.95	\$ 62,546.14	\$ -	\$ (89,574.13)	\$ (27,027.99)

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Manufactured Gas Plant Environmental Costs
Concord Gas Holder- Project DEF077

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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 7/2022 - 6/2023
1	HISTORIC PRESERVATION REDEVELOPMENT, LLC	APP# 4						\$ -			
2	ORR & RENO, P.A.	137471	\$ 246.00					\$ 246.00			\$ 246.00
3	GZA GEOENVIRONMENTAL INC	0840510		\$ 35,732.20				\$ 35,732.20			\$ 35,732.20
4	GZA GEOENVIRONMENTAL INC	842344		\$ 19,909.35				\$ 19,909.35			\$ 19,909.35
5	GZA GEOENVIRONMENTAL INC	848320		\$ 18,169.62				\$ 18,169.62			\$ 18,169.62
6	GZA GEOENVIRONMENTAL INC	0849999		\$ 3,471.86				\$ 3,471.86			\$ 3,471.86
7	GZA GEOENVIRONMENTAL INC	0858858		\$ 5,550.70				\$ 5,550.70			\$ 5,550.70
8	Total Pool Activity		\$ 246.00	\$ 82,833.73	\$ -	\$ -	\$ -	\$ 83,079.73			

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Manufactured Gas Plant Environmental Costs
Liberty Hill - RemediationProject DEF086

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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	SUB-TOTAL EXPENSES	1108 INSURANCE & THIRD PARTY EXPENSES	1109 INSURANCE & THIRD PARTY RECOVERIES	TOTAL SUBMITTED 7/2022 - 6/2023
1	MULLER'S LAWN & LANDSCAPING, LLC	5910					\$ 800.00	\$ 800.00			\$ 800.00
2	BLUE CHIP FILMS LLC	01777					\$ 1,255.00	\$ 1,255.00			\$ 1,255.00
3	MULLER'S LAWN & LANDSCAPING, LLC	5951					\$ 800.00	\$ 800.00			\$ 800.00
4	GEI CONSULTANTS, INC.	3117922		\$ 14,710.25				\$ 14,710.25			\$ 14,710.25
5	CLEAN HARBORS	1004362055					\$ 308.00	\$ 308.00			\$ 308.00
6	GEI CONSULTANTS, INC.	3119817		\$ 7,654.84				\$ 7,654.84			\$ 7,654.84
7	GEI CONSULTANTS, INC.	3121613		\$ 1,202.96				\$ 1,202.96			\$ 1,202.96
8	GEI CONSULTANTS, INC.	3123385		\$ 2,002.40				\$ 2,002.40			\$ 2,002.40
9	GEI CONSULTANTS, INC.	3128689		\$ 1,181.44				\$ 1,181.44			\$ 1,181.44
10								\$ -			\$ -
11	Environmental Staff Time						\$ -	\$ -			\$ -
12	Total Pool Activity		\$ -	\$ 26,751.89	\$ -	\$ -	\$ 3,163.00	\$ 29,914.89			\$ 29,914.89

Docket No. DG 23-076
Exhibit 21

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Manufactured Gas Plant Environmental Costs

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 Pond

																				DEF096	
		(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)	(7/22 - 6/23)	subtotal		
		pool #1 - #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 #21	pool #22	pool #23	pool #24			
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	56,231	8,153,063		
2	2 Remediation costs (i.o. 500005)																		0		
3	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	56,231	8,153,063		
4	4 Cash recoveries (i.o. 500061)	-2,075,704	0	-12,608	-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	0	-2,362,471		
5	5 Cash recoveries (i.o. 500004)	-445,985																	-445,985		
6	6 Recovery costs (i.o. 500004)	623,784																	623,784		
7	7 Transfer Credit from Gas Restructuring																				
8	8 B Subtotal - net recoveries	-1,897,905	0	-12,608	-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	0	-2,184,672		
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	56,231	5,968,391		
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																	-14,091		
21	21 Act November 2007 - October 2008	0																	0		
22	22 Act November 2012 - 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												-4,423		
25	25 Act Nov 2010-Oct 2011 Base Rate Rev	0				-32,310	-32,310												-32,310		
26	26 Act Nov 2011-Oct 2012 Base Rate Rev	0				-28,448	-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												0		
29	29 Act Nov 2014-Oct 2015 Base Rate Rev	0				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	-16,921	-16,477	-299,970		
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													
33	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	-16,921	-16,477	-4,074,703		
34	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	39,754	1,893,688		
35	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	0	-604,575		
36	36 7-YEAR AMORTIZATION SCHEDULE																		Unamortized Amt		
37	37 (7/15 - 6/16)										2,884	2,884	2,884	2,884	2,884	2,884	5,767	(2,884)	0		
38	38 (7/16 - 6/17)											10,498	10,498	10,498	10,498	15,747	5,249		0		
39	39 (7/17 - 6/18)												16,071	16,071	16,071	16,071	21,428	10,714	16,071		
40	40 (7/18 - 6/19)													8,183	8,183	8,183	10,229	6,138	16,367		
41	41 (7/19 - 6/20)														22,493	22,493	26,992	17,994	67,479		
42	42 (7/20 - 6/21)															42,511	49,596	35,426	170,043		
43	43 (7/21 - 6/22)																41,009	41,009	205,046		
44	44 (7/22 - 6/23)																	5,679	34,075		
45	45 Required annual increase in rates:																	170,768	119,325		
46	46 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	184,926,232	186,338,561	184,926,232			
47	47 surcharge per therm																	\$0.0002	\$1.0000		

Docket No. DG 23-076
Exhibit 21

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Manufactured Gas Plant Environmental Costs

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

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)	(7/22 - 6/23)		
		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 #19	pool #20	pool #21		subtotal	
		Incl. Audit Corr	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:																		0	
11	Act June 1998 - October 1998	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					-28,433	-28,433	(28,433)										-85,296	
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	
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		262,678	-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		525,356	147,219	72,188	516,424										19,011,122	
35	E Allocation of Litigated Recovery	0	-4,692,393	-607,876		-525,356	-234,530	0	0										-6,060,155	
36	7-YEAR AMORTIZATION SCHEDULE																		Unamortized Amt	
37	(7/15 - 6/16)										454,469	454,469	454,469	454,469	454,469	454,469	454,469	14,333	0	
38	(7/16 - 6/17)										14,333	14,333	14,333	14,333	14,333	14,333	14,333	4,863	0	
39	(7/17 - 6/18)										4,863	4,863	4,863	4,863	4,863	4,863	4,863	4,863	4,863	
40	(7/18 - 6/19)											2,200	2,200	2,200	2,200	2,200	2,200	3,989	11,968	
41	(7/19 - 6/20)												3,989	3,989	3,989	3,989	3,989	2,129	8,515	
42	(7/20 - 6/21)													2,129	2,129	2,129	2,129	6,984	34,918	
43	(7/21 - 6/22)																	4,274	26,641	
44	(7/22 - 6/23)																			
45	Required annual increase in rates:										454,469	468,802	473,665	475,865	479,854	481,983	488,967	38,771		
46	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	184,926,232	186,338,561	184,926,232			
47	surcharge per therm	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0025	\$0.0026	\$0.0026	\$0.0026	\$0.0027	\$0.0026	\$0.0026	\$0.0002		

Docket No. DG 23-076
Exhibit 21

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Manufactured Gas Plant Environmental Costs

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) pool #1 - #7	(9/07 - 9/08) pool #8 Incl. Audit Corr	(9/08 - 9/09) pool #9	(9/09 - 9/10) pool #10	(9/10 - 9/11) pool #11	(9/11 - 9/12) pool #12	(9/12 - 6/13) pool #13	(7/13 - 6/14) pool #14	(7/14 - 6/15) pool #15	(7/15 - 6/16) pool #16	(7/16 - 6/17) pool #17	(7/17 - 6/18) pool #18	(7/18 - 6/19) pool #19	(7/19 - 6/20) pool #20	(7/20 - 6/21) pool #22	(7/21 - 6/22) pool #23	(7/22 - 6/23) pool #24	subtotal	
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	115,866	11,425,942	
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	115,866	12,251,034	
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	0	-3,146,605	
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	0	-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	115,866	10,349,300	
10	Surcharge revenue:																		0	
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	-73,543																	-73,543	
16	Act November 2002 - October 2003	-75,984																	-75,984	
17	Act November 2003 - October 2004	-138,576																	-138,576	
18	Act November 2004 - October 2005	-326,132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-326,132	
19	Act November 2005 - October 2006	-563,732	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-563,732	
20	Act November 2006 - October 2007	-662,265	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-662,265	
21	Act November 2007 - October 2008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
22	Act November 2012- October 2013	0					-40,012								0	0	0	0	-40,012	
23	Act November 2013- October 2014	0					-50,994												-50,994	
24	Act Nov 2009-Oct 2010 Base Rate Rev	0				0													0	
25	Act Nov 2010-Oct 2011 Base Rate Rev	0				0													0	
26	Act Nov 2011-Oct 2012 Base Rate Rev	0				0													0	
27	Act Nov 2012-Oct 2013 Base Rate Rev	0				0	-23,337												-23,337	
28	Act Nov 2013-Oct 2014 Base Rate Rev	0																	0	
29	Act Nov 2014-Oct 2015 Base Rate Rev	0																	0	
30	AES collections	0																	0	
31	Gas Street overcollection	0																	0	
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	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	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	115,866	8,394,724	
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	0	-7,297,742	
36	7-YEAR AMORTIZATION SCHEDULE																		Unamortized Amt	
37	(7/15 - 6/16)										3,241	3,241	3,241	3,241	3,241	3,241	3,241		0	
38	(7/16 - 6/17)											7,218	7,218	7,218	7,218	7,218	7,218		0	
39	(7/17 - 6/18)												49,435	49,435	49,435	49,435	49,435		49,435	
40	(7/18 - 6/19)													5,431	5,431	5,431	5,431		10,863	
41	(7/19 - 6/20)														22,147	22,147	22,147		66,442	
42	(7/20 - 6/21)															726	726		2,903	
43	(7/21 - 6/22)																17,270		86,349	
44	(7/22 - 6/23)																	16,552	99,314	
45	Required annual increase in rates:										3,241	10,459	59,894	65,325	87,472	88,198	105,468	118,779		
46	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	184,926,232	186,338,561	184,926,232		
47	surcharge per therm																\$0.0006	\$0.0006		

Docket No. DG 23-076
Exhibit 21

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Manufactured Gas Plant Environmental Costs

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																	Subtotal	
		(9/00 - 9/07) pool #1 - #7	(9/07 - 9/08) pool #8	(9/08 - 9/09) pool #9	(9/09 - 9/10) pool #10	(9/10 - 9/11) pool #11	per 2/08 Audit (9/11 - 9/12) pool #12	(9/12 - 6/13) pool #13	(7/13 - 6/14) pool #14	(7/14 - 6/15) pool #15	(7/15 - 6/16) pool #16	(7/16 - 6/17) pool #17	(7/17 - 6/18) pool #18	(7/18 - 6/19) pool #19	(7/19 - 6/20) pool #20	(7/20 - 6/21) pool #21	(7/21 - 6/22) pool #22	(7/22 - 6/23) pool #23		
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	688,763	3,003,403
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	688,763	4,774,970
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	-98,800	0	-774,875
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	-98,800	0	-756,487
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	331,327	688,763	4,018,482
10		Surcharge revenue:																		0
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	-183,857																	-183,857
16		Act November 2002 - October 2003	-243,150																	-243,150
17		Act November 2003 - October 2004	-247,639																	-247,639
18		Act November 2004 - October 2005	-241,054																	-241,054
19		Act November 2005-October 2006	-274,991	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-274,991
20		Act November 2006-October 2007	-281,815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-281,815
21		Act November 2007- October 2008	0																	0
22		Act November 2012- October 2013	0					-40,012												-40,012
23		Act November 2013- October 2014	0					-38,246												-38,246
24		Act Nov 2009-Oct 2010 Base Rate Rev	0			0														0
25		Act Nov 2010-Oct 2011 Base Rate Rev	0			0														0
26		Act Nov 2011-Oct 2012 Base Rate Rev	0			0														0
27		Act Nov 2012-Oct 2013 Base Rate Rev	0			0		-20,916												-20,916
28		Act Nov 2013-Oct 2014 Base Rate Rev	0																	0
29		Act Nov 2014-Oct 2015 Base Rate Rev	0																	0
30		AES collections	0																	0
31		Gas Street overcollection	0																	0
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	0
33	C	Surcharge Subtotal	1,714,096	733,479	0	0	0	-93,558	0	0	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	331,327	688,763	2,446,803
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	0	-973,668
36	7-YEAR AMORTIZATION SCHEDULE																			Unamortized Am
37		(7/15 - 6/16)								8,919	8,919	8,919	8,919	8,919	8,919	8,919	8,919			0
38		(7/16 - 6/17)									12,188	12,188	12,188	12,188	12,188	12,188	12,188			0
39		(7/17 - 6/18)										2,218	2,218	2,218	2,218	2,218	2,218			2,218
40		(7/18 - 6/19)											11,710	11,710	11,710	11,710	11,710			23,420
41		(7/19 - 6/20)												1,639	1,639	1,639	1,639			4,916
42		(7/20 - 6/21)													8,717	8,717	8,717			34,866
43		(7/21 - 6/22)														47,332	47,332			236,662
44		(7/22 - 6/23)															98,395			590,368
45	Required annual increase in rates:										8,919	21,107	23,324	35,034	36,673	45,390	92,722	182,198		
46	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	184,926,232	186,338,561	184,926,232		
47	surcharge per therm																	\$0.0005	\$0.0010	

Docket No. DG 23-076
Exhibit 21

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Manufactured Gas Plant Environmental Costs

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

Dover													
	(9/02 - 9/03) pool #1	(9/04 - 9/05) pool #2	(9/05 - 9/06) pool #3	(9/06 - 9/07) pool #4	(9/07 - 9/08) pool #5	(9/08 - 9/09) pool #6	(9/09 - 9/10) pool #7	(9/10 - 9/11) pool #8	(9/11 - 9/12) pool #9	(9/12 - 6/13) pool #10	(7/13 - 6/14) pool #11	(7/14 - 6/15) pool #12	subtotal
1 1 Remediation costs (i.o. 500061)	0	18,854	2,288	0	0	0	0	0	0	0	0	0	21,142
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	0	202,208
4 Cash recoveries (i.o. 500061)	0					0	0	0	0	0	0	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	0
9 A-B Total net expenses to recover	181,066	18,854	2,288	0	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	0	-27,499
20 Act November 2006 - October 2007	-28,181	0	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	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								
33 C Surcharge Subtotal	-113,174	67,892	86,746	89,034	89,034	0	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	0	89,034
35 E Allocation of Litigated Recovery		0		0	-89,034	0	0	0	0	0	0	0	-89,034
36 7-YEAR AMORTIZATION SCHEDULE													
37 (7/15 - 6/16)													
38 (7/16 - 6/17)													
39 (7/17 - 6/18)													
40 (7/18 - 6/19)													
41 (7/19 - 6/20)													
42 (7/20 - 6/21)													
43 (7/21 - 6/22)													
44 (7/22 - 6/23)													
45 Required annual increase in rates:													
46 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	179,574,679	184,926,232
47 surcharge per therm													

Docket No. DG 23-076
Exhibit 21

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Manufactured Gas Plant Environmental Costs

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

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		(9/03 - 9/04) pool #1	(9/04 - 9/05) pool #2	(9/05 - 9/06) pool #3	(9/06 - 9/07) pool #4	(9/07 - 9/08) pool #5	(9/08 - 9/09) pool #6	(9/09 - 9/10) pool #7	(9/10 - 9/11) pool #8	(9/11 - 9/12) pool #9	(9/12 - 6/13) pool #10	(7/13 - 6/14) pool #11	(7/14 - 6/15) pool #12	subtotal
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								
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 revenues:													
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	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								
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	7-YEAR AMORTIZATION SCHEDULE													
37	(7/15 - 6/16)													
38	(7/16 - 6/17)													
39	(7/17 - 6/18)													
40	(7/18 - 6/19)													
41	(7/19 - 6/20)													
42	(7/20 - 6/21)													
43	(7/21 - 6/22)													
44	(7/22 - 6/23)													
45	Required annual increase in rates:													
46	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	179,574,679	184,926,232
47	surcharge per therm													

Docket No. DG 23-076
Exhibit 21

Liberty Utilities (Energy/North Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Manufactured Gas Plant Environmental Costs

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 (Energy/North Natural Gas) Corp. d/b/a Liberty
Environmental Remediation - MGPs
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		Concord (Excluding Gas Holder)													Excluding Gas Holder						subtotal	
		(9/03 - 9/07) pool #1 - #4	(9/07 - 9/08) pool #5	(9/08 - 9/09) pool #6	(9/09 - 9/10) pool #7	(9/10 - 9/11) pool #8	(9/11 - 9/12) pool #9	(9/12 - 6/13) pool #10	(7/13 - 6/14) pool #11	(7/14 - 6/15) pool #12	(7/15 - 6/16) pool #13	(7/16 - 6/17) pool #14	(7/17 - 6/18) pool #15	(7/18 - 6/19) pool #16	(7/19 - 6/20) pool #17	(7/20 - 6/21) pool #18	(7/21 - 6/22) pool #19	(7/22 - 6/23) pool #20				
1	1 Remediation costs (i.o. 500061)	0																				
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	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	Cash recoveries (i.o. 500004)	0																				
6	Recovery costs (i.o. 500004)	0	1,432	-1,007																		
7	Transfer Credit 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	0	-	-	-	-	-	-	-	(27,499)			
20	Act November 2006 - October 2007	-28,181	0	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	-6,794												(13,588)			
28	Act Nov 2013-Oct 2014 Base Rate Rev	0				0													-			
29	Act Nov 2014-Oct 2015 Base Rate Rev	0				0													-			
30	AES collections	0				0													-			
31	Gas Street overcollection	0				0													-			
32	Prior Period Pool under/overcollection	419,182	271,214																-			
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	7-YEAR AMORTIZATION SCHEDULE																		Unamortized Amt			
37	(7/15 - 6/16)									13,650	13,650	13,650	13,650	13,650	13,650	13,650	13,650		0			
38	(7/16 - 6/17)										19,038	19,038	19,038	19,038	19,038	19,038	19,038		0			
39	(7/17 - 6/18)											8,223	8,223	8,223	8,223	8,223	8,223		8,223			
40	(7/18 - 6/19)												6,232	6,232	6,232	6,232	6,232		12,464			
41	(7/19 - 6/20)													9,513	9,513	9,513	9,513		28,538			
42	(7/20 - 6/21)														54,816	54,816	54,816		219,264			
43	(7/21 - 6/22)															5,488	5,488		10,976			
44	(7/22 - 6/23)																8,935		8,935			
45	Required annual increase in rates:	13,650	32,689	40,912	47,144	56,656	111,472	116,960	112,245													
46	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	184,926,232	186,338,561	184,926,232					
47	surcharge per therm															\$0.0006	\$0.0006					

Docket No. DG 23-076
Exhibit 21

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Manufactured Gas Plant Environmental Costs

Filed under the following protective orders:
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Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Environmental Remediation - MGPs

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General																			Updated 8/2/23		MGP
(9/02 - 9/07) pool #1 - #5	(9/07 - 9/08) pool #6	(9/08 - 9/09) pool #7	(9/09 - 9/10) pool #8	(9/10 - 9/11) pool #9	(9/11 - 9/12) pool #10	(9/12 - 6/13) pool #11	(7/13 - 6/14) pool #12	(7/14 - 6/15) pool #13	(7/15 - 6/16) pool #14	(7/16 - 6/17) pool #15	(7/17 - 6/18) pool #16	(7/18 - 6/19) pool #17	(7/19 - 6/20) pool #18	(7/20 - 6/21) pool #19	(7/21 - 6/22) pool #20	(7/22 - 6/23) pool #21	subtotal	(7/22 - 6/23)	total of each subtotal	Remediation subtotal	
806,611	-181,000	-26,884	4,199	69,286	93,034	75,204	13,139	16,612	11,879	6,547	10,799	6,868	7,111	5,646	8,346	7,177	934,574	0			
806,611	-181,000	-26,884	4,199	69,286	93,034	75,204	13,139	16,612	11,879	6,547	10,799	6,868	7,111	5,646	8,346	7,177	934,574				
0	0	0																0			
	16,012	23,953	0	0	-14,068	-1,358	0	-24,250	0	0	0	0	0	0	0	0	0	288			
	-3,331																	-3,331			
0	12,681	23,953	0	0	-14,068	-1,358	0	-24,250	0	0	0	0	0	0	0	0	0	-3,043			
806,611	-168,319	-2,931	4,199	69,286	78,967	73,846	13,139	-7,638	11,879	6,547	10,799	6,868	7,111	5,646	8,346	7,177	931,532				
																		0		(54,889)	
																		0		(538,143)	
																		0		(912,804)	
																		0		(1,336,776)	
																		0		(1,679,228)	
																		0		(1,732,442)	
-8,265																		-8,265		(1,428,735)	
-70,898																		-70,898		(1,403,787)	
-96,247	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-96,247		(1,694,877)	
-49,318	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-49,318		(2,036,113)	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
0	0	0	0	0	-5,002	-5,002	0	0	0	0	0	0	0	0	0	0	0	0			
				-12,749	-12,749	-12,749	0	0	0	0	0	0	0	0	0	0	0	-10,003		(160,048)	
																		-38,246		(293,217)	
																		0		(10,611)	
																		0		(77,509)	
																		0		(68,244)	
																		0		(76,335)	
																		0		(85,298)	
																		0		(86,554)	
																		0		(299,970)	
																		0		(23,511)	
1,486,644	2,068,527																				
1,261,916	2,068,527	0	0	-17,750	-17,750	-12,749	0	0	0	0	0	0	0	0	0	0	0	-272,977	-129,651	-13,999,092	(13,999,092)
2,068,527	1,900,208	-2,931	4,199	51,536	61,217	61,098	13,139	-7,638	11,879	6,547	10,799	6,868	7,111	5,646	8,346	7,177	658,555	3,533,575	39,623,142		
0	-1,900,208	2,931	-4,199	-8,562	0	0	0	0	0	0	0	0	0	0	0	0	0	-1,910,037	-89,034		
									1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697	1,697	Unamortized Amt			
										935	935	935	935	935	935	935	935	0			
											1,543	1,543	1,543	1,543	1,543	1,543	1,543	1,543			
												981	981	981	981	981	981	1,962			
													1,016	1,016	1,016	1,016	1,016	3,047			
														807	807	807	807	3,226			
															1,192	1,192	1,192	5,961			
																	1,025	6,152			
									1,697	2,632	4,175	5,156	6,172	6,978	8,171	7,499	21,892				
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	179,574,679	184,926,232	186,338,561	184,926,232				
																\$0.0000	\$0.0000				

Docket No. DG 23-076
Exhibit 21

Liberty Utilities (Energy/North Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Manufactured Gas Plant Environmental Costs

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 (Energy/North 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)	(7/21 - 6/22)	(7/22 - 6/23)	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	860,861	
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	99,633	
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	960,499	
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	-299,127	0	
5	Cash recoveries (i.o. 500004)	-445,985	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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	0	
7	Transfer Credit from Gas Restructuring	0	-3,331	0	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	-299,127	0	
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	850,394	960,499	
10	Surcharge revenue:																	
11	Act June 1998 - October 1998	-54,889	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12	Act November 1998 - October 1999	-538,143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13	Act November 1999 - October 2000	-912,804	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14	Act November 2000 - October 2001	-1,336,776	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	Act November 2001 - October 2002	-1,679,228	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16	Act November 2002 - October 2003	-1,732,442	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17	Act November 2003 - October 2004	-1,428,735	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18	Act November 2004- October 2005	-1,403,787	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
19	Act November 2005- October 2006	-1,694,877	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20	Act November 2006- October 2007	-2,036,113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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	0	-30,009	-130,039	0	0	0	0	0	0	0	0	0	0	
23	Act November 2013- October 2014	0	0	0	0	-38,246	-165,731	-89,240	0	0	0	0	0	0	0	0	0	
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	0	
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	0	
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	0	
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	0	
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	0	
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	0	
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	-16,921	-16,477	
31	Gas Street overcollection	-23,511	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
32	Prior Period Pool under/overcollection	15,673,547															0	
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	-16,921	-16,477	1,674,455
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	833,473	944,022	
35	E Allocation of Litigated Recovery																	
36	7-YEAR AMORTIZATION SCHEDULE																	
37	(7/15 - 6/16)									\$ 484,860	\$ 484,860	\$ 484,860	\$ 484,860	\$ 484,860	\$ 484,860	\$ 487,744	(2,884)	\$ -
38	(7/16 - 6/17)										64,210	64,210	64,210	64,210	64,210	69,459	58,961	0
39	(7/17 - 6/18)											82,352	82,352	82,352	87,709	76,995	82,362	82,362
40	(7/18 - 6/19)												34,738	34,738	36,784	32,692	69,476	69,476
41	(7/19 - 6/20)													60,797	60,797	65,296	56,298	182,391
42	(7/20 - 6/21)														109,704	116,789	102,619	438,817
43	(7/21 - 6/22)															119,275	596,376	596,376
44	(7/22 - 6/23)																134,860	809,161
45	Required annual increase in rates:									\$ 484,860	\$ 549,070	\$ 631,422	\$ 666,160	\$ 726,957	\$ 836,661	\$ 983,056	\$ 578,817	\$ 2,178,573
46	forecasted therm sales																	184,926,232
47	surcharge per therm																	

Docket No. DG 23-076
Exhibit 21

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Manufactured Gas Plant Environmental Costs
Reconciliation

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Schedule 3.4
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	Spend Period	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 23	Jul 23 - Jun 24
	Collection Period	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 23	Jul 23 - Jun 24	
1 BEGINNING BALANCE		\$ (364,633)	\$ 942,575	\$ 1,123,799	\$ 466,582	\$ (1,049,402)	\$ (3,301,194)	\$ (5,823,058)	\$ (8,310,740)	\$ (10,632,864)	\$ (13,386,581)	\$ (15,663,209)	\$ (15,787,391)	
2 <u>SPEND / THIRD PARTY RECOVERIES</u>														
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	56,231	
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	115,866	
6 Nashua		396,411	(80,241)	35,950	65,217	62,435	85,314	15,523	81,969	11,472	61,016	331,327	688,763	
7 Keene														
8 Concord (excluding gas holder)														
Concord (including gas holder)														
9 General		78,967	73,846	13,139	(7,638)	11,879	6,547	10,799	6,868	7,111	5,646	8,346	7,177	
10 Difference between the GL and Filing		-	9,545	(10,312)	(921)	(2,506)	(783)	(84,532)	811	16,776	78,185	(88,398)	(95,710)	
11 TOTAL SPEND		\$ 1,526,211	\$ 563,370	\$ 255,666	\$ 374,116	\$ 224,640	\$ 229,749	\$ 415,191	\$ 199,950	\$ 363,155	\$ 462,970	\$ 1,199,708	\$ 1,017,408	
12 <u>ENVIRONMENTAL COSTS RECOVERED IN BASE RATES (DG 10-017)</u>		\$ (78,892)	\$ (78,892)	\$ (78,892)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
13 <u>ACTUAL ENVIROMENTAL COLLECTIONS PER GL</u>		\$ (140,111)	\$ (303,254)	\$ (833,991)	\$ (1,890,100)	\$ (2,476,432)	\$ (2,751,612)	\$ (2,902,873)	\$ (2,522,075)	\$ (3,116,872)	\$ (2,739,597)	\$ (1,323,889)		
14 Current Pool Under (Over) Collection		\$ 942,575	\$ 181,224	\$ (657,217)	\$ (1,515,984)	\$ (2,251,792)	\$ (2,521,864)	\$ (2,487,682)	\$ (2,322,124)	\$ (2,753,717)	\$ (2,276,627)	\$ (124,182)	\$ 1,017,408	
15 ENDING BALANCE - UNDER (OVER) COLLECTION		\$ 942,575	\$ 1,123,799	\$ 466,582	\$ (1,049,402)	\$ (3,301,194)	\$ (5,823,058)	\$ (8,310,740)	\$ (10,632,864)	\$ (13,386,581)	\$ (15,663,209)	\$ (15,787,391)	\$ (14,769,983)	
16 <u>Regulatory Filing Reconciliation (Balance through June 2019) :</u>														
17 Balance in GL	Per Audit Staff	\$ 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												

Collection over 3 years

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Revenue Decoupling Adjustment Factor (RDAF)

Residential

1	Outstanding Residential Uncollected Revenue Decoupling For Decoupling Year 2021-2022*	\$3,050,498
2	Residential Revenue Decoupling Deficiency / (Excess) For Decoupling Year 2022-2023*	\$4,054,537
3	Total Residential Revenue Deficiency / (Excess) for Decoupling Still To Be Collected as of October 31, 2023*	<hr/> \$7,105,035
4	Estimated Residential November 2023 - October 2024 Sales (therms)	68,225,945
5	Residential Revenue Decoupling Adjustment Factor rate per therm November 2023 - October 2024	\$0.1041

Commercial

6	Outstanding Commercial Uncollected Revenue Decoupling For Decoupling Year 2021-2022*	\$683,199
7	Commercial Revenue Decoupling Deficiency / (Excess) For Decoupling Year 2022-2023*	\$1,387,364
8	Total Commercial Revenue Deficiency / (Excess) for Decoupling Still To Be Collected as of October 31, 2023*	<hr/> \$2,070,562
9	Estimated Commercial November 2023 - October 2024 Sales (therms)	116,700,287
10	Commercial Revenue Decoupling Adjustment Factor rate per therm November 2023 - October 2024	\$0.0177

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Revenue Decoupling Reconciliation
Reconciliation of Previous Period November 2022 – October 2023

Residential**																	
	Month	Recoupment Beginning Balance	Recovery Rate	Therm Sales	Recovery Rate	Therm Sales	Recovery Rate	Therm Sales	Recovery Rate	Therm Sales	Collections	(Over)/Under Ending Balance	Balance Subject to Interest	Interest Rate	Days per Month	Interest	Cumulative Interest
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
2	DY 21/22 Deficiency/(Surplus)	\$2,551,253															
3																	
4	Nov-22	\$2,857,121	\$0.000	924,985	\$0.0152	2,234,947	(\$0.0623)	0	(\$0.0562)	0	(\$33,971)	\$2,823,150	\$2,840,136	6.25%	30	\$14,590	\$14,590
5	Dec-22	\$2,837,740	\$0.000	6,750,145	\$0.0152	112,821	(\$0.0623)	0	(\$0.0562)	0	(\$1,715)	\$2,836,025	\$2,836,883	7.00%	31	\$16,866	\$31,456
6	Jan-23	\$2,852,891	\$0.000	9,235,355	\$0.0152	25,123	(\$0.0623)	0	(\$0.0562)	36	(\$380)	\$2,852,511	\$2,852,701	7.50%	31	\$18,171	\$49,627
7	Feb-23	\$2,870,682	\$0.000	9,079,880	\$0.0152	30,264	(\$0.0623)	0	(\$0.0562)	644	(\$424)	\$2,870,259	\$2,870,471	7.75%	28	\$17,066	\$66,692
8	Mar-23	\$2,887,324	\$0.000	9,375,593	\$0.0152	(2,944)	(\$0.0623)	0	(\$0.0562)	125	\$52	\$2,887,376	\$2,887,350	7.75%	31	\$19,005	\$85,698
9	Apr-23	\$2,906,381	\$0.000	6,668,399	\$0.0152	1,087	(\$0.0623)	0	(\$0.0562)	0	(\$17)	\$2,906,364	\$2,906,373	8.00%	30	\$19,110	\$104,808
10	May-23	\$2,925,475	\$0.000	3,101,195	\$0.0152	1,196	(\$0.0623)	0	(\$0.0562)	0	(\$18)	\$2,925,457	\$2,925,466	8.00%	31	\$19,877	\$124,685
11	Jun-23	\$2,945,334	\$0.000	2,000,813	\$0.0152	1,044	(\$0.0623)	0	(\$0.0562)	0	(\$16)	\$2,945,318	\$2,945,326	8.25%	30	\$19,972	\$144,657
12	Jul-23	\$2,965,290	\$0.000	1,324,728	\$0.0152	149	(\$0.0623)	0	(\$0.0562)	0	(\$2)	\$2,965,287	\$2,965,289	8.25%	31	\$20,777	\$165,434
13	Aug-23	\$2,986,065	\$0.000	1,267,441	\$0.0152	0	(\$0.0623)	0	(\$0.0562)	0	\$0	\$2,986,065	\$2,986,065	8.50%	31	\$21,557	\$186,991
14	Sep-23	\$3,007,622	\$0.000	2,090,550	\$0.0152	0	(\$0.0623)	0	(\$0.0562)	0	\$0	\$3,007,622	\$3,007,622	8.50%	30	\$21,012	\$208,003
15	Oct-23	\$3,028,634	\$0.000	4,940,474	\$0.0152	0	(\$0.0623)	0	(\$0.0562)	0	\$0	\$3,028,634	\$3,028,634	8.50%	31	\$21,864	\$229,867
16	Total			56,759,558		2,403,689		0		804	(\$36,491)					\$229,867	
17																	
18																	
19	Projected Cumulative Collection										(\$36,491)						
20	Total Approved Collection										\$2,857,121						
21	(Over)/Under Collection, excluding interest										\$2,820,631						
22	Cumulative Interest										\$229,867						
23	Total (Over)/Under Collection, including interest										\$3,050,498						

26	Commercial**																
27	Month	Recoupment Beginning Balance	Recovery Rate	Therm Sales	Recovery Rate	Therm Sales	Recovery Rate	Therm Sales	Recovery Rate	Therm Sales	Collections	(Over)/Under Ending Balance	Balance Subject to Interest	Interest Rate	Days per Month	Interest	Cumulative Interest
28		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
29	DY 21/22 Deficiency/(Surplus)	\$232,515															
30	Nov-22	\$664,854	\$0.000	1,113,840	\$0.0039	3,957,319	(\$0.0241)	0	(\$0.0206)	0	(\$15,434)	\$649,420	\$657,137	6.25%	30	\$3,376	\$3,376
31	Dec-22	\$652,796	\$0.000	4,521,433	\$0.0039	3,520,580	(\$0.0241)	0	(\$0.0206)	0	(\$13,730)	\$639,066	\$645,931	7.00%	31	\$3,840	\$7,216
32	Jan-23	\$642,906	\$0.000	19,398,737	\$0.0039	1,235,232	(\$0.0241)	0	(\$0.0206)	0	(\$4,817)	\$638,089	\$640,497	7.50%	31	\$4,080	\$11,296
33	Feb-23	\$642,168	\$0.000	13,854,965	\$0.0039	25,570	(\$0.0241)	0	(\$0.0206)	0	(\$100)	\$642,069	\$642,119	7.75%	28	\$3,818	\$15,113
34	Mar-23	\$645,886	\$0.000	14,993,404	\$0.0039	125,380	(\$0.0241)	0	(\$0.0206)	0	(\$489)	\$645,397	\$645,642	7.75%	31	\$4,250	\$19,363
35	Apr-23	\$649,647	\$0.000	11,281,561	\$0.0039	33,924	(\$0.0241)	0	(\$0.0206)	0	(\$132)	\$649,515	\$649,581	8.00%	30	\$4,271	\$23,634
36	May-23	\$653,786	\$0.000	7,096,169	\$0.0039	279,882	(\$0.0241)	0	(\$0.0206)	0	(\$1,092)	\$652,694	\$653,240	8.00%	31	\$4,438	\$28,073
37	Jun-23	\$657,133	\$0.000	6,098,760	\$0.0039	(501,999)	(\$0.0241)	0	(\$0.0206)	0	\$1,958	\$659,091	\$658,112	8.25%	30	\$4,463	\$32,535
38	Jul-23	\$663,553	\$0.000	3,978,088	\$0.0039	(144,432)	(\$0.0241)	0	(\$0.0206)	0	\$563	\$664,116	\$663,835	8.25%	31	\$4,651	\$37,187
39	Aug-23	\$668,768	\$0.000	5,028,596	\$0.0039	0	(\$0.0241)	0	(\$0.0206)	0	\$0	\$668,768	\$668,768	8.50%	31	\$4,828	\$42,015
40	Sep-23	\$673,596	\$0.000	5,881,383	\$0.0039	0	(\$0.0241)	0	(\$0.0206)	0	\$0	\$673,596	\$673,596	8.50%	30	\$4,706	\$46,721
41	Oct-23	\$678,302	\$0.000	8,664,105	\$0.0039	0	(\$0.0241)	0	(\$0.0206)	0	\$0	\$678,302	\$678,302	8.50%	31	\$4,897	\$51,617
42	Total			101,911,040		8,531,457		0		0	(\$33,273)					\$51,617	
43																	
44	Projected Cumulative Collection										(\$33,273)						
45	Total Approved Collection										\$664,854						
46	(Over)/Under Collection, excluding interest										\$631,581						
47	Cumulative Interest										\$51,617						
48	Total (Over)/Under Collection, including interest										\$683,199						

Reference:

- 51 Column (a) - Line 4 (Res) and Line 29 (Com): Company Records, revised with actuals through August 2023
52 Column (b) - Approved in Docket No. DG 22-045, Order No. 26,692
53 Column (c) - Company records
54 Column (d) - Approved in Docket No. DG 21-130, Order No. 26,541
55 Column (e) - Company records
56 Column (f) - Approved in Docket No. DG 19-145, Order No. 26,306
57 Column (g) - Company records
58 Column (h) - Approved in Docket No. DG 20-141, Order No. 26,419
59 Column (i) - Company records
60 Column (j) - (Column (b) x Column (c)) + (Column (d) x Column (e)) + (Column (f) x Column (g)) + (Column (h) + Column (i))
61 Column (k) - Column (a) + Column (j)
62 Column (l) - [Column (a) + Column (k)] ÷ 2
63 Column (m) - Interest rate - Monthly Prime Rate- http://www.fedprimerate.com/wall_street_journal_prime_rate_history.htm
64 Column (n) - Days per month
65 Column (o) - [Column (l) x ((Column (m) / 365) * Column (n))]

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
September 2022 through August 2023
Revenue Decoupling Activity by Sector

RESIDENTIAL*		(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Estimate)	(Estimate)
1	FOR THE MONTH OF:	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
2	DAYS IN MONTH	30	31	30	31	31	28	31	30	31	30	31	31
3	Over Under Beginning Balance	\$ -	\$ 308,154	\$ 486,332	\$ 1,792,437	\$ 3,198,724	\$ 4,699,829	\$ 3,632,655	\$ 3,703,064	\$ 3,882,816	\$ 3,986,603	\$ 3,957,889	\$ 3,900,245
4	Monthly revenue difference Inc/(Dec) revenue	\$ 211,789	\$ 222,302	\$ 1,371,160	\$ 1,448,918	\$ 1,435,977	\$ (1,094,075)	\$ 116,559	\$ 11,196	\$ 121,997	\$ 450	\$ (85,079)	\$ 125,682
5	True up	\$ 95,671	\$ (46,227)	\$ (70,893)	\$ (57,424)	\$ 40,052	\$ 2,204	\$ (70,212)	\$ 143,698	\$ (44,855)	\$ (56,008)	\$ -	\$ -
6	Ending Balance Pre-Interest	\$ 307,460	\$ 484,229	\$ 1,786,599	\$ 3,183,931	\$ 4,674,753	\$ 3,607,959	\$ 3,679,001	\$ 3,857,958	\$ 3,959,959	\$ 3,931,045	\$ 3,872,810	\$ 4,025,927
7	Month's Average Balance	\$ 153,730	\$ 396,192	\$ 1,136,466	\$ 2,488,184	\$ 3,936,738	\$ 4,153,894	\$ 3,655,828	\$ 3,780,511	\$ 3,921,388	\$ 3,958,824	\$ 3,915,350	\$ 3,963,086
8	Interest Rate	5.50%	6.25%	6.25%	7.00%	7.50%	7.75%	7.75%	8.00%	8.00%	8.25%	8.25%	8.50%
9	Interest Applied	\$ 695	\$ 2,103	\$ 5,838	\$ 14,793	\$ 25,076	\$ 24,696	\$ 24,063	\$ 24,858	\$ 26,644	\$ 26,844	\$ 27,434	\$ 28,610
10	Ending Balance	\$ 308,154	\$ 486,332	\$ 1,792,437	\$ 3,198,724	\$ 4,699,829	\$ 3,632,655	\$ 3,703,064	\$ 3,882,816	\$ 3,986,603	\$ 3,957,889	\$ 3,900,245	\$ 4,054,537
COMMERCIAL & INDUSTRIAL*		(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Estimate)	(Estimate)
11	FOR THE MONTH OF:	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
12	DAYS IN MONTH	30	31	30	31	31	28	31	30	31	30	31	31
13	Over Under Beginning Balance	\$ -	\$ 9,048	\$ 164,338	\$ 312,212	\$ 3,928,632	\$ 50,717	\$ 765	\$ 508,967	\$ 1,710,084	\$ 1,368,522	\$ 1,414,385	\$ 1,420,598
14	Monthly revenue difference Inc/(Dec) revenue	\$ (87,225)	\$ 122,364	\$ (46,269)	\$ 3,456,112	\$ (4,270,060)	\$ (466,473)	\$ 253,570	\$ 860,819	\$ (462,148)	\$ 190	\$ (3,685)	\$ (43,333)
15	True up	\$ 96,252	\$ 32,468	\$ 192,922	\$ 147,738	\$ 379,511	\$ 416,369	\$ 252,959	\$ 333,027	\$ 110,163	\$ 36,271	\$ -	\$ -
16	Ending Balance Pre-Interest	\$ 9,027	\$ 163,879	\$ 310,992	\$ 3,916,063	\$ 38,083	\$ 612	\$ 507,295	\$ 1,702,812	\$ 1,358,098	\$ 1,404,982	\$ 1,410,700	\$ 1,377,264
17	Month's Average Balance	\$ 4,514	\$ 86,464	\$ 237,665	\$ 2,114,138	\$ 1,983,357	\$ 25,665	\$ 254,030	\$ 1,105,890	\$ 1,534,091	\$ 1,386,752	\$ 1,412,543	\$ 1,398,931
18	Interest Rate	5.50%	6.25%	6.25%	7.00%	7.50%	7.75%	7.75%	8.00%	8.00%	8.25%	8.25%	8.50%
19	Interest Applied	\$ 20	\$ 459	\$ 1,221	\$ 12,569	\$ 12,634	\$ 153	\$ 1,672	\$ 7,272	\$ 10,423	\$ 9,403	\$ 9,897	\$ 10,099
20	Ending Balance	\$ 9,048	\$ 164,338	\$ 312,212	\$ 3,928,632	\$ 50,717	\$ 765	\$ 508,967	\$ 1,710,084	\$ 1,368,522	\$ 1,414,385	\$ 1,420,598	\$ 1,387,364
21	Total Ending Balance	\$ 317,202	\$ 650,671	\$ 2,104,649	\$ 7,127,355	\$ 4,750,546	\$ 3,633,420	\$ 4,212,031	\$ 5,592,900	\$ 5,355,125	\$ 5,372,274	\$ 5,320,842	\$ 5,441,901

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Property Tax Adjustment Mechanism Summary

<u>Line</u> <u>No.</u>	<u>Property Tax Reconciliation</u> (a)	<u>Amount</u> (b)
1	Projected (Over)/Under Recovery Balance November 1, 2023	\$358,839
2	2022 Property Tax Year Variance	<u>\$2,545,330</u>
3	Total PTAM to be Recovered	\$2,904,168
4	Forecasted Distribution therm Sales (therms)	184,926,232
5	LDAC - PTAM Portion (\$/therm)	\$0.01570

Reference:

Line No. 1 - Schedule 5 page 2, Line 20

Line No. 2 - Schedule 5 page 3, Line 73

Line No. 3 - Line 1 + Line 2

Line No. 4 - Company Forecast

Line No. 5 - Line 3 divided by Line 4

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Property Tax Adjustment Mechanism
Reconciliation of Previous Recovery Period November 2022 – October 2023

	Month	Beginning Balance	Collections	(Over)/Under Ending Balance	Balance Subject to Interest	Interest Rate	Days per Month	Interest	Cumulative Interest
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
	Nov-22	\$2,364,465	(\$113,206)	\$2,251,259	\$2,307,862	5.50%	30	\$10,433	\$10,433
	Dec-22	\$2,261,692	(\$191,266)	\$2,070,426	\$2,166,059	5.50%	31	\$10,118	\$20,551
	Jan-23	\$2,080,544	(\$372,424)	\$1,708,120	\$1,894,332	7.00%	31	\$11,262	\$31,813
	Feb-23	\$1,719,382	(\$283,052)	\$1,436,331	\$1,577,856	7.00%	28	\$8,473	\$40,286
	Mar-23	\$1,444,803	(\$301,075)	\$1,143,728	\$1,294,266	7.00%	31	\$7,695	\$47,981
	Apr-23	\$1,151,423	(\$221,228)	\$930,195	\$1,040,809	7.75%	30	\$6,630	\$54,611
	May-23	\$936,825	(\$129,370)	\$807,455	\$872,140	7.75%	31	\$5,741	\$60,351
	Jun-23	\$813,195	(\$92,470)	\$720,725	\$766,960	7.75%	30	\$4,885	\$65,237
*	Jul-23	\$725,610	(\$68,657)	\$656,953	\$691,282	8.25%	31	\$4,844	\$70,080
*	Aug-23	\$661,797	(\$70,974)	\$590,823	\$626,310	8.25%	31	\$4,388	\$74,469
*	Sep-23	\$595,212	(\$89,866)	\$505,346	\$550,279	8.25%	30	\$3,731	\$78,200
*	Oct-23	\$509,078	(\$153,361)	\$355,717	\$432,397	8.50%	31	\$3,122	\$81,322
15		\$358,839	(\$2,086,947)						
16			Projected Cumulative Collection	(\$2,086,947)					
17			Total Approved Collection	\$2,364,465					
18			(Over)/Under Collection, excluding interest	\$277,517					
19			Cumulative Interest	\$81,322					
20			Total (Over)/Under Collection, including interest	\$358,839					

Reference:

- (a) From General Ledger
- (b) Actuals: Company financials; Forecast: PTAM Rate * Forecasted Therms
- (c) Column (a) + Column (b)
- (d) [Column (a) + Column (c)] ÷ 2
- (e) Interest rate - Quarterly Prime Rate- http://www.fedprimerate.com/wall_street_journal_prime_rate_history.htm
- (f) Days per month
- (g) [Column (d) x ((Column (e) / 365) * Column (f))]
- (h) Column (g) + Prior Month Column (h)
- * Projected

**Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Property Tax Adjustment Mechanism
Municipal Property Tax 2022 Invoices**

Tax Year 2022								
Line	Municipality	Parcel	Installment #1	Installment #2	Installment #3	Installment #4	Total Due	Notes
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	
1	Allenstown	000400-000001-000000	\$ 28,173	\$ 15,891	\$ -	\$ -	\$ 44,064	
2	Amherst	002-033-008	55,921	53,326	-	-	109,247	
3	Amherst	002-033-007	2,711	2,660	-	-	5,371	
4	Auburn	000001/000001/000UTL	803	738	-	-	1,541	
5	Bedford	1-1-A	78,192	89,187	-	-	167,379	
6	Belmont	999-000-000-001	21,032	16,015	-	-	37,046	
7	Berlin	000404-000051.0000L1	9,619	6,563	-	-	16,182	
8	Boscawen	000099-000002-000000	14,078	14,619	-	-	28,697	
9	Bow	0-9-99	70,186	60,426	-	-	130,614	
10	Canterbury	000000-000002-000000	2,683	2,939	-	-	5,622	
11	Derry	35-102	54,263	41,956	-	-	96,219	
12	Franklin	000-001-00	50,242	50,867	-	-	101,109	
13	Gilford	210-002.000	51	50	-	-	101	(A)
14	Gilford	210-003.000	48	47	-	-	95	(A)
15	Gilford	210-004.000	46	46	-	-	92	(A)
16	Gilford	210-005.000	48	48	-	-	96	(A)
17	Gilford	200-003.000	3,158	2,595	-	-	5,753	
18	Goffstown	99-4-2	46,619	41,589	-	-	88,208	
19	Goffstown	99-4-1	1,379	1,232	-	-	2,610	
20	Hollis	056-027-001	2,069	1,354	-	-	3,423	
21	Hooksett	OGAS-0001	148,889	187,820	-	-	336,709	
22	Hooksett	0036-0041-0001	3,024	3,815	-	-	6,839	
23	Hudson	100-006-000	192,634	133,065	-	-	325,699	
24	Hudson	167-030-000	861	908	-	-	1,769	
25	Hudson	167-029-000	1,057	794	-	-	1,851	
26	Laconia	425/44/83/1	159,000	116,063	-	-	275,063	
27	Litchfield	000UTL-000UTL-000001	14,788	15,876	-	-	30,664	
28	Londonderry	81-7-0	46,634	24,320	-	-	70,954	
29	Londonderry	81-7-1	241,469	239,644	-	-	481,113	
30	Londonderry	81-14-0	16,638	12,048	-	-	28,685	(B)
31	Londonderry	81-14-0	11,549	10,454	-	-	22,002	(B)
32	Londonderry- 7 Delta Drive LLC	14-21-2	14,184	14,338	-	-	28,522	(C)
33	Loudon	000070-000004-000000	81,479	124,701	-	-	206,180	
34	Manchester	0999A-0075	1,174,871	1,493,525	-	-	2,668,395	
35	Manchester	0752-0001	20,310	22,842	-	-	43,152	
36	Manchester	0508-0002A	63	70	-	-	133	
37	Manchester	0394-0004	266	299	-	-	566	
38	Manchester	0471-0008	461	519	-	-	980	
39	Merrimack	006D-3-000000-000000	135,089	215,420	-	-	350,509	
40	Milford	036-183-000-000	868	973	-	-	1,841	
41	Milford	055-007-000-000	63,457	64,796	-	-	128,252	
42	Nashua	0039-00026	1,618	1,580	-	-	3,198	
43	Nashua	0038-00063	97	137	-	-	234	
44	Nashua	0038-00020	153	217	-	-	370	
45	Nashua	0041-00011	40,712	15,428	-	-	56,140	
46	Nashua	0000PC-00005	1,313,323	1,413,359	-	-	2,726,682	
47	Northfield	000999-000001-000001	25,815	16,172	-	-	41,987	
48	Pembroke	999-11	77,306	57,172	-	-	134,478	
49	Sanborton	00.003.000.000	2,168	2,003	-	-	4,171	
50	Tilton	000R23-000013-000000	125,307	135,767	-	-	261,074	
51	Tilton	000R23-000014-000000	10,315	11,153	-	-	21,468	
52	Concord	772/12	7,640	7,640	8,435	8,435	32,151	(D)
53	Concord	772/11	503	503	553	553	2,111	(E)
54	Concord	772/10	6,263	6,263	6,914	6,914	26,353	
55	Concord	772/9	304	304	336	336	1,281	
56	Concord	772/7	558	558	616	616	2,347	
57	Concord	772/6	881	881	973	973	3,707	
58	Concord	772/6/A	5	5	5	5	19	(F)
59	Concord	N000/1/13	12,687	12,687	14,817	14,817	55,007	
60	Concord	P000/1/6	860	860	682	682	3,082	
61	Concord	7922/2/1	344	344	379	379	1,446	
62	Concord	P000/1/3	28,652	28,652	22,737	22,737	102,779	
63	Concord	N000/1/2	422,896	422,896	493,879	493,879	1,833,549	
64	Concord	2022/2/1	249	249	275	275	1,046	
65	Concord	7432/19	1,729	1,729	1,909	1,909	7,276	
66	Concord	4942/3	283	283	313	313	1,192	
67	Keene	583038000UTL000	119,006	138,132	-	-	257,138	(G)
68	Keene	116039000000000	9,407	9,541	-	-	18,948	
69	Keene- R&M REALTY	582014000000000	5,102	5,020	-	-	10,122	(H)
70	Keene Propane	583038000000000	3,791	3,731	-	-	7,522	(I)
71	Total		\$ 4,986,886	\$ 5,377,700	\$ 552,820	\$ 552,820	\$ 11,470,227	
72	Calculated Municipal Property Taxes Included in Distribution Rates through 12/31/2022						\$ 8,924,897	
73	Difference Between 2022 Municipal Property Taxes Paid and Approved Calculation Municipal Property Taxes Included in Distribution Rates Per Order No. 26,808						\$ 2,545,330	

Reference:

Line 72 - Per Settlement Agreement - Order No. 26,808 (April 28, 2023)

Line 73 - Line 71, Column G - Line 72

Note (A) - Since this Parcel is a non-utility property, the Company appropriately paid the State Education Tax. Per RSA 83-F:1.V, the land subject to taxation on those parcels do not meet the definition of utility property and as such is not exempt from the State Education tax.

Note (B) - Both parcels 81-14-0 and 81-14-1 are related to our Londonderry office on Buttrick Road, which houses both gas and electric employees for NH operations. This is a shared service building; therefore, costs have historically been split 70/30 between EnergyNorth Natural Gas (8840) and Granite State Electric (8830). EnergyNorth Natural Gas pays 70% of the invoice and Granite State Electric pays the remaining 30%.

Note (C) - For Parcel 14-21-2, This Invoice is paid to 7 Delta Drive LLC, and not to the Town of Londonderry, the Company appropriately paid the State Education Tax, as this is a leased property and is considered a non-utility property.

Note (D) - For all Parcels for City of Concord, two invoices for are issued in May 2022 and December 2022. The May Invoice contains Installment #1 for Q2 2022 and Installment #2 for Q3 2022. The December Invoice contains Installment #3 for Q4 2022 and Installment #4 for Q1 2023.

Note (E) - For Parcel No. 772/11, The company paid \$35.59 in State Education Tax for both Installments #1 and #2. The company paid \$16.17 for Installment #3 and \$16.16 for Installment #4, for a total of \$103.51.

Note (F) - For Parcel No. 772/6/A, The company subtracted the State Education Tax correctly for Installments #1 & #2, but subtracted the amount of \$1.03 on #3 and #4 instead of \$0.52 for #3 and \$0.51 for #4.

Note (G) - Formerly listed as Parcel No. 583038000001000.

Note (H) - This invoice is paid to R&M Realty, not to the Town of Keene. Since this Parcel is a leased property, the Company appropriately paid the State Education Tax. Per RSA 83-F:1.V.

Note (I) - This Invoice is paid to Keene Propane NY, not the Town of Keene, so the Company appropriately paid the State Education Tax.

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Local Delivery Adjustment Charge (LDAC) - Recovery of Rate Case Expense and Recoupment Summary

<u>Line</u> <u>No.</u>	<u>Description</u> (A)	<u>Total</u> (B)
1	Projected (Over)/Under Recovery Balance November 1, 2023	\$ (73,721)
2	Additional Rate Case Expenses Approved to be Recovered	\$ -
3	Total Rate Case Expenses to be Recovered	\$ (73,721)
4	Forecast Throughput (Therms)	184,926,232
5	LDAC - RCE Factor (\$/Therm)	(\$0.0004)

Reference:

Line No. 1 - Schedule 6 Page 2, Line 20

Line No. 2 - Per Settlement Agreement dated April 19, 2023 in Docket No. DG 20-105, Exhibit 64, Bates 007. Order No. 26,808

Line No. 3 - Line 1 plus Line 2

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Recoupment/Rate Case Expense Reconciliation
Reconciliation of Previous Period November 2022 – October 2023

	Month	Beginning Balance	Collections	(Over)/Under Ending Balance	Balance Subject to Interest	Interest Rate	Days per Month	Interest	Cumulative Interest
		(a)**	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	Nov-22	\$885,471	(\$54,780)	\$830,691	\$858,081	6.25%	30	\$4,408	\$4,408
2	Dec-22	\$835,099	(\$76,466)	\$758,633	\$796,866	7.00%	31	\$4,738	\$9,145
3	Jan-23	\$763,370	(\$135,333)	\$628,037	\$695,704	7.50%	31	\$4,432	\$13,577
4	Feb-23	\$632,469	(\$101,402)	\$531,066	\$581,767	7.75%	28	\$3,459	\$17,036
5	Mar-23	\$534,525	(\$107,914)	\$426,611	\$480,568	7.75%	31	\$3,163	\$20,199
6	Apr-23	\$429,774	(\$79,215)	\$350,559	\$390,166	8.00%	30	\$2,565	\$22,764
7	May-23	\$353,124	(\$46,921)	\$306,203	\$329,664	8.00%	31	\$2,240	\$25,004
8	Jun-23	\$308,443	(\$40,265)	\$268,179	\$288,311	0.00%	30	\$0	\$25,004
9	Jul-23	\$268,179	(\$57,469)	\$210,709	\$239,444	0.00%	31	\$0	\$25,004
10	Aug-23	\$210,709	(\$61,460)	\$149,249	\$179,979	0.00%	31	\$0	\$25,004
11	Sep-23	\$149,249	(\$77,530)	\$71,719	\$110,484	0.00%	30	\$0	\$25,004
12	Oct-23	\$71,719	(\$145,440)	(\$73,721)	(\$1,001)	0.00%	31	\$0	\$25,004
13			(\$984,196)					\$25,004	
14									
15									
16			Projected Cumulative Collection	(\$984,196)					
17			Total Approved Collection	\$885,471					
18			(Over)/Under Collection, excluding interest	(\$98,725)					
19			Cumulative Interest	\$25,004					
20			Total (Over)/Under Collection, including interest	(\$73,721)					

Reference:

- (a) Per Settlement Agreement dated April 19, 2023 in Docket No. DG 20-105, Exhibit 64, Bates 007.
- (b) Company records (Rate Case Recoveries minus Sent to Phased-In Revenues)
- (c) Column (a) + Column (b)
- (d) [Column (a) + Column (c)] ÷ 2
- (e) Per Settlement Agreement dated April 19, 2023 in Docket No. DG 20-105, the Company eliminated carrying charges on a going forward basis effective Jun 1, 2
- (f) Days per month
- (g) [Column (d) x ((Column (e) / 365) * Column (f))]
- (h) Column (g) + Prior Month Column (h)
- * Projected

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Docket No. DG 20-105 Rate Case Expense
To be Recovered November 2023 – October 2024
As of July 31, 2023

Line No	Service Provider	(a) Expense as of 8/31/22	(b) Amount Approved for Recovery per Order No. 26,691	(c) Agreed upon 11/18/22 Audit Adjustments	(d) = (a) - (b) + (c) Unresolved Amounts Prior to 4/28/23 Settlement	(e) Agreed upon 4/28/23 Settlement Agreement Adjustments	(f) = (d) + (e) Amount Approved for Recovery per Order No. 26,808	Description of Service
1	Concentric Energy Advisors	\$ 48,381.75	\$ -	-	\$ 48,381.75	\$ -	\$ 48,381.75	Review of Decoupling Mechanism
	FTI Consulting							Revenue Requirement, Rate Design, Marginal Cost of Service , Functional Cost of Service, Decoupling Effects on EE, Cost of Capital
2		\$ 385,965	\$ 385,965	-	\$ -	\$ -	\$ -	Capital
3	Keegan Werlin	\$ 148,407	\$ 101,571	\$ (5,913)	\$ 40,923	\$ -	\$ 40,923	Legal Services
4	ScottMadden	\$ 34,215	\$ -	-	\$ 34,215	\$ -	\$ 34,215	Testimony Support
5	Management Applications Consulting	\$ 71,243	\$ 33,246	-	\$ 37,997	\$ (37,997)	\$ -	Review Status of Depreciation
6	Court Reporter	\$ 1,743	\$ 1,743		\$ -	\$ -	\$ -	Court Reporter
7	Customer Notice	\$ 46,241	\$ 46,241	\$ -	\$ -	\$ -	\$ -	Customer Notice
8	Legal Notices	\$ 467	\$ 467	\$ -	\$ -	\$ -	\$ -	Legal Notices
9	Printing Expenses	\$ 160	\$ 160	\$ -	\$ -	\$ -	\$ -	Printing Expenses
10								
11	Subtotal	\$ 736,821	\$ 569,392	\$ (5,913)	\$ 161,516	\$ (37,997)	\$ 123,519	
12								
13								
14	<u>DOE Consultants</u>							
15	Blue Ridge Consulting	\$ 64,653	\$ 64,653	\$ -	\$ -	\$ -	\$ -	Revenue Requirement
16	J. Randall Woolridge	\$ 33,800	\$ 33,800	\$ -	\$ -	\$ -	\$ -	Cost of Capital
17								
18	<u>OCA Consultants</u>							
19	Exeter Associates	\$ 12,924	\$ 12,924	\$ -	\$ -	\$ -	\$ -	Cost of Service/Rate Design
20								
21	Subtotal DOE/OCA	\$ 111,376	\$ 111,376	\$ -	\$ -	\$ -	\$ -	
22								
23	Grand Total	\$ 848,198	\$ 680,768	\$ (5,913)	\$ 161,516	\$ (37,997)	\$ 123,519	Total Estimated Amount

Reference:

Amounts in "Post Audit Expense" column represent costs for which invoices were received after the completion of the Audit.

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
For Recovery Period November 1, 2023 - October 31, 2024
Residential Gas Assistance Program

Winter Period Distribution (as of August 1, 2023)	Customer Charge	Block	Total
R-3 Base Rates	\$ 15.39	\$ 0.6167	
R-4 Base Rates	\$ 8.47	\$ 0.3392	
Program Distribution Subsidy	\$ 6.9260	\$ 0.2775	
Normal Winter Therms			640
Estimated Winter 2023/2024 Distribution Subsidy	\$ 41.56	\$ 177.60	\$ 219.16
Number of Estimated 2023/2024 Participants	6,032	65	6,097
Winter Period COG (as of August 1, 2023)	ENNG	Keene	Total
R-3 COG Rates	\$ 0.1326	\$ 2.6520	
R-4 COG Rates	\$ 0.0729	\$ 1.4586	
Program COG Subsidy	\$ 0.0597	\$ 1.1934	\$ -
Estimated Winter 2023/2024 COG Subsidy	\$ 38.19	\$ 763.76	\$ 801.94
Winter Distribution Subsidy times Number of Participants			\$ 1,336,221
Winter COG Subsidy times Number of Participants			\$ 279,993
Projected (Over)/Under Recovery Balance November 1, 2023			\$ 99,724
Estimated Annual Administrative Costs			-
Total Program Costs			\$ 1,715,939
Estimated weather normalized firm therms billed for the Twelve months ended 10/31/23 sales and transportation			184,926,232
Total Gas Assistance Program Charge			\$ 0.0093

Reference:

Line 3 - Line 2 * 55% to determine discounted rate
Line 4 - Line 2 minus Line 3
Line 5 - Company Forecast
Line 6 - Line 4 * 6 (Months of Winter Period)
Line 7 - Estimated number of participants for 2023/2024 is based on the actual
number participants as of April 2022.
Line 10 - Line 9 * 55% to determine discounte rate
Line 11 - Line 9 - Line 10
Line 12 - Line 5 * Line 11
Line 13 - Line 6 * Line 8
Line 14 - Line 8 * Line 13
Line 15 - Schedule 7, page 2, Line 11, Total column
Line 16 - No costs anticipated
Line 17 - Line 13 + Line 14 + Line 15 + Line 16
Line 18 & 19 - Company forecast
Line 20 - Line 17 / Line 18 & 19

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
November 2022 through October 2023
Residential Gas Assistance Program Reconciliation

1 2	FOR THE MONTH OF: DAYS IN MONTH	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Estimate)	(Estimate)	(Estimate)	(Estimate)	Total
		Nov-22 30	Dec-22 31	Jan-23 31	Feb-23 28	Mar-23 31	Apr-23 30	May-23 31	Jun-23 30	Jul-23 31	Aug-23 31	Sep-23 30	Oct-23 31	
3	Beginning Balance	\$ 520,920	\$ 469,649	\$ 863,860	\$ 866,595	\$ 762,607	\$ 642,187	\$ 531,271	\$ 471,455	\$ 352,098	\$ 290,521	\$ 235,271	\$ 160,200	\$ 520,920
4	Add: Actual Costs	84,145	675,647	598,216	357,611	371,022	250,067	148,059	34,397	13,907	13,564	(798)	797	2,546,634
5	Less: Collected Revenue	(137,948)	(285,392)	(600,968)	(466,422)	(496,044)	(364,828)	(211,270)	(156,537)	(77,728)	(70,705)	(75,650)	(62,207)	(3,005,699)
6	Add: Administrative and Start Up Costs	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Ending Balance Pre-Interest	\$ 467,117	\$ 859,903	\$ 861,108	\$ 757,785	\$ 637,585	\$ 527,426	\$ 468,060	\$ 349,315	\$ 288,277	\$ 233,380	\$ 158,823	\$ 98,790	\$ 61,855
8	Month's Average Balance	\$ 494,018	\$ 664,776	\$ 862,484	\$ 812,190	\$ 700,096	\$ 584,806	\$ 499,666	\$ 410,385	\$ 320,188	\$ 261,950	\$ 197,047	\$ 129,495	\$ 494,758
9	Interest Rate	6.25%	7.00%	7.50%	7.75%	7.75%	8.00%	8.00%	8.25%	8.25%	8.50%	8.50%	8.50%	
10	Interest Applied	\$ 2,532	\$ 3,957	\$ 5,487	\$ 4,822	\$ 4,601	\$ 3,845	\$ 3,395	\$ 2,783	\$ 2,244	\$ 1,891	\$ 1,377	\$ 935	37,869
11	Ending Balance	\$ 469,649	\$ 863,860	\$ 866,595	\$ 762,607	\$ 642,187	\$ 531,271	\$ 471,455	\$ 352,098	\$ 290,521	\$ 235,271	\$ 160,200	\$ 99,724	\$ 99,724

Reference:

Estimated Actual Costs are based off 2022 data

Estimated Collected Revenue are based off 2022 data, Keene's Collected Revenue are included in ENNG GL for those estimates

October 2023 Estimated Actual Costs based off 2021 data, no costs reported for Keene in that period

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Exhibit 21

Schedule 7
RGAP
Page 3 of 3

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Quarterly Report
Gas Assistance Program (GAP)
2022-23 Discounted 45%

													Summary		
	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Actual/ Projected Total To Date (1)	Original Projection (2)	Variance
Customer Count															
Actual / Projected No. of Customers	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Projected	Projected	Projected	Projected	Average		
LIHEAP	4,315	4,315	4,315	4,315	4,315	4,315	4,315	4,315	4,315	4,315	4,315	4,315	4,315	4,315	167
Non-LIHEAP	1,612	1,612	1,612	1,612	1,612	1,612	1,612	1,612	1,612	1,612	1,612	1,612	1,612	1,615	3
Total	(a) 5,927	5,927	5,927	5,927	5,927	5,927	5,927	5,927	5,927	5,927	5,927	5,927	5,927	6,097	170
GAP Recoveries															
Actual / Projected															
Therm Sales	8,231,091	14,904,980	29,897,544	22,991,323	24,491,558	17,984,971	10,478,442	7,598,618	6,090,557	6,296,037	7,971,933	13,604,579	170,541,633	186,338,561	15,796,928
GAP Rate Per Therm	\$0.0203	\$0.0203	\$0.0203	\$0.0203	\$0.0203	\$0.0203	\$0.0203	\$0.0203	\$0.0203	\$0.0203	\$0.0203	\$0.0203	\$0.0203	\$0.0203	
Total	\$167,091	\$302,571	\$606,920	\$466,724	\$497,179	\$365,095	\$212,712	\$154,252	\$123,638	\$127,810	\$161,830	\$276,173	\$3,461,995	\$3,782,673	\$320,678
Adjustment	-\$29,143	-\$17,179	-\$5,952	-\$302	-\$1,135	-\$267	-\$1,442	\$2,285	\$0	\$0	\$0	\$0	-\$53,134	\$0	
Total Adjusted Recoveries (3)	\$137,948	\$285,392	\$600,968	\$466,422	\$496,044	\$364,828	\$211,270	\$156,537	\$123,638	\$127,810	\$161,830	\$276,173	\$3,408,861	\$3,782,673	\$373,812
Program Costs															
Actual & Projected Costs															
Prior Period Ending Balance	(c) 520,920												520,920	494,571	(26,349)
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)	2,532	3,957.36	5,487	4,822	4,601	3,845	3,395	2,783	0	0	0	0	31,423	0	(31,423)
Fixed Discount	9,478	41,057.54	41,604	42,665	53,069	50,707	38,434	7,030	41,050	41,050	41,050	41,050	448,244	253,365	(194,879)
Variable Discount	16,354	134,679.57	184,681	189,765	229,241	171,449	88,610	23,488	21,684	26,784	57,043	123,655	1,267,433	959,169	(308,264)
COG Discount	58,313	499,909.48	371,931	125,182	88,712	27,912	21,015	3,880	16,695	20,622	43,919	95,206	1,373,296	2,074,829	701,533
Total Monthly Costs (3)	(d) \$86,677	\$679,604	\$603,704	\$362,433	\$375,623	\$253,913	\$151,454	\$37,180	\$79,429	\$88,456	\$142,013	\$259,911	\$3,120,396	\$3,287,364	\$166,967
Avg Monthly Residential Customer Bill	\$ 145.99	\$ 227.86	\$ 262.41	\$ 182.87	\$ 137.28	\$ 90.09	\$ 115.25	\$ 69.29	\$ 46.19	\$ 43.33	\$ 43.58	\$ 57.68	\$1,421.81	\$2,697.63	\$1,275.82
Avg Monthly Residential Low Income Customer Bill	\$ 90.25	\$ 137.62	\$ 157.41	\$ 114.91	\$ 89.04	\$ 61.08	\$ 114.88	\$ 67.23	\$ 44.84	\$ 42.36	\$ 43.74	\$ 59.19	\$1,022.54	\$453.64	(\$568.90)
Avg Monthly GAP Customer Discount	\$55.74	\$90.23	\$105.00	\$67.95	\$48.24	\$29.01	\$0.38	\$2.06	\$1.35	\$0.97	(\$0.16)	(\$1.51)	\$399.27	\$2,243.99	\$1,844.42
Avg Monthly GAP Customer Discount as a % to Avg Monthly Residential Customer Bill	38.18%	39.60%	40.01%	37.16%	35.14%	32.20%	0.33%	2.98%	2.93%	2.24%	-0.36%	-2.62%	28.08%	83.18%	
Gross Monthly Revenues	\$14,095,231	\$27,071,121	\$41,607,821	\$34,648,481	\$25,347,265	\$16,355,107	\$10,413,931	\$9,937,569	\$5,815,241	\$5,736,826	\$6,538,784	\$7,948,572	\$205,515,949	196,688,781	\$8,827,168
Total Costs as a percent of Gross Monthly Revenues	0.61%	2.51%	1.45%	1.05%	1.48%	1.55%	1.45%	0.37%	1.37%	1.54%	2.17%	3.27%	1.52%	2.03%	

Reference:

- (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 2021-22 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.

Docket No. DG 23-076
Exhibit 21

Schedule 8
Page 1 of 4

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
LDAC 2023-2024 Filing
LDAC Bill Comparisons, Proposed LDAC Rates November 1, 2023 – October 31, 2024 vs. Current LDAC Rates

1 Proposed LDAC Rates November 1, 2023 – October 31, 2024									
2 Residential Customers (Rate Codes R-3)									
4	Typical Usage (Therms)	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter	
		84	118	137	131	104	66	Nov-Apr	Nov-Apr
6	Energy Efficiency	\$ 0.0667	\$ 0.0667	\$ 0.0699	\$ 0.0699	\$ 0.0699	\$ 0.0699	\$ 0.0699	
7	Energy Efficiency Amount	\$ 5.63	\$ 7.90	\$ 9.56	\$ 9.13	\$ 7.26	\$ 4.61	\$ 44.09	
8	Gas Holder	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
9	Gas Holder Amount	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
10	MGP	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	
11	MGP Amount	\$ 0.19	\$ 0.26	\$ 0.30	\$ 0.29	\$ 0.23	\$ 0.15	\$ 1.42	
12	Environmental	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	
13	Total Environmental	\$ 0.19	\$ 0.26	\$ 0.30	\$ 0.29	\$ 0.23	\$ 0.15	\$ 1.42	
14	RDAF	\$ 0.1041	\$ 0.1041	\$ 0.1041	\$ 0.1041	\$ 0.1041	\$ 0.1041	\$ 0.1041	
15	RDAF amount	\$ 8.78	\$ 12.33	\$ 14.24	\$ 13.60	\$ 10.81	\$ 6.87	\$ 66.62	
16	PTAM	\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 0.0157	
17	PTAM amount	\$ 1.32	\$ 1.86	\$ 2.15	\$ 2.05	\$ 1.63	\$ 1.04	\$ 10.05	
18	RCE	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	
19	RCE Amount	\$ (0.03)	\$ (0.05)	\$ (0.05)	\$ (0.05)	\$ (0.04)	\$ (0.03)	\$ (0.26)	
20	GAP	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	
21	GAP Amount	\$ 0.78	\$ 1.10	\$ 1.27	\$ 1.21	\$ 0.97	\$ 0.61	\$ 5.95	
22	LDAC	\$ 0.1976	\$ 0.1976	\$ 0.2008	\$ 0.2008	\$ 0.2008	\$ 0.2008	\$ 0.2008	
23	LDAC Amount	\$ 16.67	\$ 23.40	\$ 27.48	\$ 26.23	\$ 20.85	\$ 13.25	\$ 127.87	

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer		Total	
						May-Oct	May-Oct	Nov-Oct	Nov-Oct
37	19	14	12	21	52	155	795		
\$ 0.0699	\$ 0.0699	\$ 0.0699	\$ 0.0699	\$ 0.0699	\$ 0.0699	\$ 0.0699	\$ 0.0699	\$ 10.87	\$ 54.95
\$ 2.61	\$ 1.35	\$ 0.97	\$ 0.86	\$ 1.47	\$ 3.60	\$ 10.87	\$ 54.95		
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.34	\$ 1.76
\$ 0.08	\$ 0.04	\$ 0.03	\$ 0.03	\$ 0.05	\$ 0.11	\$ 0.34	\$ 1.76		
\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.34	\$ 1.76
\$ 0.08	\$ 0.04	\$ 0.03	\$ 0.03	\$ 0.05	\$ 0.11	\$ 0.34	\$ 1.76		
\$ 0.1041	\$ 0.1041	\$ 0.1041	\$ 0.1041	\$ 0.1041	\$ 0.1041	\$ 0.1041	\$ 0.1041	\$ 16.19	\$ 82.81
\$ 3.89	\$ 2.02	\$ 1.44	\$ 1.28	\$ 2.19	\$ 5.30	\$ 16.19	\$ 82.81		
\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 2.44	\$ 12.49
\$ 0.59	\$ 0.30	\$ 0.22	\$ 0.19	\$ 0.33	\$ 0.81	\$ 2.44	\$ 12.49		
\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.06)	\$ (0.32)
\$ (0.01)	\$ (0.01)	\$ (0.01)	\$ (0.00)	\$ (0.01)	\$ (0.02)	\$ (0.06)	\$ (0.32)		
\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 1.45	\$ 7.40
\$ 0.35	\$ 0.18	\$ 0.13	\$ 0.11	\$ 0.20	\$ 0.48	\$ 1.45	\$ 7.40		
\$ 0.2008	\$ 0.2008	\$ 0.2008	\$ 0.2008	\$ 0.2008	\$ 0.2008	\$ 0.2008	\$ 0.2008	\$ 31.22	\$ 159.09
\$ 7.50	\$ 3.89	\$ 2.78	\$ 2.48	\$ 4.23	\$ 10.35	\$ 31.22	\$ 159.09		

24 Current LDAC Rates									
25 Residential Customers (Rate Codes R-3)									
26	Typical Usage (Therms)	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter	
		84	118	137	131	104	66	Nov-Apr	Nov-Apr
28	Energy Efficiency	\$ 0.0640	\$ 0.0640	\$ 0.0667	\$ 0.0667	\$ 0.0667	\$ 0.0667	\$ 0.0667	
29	Energy Efficiency Amount	\$ 5.40	\$ 7.58	\$ 4.99	\$ 4.99	\$ 4.99	\$ 4.99	\$ 32.92	
30	Gas Holder	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
31	Gas Holder Amount	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
32	MGP	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	
33	MGP Amount	\$ 0.64	\$ 0.90	\$ 1.04	\$ 0.99	\$ 0.79	\$ 0.50	\$ 4.86	
34	Environmental	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	
35	Total Environmental	\$ 0.64	\$ 0.90	\$ 1.04	\$ 0.99	\$ 0.79	\$ 0.50	\$ 4.86	
36	RDAF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
37	RDAF amount	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
38	PTAM	\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 0.0124	
39	PTAM amount	\$ 1.05	\$ 1.47	\$ 1.70	\$ 1.62	\$ 1.29	\$ 0.82	\$ 7.94	
40	RCE	\$ 0.0044	\$ 0.0044	\$ 0.0044	\$ 0.0044	\$ 0.0044	\$ 0.0044	\$ 0.0044	
41	RCE Amount	\$ 0.37	\$ 0.52	\$ 0.60	\$ 0.57	\$ 0.46	\$ 0.29	\$ 2.82	
42	GAP	\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 0.0203	
43	GAP Amount	\$ 1.71	\$ 2.40	\$ 2.78	\$ 2.65	\$ 2.11	\$ 1.34	\$ 12.99	
44	Total LDAC	\$ 0.1086	\$ 0.1086	\$ 0.1113	\$ 0.1113	\$ 0.1113	\$ 0.1113	\$ 0.1113	
45	Total LDAC Amount	\$ 9.16	\$ 12.86	\$ 15.23	\$ 14.54	\$ 11.56	\$ 7.34	\$ 70.68	

May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Summer		Total	
						May-Oct	May-Oct	Nov-Oct	Nov-Oct
37	19	14	12	21	52	155	795		
\$ 0.0667	\$ 0.0667	\$ 0.0667	\$ 0.0667	\$ 0.0667	\$ 0.0667	\$ 0.0667	\$ 0.0667	\$ 10.37	\$ 43.29
\$ 2.49	\$ 1.29	\$ 0.92	\$ 0.82	\$ 1.40	\$ 3.44	\$ 10.37	\$ 43.29		
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 1.18	\$ 6.05
\$ 0.28	\$ 0.15	\$ 0.11	\$ 0.09	\$ 0.16	\$ 0.39	\$ 1.18	\$ 6.05		
\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 1.18	\$ 6.05
\$ 0.28	\$ 0.15	\$ 0.11	\$ 0.09	\$ 0.16	\$ 0.39	\$ 1.18	\$ 6.05		
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 1.93	\$ 9.86
\$ 0.46	\$ 0.24	\$ 0.17	\$ 0.15	\$ 0.26	\$ 0.64	\$ 1.93	\$ 9.86		
\$ 0.0044	\$ 0.0111	\$ 0.0111	\$ 0.0111	\$ 0.0111	\$ 0.0111	\$ 0.0111	\$ 0.0111	\$ 1.48	\$ 4.29
\$ 0.16	\$ 0.21	\$ 0.15	\$ 0.14	\$ 0.23	\$ 0.57	\$ 1.48	\$ 4.29		
\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 3.16	\$ 16.15
\$ 0.76	\$ 0.39	\$ 0.28	\$ 0.25	\$ 0.43	\$ 1.05	\$ 3.16	\$ 16.15		
\$ 0.1113	\$ 0.1180	\$ 0.1180	\$ 0.1180	\$ 0.1180	\$ 0.1180	\$ 0.1180	\$ 0.1180	\$ 18.10	\$ 88.78
\$ 4.16	\$ 2.29	\$ 1.63	\$ 1.46	\$ 2.48	\$ 6.08	\$ 18.10	\$ 88.78		

46 LDAC Bill Impact : Residential Customers (Rate Codes R-3)									
47	Typical Usage (Therms)	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter	
		84	118	137	131	104	66	Nov-Apr	Nov-Apr
48	Energy Efficiency	\$ 0.23	\$ 4.14	\$ 4.58	\$ 4.14	\$ 2.27	\$ (0.37)	\$ 11.17	
49	Energy Efficiency Amount	\$ 4.2%	\$ 4.2%	\$ 91.8%	\$ 83.1%	\$ 45.6%	\$ -7.5%	\$ 15.8%	
51	Environmental	\$ (0.45)	\$ (0.64)	\$ (0.74)	\$ (0.70)	\$ (0.56)	\$ (0.36)	\$ (3.44)	
52	Total Environmental	\$ -70.8%	\$ -70.8%	\$ -70.8%	\$ -70.8%	\$ -70.8%	\$ -70.8%	\$ -70.8%	
53	RDAF	\$ 8.78	\$ 12.33	\$ 14.24	\$ 13.60	\$ 10.81	\$ 6.87	\$ 66.62	
54	RDAF amount	\$ 8.78	\$ 12.33	\$ 14.24	\$ 13.60	\$ 10.81	\$ 6.87	\$ 66.62	
55	PTAM	\$ 0.28	\$ 0.39	\$ 0.45	\$ 0.43	\$ 0.34	\$ 0.22	\$ 2.11	
56	PTAM amount	\$ 26.6%	\$ 26.6%	\$ 26.6%	\$ 26.6%	\$ 26.6%	\$ 26.6%	\$ 26.6%	
57	RCE	\$ (0.40)	\$ (0.57)	\$ (0.66)	\$ (0.63)	\$ (0.50)	\$ (0.32)	\$ (3.07)	
58	RCE Amount	\$ -109.1%	\$ -109.1%	\$ -109.1%	\$ -109.1%	\$ -109.1%	\$ -109.1%	\$ -109.1%	
59	GAP	\$ (0.93)	\$ (1.30)	\$ (1.50)	\$ (1.44)	\$ (1.14)	\$ (0.73)	\$ (7.04)	
60	GAP Amount	\$ -54.2%	\$ -54.2%	\$ -54.2%	\$ -54.2%	\$ -54.2%	\$ -54.2%	\$ -54.2%	
61	Total LDAC	\$ 7.51	\$ 10.54	\$ 12.25	\$ 11.69	\$ 9.29	\$ 5.91	\$ 57.19	
62	Total LDAC Amount	\$ 82.0%	\$ 82.0%	\$ 80.4%	\$ 80.4%	\$ 80.4%	\$ 80.4%	\$ 80.9%	

						Summer	Total
May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	May-Oct	Nov-Oct
\$ 0.12	\$ 0.06	\$ 0.04	\$ 0.04	\$ 0.07	\$ 0.16	\$ 0.50	\$ 11.66
4.8%	5%	5%	5%	5%	5%	5%	27%
\$ (0.20)	\$ (0.10)	\$ (0.07)	\$ (0.07)	\$ (0.11)	\$ (0.28)	\$ 1.53	\$ 7.81
-70.8%	-70.8%	-70.8%	-70.8%	-70.8%	-70.8%	129.2%	129.2%
\$ 3.89	\$ 2.02	\$ 1.44	\$ 1.28	\$ 2.19	\$ 5.36	\$ 16.19	\$ 82.81
\$ 0.12	\$ 0.06	\$ 0.05	\$ 0.04	\$ 0.07	\$ 0.17	\$ 0.51	\$ 2.63
26.6%	26.6%	26.6%	26.6%	26.6%	26.6%	26.6%	26.6%
\$ (0.18)	\$ (0.22)	\$ (0.16)	\$ (0.14)	\$ (0.24)	\$ (0.59)	\$ (1.54)	\$ (4.61)
-109.1%	-103.6%	-103.6%	-103.6%	-103.6%	-103.6%	-104.2%	-107.4%
\$ (0.41)	\$ (0.21)	\$ (0.15)	\$ (0.14)	\$ (0.23)	\$ (0.57)	\$ (1.71)	\$ (8.75)
-54.2%	-54.2%	-54.2%	-54.2%	-54.2%	-54.2%	-9.5%	-54.2%
\$ 3.34	\$ 1.60	\$ 1.15	\$ 1.02	\$ 1.74	\$ 4.27	\$ 13.13	\$ 70.32
80.4%	70.2%	70.2%	70.2%	70.2%	70.2%	72.5%	79.2%

Docket No. DG 23-076
Exhibit 21

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
LDAC 2023-2024 Filing
LDAC Bill Comparisons, Proposed LDAC Rates November 1, 2023 – October 31, 2024 vs. Current LDAC Rates

Schedule 8
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1 Proposed LDAC Rates November 1, 2023 – October 31, 2024							
2 Commercial/Industrial Sales Customers and Commercial/Industrial Transportation Customers (Rate Codes G-41)							
3	Nov-23		Dec-23		Jan-24		Winter Nov-Apr
	261		390		482		
4							2,111
5 Typical Usage (Therms)							
6 Energy Efficiency	\$ 0.0444	\$ 0.0444	\$ 0.0466	\$ 0.0466	\$ 0.0466	\$ 0.0466	
7 Energy Efficiency Amount	\$ 11.58	\$ 17.33	\$ 22.46	\$ 21.35	\$ 15.58	\$ 8.62	\$ 96.93
8 Gas Holder	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
9 Gas Holder Amount	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10 MGP	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	
11 MGP Amount	\$ 0.58	\$ 0.87	\$ 1.07	\$ 1.02	\$ 0.74	\$ 0.41	\$ 4.68
12 Environmental	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	
13 Total Environmental	\$ 0.58	\$ 0.87	\$ 1.07	\$ 1.02	\$ 0.74	\$ 0.41	\$ 4.68
14 RDAF	\$ 0.0177	\$ 0.0177	\$ 0.0177	\$ 0.0177	\$ 0.0177	\$ 0.0177	
15 RDAF amount	\$ 4.62	\$ 6.91	\$ 8.53	\$ 8.11	\$ 5.92	\$ 3.27	\$ 37.36
16 PTAM	\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 0.0157	
17 PTAM amount	\$ 4.10	\$ 6.13	\$ 7.57	\$ 7.19	\$ 5.25	\$ 2.90	\$ 33.14
18 RCE	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	
19 RCE Amount	\$ (0.10)	\$ (0.16)	\$ (0.19)	\$ (0.18)	\$ (0.13)	\$ (0.07)	\$ (0.84)
20 GAP	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	
21 GAP Amount	\$ 2.43	\$ 3.63	\$ 4.48	\$ 4.26	\$ 3.11	\$ 1.72	\$ 19.63
22 LDAC	\$ 0.0889	\$ 0.0889	\$ 0.0911	\$ 0.0911	\$ 0.0911	\$ 0.0911	
23 LDAC Amount	\$ 23.19	\$ 34.71	\$ 43.91	\$ 41.75	\$ 30.47	\$ 16.86	\$ 190.89

May-24		Jun-24		Jul-24		Aug-24		Sep-24	
91		47		33		25		47	
\$ 0.0466	\$ 4.23	\$ 0.0466	\$ 2.18	\$ 0.0466	\$ 1.52	\$ 0.0466	\$ 1.18	\$ 0.0466	\$ 2.17
\$ 0.0466	\$ 6.58	\$ 0.0466	\$ 2.17	\$ 0.0466	\$ 1.52	\$ 0.0466	\$ 1.18	\$ 0.0466	\$ 2.17
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 0.0022	\$ 0.20	\$ 0.0022	\$ 0.10	\$ 0.0022	\$ 0.07	\$ 0.0022	\$ 0.06	\$ 0.0022	\$ 0.10
\$ 0.0022	\$ 0.31	\$ 0.0022	\$ 0.10	\$ 0.0022	\$ 0.06	\$ 0.0022	\$ 0.10	\$ 0.0022	\$ 0.31
\$ 0.0022	\$ 0.20	\$ 0.0022	\$ 0.10	\$ 0.0022	\$ 0.07	\$ 0.0022	\$ 0.06	\$ 0.0022	\$ 0.10
\$ 0.0022	\$ 0.31	\$ 0.0022	\$ 0.10	\$ 0.0022	\$ 0.06	\$ 0.0022	\$ 0.10	\$ 0.0022	\$ 0.31
\$ 0.0177	\$ 1.61	\$ 0.0177	\$ 0.83	\$ 0.0177	\$ 0.58	\$ 0.0177	\$ 0.45	\$ 0.0177	\$ 0.82
\$ 0.0177	\$ 2.50	\$ 0.0177	\$ 0.83	\$ 0.0177	\$ 0.58	\$ 0.0177	\$ 0.45	\$ 0.0177	\$ 0.82
\$ 0.0157	\$ 1.43	\$ 0.0157	\$ 0.73	\$ 0.0157	\$ 0.51	\$ 0.0157	\$ 0.40	\$ 0.0157	\$ 0.73
\$ 0.0157	\$ 2.22	\$ 0.0157	\$ 0.73	\$ 0.0157	\$ 0.51	\$ 0.0157	\$ 0.40	\$ 0.0157	\$ 0.73
\$ (0.0004)	\$ (0.04)	\$ (0.0004)	\$ (0.02)	\$ (0.0004)	\$ (0.01)	\$ (0.0004)	\$ (0.01)	\$ (0.0004)	\$ (0.02)
\$ (0.0004)	\$ (0.06)	\$ (0.0004)	\$ (0.02)	\$ (0.0004)	\$ (0.01)	\$ (0.0004)	\$ (0.01)	\$ (0.0004)	\$ (0.06)
\$ 0.0093	\$ 0.84	\$ 0.0093	\$ 0.43	\$ 0.0093	\$ 0.30	\$ 0.0093	\$ 0.24	\$ 0.0093	\$ 0.43
\$ 0.0093	\$ 1.31	\$ 0.0093	\$ 0.43	\$ 0.0093	\$ 0.30	\$ 0.0093	\$ 0.24	\$ 0.0093	\$ 0.43
\$ 0.0911	\$ 8.28	\$ 0.0911	\$ 4.25	\$ 0.0911	\$ 2.97	\$ 0.0911	\$ 2.30	\$ 0.0911	\$ 4.24
\$ 0.0911	\$ 12.87	\$ 0.0911	\$ 4.25	\$ 0.0911	\$ 2.97	\$ 0.0911	\$ 2.30	\$ 0.0911	\$ 4.24

24	Current LDAC Rates November 1, 2023 – October 31, 2024							
25	Commercial/Industrial Sales Customers and Commercial/Industrial Transportation Customers (Rate Codes G-41)							
26		Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter
27		261	390	482	458	334	185	Nov-Apr
28	Typical Usage (Therms)							2,111
29	Energy Efficiency	\$ 0.0426	\$ 0.0426	\$ 0.0444	\$ 0.0444	\$ 0.0444	\$ 0.0444	\$ 0.0444
30	Energy Efficiency Amount	\$ 11.10	\$ 16.61	\$ 21.40	\$ 20.34	\$ 14.85	\$ 8.21	\$ 92.51
31	Gas Holder	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
32	Gas Holder Amount	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
33	MGP	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	
34	MGP Amount	\$ 1.98	\$ 2.97	\$ 3.66	\$ 3.48	\$ 2.54	\$ 1.41	\$ 16.04
35	Environmental	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	
36	Total Environmental	\$ 1.98	\$ 2.97	\$ 3.66	\$ 3.48	\$ 2.54	\$ 1.41	\$ 16.04
37	RDAF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
38	RDAF amount	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
39	PTAM	\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 0.0124	
40	PTAM amount	\$ 3.23	\$ 4.84	\$ 5.98	\$ 5.68	\$ 4.15	\$ 2.29	\$ 26.17
41	RCE	\$ 0.0044	\$ 0.0044	\$ 0.0044	\$ 0.0044	\$ 0.0044	\$ 0.0044	
42	RCE Amount	\$ 1.15	\$ 1.72	\$ 2.12	\$ 2.02	\$ 1.47	\$ 0.81	\$ 9.29
43	GAP	\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 0.0203	
44	GAP Amount	\$ 5.30	\$ 7.92	\$ 9.78	\$ 9.30	\$ 6.79	\$ 3.76	\$ 42.85
45	Total LDAC	\$ 0.0872	\$ 0.0872	\$ 0.0890	\$ 0.0890	\$ 0.0890	\$ 0.0890	
46	Total LDAC Amount	\$ 22.73	\$ 34.02	\$ 42.89	\$ 40.78	\$ 29.76	\$ 16.46	\$ 186.65

May-23		Jun-23		Jul-23		Aug-23		Sep-23	
91		47		33		25		47	
\$ 0.0444	\$ 4.03	\$ 0.0444	\$ 2.07	\$ 0.0444	\$ 1.45	\$ 0.0444	\$ 1.12	\$ 0.0444	\$ 2.07
\$ 0.0444	\$ 6.27	\$ 0.0444	\$ 2.07	\$ 0.0444	\$ 1.45	\$ 0.0444	\$ 1.12	\$ 0.0444	\$ 2.07
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 0.0076	\$ 0.69	\$ 0.0076	\$ 0.35	\$ 0.0076	\$ 0.25	\$ 0.0076	\$ 0.19	\$ 0.0076	\$ 0.35
\$ 0.0076	\$ 1.07	\$ 0.0076	\$ 0.35	\$ 0.0076	\$ 0.25	\$ 0.0076	\$ 0.19	\$ 0.0076	\$ 0.35
\$ 0.0076	\$ 0.69	\$ 0.0076	\$ 0.35	\$ 0.0076	\$ 0.25	\$ 0.0076	\$ 0.19	\$ 0.0076	\$ 0.35
\$ 0.0076	\$ 1.07	\$ 0.0076	\$ 0.35	\$ 0.0076	\$ 0.25	\$ 0.0076	\$ 0.19	\$ 0.0076	\$ 0.35
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 0.0124	\$ 1.13	\$ 0.0124	\$ 0.58	\$ 0.0124	\$ 0.40	\$ 0.0124	\$ 0.31	\$ 0.0124	\$ 0.58
\$ 0.0124	\$ 1.75	\$ 0.0124	\$ 0.58	\$ 0.0124	\$ 0.40	\$ 0.0124	\$ 0.31	\$ 0.0124	\$ 0.58
\$ 0.0044	\$ 0.40	\$ 0.0111	\$ 0.52	\$ 0.0111	\$ 0.36	\$ 0.0111	\$ 0.28	\$ 0.0111	\$ 0.52
\$ 0.0044	\$ 1.57	\$ 0.0111	\$ 0.52	\$ 0.0111	\$ 0.36	\$ 0.0111	\$ 0.28	\$ 0.0111	\$ 0.52
\$ 0.0203	\$ 1.84	\$ 0.0203	\$ 0.95	\$ 0.0203	\$ 0.66	\$ 0.0203	\$ 0.51	\$ 0.0203	\$ 0.94
\$ 0.0203	\$ 2.87	\$ 0.0203	\$ 0.95	\$ 0.0203	\$ 0.66	\$ 0.0203	\$ 0.51	\$ 0.0203	\$ 0.94
\$ 0.0890	\$ 8.08	\$ 0.0957	\$ 4.47	\$ 0.0957	\$ 3.12	\$ 0.0957	\$ 2.42	\$ 0.0957	\$ 4.45
\$ 0.0890	\$ 13.52	\$ 0.0957	\$ 4.47	\$ 0.0957	\$ 3.12	\$ 0.0957	\$ 2.42	\$ 0.0957	\$ 4.45

47 LDAC Bill Impact : Commercial/Industrial Sales Customers and Commercial/Industrial Transportation Customers (Rate Codes G-41)														
48	Nov-23		Dec-23		Jan-24		Feb-24		Mar-24		Apr-24		Winter	
49													Nov-Apr	
50 Energy Efficiency Amount	\$	0.48	\$	0.72	\$	1.06	\$	1.01	\$	0.74	\$	0.41	\$	4.4
51 Energy Efficiency %		4.3%		4.3%		5.0%		5.0%		5.0%		5.0%		4.8
52 Environmental Amount	\$	(1.40)	\$	(2.10)	\$	(2.59)	\$	(2.47)	\$	(1.80)	\$	(1.00)	\$	(11.3)
53 Environmental %		-70.8%		-70.8%		-70.8%		-70.8%		-70.8%		-70.8%		-70.8
54 RDAF amount	\$	4.62	\$	6.91	\$	8.53	\$	8.11	\$	5.92	\$	3.27	\$	37.3
55 RDAF %		-		-		-		-		-		-		-
56 PTAM amount	\$	0.86	\$	1.29	\$	1.59	\$	1.51	\$	1.10	\$	0.61	\$	6.9
57 PTAM %		26.6%		26.6%		26.6%		26.6%		26.6%		26.6%		26.6
58 RCE Amount	\$	(1.25)	\$	(1.87)	\$	(2.31)	\$	(2.20)	\$	(1.61)	\$	(0.89)	\$	(10.1)
59 RCE %		-109.1%		-109.1%		-109.1%		-109.1%		-109.1%		-109.1%		-109.1
60 GAP Amount	\$	(2.87)	\$	(4.29)	\$	(5.30)	\$	(5.04)	\$	(3.68)	\$	(2.03)	\$	(23.2)
61 GAP %		-54.2%		-54.2%		-54.2%		-54.2%		-54.2%		-54.2%		-54.2
62 Total LDAC Amount	\$	0.46	\$	0.69	\$	1.02	\$	0.97	\$	0.71	\$	0.39	\$	4.2
63 Total LDAC %		2.0%		2.0%		2.4%		2.4%		2.4%		2.4%		2.3

May-24		Jun-24		Jul-24		Aug-24		Sep-24	
\$ 0.20	\$ 5.0%	\$ 0.10	\$ 5.0%	\$ 0.07	\$ 5.0%	\$ 0.06	\$ 5.0%	\$ 0.10	\$ 5.0%
\$ 0.049	\$ -70.8%	\$ (0.25)	\$ -70.8%	\$ (0.18)	\$ -70.8%	\$ (0.14)	\$ -70.8%	\$ (0.25)	\$ -70.8%
\$ 1.61	\$ 0.83	\$ 0.83	\$ 0.58	\$ 0.58	\$ 0.45	\$ 0.82	\$ 2.50	\$ 6.78	\$ 44.14
\$ 0.30	\$ 26.6%	\$ 0.15	\$ 26.6%	\$ 0.11	\$ 26.6%	\$ 0.08	\$ 26.6%	\$ 0.15	\$ 26.6%
\$ (0.44)	\$ -109.1%	\$ (0.54)	\$ -103.6%	\$ (0.37)	\$ -103.6%	\$ (0.29)	\$ -103.6%	\$ (0.54)	\$ -103.6%
\$ (1.00)	\$ -54.2%	\$ (0.51)	\$ -54.2%	\$ (0.36)	\$ -54.2%	\$ (0.28)	\$ -54.2%	\$ (0.51)	\$ -54.2%
\$ 0.19	\$ 2.4%	\$ (0.21)	\$ -4.8%	\$ (0.15)	\$ -4.8%	\$ (0.12)	\$ -4.8%	\$ (0.21)	\$ -4.8%
\$ 0.19	\$ 2.4%	\$ (0.21)	\$ -4.8%	\$ (0.15)	\$ -4.8%	\$ (0.12)	\$ -4.8%	\$ (0.21)	\$ -4.8%

Docket No. DG 23-076
Exhibit 21

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
LDAC 2023-2024 Filing
LDAC Bill Comparisons, Proposed LDAC Rates November 1, 2023 – October 31, 2024 vs. Current LDAC Rates

Schedule 8
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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)							
3	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter Nov-Apr
4	2,543	3,519	4,174	3,998	3,106	1,898	19,238
5 Typical Usage (Therms)							
6 Energy Efficiency	\$ 0.0444	\$ 0.0444	\$ 0.0466	\$ 0.0466	\$ 0.0466	\$ 0.0466	
7 Energy Efficiency Amount	\$ 112.91	\$ 156.23	\$ 194.53	\$ 186.31	\$ 144.73	\$ 88.43	\$ 883.14
8 Gas Holder	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
9 Gas Holder Amount	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10 MGP	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	
11 MGP Amount	\$ 5.64	\$ 7.80	\$ 9.26	\$ 8.87	\$ 6.89	\$ 4.21	\$ 42.67
12 Environmental	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	
13 Total Environmental	\$ 5.64	\$ 7.80	\$ 9.26	\$ 8.87	\$ 6.89	\$ 4.21	\$ 42.67
14 RDAF	\$ 0.0177	\$ 0.0177	\$ 0.0177	\$ 0.0177	\$ 0.0177	\$ 0.0177	
15 RDAF amount	\$ 45.01	\$ 62.28	\$ 73.89	\$ 70.77	\$ 54.97	\$ 33.59	\$ 340.51
16 PTAM	\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 0.0157	
17 PTAM amount	\$ 39.93	\$ 55.24	\$ 65.54	\$ 62.77	\$ 48.76	\$ 29.79	\$ 302.03
18 RCE	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	
19 RCE Amount	\$ (1.02)	\$ (1.67)	\$ (1.67)	\$ (1.60)	\$ (1.24)	\$ (0.76)	\$ (7.70)
20 GAP	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	
21 GAP Amount	\$ 23.65	\$ 32.72	\$ 38.82	\$ 37.18	\$ 28.88	\$ 17.65	\$ 178.91
22 LDAC	\$ 0.0889	\$ 0.0889	\$ 0.0911	\$ 0.0911	\$ 0.0911	\$ 0.0911	
23 LDAC Amount	\$ 226.12	\$ 312.87	\$ 380.37	\$ 364.30	\$ 283.00	\$ 172.91	\$ 1,739.57

24 Current LDAC Rates November 1, 2022 – October 31, 2023 25 Commercial/Industrial Sales Customers and Commercial/Industrial Transportation Customers (Rate Codes G-42)							
26	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	Winter Nov-Apr
27	2,543	3,519	4,174	3,998	3,106	1,898	19,238
28 Typical Usage (Therms)							
29 Energy Efficiency	\$ 0.0426	\$ 0.0426	\$ 0.0444	\$ 0.0444	\$ 0.0444	\$ 0.0444	
30 Energy Efficiency Amount	\$ 108.21	\$ 149.72	\$ 185.35	\$ 177.52	\$ 137.90	\$ 84.25	\$ 842.94
31 Gas Holder	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
32 Gas Holder Amount	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
33 MGP	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	
34 MGP Amount	\$ 19.33	\$ 26.74	\$ 31.73	\$ 30.39	\$ 23.60	\$ 14.42	\$ 146.21
35 Environmental	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	
36 Total Environmental	\$ 19.33	\$ 26.74	\$ 31.73	\$ 30.39	\$ 23.60	\$ 14.42	\$ 146.21
37 RDAF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
38 RDAF amount	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
39 PTAM	\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 0.0124	
40 PTAM amount	\$ 31.53	\$ 43.63	\$ 51.76	\$ 49.58	\$ 38.51	\$ 23.53	\$ 238.55
41 RCE	\$ 0.0044	\$ 0.0044	\$ 0.0044	\$ 0.0044	\$ 0.0044	\$ 0.0044	
42 RCE Amount	\$ 11.19	\$ 15.48	\$ 18.37	\$ 17.59	\$ 13.67	\$ 8.35	\$ 84.65
43 GAP	\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 0.0203	
44 GAP Amount	\$ 51.62	\$ 71.43	\$ 84.74	\$ 81.16	\$ 63.05	\$ 38.52	\$ 390.53
45 Total LDAC	\$ 0.0872	\$ 0.0872	\$ 0.0890	\$ 0.0890	\$ 0.0890	\$ 0.0890	
46 Total LDAC Amount	\$ 221.88	\$ 307.00	\$ 371.95	\$ 356.23	\$ 276.73	\$ 169.08	\$ 1,702.87

46 LDAC Bill Impact : Commercial/Industrial Sales Customers and Commercial/Industrial Transportation Customers (Rate Codes G-42)							
47	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter Nov-Apr
48	4.70	6.51	9.18	8.80	6.83	4.17	40.20
49 Energy Efficiency Amount	4.3%	4.3%	5.0%	5.0%	5.0%	5.0%	4.8%
50 Total Environmental	\$ (13.69)	\$ (18.94)	\$ (22.47)	\$ (21.52)	\$ (16.72)	\$ (10.21)	\$ (103.54)
51 Environmental %	-70.8%	-70.8%	-70.8%	-70.8%	-70.8%	-70.8%	-70.8%
52 RDAF amount	\$ 45.01	\$ 62.28	\$ 73.89	\$ 70.77	\$ 54.97	\$ 33.59	\$ 340.51
53 RDAF %	4501%						
54 PTAM amount	\$ 8.39	\$ 11.61	\$ 13.78	\$ 13.19	\$ 10.25	\$ 6.26	\$ 63.48
55 PTAM %	26.6%	26.6%	26.6%	26.6%	26.6%	26.6%	26.6%
56 RCE Amount	\$ (12.21)	\$ (16.89)	\$ (20.04)	\$ (19.19)	\$ (14.91)	\$ (9.11)	\$ (92.34)
57 RCE %	-109.1%	-109.1%	-109.1%	-109.1%	-109.1%	-109.1%	-109.1%
58 GAP Amount	\$ (27.97)	\$ (38.71)	\$ (45.92)	\$ (43.98)	\$ (34.16)	\$ (20.87)	\$ (211.62)
59 GAP %	-54.2%	-54.2%	-54.2%	-54.2%	-54.2%	-54.2%	-54.2%
60 Total LDAC Amount	\$ 4.24	\$ 5.87	\$ 8.42	\$ 8.07	\$ 6.27	\$ 3.83	\$ 36.70
61 Total LDAC %	1.9%	1.9%	2.3%	2.3%	2.3%	2.3%	2.2%

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer May-Oct	Total Nov-Oct
1,031	572	420	343	619	1,610	4,595	23,832
\$ 0.0466	\$ 0.0466	\$ 0.0466	\$ 0.0466	\$ 0.0466	\$ 0.0466		
\$ 48.06	\$ 26.66	\$ 19.55	\$ 15.97	\$ 28.87	\$ 75.01	\$ 214.11	\$ 1,097.26
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022		
\$ 2.29	\$ 1.27	\$ 0.93	\$ 0.76	\$ 1.37	\$ 3.57	\$ 10.19	\$ 52.86
\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022	\$ 0.0022		
\$ 2.29	\$ 1.27	\$ 0.93	\$ 0.76	\$ 1.37	\$ 3.57	\$ 10.19	\$ 52.86
\$ 0.0177	\$ 0.0177	\$ 0.0177	\$ 0.0177	\$ 0.0177	\$ 0.0177		
\$ 18.25	\$ 10.13	\$ 7.43	\$ 6.06	\$ 10.96	\$ 28.49	\$ 81.33	\$ 421.84
\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 0.0157	\$ 0.0157		
\$ 16.19	\$ 8.98	\$ 6.59	\$ 5.38	\$ 9.73	\$ 25.27	\$ 72.14	\$ 374.17
\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)	\$ (0.0004)		
\$ (0.41)	\$ (0.23)	\$ (0.17)	\$ (0.14)	\$ (0.25)	\$ (0.64)	\$ (1.84)	\$ (9.53)
\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093	\$ 0.0093		
\$ 9.59	\$ 5.32	\$ 3.90	\$ 3.19	\$ 5.76	\$ 14.97	\$ 42.73	\$ 221.64
\$ 0.0911	\$ 0.0911	\$ 0.0911	\$ 0.0911	\$ 0.0911	\$ 0.0911		
\$ 93.97	\$ 52.13	\$ 38.23	\$ 31.22	\$ 56.44	\$ 146.68	\$ 418.66	\$ 2,158.23

May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Summer May-Oct	Total Nov-Oct
1,031	572	420	343	619	1,610	4,595	23,832
\$ 0.0444	\$ 0.0444	\$ 0.0444	\$ 0.0444	\$ 0.0444	\$ 0.0444		
\$ 45.79	\$ 25.40	\$ 18.63	\$ 15.21	\$ 27.50	\$ 71.47	\$ 204.01	\$ 1,046.95
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076		
\$ 7.84	\$ 4.35	\$ 3.19	\$ 2.60	\$ 4.71	\$ 12.23	\$ 34.92	\$ 181.13
\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076	\$ 0.0076		
\$ 7.84	\$ 4.35	\$ 3.19	\$ 2.60	\$ 4.71	\$ 12.23	\$ 34.92	\$ 181.13
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 0.0124	\$ 0.0124		
\$ 12.79	\$ 7.09	\$ 5.20	\$ 4.25	\$ 7.68	\$ 19.96	\$ 56.97	\$ 295.52
\$ 0.0044	\$ 0.0111	\$ 0.0111	\$ 0.0111	\$ 0.0111	\$ 0.0111		
\$ 4.54	\$ 6.35	\$ 4.66	\$ 3.80	\$ 6.88	\$ 17.87	\$ 44.09	\$ 128.74
\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 0.0203	\$ 0.0203		
\$ 20.94	\$ 11.61	\$ 8.52	\$ 6.96	\$ 12.57	\$ 32.68	\$ 93.27	\$ 483.80
\$ 0.0890	\$ 0.0957	\$ 0.0957	\$ 0.0957	\$ 0.0957	\$ 0.0957		
\$ 91.89	\$ 54.81	\$ 40.19	\$ 32.82	\$ 59.34	\$ 154.21	\$ 433.27	\$ 2,136.14

May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Summer May-Oct	Total Nov-Oct
\$ 2.27	\$ 1.26	\$ 0.92	\$ 0.75	\$ 1.36	\$ 3.54	\$ 10.11	\$ 50.31
5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	4.8%
\$ (5.55)	\$ (3.08)	\$ (2.26)	\$ (1.84)	\$ (3.33)	\$ (8.66)	\$ (24.73)	\$ (128.27)
-70.8%	-70.8%	-70.8%	-70.8%	-70.8%	-70.8%	-70.8%	-70.8%
\$ 18.25	\$ 10.13	\$ 7.43	\$ 6.06	\$ 10.96	\$ 28.49	\$ 81.33	\$ 421.84
\$ 3.40	\$ 1.89	\$ 1.38	\$ 1.13	\$ 2.04	\$ 5.31	\$ 15.16	\$ 78.65
26.6%	26.6%	26.6%	26.6%	26.6%	26.6%	26.6%	26.6%
\$ (4.95)	\$ (6.58)	\$ (4.82)	\$ (3.94)	\$ (7.12)	\$ (18.51)	\$ (45.93)	\$ (138.27)
-109.1%	-103.6%	-103.6%	-103.6%	-103.6%	-103.6%	-104.2%	-107.4%
\$ (11.34)	\$ (6.29)	\$ (4.61)	\$ (3.77)	\$ (6.81)	\$ (17.71)	\$ (50.54)	\$ (262.16)
-54.2%	-54.2%	-54.2%	-54.2%	-54.2%	-54.2%	-54.2%	-54.2%
\$ 2.08	\$ (2.68)	\$ (1.96)	\$ (1.60)	\$ (2.90)	\$ (7.54)	\$ (14.60)	\$ 22.10
2.3%	-4.9%	-4.9%	-4.9%	-4.9%	-4.9%	-3.4%	1.0%

Docket No. DG 23-076
Exhibit 21

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
LDAC 2023-2024 Filing
LDAC Bill Comparisons, Proposed LDAC Rates November 1, 2023 – October 31, 2024 vs. Current LDAC Rates

Schedule 8
Page 4 of 4

1 Proposed LDAC Rates November 1, 2022 – October 31, 2023															
2 Commercial/Industrial Sales Customers and Commercial/Industrial Transportation Customers (Rate Codes G-52)															
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	Typical Usage (Therms)		Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Winter Nov-Apr						
			1,907	2,294	2,692	2,308	2,175	1,933	13,309						
	Energy Efficiency	\$	0.0444	\$	0.0444	\$	0.0466	\$	0.0466	\$	0.0466				
	Energy Efficiency Amount	\$	84.68	\$	101.83	\$	125.44	\$	107.55	\$	101.38	\$	90.08	\$	610.9
	Gas Holder	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	Gas Holder Amount	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
	MGP	\$	0.0022	\$	0.0022	\$	0.0022	\$	0.0022	\$	0.0022	\$	0.0022		
	MGP Amount	\$	4.23	\$	5.0871	\$	5.9706	\$	5.1190	\$	4.8252	\$	4.2874	\$	29.5
	Environmental	\$	0.0022	\$	0.0022	\$	0.0022	\$	0.0022	\$	0.0022	\$	0.0022		
	Total Environmental	\$	4.23	\$	5.09	\$	5.97	\$	5.12	\$	4.83	\$	4.29	\$	29.5
	RDAF	\$	0.0177	\$	0.0177	\$	0.0177	\$	0.0177	\$	0.0177	\$	0.0177		
	RDAF amount	\$	33.76	\$	40.60	\$	47.65	\$	40.85	\$	38.51	\$	34.21	\$	235.5
	PTAM	\$	0.0157	\$	0.0157	\$	0.0157	\$	0.0157	\$	0.0157	\$	0.0157		
	PTAM amount	\$	29.94	\$	36.01	\$	42.26	\$	36.23	\$	34.15	\$	30.35	\$	208.9
	RCE	\$	(0.0004)	\$	(0.0004)	\$	(0.0004)	\$	(0.0004)	\$	(0.0004)	\$	(0.0004)		
	RCE Amount	\$	(0.76)	\$	(0.92)	\$	(1.08)	\$	(0.92)	\$	(0.87)	\$	(0.77)	\$	(5.3)
	GAP	\$	0.0093	\$	0.0093	\$	0.0093	\$	0.0093	\$	0.0093	\$	0.0093		
	GAP Amount	\$	17.74	\$	21.33	\$	25.03	\$	21.46	\$	20.23	\$	17.98	\$	123.7
	LDAC	\$	0.0889	\$	0.0889	\$	0.0911	\$	0.0911	\$	0.0911	\$	0.0911		
	LDAC Amount	\$	169.59	\$	203.94	\$	245.28	\$	210.30	\$	198.22	\$	176.13	\$	1,203.4

						Summer		Total							
May-24		Jun-24		Jul-24		Aug-24		Sep-24		Oct-24		May-Oct		Nov-Oct	
1,482		1,317		1,269		1,323		1,295		1,611		8,298		21,607	
\$	0.0466	\$	0.0486	\$	0.0466	\$	0.0466	\$	0.0466	\$	0.0466	\$	386.68	\$	997.65
	69.07		61.40		59.13		61.66		60.35		75.08				
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
\$	0.0022	\$	0.0022	\$	0.0022	\$	0.0022	\$	0.0022	\$	0.0022	\$	18.40	\$	47.92
\$	3.2874	\$	2.9222	\$	2.8142	\$	2.9350	\$	2.8725	\$	3.5736	\$		\$	
\$	0.0022	\$	0.0022	\$	0.0022	\$	0.0022	\$	0.0022	\$	0.0022	\$	18.40	\$	47.92
\$	3.29	\$	2.92	\$	2.81	\$	2.94	\$	2.87	\$	3.57	\$		\$	
\$	0.0177	\$	0.0177	\$	0.0177	\$	0.0177	\$	0.0177	\$	0.0177	\$	146.87	\$	382.45
\$	26.23	\$	23.32	\$	22.46	\$	23.42	\$	22.92	\$	28.52	\$		\$	
\$	0.0157	\$	0.0157	\$	0.0157	\$	0.0157	\$	0.0157	\$	0.0157	\$	130.28	\$	339.23
\$	23.27	\$	20.68	\$	19.92	\$	20.78	\$	20.33	\$	25.30	\$		\$	
\$	(0.0004)	\$	(0.0004)	\$	(0.0004)	\$	(0.0004)	\$	(0.0004)	\$	(0.0004)	\$	(3.32)	\$	(8.64)
\$	(0.59)	\$	(0.53)	\$	(0.51)	\$	(0.53)	\$	(0.52)	\$	(0.64)	\$		\$	
\$	0.0093	\$	0.0093	\$	0.0093	\$	0.0093	\$	0.0093	\$	0.0093	\$	77.17	\$	200.95
\$	13.78	\$	12.25	\$	11.80	\$	12.31	\$	12.04	\$	14.98	\$		\$	
\$	0.0911	\$	0.0911	\$	0.0911	\$	0.0911	\$	0.0911	\$	0.0911	\$	756.09	\$	1,959.55
\$	135.05	\$	120.05	\$	115.61	\$	120.57	\$	118.01	\$	146.81	\$		\$	

NHPUC NO. 11 GAS
LIBERTY UTILITIES

Third Revised Page 99
Superseding Second Revised Page 99
Environmental Surcharge

34 ENVIRONMENTAL SURCHARGE - MANUFACTURED GAS PLANTS

Manufactured Gas Plants

Required Annual Environmental Increase	\$500,070
Estimated Ending Balance on October 31, 2023	<u>-\$168,651</u>
Annual Net Increase to Rates	\$331,419
Estimated weather normalized firm therms billed for the twelve months ended 10/31/2024 - sales and transportation	184,926,232 therms
MGP Surcharge per therm	<u>\$0.0018</u> per therm
<u>Gasholder and pond at Gas Street, Concord, NH</u>	
Required Annual Environmental Increase	\$35,011
Estimated weather normalized firm therms billed for the twelve months ended 10/31/2024 - sales and transportation	184,926,232 therms
Gasholder and pond at Gas Street, Concord, NH Surcharge per therm	<u>\$0.0002</u> per therm
<u>Total Environmental Surcharge</u>	<u>\$0.0020</u> per therm

DATED: August 21, 2023
EFFECTIVE: November 1, 2023

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

NHPUC NO. 11 GAS
LIBERTY UTILITIES

Third Revised Page 100
Superseding Second Revised Page 100
Rate Case Expense

35 RATE CASE EXPENSE AND RECOUPMENT FACTOR CALCULATION

<u>Description</u>	<u>Total</u>
Prior Period Recoupment/Rate Case Expense (Over)/Under Collection, including interest as of October 31, 2023	\$ (73,721)
Rate Case Expense DG 17-048	\$ -
Rate Case Expense DG 20-105	\$ -
Rate Case Expense to Recover as of August 31, 2023	\$ -
Projected Recoupment/Rate Case Expense Recovery	\$ (73,721)
Projected Interest	\$ 25,004
Total Projected Recovery, November 1, 2023 - October 31, 2024	\$ (73,721)
Forecast Throughput (Therms)	184,926,232
RCE Factor (\$/Therm)	(\$0.0004)

DATED: August 21, 2023

ISSUED BY: /s/Neil Proudman
Neil Proudman

EFFECTIVE: November 1, 2023

TITLE: President

36 LOCAL DISTRIBUTION ADJUSTMENT CHARGE CALCULATION

Local Delivery Adjustment Charge Calculation			
		Sales Customer:	Transportation Customer:
Residential Non Heating Rates - R-1			
Energy Efficiency Charge	0.0667		
Demand Side Management Charge	0.0000		
Conservation Charge (CCx)		0.0667	
Relief Holder and pond at Gas Street, Concord, NH	0.0002		
Manufactured Gas Plants	0.0018		
Environmental Surcharge (ES)		0.0020	
Revenue Decoupling Adjustment Factor (RDAF)		0.1041	
Property Tax Adjustment Mechanism (PTAM)		0.0157	
Rate Case Expense Factor (RCEF)		(0.0004)	
Gas Assistance Program (GAP)		0.0033	
LDAC		0.1974	per therm
Residential Heating Rates - R-3, R-4, R-6, R-7			
Energy Efficiency Charge	0.0667		
Demand Side Management Charge	0.0000		
Conservation Charge (CCx)		0.0667	
Relief Holder and pond at Gas Street, Concord, NH	0.0002		
Manufactured Gas Plants	0.0018		
Environmental Surcharge (ES)		0.0020	
Revenue Decoupling Adjustment Factor (RDAF)		0.1041	
Property Tax Adjustment Mechanism (PTAM)		0.0157	
Rate Case Expense Factor (RCEF)		(0.0004)	
Gas Assistance Program (GAP)		0.0033	
LDAC		0.1974	per therm
Commercial/Industrial Low Annual Use Rates - G-41, G-51, G-44, G-55			
Energy Efficiency Charge	0.0444		
Demand Side Management Charge	0.0000		
Conservation Charge (CCx)		0.0444	0.0444
Relief Holder and pond at Gas Street, Concord, NH	0.0002		
Manufactured Gas Plants	0.0018		
Environmental Surcharge (ES)		0.0020	0.0020
Revenue Decoupling Adjustment Factor (RDAF)		0.0177	0.0177
Property Tax Adjustment Mechanism (PTAM)		0.0157	0.0157
Rate Case Expense Factor (RCEF)		(0.0004)	(0.0004)
Gas Assistance Program (GAP)		0.0033	0.0033
LDAC		0.0887	0.0887 per therm
Commercial/Industrial Medium Annual Use Rates - G-42, G-52, G-45, G-56			
Energy Efficiency Charge	0.0444		
Demand Side Management Charge	0.0000		
Conservation Charge (CCx)		0.0444	0.0444
Relief Holder and pond at Gas Street, Concord, NH	0.0002		
Manufactured Gas Plants	0.0018		
Environmental Surcharge (ES)		0.0020	0.0020
Revenue Decoupling Adjustment Factor (RDAF)		0.0177	0.0177
Property Tax Adjustment Mechanism (PTAM)		0.0157	0.0157
Rate Case Expense Factor (RCEF)		(0.0004)	(0.0004)
Gas Assistance Program (GAP)		0.0033	0.0033
LDAC		0.0887	0.0887 per therm
Commercial/Industrial Large Annual Use Rates - G-43, G-53, G-54, G-46, G-56, G-57, G-58			
Energy Efficiency Charge	0.0444		
Demand Side Management Charge	0.0000		
Conservation Charge (CCx)		0.0444	0.0444
Relief Holder and pond at Gas Street, Concord, NH	0.0002		
Manufactured Gas Plants	0.0018		
Environmental Surcharge (ES)		0.0020	0.0020
Revenue Decoupling Adjustment Factor (RDAF)		0.0177	0.0177
Property Tax Adjustment Mechanism (PTAM)		0.0157	0.0157
Rate Case Expense Factor (RCEF)		(0.0004)	(0.0004)
Gas Assistance Program (GAP)		0.0033	0.0033
LDAC		0.0887	0.0887 per therm

DATED: August 21, 2023

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

EFFECTIVE: November 1, 2023

NHPUC NO. 11 GAS
LIBERTY UTILITIES

~~Second-Third~~ Revised Page 99
Superseding ~~First-Second~~ Revised Page 99
Environmental Surcharge

34 ENVIRONMENTAL SURCHARGE - MANUFACTURED GAS PLANTS

Manufactured Gas Plants

Required Annual Environmental Increase	\$983,056	\$500,070
DG 19-145 Audit adjustment of \$1,024,167 amortized over 3 years, approved by Order.	\$341,389	<u>-\$168,651</u>
Estimated Ending Balance on October 31, 202 23	<u>\$89,763</u>	\$331,419
Environmental Subtotal	\$1,414,208	
Overall Annual Net Increase to Rates	\$1,414,208	
Estimated weather normalized firm therms billed for the twelve months ended 10/31/202 34 - sales and transportation	-186,338,561	184,926,232 therms
MGP Surcharge per therm	<u>\$0.0076</u>	\$0.0018 per therm
<u>Gasholder and pond at Gas Street, Concord, NH</u>		
Required Annual Environmental Increase	\$69,514	\$35,011
Estimated weather normalized firm therms billed for the twelve months ended 10/31/202 34 - sales and transportation	-186,338,561	184,926,232 therms
Gasholder and pond at Gas Street, Concord, NH Surcharge per therm	<u>\$0.0004</u>	\$0.0002 per therm
Total Environmental Surcharge (excludes Gas Holder per Order No. 26,692 dated September 29, 2022)	<u>\$0.0076</u>	\$0.0020 per therm

DATED: ~~February 7, 2023~~ August 21, 2023

ISSUED BY: /s/Neil Proudman

EFFECTIVE: November 1, 202~~32~~

Neil Proudman
TITLE: President

Authorized by NHPUC Order No. xxxxxx dated xxxx, in Docket No. DG 23-xxx
Authorized by NHPUC Order No. 26,715 dated October 31, 2022, in Docket No. DG 22-045

NHPUC NO. 11 GAS
LIBERTY UTILITIES

~~Second-Third~~ Revised Page 100
Superseding ~~First-Second~~ Revised Page 100
Rate Case Expense

35 RATE CASE EXPENSE AND RECOUPMENT FACTOR CALCULATION

<u>Description</u>	<u>Total</u>	
Prior Period Recoupment/Rate Case Expense (Over)/Under Collection, including interest as of October 31, 2023 34	\$ 129,039	\$ (73,721)
Rate Case Expense DG 17-048	\$ (4,836)	\$ -
Rate Case Expense DG 20-105	\$ 680,768	\$ -
Rate Case Expense to Recover as of August 31, 2023 34	\$ 675,932	\$ -
Projected Recoupment/Rate Case Expense Recovery	\$ 804,971	\$ (73,721)
Projected Interest	\$ 17,048	\$ 29,668
Total Projected Recovery, November 1, 2022 - October 31, 2023 November 1, 2023 - October 31, 2024	\$ 822,019	\$ (73,721)
Forecast Throughput (Therms)	186,338,561	184,926,232
RCE Factor (\$/Therm)	\$0.0044	(\$0.0004)

DATED: ~~February 7~~ August 21, 2023

ISSUED BY: /s/Neil Proudman

EFFECTIVE: ~~November 1, 2023~~ November 1, 2022

TITLE: President

Authorized by NHPUC Order No. 26,715 dated October 31, 2022, in Docket No. DG 22-045
Authorized by NHPUC Order No. 26,xxx dated xxx in Docket No. DG 23-xxx

36 LOCAL DISTRIBUTION ADJUSTMENT CHARGE CALCULATION

Local Delivery Adjustment Charge Calculation				Sales Customers	Transportation Customers
Residential Non Heating Rates - R-1					
Energy Efficiency Charge		0.0667			
Demand Side Management Charge		0.0000			
Conservation Charge (CCx)			0.0667		
Relief Holder and pond at Gas Street, Concord, NH	0.0000	0.0002			
Manufactured Gas Plants	0.0076	0.0018			
Environmental Surcharge (ES)	0.0076		0.0020		
Revenue Decoupling Adjustment Factor (RDAF)	0.0000		0.1041		
Property Tax Adjustment Mechanism (PTAM)	0.0124		0.0157		
Rate Case Expense Factor (RCEF)	0.0111		(0.0004)		
Gas Assistance Program (GAP)	0.0203		0.0093		
LDAC	0.1180	0.1974	per therm		
Residential Heating Rates - R-3, R-4, R-6, R-7					
Energy Efficiency Charge		0.0667			
Demand Side Management Charge		0.0000			
Conservation Charge (CCx)			0.0667		
Relief Holder and pond at Gas Street, Concord, NH	0.0000	0.0002			
Manufactured Gas Plants	0.0076	0.0018			
Environmental Surcharge (ES)	0.0076		0.0020		
Revenue Decoupling Adjustment Factor (RDAF)	0.0000		0.1041		
Property Tax Adjustment Mechanism (PTAM)	0.0124		0.0157		
Rate Case Expense Factor (RCEF)	0.0111		(0.0004)		
Gas Assistance Program (GAP)	0.0203		0.0093		
LDAC	0.1180	0.1974	per therm		
Commercial/Industrial Low Annual Use Rates - G-41, G-51, G-44, G-55					
Energy Efficiency Charge		0.0444			
Demand Side Management Charge		0.0000			
Conservation Charge (CCx)			0.0444	0.0444	
Relief Holder and pond at Gas Street, Concord, NH	0.0000	0.0002			
Manufactured Gas Plants	0.0076	0.0018			
Environmental Surcharge (ES)	0.0076		0.0020	0.0020	
Revenue Decoupling Adjustment Factor (RDAF)	0.0000		0.0177	0.0177	
Property Tax Adjustment Mechanism (PTAM)	0.0124		0.0157	0.0157	
Rate Case Expense Factor (RCEF)	0.0111		(0.0004)	(0.0004)	
Gas Assistance Program (GAP)	0.0203		0.0093	0.0093	
LDAC	0.0352	0.0887	0.0887	per therm	
Commercial/Industrial Medium Annual Use Rates - G-42, G-52, G-45, G-56					
Energy Efficiency Charge		0.0444			
Demand Side Management Charge		0.0000			
Conservation Charge (CCx)			0.0444	0.0444	
Relief Holder and pond at Gas Street, Concord, NH	0.0000	0.0002			
Manufactured Gas Plants	0.0076	0.0018			
Environmental Surcharge (ES)	0.0076		0.0020	0.0020	
Revenue Decoupling Adjustment Factor (RDAF)	0.0000		0.0177	0.0177	
Property Tax Adjustment Mechanism (PTAM)	0.0124		0.0157	0.0157	
Rate Case Expense Factor (RCEF)	0.0111		(0.0004)	(0.0004)	
Gas Assistance Program (GAP)	0.0203		0.0093	0.0093	
LDAC	0.0352	0.0887	0.0887	per therm	
Commercial/Industrial Large Annual Use Rates - G-43, G-53, G-54, G-46, G-56, G-57, G-58					
Energy Efficiency Charge		0.0444			
Demand Side Management Charge		0.0000			
Conservation Charge (CCx)			0.0444	0.0444	
Relief Holder and pond at Gas Street, Concord, NH	0.0000	0.0002			
Manufactured Gas Plants	0.0076	0.0018			
Environmental Surcharge (ES)	0.0076		0.0020	0.0020	
Revenue Decoupling Adjustment Factor (RDAF)	0.0000		0.0177	0.0177	
Property Tax Adjustment Mechanism (PTAM)	0.0124		0.0157	0.0157	
Rate Case Expense Factor (RCEF)	0.0111		(0.0004)	(0.0004)	
Gas Assistance Program (GAP)	0.0203		0.0093	0.0093	
LDAC	0.0352	0.0887	0.0887	per therm	

DATED: ~~May 15, 2023~~ August 21, 2023

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

EFFECTIVE: ~~June 1, 2023~~ November 1, 2023

Authorized by NHPUC Order No. ~~26,808~~ dated ~~April 28, 2023~~, in Docket No. DG ~~20-10523-xxx~~