

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

DG 21-130
Winter 2021/2022 Cost of Gas and Summer 2022 Cost of Gas

Energy Data Requests - Set 1

Date Request Received: 9/29/21
Request No. Energy 1-1

Date of Response: 10/7/21
Respondent: David Simek

REQUEST:

Reference: Testimony of Simek/McNamara, Bates 015 and Schedule 19, RDAF, Bates 131

- a. Please explain in detail why the Company asserts that the Company should “recover \$4,024,830 which was improperly refunded to residential customers over the past two years.”
- b. Please explain in detail why the refund was improper, and what changes have been made (including any changes made in the recent DG 20-105 rate case) to prospectively change the decoupling formula to avoid allegedly improper refunds in the future.
 1. Please identify the effective date of each prospective change identified, and the document allowing or requesting the change by title, date, and page number.
 - c. Please provide a detailed spreadsheet showing calculations (live format) used to arrive at the amount sought to be recovered, including each source of the information Liberty relied upon for these calculations
 - d. If Liberty alleges that any formula used to calculate any rate approved in past LDAC and base rate dockets was incorrect, please provide these formula, specify which term(s) in the formula were incorrect, provide corrected formula, and identify whether the allegedly incorrect formula was provided, reviewed, filed and/or agreed to by the Company, and whether the formula was approved by the Public Utilities Commission. Please identify each document wherein the allegedly incorrect formula was proposed, agreed upon, or approved.
 - e. Does Liberty assert that the decoupling provisions in the LDAC tariff in effect from 2017 to the present (including all versions) was inconsistent with any Liberty request for a decoupling formula or LDAC or inconsistent those approved in Commission Orders? If so, please identify specifically Liberty’s request, the Commission Order, and the alleged inconsistencies.

RESPONSE:

- a. As agreed in the Docket No. DG 20-105 Settlement Agreement, the settling parties and the Commission, through its approval, agreed that the treatment of low-income customers

Docket No. DG 21-130 Request No. Energy 1-1

in the decoupling revenue calculation was not as intended with the 2018 approval of decoupling, and was incorrect. As a direct result of this incorrect treatment, the Company improperly refunded \$4,024,830 as part of the 2019 and 2020 LDAC filings through the Revenue Decoupling Adjustment Factor.

- b. The refund was improper as it was calculated using incorrect treatment for low-income customers. In effect, the Company was previously providing the discount to low-income customers twice — through both the Gas Assistance Program (GAP) portion of the LDAC, as well as through the decoupling formula. In the most recent LDAC filing, the Company aligned the decoupling formula as agreed in the Docket No. DG 20-105 Settlement Agreement. In doing so, low-income customers are now treated the same for both the allowed and actual revenue, thereby showing a proper comparison. Please see the Company's response to Energy 1-2 for additional details on why the refund was improper.
 1. With the 2021 LDAC filing made in Docket No. DG 21-130, we have appropriately calculated the decoupling formula in line with changes as agreed in the Docket No. DG 20-105 Settlement Agreement for the full filing period. This can be seen on Bates 128–130.
- c. Please see Attachment Energy 1-1.c.1.xlsx for a detailed spreadsheet of the 2019–2020 RDAF adjustment calculation. Please see Attachment Energy 1-1.c.2.xlsx for a detailed spreadsheet of the 2020–2021 RDAF adjustment calculation. A summary of these spreadsheets can be found at Bates 131. The source of the information is the Company's financial system.
- d. The Company does not allege that any formula used to calculate any rate approved in past LDAC and base rate dockets was incorrect. There was a difference in how the low-income allowed revenue was calculated and how the actual revenue was calculated. The low-income allowed revenue calculation included the low-income discount, but the low-income actual revenue calculation did not include the discount.
- e. Yes, the Company does assert that the decoupling provisions in the LDAC tariff in effect prior to August 1, 2021, were inconsistent with approved LDAC Commission Orders.

Order No. 26,188 (November 1, 2018) in Docket DG 18-137 authorized the Company to collect a projected RLIAP discount of \$2,409,164 from customers from November 1, 2018, through October 31, 2019. Due to the low-income tariff mismatch between allowed and actual revenues, Order No. 26,306 (October 31, 2019) in Docket DG 19-145 mistakenly required the Company to refund to customers through the RDAF \$1,932,224 from November 1, 2019, through October 31, 2020, the actual RLIAP discount collected from customers November 1, 2018, through October 31, 2019.

Order No. 26,306 (October 31, 2019) in Docket DG 19-145 authorized the Company to collect a projected RLIAP discount of \$2,307,356 from customers from November 1, 2019, through October 31, 2020. Again, due to the low-income tariff mismatch between allowed and actual revenues, Order No. 26,419 (October 30, 2020) in Docket DG 20-141 similarly required the Company to refund to customers through the RDAF \$2,092,605 from November 1, 2020, through October 31, 2021, actual RLIAP discount collected from customers November 1, 2019, through October 31, 2020.

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

DG 21-130
Winter 2021/2022 Cost of Gas and Summer 2022 Cost of Gas

Energy Data Requests - Set 1

Date Request Received: 9/29/21
Request No. Energy 1-2

Date of Response: 10/7/21
Respondent: David Simek

REQUEST:

Reference Testimony of Simek/McNamara, at Bates 13

The referenced testimony states:

“New to this filing and pursuant to the Settlement Agreement in Docket No. DG 20-105 (Order No. 26,505) (*emphasis added*) is the prior period reconciliation of the Gas Assistance Program (previously the Residential Low-Income Program) customers allowed revenue, as shown on Schedule 19 RDAF (Bates 131). *** The allowed revenue correction allows the Company to recover \$4,024,830 which was improperly refunded to residential customers over the past two Years.”

Please indicate specifically what provisions in the Settlement Agreement in DG 20-105 (Exhibit 49, Docket No. DG 20-105) that either discussed or authorized the prior period reconciliation of the Gas Assistance Program customers allowed revenue.

RESPONSE:

There is no provision in the Settlement Agreement in Docket No. DG 20-105 that discussed or authorized the prior period reconciliation of the Gas Assistance Program customers allowed revenue, although Section 11.2(b) of the Settlement Agreement states:

The revenue per customer for low-income customers shall not be different from customers not categorized as low-income. The discount provided to low-income customers shall not be included in the revenue calculation as it is reconciled separately through the Gas Assistance Program (GAP) portion of the LDAC.

Section 11.2(b) of the Settlement Agreement corrects the asymmetry of how the low-income allowed revenue is calculated compared to the actual revenue calculation and the reference in testimony was intended to identify the consistency of the correction for the prior years with the agreement reached in DG 20-105 related to the proper treatment of the low income revenue. Previously, the low-income allowed revenue calculation included the low-income discount, but the low-income actual revenue calculation did not include the discount. This formula mismatch

Docket No. DG 21-130 Request No. Energy 1-2

in the Company's tariff calculated a two-year difference between the allowed and actual revenue of \$4,024,830 which was improperly refunded to residential customers over the past two years. The purpose of the Revenue Decoupling Adjustment Factor ("RDAF") is to recover or refund, on an annual basis, the difference between the Actual Base Revenue per Customer and the Allowed Base Revenue per Customer. **The RDAF was never intended to remove recovery of the low-income costs from the Company, which this mismatch essentially did.**

The Company first brought this RDAF tariff mismatch to the Commission's attention in Docket No. DG 19-145, which was the initial calculation of the RDAF following the implementation of decoupling on November 1, 2018 (Exhibit 2, Bates 11, Lines 16 through Bates 12, Line 21). Technical sessions that were attended by Staff, OCA, and the Company were held on September 23, 2019, and September 27, 2019, to discuss this tariff mismatch and other items. During these technical sessions, Mr. Al-Azad Iqbal from Commission Staff argued that Revenue Decoupling is working as intended and that the Company's actual revenue is made whole after the low-income revenues were accounted for. Mr. Iqbal then confirmed his point further in his written testimony where he stated "Staff's analysis is consistent with the relevant tariff language which states that 'For purposes of calculating the Actual Base Revenue, base revenues for Low Income rate class R4, shall be determined based on non-discounted rate R-3'" (Exhibit 5, Bates 3, Lines 7-8). Mr. Iqbal then confirmed that the intent of the RDAF and tariff language match perfectly in this context (Exhibit 5, Bates 3, Lines 10 and 11). The Company followed Mr. Iqbal's recommendation and made a revised filing on October 7, 2019, with the approximately \$2.1M related to the low-income LDAC costs removed (along with some other Commission Staff/OCA recommended changes).

The issue with Mr. Iqbal's recommendation in Docket No. DG 19-145 is that it never addressed the original issue raised by the Company. Mr. Iqbal's analysis only concentrated on the calculation of RDAF Actual Base Revenue and did not recognize that the RDAF Allowed Base Revenue was calculated on a different basis. As stated above, the low-income allowed revenue calculation included the low-income discount, but the actual revenue calculation did not include the discount. Essentially, the Company was collecting the LDAC discount from customers one year then returning the discount to customers the following year through the RDAF. Mr. Iqbal, while employed by the OCA, identified this in his written testimony in Docket No. DG 20-105 when he stated, "I recommend that the Company treat all low-income customers as regular customers *for all rates and revenue related matters*, and reconcile the discount through the LDAC" (Exhibit 39, Bates 23, Lines 3 through 5) (*emphasis added*). This correction, resulting in symmetrical treatment, was memorialized in Section 11.2(b)i. of the DG 20-105 Settlement Agreement. By treating all low-income customers as regular customers for all rates and revenue related matters, the Company is able to calculate the allowed and actual base revenue on the same basis and a formula mismatch no longer exists.

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

DG 21-130
Winter 2021/2022 Cost of Gas and Summer 2022 Cost of Gas

Energy Data Requests - Set 1

Date Request Received: 9/29/21
Request No. Energy 1-3

Date of Response: 10/7/21
Respondent: Catherine McNamara

REQUEST:

Reference: Bates 053 and 054 (Rate Schedules) and Bates 104-108 (Schedule 8 - Bill Comparisons)

- a. Please recalculate the proposed LDAC and the cost of gas rates, by rate class, excluding Liberty's requested decoupling related refund.
- b. Please provide the bill impacts comparisons excluding Liberty's requested decoupling related refund, in live format.
- c. Please provide a live spreadsheet comparing the LDAC and cost of gas for each rate class as filed, and with the requested decoupling related refund removed. Please show the percentage differences and provide a narrative explanation of the major differences.

RESPONSE:

- a. The revised LDAC rate would be \$0.1426 per therm for Residential, a decrease of \$0.0307 per therm. There is no change to the LDAC rate for Commercial and Industrial customers as the proposed RDAF adjustment impacted residential customers only. There is also no change to the Cost of Gas rates, as LDAC rates are independent of the Cost of Gas rates.
- b. See Attachment Energy 1-3.b.xlsx.
- c. See Attachment Energy 1-3.c.xlsx.

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

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Winter 2021/2022 Cost of Gas and Summer 2022 Cost of Gas

Energy Data Requests - Set 1

Date Request Received: 9/29/21
Request No. Energy 1-4

Date of Response: 10/7/21
Respondent: Mary Casey

REQUEST:

Reference: Bates 048 Testimony of Mary E. Casey Bates

- a. Please confirm that reference to the Gas Holder site and Liberty's intent to "seek Commission approval" does not refer to Liberty's reference to the Gas Holder site in testimony filed in this docket. Please confirm that Liberty will seek approval in a separate docket/ separate proceeding.
- b. Please confirm that no costs in this docket result from or are associated with the Gas Holder site or the proposed restoration of the Gas Holder building or site. If there are any associated costs, please indicate where, and what they are, and their role in this rate case.
- c. Liberty states that several parties "... and Liberty met with Commission Staff in February 2021 and obtained Staff's support for the plan."
 1. Please confirm that the referenced meeting included Stephen Frink, Amanda Noonan, and Mary Schwarzer, and that these PUC Staff did not "approve the plan" on behalf of PUC Commission Staff.

RESPONSE:

- a. The Company does not seek approval in this docket of any costs related to the stabilization of the gas holder house structure. The Company does seek recovery of ongoing remediation costs associated with the gas holder site, which are similar to costs that have been recovered in past COG proceedings.
- b. See the response to a. above.
- c. Confirmed that the above Commission Staff members were present at the February 2021 meeting. Confirmed that Commission Staff did not "approve" anything, but they did indicate Staff would look favorably on a project that would maintain the gas holder structure if it would result in customer savings or no greater cost than what would otherwise be incurred related to the demolition of the Gas Holder building and remediation of the site.

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Docket DG 19-_____
Revenue Decoupling Adjustment Factor

(1) (2) (3)

Residential Revenue Decoupling Adjustment Factor

1. Allowed Base Revenue	\$ 42,517,544	
2. less: Actual and Estimated Base Revenue	<u>44,670,474</u>	
3. Revenue Deficiency / (Excess)	\$ (2,152,930)	
4. divided by: Forecasted Residential Sales	<u>65,525,530</u>	
5. Residential Revenue Decoupling Adjustment Factor	\$ <u>(0.0329)</u>	

Commercial Revenue Decoupling Adjustment Factor

6. Allowed Base Revenue	\$ 31,436,763	
7. less: Actual and Estimated Base Revenue	<u>34,368,401</u>	
8. Revenue Deficiency / (Excess)	\$ (2,931,638)	
9. divided by: Forecasted Commercial Sales	<u>118,821,604</u>	
10. Commercial Revenue Decoupling Adjustment Factor	\$ <u>(0.0247)</u>	

11. TOTAL Revenue Deficiency / (Excess)	\$ <u>(5,084,568)</u>	
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Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Docket DG 19-
 Revenue Decoupling Adjustment Factor
 Allowed Decoupling Year Revenues

EnergyNorth Natural Gas Inc

2018-19 Customers (Equivalent Bills)

	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-18	S&T Aug-18	S&T Total
R-1	3,492	3,607	3,611	3,258	3,608	3,489	3,605	3,481	3,574	3,586	35,311
R-3	71,747	74,482	74,676	67,598	74,949	72,450	74,670	72,069	73,360	73,237	729,238
R-4	5,948	6,205	6,210	5,599	6,170	5,875	5,956	5,679	5,777	5,675	59,095
Total Resid.	81,187	84,295	84,496	76,455	84,727	81,814	84,231	81,229	82,711	82,498	823,643
G-41	9,279	9,683	9,716	8,804	9,751	9,385	9,526	9,043	9,125	9,104	93,416
G-42	1,388	1,439	1,441	1,303	1,442	1,386	1,427	1,375	1,452	1,415	14,067
G-43	57	60	60	54	59	56	58	56	55	56	571
G-51	1,291	1,339	1,340	1,209	1,339	1,292	1,328	1,285	1,261	1,298	12,982
G-52	378	391	390	352	392	381	396	384	396	391	3,851
G-53	37	38	37	34	35	34	36	35	38	38	363
G-54	29	30	29	27	30	28	29	28	29	29	288
Total C/I	12,458	12,980	13,013	11,783	13,048	12,563	12,799	12,206	12,357	12,331	125,538
Total All	93,645	97,275	97,509	88,238	97,776	94,377	97,030	93,435	95,068	94,828	949,181

2018-19 Benchmark Base Revenue Per Bill

	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-19	S&T Aug-19
R-1	\$ 23,348	\$ 25,283	\$ 26,012	\$ 25,753	\$ 24,068	\$ 21,406	\$ 20,682	\$ 19,317	\$ 18,581	\$ 18,520
R-3	\$ 57,780	\$ 77,468	\$ 88,801	\$ 83,856	\$ 71,842	\$ 45,379	\$ 33,218	\$ 25,573	\$ 22,855	\$ 22,974
R-4	\$ 57,780	\$ 77,468	\$ 88,801	\$ 83,856	\$ 71,842	\$ 45,379	\$ 33,218	\$ 25,573	\$ 22,855	\$ 22,974
G-41	\$ 139,367	\$ 185,085	\$ 211,254	\$ 201,863	\$ 172,188	\$ 118,730	\$ 88,674	\$ 72,229	\$ 67,581	\$ 67,203
G-42	\$ 821,458	\$ 1,125,575	\$ 1,259,787	\$ 1,167,405	\$ 983,555	\$ 684,624	\$ 472,419	\$ 349,595	\$ 296,514	\$ 289,956
G-43	\$ 6,550,598	\$ 7,502,097	\$ 8,664,543	\$ 7,626,280	\$ 6,553,396	\$ 4,286,167	\$ 2,095,245	\$ 1,460,169	\$ 1,276,137	\$ 1,310,918
G-51	\$ 115,703	\$ 127,293	\$ 130,854	\$ 125,983	\$ 115,870	\$ 99,796	\$ 94,811	\$ 85,816	\$ 86,305	\$ 87,102
G-52	\$ 627,414	\$ 664,356	\$ 662,625	\$ 649,692	\$ 593,999	\$ 514,744	\$ 372,278	\$ 338,050	\$ 345,377	\$ 356,854
G-53	\$ 5,223,263	\$ 6,402,732	\$ 5,376,660	\$ 5,441,929	\$ 5,316,353	\$ 4,644,882	\$ 2,523,664	\$ 2,138,370	\$ 2,145,270	\$ 2,343,537
G-54	\$ 4,462,745	\$ 4,980,221	\$ 4,323,529	\$ 3,728,568	\$ 2,872,867	\$ 3,248,080	\$ 2,004,687	\$ 2,363,392	\$ 2,360,857	\$ 2,675,881

2018-19 Allowed Base Revenue

	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-19	S&T Aug-19	S&T Total
R-1	\$ 81,527	\$ 91,197	\$ 93,922	\$ 83,891	\$ 86,847	\$ 74,680	\$ 74,567	\$ 67,246	\$ 66,414	\$ 66,407	\$ 786,697
R-3	\$ 4,145,546	\$ 5,770,020	\$ 6,631,299	\$ 5,668,528	\$ 5,384,448	\$ 3,287,719	\$ 2,480,407	\$ 1,842,996	\$ 1,676,613	\$ 1,682,555	\$ 38,570,131
R-4	\$ 343,665	\$ 480,701	\$ 551,413	\$ 469,546	\$ 443,279	\$ 266,620	\$ 197,854	\$ 145,227	\$ 132,024	\$ 130,387	\$ 3,160,716
Total Resid.	\$ 4,570,738	\$ 6,341,918	\$ 7,276,634	\$ 6,221,965	\$ 5,914,575	\$ 3,629,019	\$ 2,752,828	\$ 2,055,470	\$ 1,875,050	\$ 1,879,348	\$ 42,517,544
G-41	\$ 1,293,228	\$ 1,792,221	\$ 2,052,443	\$ 1,777,158	\$ 1,678,971	\$ 1,114,268	\$ 844,671	\$ 653,195	\$ 616,699	\$ 611,821	\$ 12,434,674
G-42	\$ 1,139,946	\$ 1,619,826	\$ 1,815,459	\$ 1,521,121	\$ 1,418,584	\$ 948,585	\$ 673,921	\$ 480,758	\$ 430,461	\$ 410,240	\$ 10,458,902
G-43	\$ 370,546	\$ 453,128	\$ 519,296	\$ 412,836	\$ 387,525	\$ 240,740	\$ 121,245	\$ 81,867	\$ 70,230	\$ 73,193	\$ 2,730,605
G-51	\$ 149,337	\$ 170,455	\$ 175,348	\$ 152,337	\$ 155,124	\$ 128,940	\$ 125,890	\$ 110,257	\$ 108,874	\$ 113,043	\$ 1,389,604
G-52	\$ 236,995	\$ 259,433	\$ 258,532	\$ 228,906	\$ 232,868	\$ 196,359	\$ 147,437	\$ 129,752	\$ 136,923	\$ 139,482	\$ 1,966,686
G-53	\$ 193,261	\$ 240,528	\$ 200,011	\$ 182,849	\$ 188,021	\$ 160,248	\$ 90,936	\$ 74,629	\$ 82,021	\$ 89,601	\$ 1,502,104
G-54	\$ 129,420	\$ 149,240	\$ 127,207	\$ 100,837	\$ 86,090	\$ 91,487	\$ 58,002	\$ 66,175	\$ 68,308	\$ 77,422	\$ 954,188
Total C/I	\$ 3,512,731	\$ 4,684,830	\$ 5,148,296	\$ 4,376,043	\$ 4,147,181	\$ 2,880,627	\$ 2,062,103	\$ 1,596,633	\$ 1,513,516	\$ 1,514,802	\$ 31,436,763
Total All	\$ 8,083,470	\$ 11,026,748	\$ 12,424,930	\$ 10,598,008	\$ 10,061,756	\$ 6,509,646	\$ 4,814,930	\$ 3,652,103	\$ 3,388,566	\$ 3,394,151	\$ 73,954,307

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Docket DG 19-
Revenue Decoupling Adjustment Factor

(1) (2) (3)

Residential Revenue Decoupling Adjustment Factor

1. Allowed Base Revenue	\$ 40,585,321	
2. less: Actual and Estimated Base Revenue	<u>44,670,474</u>	
3. Revenue Deficiency / (Excess)	\$ (4,085,153)	
4. divided by: Forecasted Residential Sales	<u>65,525,530</u>	
5. Residential Revenue Decoupling Adjustment Factor	\$ <u>(0.0623)</u>	

Commercial Revenue Decoupling Adjustment Factor

6. Allowed Base Revenue	\$ 31,436,763	
7. less: Actual and Estimated Base Revenue	<u>34,368,401</u>	
8. Revenue Deficiency / (Excess)	\$ (2,931,638)	
9. divided by: Forecasted Commercial Sales	<u>118,821,604</u>	
10. Commercial Revenue Decoupling Adjustment Factor	\$ <u>(0.0247)</u>	
11. TOTAL Revenue Deficiency / (Excess)	<u>\$ (7,016,791)</u>	

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Docket DG 19-_____
Revenue Decoupling Adjustment Factor
Allowed Decoupling Year Revenues

EnergyNorth Natural Gas Inc**2018-19 Customers (Equivalent Bills)**

	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-18	S&T Aug-18	S&T Total
R-1	3,492	3,607	3,611	3,258	3,608	3,489	3,605	3,481	3,574	3,586	35,311
R-3	71,747	74,482	74,676	67,598	74,949	72,450	74,670	72,069	73,360	73,237	729,238
R-4	5,948	6,205	6,210	5,599	6,170	5,875	5,956	5,679	5,777	5,675	59,095
Total Resid.	81,187	84,295	84,496	76,455	84,727	81,814	84,231	81,229	82,711	82,498	823,643
G-41	9,279	9,683	9,716	8,804	9,751	9,385	9,526	9,043	9,125	9,104	93,416
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G-43	57	60	60	54	59	56	58	56	55	56	571
G-51	1,291	1,339	1,340	1,209	1,339	1,292	1,328	1,285	1,261	1,298	12,982
G-52	378	391	390	352	392	381	396	384	396	391	3,851
G-53	37	38	37	34	35	34	36	35	38	38	363
G-54	29	30	29	27	30	28	29	28	29	29	288
Total C/I	12,458	12,980	13,013	11,783	13,048	12,563	12,799	12,206	12,357	12,331	125,538
Total All	93,645	97,275	97,509	88,238	97,776	94,377	97,030	93,435	95,068	94,828	949,181

2018-19 Benchmark Base Revenue Per Bill

	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-19	S&T Aug-19
R-1	\$ 23,348	\$ 25,283	\$ 26,012	\$ 25,753	\$ 24,068	\$ 21,406	\$ 20,682	\$ 19,317	\$ 18,581	\$ 18,520
R-3	\$ 57,780	\$ 77,468	\$ 88,801	\$ 83,856	\$ 71,842	\$ 45,379	\$ 33,218	\$ 25,573	\$ 22,855	\$ 22,974
R-4	\$ 22,047	\$ 29,563	\$ 33,409	\$ 31,062	\$ 28,369	\$ 19,541	\$ 12,971	\$ 10,385	\$ 9,239	\$ 9,352
G-41	\$ 139,367	\$ 185,085	\$ 211,254	\$ 201,863	\$ 172,188	\$ 118,730	\$ 88,674	\$ 72,229	\$ 67,581	\$ 67,203
G-42	\$ 821,458	\$ 1,125,575	\$ 1,259,787	\$ 1,167,405	\$ 983,555	\$ 684,624	\$ 472,419	\$ 349,595	\$ 296,514	\$ 289,956
G-43	\$ 6,550,598	\$ 7,502,097	\$ 8,664,543	\$ 7,626,280	\$ 6,553,396	\$ 4,286,167	\$ 2,095,245	\$ 1,460,169	\$ 1,276,137	\$ 1,310,918
G-51	\$ 115,703	\$ 127,293	\$ 130,854	\$ 125,983	\$ 115,870	\$ 99,796	\$ 94,811	\$ 85,816	\$ 86,305	\$ 87,102
G-52	\$ 627,414	\$ 664,356	\$ 662,625	\$ 649,692	\$ 593,999	\$ 514,744	\$ 372,278	\$ 338,050	\$ 345,377	\$ 356,854
G-53	\$ 5,223,263	\$ 6,402,732	\$ 5,376,660	\$ 5,441,929	\$ 5,316,353	\$ 4,644,882	\$ 2,523,664	\$ 2,138,370	\$ 2,145,270	\$ 2,343,537
G-54	\$ 4,462,745	\$ 4,980,221	\$ 4,323,529	\$ 3,728,568	\$ 2,872,867	\$ 3,248,080	\$ 2,004,687	\$ 2,363,392	\$ 2,360,857	\$ 2,675,881

2018-19 Allowed Base Revenue

	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-19	S&T Aug-19	S&T Total
R-1	\$ 81,527	\$ 91,197	\$ 93,922	\$ 83,891	\$ 86,847	\$ 74,680	\$ 74,567	\$ 67,246	\$ 66,414	\$ 66,407	\$ 786,697
R-3	\$ 4,145,546	\$ 5,770,020	\$ 6,631,299	\$ 5,668,528	\$ 5,384,448	\$ 3,287,719	\$ 2,480,407	\$ 1,842,996	\$ 1,676,613	\$ 1,682,555	\$ 38,570,131
R-4	\$ 131,133	\$ 183,445	\$ 207,454	\$ 173,927	\$ 175,042	\$ 114,809	\$ 77,260	\$ 58,978	\$ 53,370	\$ 53,073	\$ 1,228,492
Total Resid.	\$ 4,358,207	\$ 6,044,662	\$ 6,932,675	\$ 5,926,346	\$ 5,646,337	\$ 3,477,208	\$ 2,632,234	\$ 1,969,220	\$ 1,796,397	\$ 1,802,035	\$ 40,585,321
G-41	\$ 1,293,228	\$ 1,792,221	\$ 2,052,443	\$ 1,777,158	\$ 1,678,971	\$ 1,114,268	\$ 844,671	\$ 653,195	\$ 616,699	\$ 611,821	\$ 12,434,674
G-42	\$ 1,139,946	\$ 1,619,826	\$ 1,815,459	\$ 1,521,121	\$ 1,418,584	\$ 948,585	\$ 673,921	\$ 480,758	\$ 430,461	\$ 410,240	\$ 10,458,902
G-43	\$ 370,546	\$ 453,128	\$ 519,296	\$ 412,836	\$ 387,525	\$ 240,740	\$ 121,245	\$ 81,867	\$ 70,230	\$ 73,193	\$ 2,730,605
G-51	\$ 149,337	\$ 170,455	\$ 175,348	\$ 152,337	\$ 155,124	\$ 128,940	\$ 125,890	\$ 110,257	\$ 108,874	\$ 113,043	\$ 1,389,604
G-52	\$ 236,995	\$ 259,433	\$ 258,532	\$ 228,906	\$ 232,868	\$ 196,359	\$ 147,437	\$ 129,752	\$ 136,923	\$ 139,482	\$ 1,966,686
G-53	\$ 193,261	\$ 240,528	\$ 200,011	\$ 182,849	\$ 188,021	\$ 160,248	\$ 90,936	\$ 74,629	\$ 82,021	\$ 89,601	\$ 1,502,104
G-54	\$ 129,420	\$ 149,240	\$ 127,207	\$ 100,837	\$ 86,090	\$ 91,487	\$ 58,002	\$ 66,175	\$ 68,308	\$ 77,422	\$ 954,188
Total C/I	\$ 3,512,731	\$ 4,684,830	\$ 5,148,296	\$ 4,376,043	\$ 4,147,181	\$ 2,880,627	\$ 2,062,103	\$ 1,596,633	\$ 1,513,516	\$ 1,514,802	\$ 31,436,763
Total All	\$ 7,870,938	\$ 10,729,492	\$ 12,080,971	\$ 10,302,389	\$ 9,793,519	\$ 6,357,835	\$ 4,694,336	\$ 3,565,853	\$ 3,309,912	\$ 3,316,837	\$ 72,022,084

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Docket DG 19-
 Revenue Decoupling Adjustment Factor
 Actual and Estimated Decoupling Year Revenues

SALES AND TRANSPORT DATA

CUSTOMER COMPONENT

EnergyNorth Natural Gas Inc

2018-19 Customers (Equivalent Bills)

	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-18	S&T Aug-18	S&T Total
R-1	3,492	3,607	3,611	3,258	3,608	3,489	3,605	3,481	3,574	3,586	35,311
R-3	71,747	74,482	74,676	67,598	74,949	72,450	74,670	72,069	73,360	73,237	729,238
R-4	5,948	6,205	6,210	5,599	6,170	5,875	5,956	5,679	5,777	5,675	59,095
Total Resid.	81,187	84,295	84,496	76,455	84,727	81,814	84,231	81,229	82,711	82,498	823,643
G-41	9,279	9,683	9,716	8,804	9,751	9,385	9,526	9,043	9,125	9,104	93,416
G-42	1,388	1,439	1,441	1,303	1,442	1,386	1,427	1,375	1,452	1,415	14,067
G-43	57	60	60	54	59	56	58	56	55	56	571
G-51	1,291	1,339	1,340	1,209	1,339	1,292	1,328	1,285	1,261	1,298	12,982
G-52	378	391	390	352	392	381	396	384	396	391	3,851
G-53	37	38	37	34	35	34	36	35	38	38	363
G-54	29	30	29	27	30	28	29	28	29	29	288
Total C/I	12,458	12,980	13,013	11,783	13,048	12,563	12,799	12,206	12,357	12,331	125,538
Total All	93,645	97,275	97,509	88,238	97,776	94,377	97,030	93,435	95,068	94,828	949,181

2018-19 Customer Charge

	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-19	S&T Aug-19
R-1	\$ 15.02	\$ 15.02	\$ 15.02	\$ 15.02	\$ 15.02	\$ 15.02	\$ 15.02	\$ 15.02	\$ 15.20	\$ 15.20
R-3	\$ 15.02	\$ 15.02	\$ 15.02	\$ 15.02	\$ 15.02	\$ 15.02	\$ 15.02	\$ 15.02	\$ 15.20	\$ 15.20
R-4	\$ 15.02	\$ 15.02	\$ 15.02	\$ 15.02	\$ 15.02	\$ 15.02	\$ 15.02	\$ 15.02	\$ 15.20	\$ 15.20
G-41	\$ 55.68	\$ 55.68	\$ 55.68	\$ 55.68	\$ 55.68	\$ 55.68	\$ 55.68	\$ 55.68	\$ 56.36	\$ 56.36
G-42	\$ 167.06	\$ 167.06	\$ 167.06	\$ 167.06	\$ 167.06	\$ 167.06	\$ 167.06	\$ 167.06	\$ 169.09	\$ 169.09
G-43	\$ 716.95	\$ 716.95	\$ 716.95	\$ 716.95	\$ 716.95	\$ 716.95	\$ 716.95	\$ 716.95	\$ 725.66	\$ 725.66
G-51	\$ 55.68	\$ 55.68	\$ 55.68	\$ 55.68	\$ 55.68	\$ 55.68	\$ 55.68	\$ 55.68	\$ 56.36	\$ 56.36
G-52	\$ 167.06	\$ 167.06	\$ 167.06	\$ 167.06	\$ 167.06	\$ 167.06	\$ 167.06	\$ 167.06	\$ 169.09	\$ 169.09
G-53	\$ 737.84	\$ 737.84	\$ 737.84	\$ 737.84	\$ 737.84	\$ 737.84	\$ 737.84	\$ 737.84	\$ 746.81	\$ 746.81
G-54	\$ 737.84	\$ 737.84	\$ 737.84	\$ 737.84	\$ 737.84	\$ 737.84	\$ 737.84	\$ 737.84	\$ 746.81	\$ 746.81

2018-19 Customer Revenue

	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-19	S&T Aug-19	S&T Total
R-1	\$ 52,451	\$ 54,183	\$ 54,237	\$ 48,932	\$ 54,202	\$ 52,404	\$ 54,158	\$ 52,291	\$ 54,337	\$ 54,511	\$ 531,706
R-3	\$ 1,077,733	\$ 1,118,817	\$ 1,121,723	\$ 1,015,408	\$ 1,125,820	\$ 1,088,293	\$ 1,121,628	\$ 1,082,561	\$ 1,115,259	\$ 1,113,383	\$ 10,980,626
R-4	\$ 89,344	\$ 93,209	\$ 93,275	\$ 84,110	\$ 92,684	\$ 88,256	\$ 89,469	\$ 85,305	\$ 87,820	\$ 86,280	\$ 889,752
Total Resid.	\$ 1,219,528	\$ 1,266,209	\$ 1,269,235	\$ 1,148,451	\$ 1,272,707	\$ 1,228,953	\$ 1,265,255	\$ 1,220,157	\$ 1,257,416	\$ 1,254,174	\$ 12,402,084
G-41	\$ 516,704	\$ 539,197	\$ 540,996	\$ 490,224	\$ 542,960	\$ 522,584	\$ 530,418	\$ 503,568	\$ 514,272	\$ 513,073	\$ 5,213,997
G-42	\$ 231,832	\$ 240,418	\$ 240,749	\$ 217,679	\$ 240,952	\$ 231,472	\$ 238,317	\$ 229,739	\$ 245,475	\$ 239,235	\$ 2,355,869
G-43	\$ 40,556	\$ 43,304	\$ 42,969	\$ 38,811	\$ 42,396	\$ 40,269	\$ 41,488	\$ 40,197	\$ 39,936	\$ 40,516	\$ 410,440
G-51	\$ 71,870	\$ 74,564	\$ 74,618	\$ 67,331	\$ 74,547	\$ 71,945	\$ 73,937	\$ 71,542	\$ 71,094	\$ 73,141	\$ 724,589
G-52	\$ 63,104	\$ 65,238	\$ 65,181	\$ 58,861	\$ 65,493	\$ 63,728	\$ 66,163	\$ 64,122	\$ 67,035	\$ 66,091	\$ 645,016
G-53	\$ 27,300	\$ 27,718	\$ 27,447	\$ 24,791	\$ 26,095	\$ 25,455	\$ 26,587	\$ 25,751	\$ 28,553	\$ 28,553	\$ 268,250
G-54	\$ 21,397	\$ 22,110	\$ 21,709	\$ 19,954	\$ 22,110	\$ 20,782	\$ 21,348	\$ 20,659	\$ 21,608	\$ 21,608	\$ 213,286
Total C/I	\$ 972,763	\$ 1,012,550	\$ 1,013,668	\$ 917,652	\$ 1,014,553	\$ 976,236	\$ 998,257	\$ 955,579	\$ 987,972	\$ 982,217	\$ 9,831,448
Total All	\$ 2,192,291	\$ 2,278,759	\$ 2,282,903	\$ 2,066,103	\$ 2,287,260	\$ 2,205,189	\$ 2,263,512	\$ 2,175,736	\$ 2,245,388	\$ 2,236,391	\$ 22,233,532

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Docket DG 19-
 Revenue Decoupling Adjustment Factor
 Actual and Estimated Decoupling Year Revenues

ENERGY COMPONENT

HEADBLOCK

2018-19 Decoupling Year Weather Normalized Volume Headblock

	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-18	S&T Aug-18	S&T Total
R-1	66,792	87,822	99,362	85,620	83,304	65,051	51,933	39,449	32,291	32,765	644,390
R-3	6,221,642	9,273,573	10,904,070	9,354,740	7,899,041	4,508,297	2,467,008	1,285,515	990,721	989,518	53,894,124
R-4	491,772	735,019	873,656	741,408	632,293	360,273	194,913	104,523	79,984	78,607	4,292,449
Total Resid.	6,780,206	10,096,414	11,877,089	10,181,768	8,614,637	4,933,621	2,713,854	1,429,487	1,102,997	1,100,890	58,830,964
G-41	698,491	844,909	926,015	786,563	812,716	565,676	193,382	74,324	57,111	57,590	5,016,777
G-42	1,241,023	1,392,453	1,480,285	1,260,544	1,375,171	1,112,472	572,704	309,194	259,160	258,160	9,261,165
G-43	1,170,879	1,560,031	1,880,532	1,588,205	1,421,586	921,228	605,797	357,158	250,469	286,023	10,041,907
G-51	89,144	92,287	99,291	84,728	92,222	85,981	84,523	78,530	74,698	80,167	861,572
G-52	367,555	376,179	397,277	337,304	372,033	351,543	342,439	318,213	318,801	332,043	3,513,388
G-53	931,915	1,052,819	1,326,395	1,075,500	1,041,483	836,257	775,207	663,591	645,678	699,787	9,048,631
G-54	1,738,724	1,395,308	1,366,276	1,273,105	1,248,999	1,368,406	1,679,230	1,659,707	1,578,597	1,678,114	14,986,466
Total C/I	6,237,730	6,713,985	7,476,072	6,405,948	6,364,211	5,241,563	4,253,283	3,460,715	3,184,514	3,391,883	52,729,905
Total All	13,017,936	16,810,400	19,353,161	16,587,717	14,978,848	10,175,185	6,967,137	4,890,202	4,287,510	4,492,773	111,560,869

2018-19 Headblock Charge

	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-19	S&T Aug-19
R-1	\$ 0.3741	\$ 0.3741	\$ 0.3741	\$ 0.3741	\$ 0.3741	\$ 0.3741	\$ 0.3741	\$ 0.3741	\$ 0.3741	\$ 0.3786
R-3	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5569
R-4	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5569	\$ 0.5569
G-41	\$ 0.4566	\$ 0.4566	\$ 0.4566	\$ 0.4566	\$ 0.4566	\$ 0.4566	\$ 0.4566	\$ 0.4566	\$ 0.4621	\$ 0.4621
G-42	\$ 0.4152	\$ 0.4152	\$ 0.4152	\$ 0.4152	\$ 0.4152	\$ 0.4152	\$ 0.4152	\$ 0.4152	\$ 0.4202	\$ 0.4202
G-43	\$ 0.2552	\$ 0.2552	\$ 0.2552	\$ 0.2552	\$ 0.2552	\$ 0.2552	\$ 0.2552	\$ 0.1167	\$ 0.1181	\$ 0.1181
G-51	\$ 0.2752	\$ 0.2752	\$ 0.2752	\$ 0.2752	\$ 0.2752	\$ 0.2752	\$ 0.2752	\$ 0.2752	\$ 0.2785	\$ 0.2785
G-52	\$ 0.2363	\$ 0.2363	\$ 0.2363	\$ 0.2363	\$ 0.2363	\$ 0.2363	\$ 0.1712	\$ 0.1712	\$ 0.1733	\$ 0.1733
G-53	\$ 0.1652	\$ 0.1652	\$ 0.1652	\$ 0.1652	\$ 0.1652	\$ 0.1652	\$ 0.0792	\$ 0.0792	\$ 0.0802	\$ 0.0802
G-54	\$ 0.0630	\$ 0.0630	\$ 0.0630	\$ 0.0630	\$ 0.0630	\$ 0.0630	\$ 0.0342	\$ 0.0342	\$ 0.0346	\$ 0.0346

2018-19 Decoupling Year Weather Normalized Volume Headblock Revenue

	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-19	S&T Aug-19	S&T Total
R-1	\$ 24,988	\$ 32,856	\$ 37,173	\$ 32,032	\$ 31,165	\$ 24,337	\$ 19,429	\$ 14,759	\$ 12,227	\$ 12,406	\$ 241,372
R-3	\$ 3,422,977	\$ 5,102,066	\$ 5,999,121	\$ 5,146,722	\$ 4,345,836	\$ 2,480,341	\$ 1,357,280	\$ 707,255	\$ 551,719	\$ 551,049	\$ 29,664,365
R-4	\$ 270,560	\$ 404,388	\$ 480,662	\$ 407,903	\$ 347,870	\$ 198,212	\$ 107,236	\$ 57,505	\$ 44,542	\$ 43,775	\$ 2,362,653
Total Resid.	\$ 3,718,524	\$ 5,539,309	\$ 6,516,956	\$ 5,586,656	\$ 4,724,871	\$ 2,702,891	\$ 1,483,945	\$ 779,519	\$ 608,488	\$ 607,230	\$ 32,268,390
G-41	\$ 318,926	\$ 385,779	\$ 422,812	\$ 359,139	\$ 371,080	\$ 258,283	\$ 88,297	\$ 33,936	\$ 26,394	\$ 26,615	\$ 2,291,261
G-42	\$ 515,277	\$ 578,151	\$ 614,620	\$ 523,383	\$ 570,976	\$ 461,902	\$ 237,789	\$ 128,378	\$ 108,911	\$ 108,490	\$ 3,847,878
G-43	\$ 298,807	\$ 398,119	\$ 479,911	\$ 405,309	\$ 362,788	\$ 235,097	\$ 70,695	\$ 41,679	\$ 29,585	\$ 33,784	\$ 2,355,774
G-51	\$ 24,531	\$ 25,396	\$ 27,324	\$ 23,316	\$ 25,378	\$ 23,661	\$ 23,260	\$ 21,610	\$ 20,807	\$ 22,330	\$ 237,614
G-52	\$ 86,861	\$ 88,899	\$ 93,885	\$ 79,712	\$ 87,920	\$ 83,077	\$ 58,629	\$ 54,481	\$ 55,242	\$ 57,537	\$ 746,244
G-53	\$ 153,908	\$ 173,876	\$ 219,058	\$ 177,622	\$ 172,004	\$ 138,110	\$ 61,431	\$ 52,586	\$ 51,759	\$ 56,097	\$ 1,256,451
G-54	\$ 109,526	\$ 87,894	\$ 86,065	\$ 80,196	\$ 78,677	\$ 86,199	\$ 57,466	\$ 56,798	\$ 54,644	\$ 58,089	\$ 755,554
Total C/I	\$ 1,507,838	\$ 1,738,115	\$ 1,943,674	\$ 1,648,676	\$ 1,668,823	\$ 1,286,330	\$ 597,566	\$ 389,469	\$ 347,342	\$ 362,942	\$ 11,490,775
Total All	\$ 5,226,362	\$ 7,277,424	\$ 8,460,629	\$ 7,235,332	\$ 6,393,695	\$ 3,989,221	\$ 2,081,511	\$ 1,168,988	\$ 955,830	\$ 970,173	\$ 43,759,165

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Docket DG 19-
 Revenue Decoupling Adjustment Factor
 Actual and Estimated Decoupling Year Revenues

TAILBLOCK

2018-19 Decoupling Year Weather Normalized Volume Tailblock											
	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-18	S&T Aug-18	S&T Total
R-1	-	-	-	-	-	-	-	-	-	-	-
R-3	-	-	-	-	-	-	-	-	-	-	-
R-4	-	-	-	-	-	-	-	-	-	-	-
Total Resid.	-	-	-	-	-	-	-	-	-	-	-
G-41	1,938,614	3,343,950	4,166,822	3,576,457	2,740,654	1,255,821	668,596	279,273	188,281	175,600	18,334,069
G-42	2,451,369	4,101,210	4,969,759	4,330,009	3,389,239	1,645,906	909,929	385,250	248,064	272,512	22,703,247
G-43	-	-	-	-	-	-	-	-	-	-	-
G-51	263,711	349,540	410,409	357,324	332,444	250,801	213,310	170,693	144,292	154,724	2,647,248
G-52	488,052	651,357	760,745	660,694	606,499	430,589	314,228	245,164	222,157	241,924	4,621,407
G-53	-	-	-	-	-	-	-	-	-	-	-
G-54	-	-	-	-	-	-	-	-	-	-	-
Total C/I	5,141,746	8,446,056	10,307,734	8,924,483	7,068,836	3,583,117	2,106,064	1,080,380	802,794	844,759	48,305,971
Total All	5,141,746	8,446,056	10,307,734	8,924,483	7,068,836	3,583,117	2,106,064	1,080,380	802,794	844,759	48,305,971

2018-19 Tailblock Charge											
	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-19	S&T Aug-19	
R-1	\$ 0.3741	\$ 0.3741	\$ 0.3741	\$ 0.3741	\$ 0.3741	\$ 0.3741	\$ 0.3741	\$ 0.3741	\$ 0.3786	\$ 0.3786	
R-3	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5569	\$ 0.5569	
R-4	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5569	\$ 0.5569	
G-41	\$ 0.3067	\$ 0.3067	\$ 0.3067	\$ 0.3067	\$ 0.3067	\$ 0.3067	\$ 0.3067	\$ 0.3067	\$ 0.3104	\$ 0.3104	
G-42	\$ 0.2766	\$ 0.2766	\$ 0.2766	\$ 0.2766	\$ 0.2766	\$ 0.2766	\$ 0.2766	\$ 0.2766	\$ 0.2800	\$ 0.2800	
G-43	\$ 0.2552	\$ 0.2552	\$ 0.2552	\$ 0.2552	\$ 0.2552	\$ 0.2552	\$ 0.2552	\$ 0.2552	\$ 0.1167	\$ 0.1167	
G-51	\$ 0.1789	\$ 0.1789	\$ 0.1789	\$ 0.1789	\$ 0.1789	\$ 0.1789	\$ 0.1789	\$ 0.1789	\$ 0.1811	\$ 0.1811	
G-52	\$ 0.1574	\$ 0.1574	\$ 0.1574	\$ 0.1574	\$ 0.1574	\$ 0.1574	\$ 0.1574	\$ 0.1574	\$ 0.0973	\$ 0.0973	
G-53	\$ 0.1652	\$ 0.1652	\$ 0.1652	\$ 0.1652	\$ 0.1652	\$ 0.1652	\$ 0.1652	\$ 0.1652	\$ 0.0802	\$ 0.0802	
G-54	\$ 0.0630	\$ 0.0630	\$ 0.0630	\$ 0.0630	\$ 0.0630	\$ 0.0630	\$ 0.0630	\$ 0.0630	\$ 0.0346	\$ 0.0346	

2018-19 Decoupling Year Weather Normalized Volume Tailblock Revenue											
	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-19	S&T Aug-19	S&T Total
R-1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
R-3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
R-4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Resid.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
G-41	\$ 594,541	\$ 1,025,534	\$ 1,277,895	\$ 1,096,840	\$ 840,513	\$ 385,139	\$ 205,047	\$ 85,648	\$ 58,448	\$ 54,511	\$ 5,624,116
G-42	\$ 678,050	\$ 1,134,397	\$ 1,374,638	\$ 1,197,683	\$ 937,465	\$ 455,258	\$ 251,687	\$ 106,560	\$ 69,448	\$ 76,293	\$ 6,281,480
G-43	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-51	\$ 47,173	\$ 62,526	\$ 73,415	\$ 63,919	\$ 59,468	\$ 44,864	\$ 38,157	\$ 30,534	\$ 26,128	\$ 28,017	\$ 474,200
G-52	\$ 76,809	\$ 102,510	\$ 119,726	\$ 103,980	\$ 95,451	\$ 67,766	\$ 30,579	\$ 23,858	\$ 21,879	\$ 23,825	\$ 666,383
G-53	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-54	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total C/I	\$ 1,396,573	\$ 2,324,967	\$ 2,845,673	\$ 2,462,421	\$ 1,932,897	\$ 953,028	\$ 525,471	\$ 246,601	\$ 175,902	\$ 182,645	\$ 13,046,179
Total All	\$ 1,396,573	\$ 2,324,967	\$ 2,845,673	\$ 2,462,421	\$ 1,932,897	\$ 953,028	\$ 525,471	\$ 246,601	\$ 175,902	\$ 182,645	\$ 13,046,179

HEADBLOCK + TAILBLOCK

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Docket DG 19-
 Revenue Decoupling Adjustment Factor
 Actual and Estimated Decoupling Year Revenues

2018-19 Decoupling Year Weather Normalized Volume Headblock + Tailblock												
	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-18	S&T Aug-18	S&T Total	
R-1	66,792	87,822	99,362	85,620	83,304	65,051	51,933	39,449	32,291	32,765	644,390	
R-3	6,221,642	9,273,573	10,904,070	9,354,740	7,899,041	4,508,297	2,467,008	1,285,515	990,721	989,518	53,894,124	
R-4	491,772	735,019	873,656	741,408	632,293	360,273	194,913	104,523	79,984	78,607	4,292,449	
Total Resid.	6,780,206	10,096,414	11,877,089	10,181,768	8,614,637	4,933,621	2,713,854	1,429,487	1,102,997	1,100,890	58,830,964	
G-41	2,637,105	4,188,859	5,092,837	4,363,020	3,553,370	1,821,497	861,978	353,597	245,393	233,190	23,350,846	
G-42	3,692,391	5,493,662	6,450,044	5,590,553	4,764,411	2,758,378	1,482,633	694,444	507,224	530,672	31,964,413	
G-43	1,170,879	1,560,031	1,880,532	1,588,205	1,421,586	921,228	605,797	357,158	250,469	286,023	10,041,907	
G-51	352,855	441,827	509,700	442,052	424,666	336,783	297,833	249,223	218,990	234,891	3,508,820	
G-52	855,608	1,027,535	1,158,022	997,997	978,532	782,132	656,667	563,376	540,958	573,966	8,134,795	
G-53	931,915	1,052,819	1,326,395	1,075,500	1,041,483	836,257	775,207	663,591	645,678	699,787	9,048,631	
G-54	1,738,724	1,395,308	1,366,276	1,273,105	1,248,999	1,368,406	1,679,230	1,659,707	1,578,597	1,678,114	14,986,466	
Total C/I	11,379,477	15,160,041	17,783,806	15,330,432	13,433,046	8,824,681	6,359,347	4,541,096	3,987,308	4,236,643	101,035,876	
Total All	18,159,682	25,256,456	29,660,895	25,512,200	22,047,684	13,758,302	9,073,201	5,970,583	5,090,305	5,337,533	159,866,840	
2018-19 Decoupling Year Weather Normalized Volume Headblock + Tailblock Revenue												
	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-19	S&T Aug-19	S&T Total	
R-1	\$ 24,988	\$ 32,856	\$ 37,173	\$ 32,032	\$ 31,165	\$ 24,337	\$ 19,429	\$ 14,759	\$ 12,227	\$ 12,406	\$ 241,372	
R-3	\$ 3,422,977	\$ 5,102,066	\$ 5,999,121	\$ 5,146,722	\$ 4,345,836	\$ 2,480,341	\$ 1,357,280	\$ 707,255	\$ 551,719	\$ 551,049	\$ 29,664,365	
R-4	\$ 270,560	\$ 404,388	\$ 480,662	\$ 407,903	\$ 347,870	\$ 198,212	\$ 107,236	\$ 57,505	\$ 44,542	\$ 43,775	\$ 2,362,653	
Total Resid.	\$ 3,718,524	\$ 5,539,309	\$ 6,516,956	\$ 5,586,656	\$ 4,724,871	\$ 2,702,891	\$ 1,483,945	\$ 779,519	\$ 608,488	\$ 607,230	\$ 32,268,390	
G-41	\$ 913,467	\$ 1,411,313	\$ 1,700,707	\$ 1,455,979	\$ 1,211,593	\$ 643,423	\$ 293,344	\$ 119,584	\$ 84,842	\$ 81,126	\$ 7,915,378	
G-42	\$ 1,193,327	\$ 1,712,548	\$ 1,989,258	\$ 1,721,065	\$ 1,508,442	\$ 917,161	\$ 489,476	\$ 234,939	\$ 178,359	\$ 184,783	\$ 10,129,358	
G-43	\$ 298,807	\$ 398,119	\$ 479,911	\$ 405,309	\$ 362,788	\$ 235,097	\$ 70,695	\$ 41,679	\$ 29,585	\$ 33,784	\$ 2,355,774	
G-51	\$ 71,704	\$ 87,923	\$ 100,738	\$ 87,235	\$ 84,847	\$ 68,525	\$ 61,417	\$ 52,144	\$ 46,934	\$ 50,346	\$ 711,813	
G-52	\$ 163,671	\$ 191,410	\$ 213,611	\$ 183,692	\$ 183,370	\$ 150,843	\$ 89,208	\$ 78,339	\$ 77,120	\$ 81,362	\$ 1,412,626	
G-53	\$ 153,908	\$ 173,876	\$ 219,058	\$ 177,622	\$ 172,004	\$ 138,110	\$ 61,431	\$ 52,586	\$ 51,759	\$ 56,097	\$ 1,256,451	
G-54	\$ 109,526	\$ 87,894	\$ 86,065	\$ 80,196	\$ 78,677	\$ 86,199	\$ 57,466	\$ 56,798	\$ 54,644	\$ 58,089	\$ 755,554	
Total C/I	\$ 2,904,411	\$ 4,063,082	\$ 4,789,347	\$ 4,111,097	\$ 3,601,720	\$ 2,239,358	\$ 1,123,037	\$ 636,070	\$ 523,244	\$ 545,588	\$ 24,536,954	
Total All	\$ 6,622,935	\$ 9,602,391	\$ 11,306,303	\$ 9,697,754	\$ 8,326,592	\$ 4,942,248	\$ 2,606,982	\$ 1,415,589	\$ 1,131,732	\$ 1,152,818	\$ 56,805,344	
TOTAL REVENUE												
2018-19 Decoupling Year Weather Normalized Base Revenue												
	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-19	S&T Aug-19	S&T Total	
R-1	\$ 77,439	\$ 87,039	\$ 91,410	\$ 80,964	\$ 85,368	\$ 76,741	\$ 73,587	\$ 67,049	\$ 66,563	\$ 66,917	\$ 773,078	
R-3	\$ 4,500,710	\$ 6,220,883	\$ 7,120,844	\$ 6,162,130	\$ 5,471,656	\$ 3,568,634	\$ 2,478,908	\$ 1,789,816	\$ 1,666,978	\$ 1,664,432	\$ 40,644,991	
R-4	\$ 359,903	\$ 497,596	\$ 573,936	\$ 492,013	\$ 440,554	\$ 286,468	\$ 196,705	\$ 142,811	\$ 132,362	\$ 130,055	\$ 3,252,404	
Total Resid.	\$ 4,938,052	\$ 6,805,518	\$ 7,786,191	\$ 6,735,107	\$ 5,997,578	\$ 3,931,843	\$ 2,749,200	\$ 1,999,677	\$ 1,865,904	\$ 1,861,404	\$ 44,670,474	
G-41	\$ 1,430,171	\$ 1,950,510	\$ 2,241,703	\$ 1,946,203	\$ 1,754,553	\$ 1,166,007	\$ 823,762	\$ 623,152	\$ 599,114	\$ 594,200	\$ 13,129,375	
G-42	\$ 1,425,159	\$ 1,952,967	\$ 2,230,006	\$ 1,938,744	\$ 1,749,393	\$ 1,148,633	\$ 727,793	\$ 464,678	\$ 423,835	\$ 424,018	\$ 12,485,227	
G-43	\$ 339,363	\$ 441,423	\$ 522,880	\$ 444,120	\$ 405,183	\$ 275,366	\$ 112,182	\$ 81,876	\$ 69,520	\$ 74,301	\$ 2,766,214	
G-51	\$ 143,575	\$ 162,487	\$ 175,356	\$ 154,566	\$ 159,394	\$ 140,470	\$ 135,354	\$ 123,686	\$ 118,028	\$ 123,487	\$ 1,436,403	
G-52	\$ 226,775	\$ 256,647	\$ 278,792	\$ 242,553	\$ 248,864	\$ 214,572	\$ 155,371	\$ 142,461	\$ 144,155	\$ 147,453	\$ 2,057,643	
G-53	\$ 181,208	\$ 201,594	\$ 246,505	\$ 202,413	\$ 198,099	\$ 163,565	\$ 88,018	\$ 78,337	\$ 80,312	\$ 84,650	\$ 1,524,700	
G-54	\$ 130,923	\$ 110,004	\$ 107,773	\$ 100,150	\$ 100,788	\$ 106,981	\$ 78,814	\$ 77,458	\$ 76,252	\$ 79,697	\$ 968,840	
Total C/I	\$ 3,877,174	\$ 5,075,631	\$ 5,803,015	\$ 5,028,749	\$ 4,616,274	\$ 3,215,593	\$ 2,121,294	\$ 1,591,649	\$ 1,511,216	\$ 1,527,805	\$ 34,368,401	
Total All	\$ 8,815,226	\$ 11,881,150	\$ 13,589,206	\$ 11,763,856	\$ 10,613,852	\$ 7,147,437	\$ 4,870,494	\$ 3,591,326	\$ 3,377,119	\$ 3,389,209	\$ 79,038,875	

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Docket DG 19-_____
Revenue Decoupling Adjustment Factor

Docket No. DG 21-130
Exhibit 13
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(1) (2) (3)

Residential Revenue Decoupling Adjustment Factor

1. Allowed Base Revenue	\$	(1,932,224)
2. less: Actual and Estimated Base Revenue	\$	-
3. Revenue Deficiency / (Excess)	\$	(1,932,224)
4. divided by: Forecasted Residential Sales	\$	-
5. Residential Revenue Decoupling Adjustment Factor	\$	<u>(0.0295)</u>

Commercial Revenue Decoupling Adjustment Factor

6. Allowed Base Revenue	\$	-
7. less: Actual and Estimated Base Revenue	\$	-
8. Revenue Deficiency / (Excess)	\$	-
9. divided by: Forecasted Commercial Sales	\$	-
10. Commercial Revenue Decoupling Adjustment Factor	\$	-
11. TOTAL Revenue Deficiency / (Excess)	\$	<u>(1,932,224)</u>

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Docket DG 19-
 Revenue Decoupling Adjustment Factor
 Allowed Decoupling Year Revenues

EnergyNorth Natural Gas Inc

2018-19 Customers (Equivalent Bills)

	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-18	S&T Aug-18	S&T Total
R-1	-	-	-	-	-	-	-	-	-	-	-
R-3	-	-	-	-	-	-	-	-	-	-	-
R-4	-	-	-	-	-	-	-	-	-	-	-
Total Resid.	-	-	-	-	-	-	-	-	-	-	-
G-41	-	-	-	-	-	-	-	-	-	-	-
G-42	-	-	-	-	-	-	-	-	-	-	-
G-43	-	-	-	-	-	-	-	-	-	-	-
G-51	-	-	-	-	-	-	-	-	-	-	-
G-52	-	-	-	-	-	-	-	-	-	-	-
G-53	-	-	-	-	-	-	-	-	-	-	-
G-54	-	-	-	-	-	-	-	-	-	-	-
Total C/I	-	-	-	-	-	-	-	-	-	-	-
Total All	-	-	-	-	-	-	-	-	-	-	-

2018-19 Benchmark Base Revenue Per Bill

	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-19	S&T Aug-19
R-1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
R-3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
R-4	\$ (35.733)	\$ (47.905)	\$ (55.392)	\$ (52.795)	\$ (43.473)	\$ (25.838)	\$ (20.247)	\$ (15.187)	\$ (13.616)	\$ (13.623)
G-41	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-42	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-43	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-51	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-52	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-53	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-54	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

2018-19 Allowed Base Revenue

	S&T Nov-18	S&T Dec-18	S&T Jan-19	S&T Feb-19	S&T Mar-19	S&T Apr-19	S&T May-19	S&T Jun-19	S&T Jul-19	S&T Aug-19	S&T Total
R-1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
R-3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
R-4	\$ (212,531)	\$ (297,256)	\$ (343,959)	\$ (295,619)	\$ (268,237)	\$ (151,811)	\$ (120,594)	\$ (86,249)	\$ (78,654)	\$ (77,313)	\$ (1,932,224)
Total Resid.	\$ (212,531)	\$ (297,256)	\$ (343,959)	\$ (295,619)	\$ (268,237)	\$ (151,811)	\$ (120,594)	\$ (86,249)	\$ (78,654)	\$ (77,313)	\$ (1,932,224)
G-41	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-42	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-43	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-51	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-52	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-53	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-54	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total C/I	\$ -	\$ -	\$ -	\$ -	\$ -						
Total All	\$ (212,531)	\$ (297,256)	\$ (343,959)	\$ (295,619)	\$ (268,237)	\$ (151,811)	\$ (120,594)	\$ (86,249)	\$ (78,654)	\$ (77,313)	\$ (1,932,224)

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Docket DG 20-
Revenue Decoupling Adjustment Factor

Docket No. DG 21-130
Exhibit 13
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(1) (2) (3)

Residential Revenue Decoupling Adjustment Factor

1. Allowed Base Revenue	\$ 49,147,752	
2. less: Actual and Estimated Base Revenue	<u>50,205,891</u>	
3. Revenue Deficiency / (Excess)	\$ (1,058,139)	
4. divided by: Forecasted Residential Sales	<u>63,612,499</u>	
5. Residential Revenue Decoupling Adjustment Factor	\$ <u>(0.0166)</u>	

Commercial Revenue Decoupling Adjustment Factor

6. Allowed Base Revenue	\$ 36,558,043	
7. less: Actual and Estimated Base Revenue	<u>38,373,247</u>	
8. Revenue Deficiency / (Excess)	\$ (1,815,203)	
9. divided by: Forecasted Commercial Sales	<u>111,244,381</u>	
10. Commercial Revenue Decoupling Adjustment Factor	\$ <u>(0.0163)</u>	
11. TOTAL Revenue Deficiency / (Excess)	<u>\$ (2,873,342)</u>	

Liberty Utilities (EnergyNorth Natural Gas) Corp.

Docket DG 20-

Revenue Decoupling Adjustment Factor
Allowed Decoupling Year Revenues

EnergyNorth Natural Gas Inc

2019-20 Customers (Equivalent Bills)

	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19	S&T Total
R-1	3,497	3,611	3,503	3,627	3,630	3,403	3,645	3,520	3,633	3,514	3,605	3,613	42,801
R-3	72,511	75,302	73,218	76,274	76,471	71,695	76,753	74,366	76,831	73,589	74,635	74,652	896,299
R-4	5,314	5,687	5,939	5,943	5,921	5,522	5,814	5,486	5,610	5,356	5,713	5,574	67,879
Total Resid.	81,322	84,600	82,660	85,844	86,022	80,620	86,212	83,372	86,074	82,459	83,953	83,840	1,006,979
G-41	8,868	9,414	9,424	9,851	9,899	9,280	9,918	9,534	9,722	9,135	9,210	9,149	113,403
G-42	1,409	1,467	1,434	1,483	1,487	1,394	1,492	1,442	1,486	1,419	1,441	1,457	17,411
G-43	56	59	58	64	63	59	63	61	63	60	59	56	721
G-51	1,306	1,353	1,311	1,350	1,347	1,260	1,346	1,298	1,340	1,272	1,345	1,357	15,886
G-52	392	409	401	417	419	393	421	406	419	402	401	406	4,886
G-53	33	34	33	34	34	32	34	33	34	33	34	33	402
G-54	26	27	26	28	29	26	29	28	28	27	28	27	329
Total C/I	12,091	12,763	12,687	13,226	13,279	12,443	13,302	12,802	13,092	12,348	12,519	12,485	153,037
Total All	93,413	97,363	95,347	99,070	99,300	93,063	99,514	96,174	99,166	94,807	96,472	96,325	1,160,016

2019-20 Benchmark Base Revenue Per Bill

	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19
R-1	\$ 18,859	\$ 20,743	\$ 23,630	\$ 25,588	\$ 26,326	\$ 26,064	\$ 24,359	\$ 21,665	\$ 20,932	\$ 19,551	\$ 18,941	\$ 18,879
R-3	\$ 25,472	\$ 36,363	\$ 58,483	\$ 78,412	\$ 89,883	\$ 84,877	\$ 72,716	\$ 45,931	\$ 33,622	\$ 25,883	\$ 23,299	\$ 23,420
R-4	\$ 25,472	\$ 36,363	\$ 58,483	\$ 78,412	\$ 89,883	\$ 84,877	\$ 72,716	\$ 45,931	\$ 33,622	\$ 25,883	\$ 23,299	\$ 23,420
G-41	\$ 72,158	\$ 91,992	\$ 141,061	\$ 187,336	\$ 213,824	\$ 204,320	\$ 174,282	\$ 120,172	\$ 89,749	\$ 73,104	\$ 68,903	\$ 68,518
G-42	\$ 350,138	\$ 536,208	\$ 831,437	\$ 1,139,248	\$ 1,275,090	\$ 1,181,586	\$ 995,503	\$ 692,940	\$ 478,158	\$ 353,842	\$ 302,305	\$ 295,617
G-43	\$ 1,571,363	\$ 1,527,764	\$ 6,630,216	\$ 7,593,280	\$ 8,769,856	\$ 7,718,973	\$ 6,633,048	\$ 4,338,262	\$ 2,120,739	\$ 1,477,930	\$ 1,300,970	\$ 1,336,424
G-51	\$ 89,704	\$ 101,446	\$ 117,110	\$ 128,843	\$ 132,447	\$ 127,517	\$ 117,280	\$ 101,009	\$ 95,963	\$ 86,858	\$ 87,995	\$ 88,807
G-52	\$ 364,914	\$ 437,330	\$ 635,041	\$ 672,436	\$ 670,683	\$ 657,599	\$ 601,232	\$ 521,003	\$ 376,781	\$ 342,142	\$ 352,146	\$ 363,849
G-53	\$ 2,344,638	\$ 2,881,035	\$ 5,288,039	\$ 6,482,182	\$ 5,443,345	\$ 5,509,426	\$ 5,382,287	\$ 4,702,462	\$ 2,553,307	\$ 2,163,553	\$ 2,187,837	\$ 2,390,070
G-54	\$ 2,869,470	\$ 3,362,856	\$ 4,517,444	\$ 5,041,273	\$ 4,376,519	\$ 3,774,254	\$ 2,908,047	\$ 2,387,867	\$ 2,028,236	\$ 2,391,070	\$ 2,406,224	\$ 2,727,255

2019-20 Allowed Base Revenue

	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19	S&T Total
R-1	\$ 65,957	\$ 74,907	\$ 82,768	\$ 92,799	\$ 95,563	\$ 88,684	\$ 88,792	\$ 76,262	\$ 76,047	\$ 68,708	\$ 68,278	\$ 68,211	\$ 946,976
R-3	\$ 1,846,975	\$ 2,738,202	\$ 4,282,002	\$ 5,980,759	\$ 6,873,453	\$ 6,085,300	\$ 5,581,209	\$ 3,415,684	\$ 2,583,185	\$ 1,904,687	\$ 1,738,889	\$ 1,748,397	\$ 44,778,744
R-4	\$ 135,345	\$ 206,789	\$ 347,344	\$ 466,027	\$ 532,158	\$ 468,726	\$ 422,743	\$ 251,982	\$ 188,627	\$ 138,633	\$ 133,101	\$ 130,556	\$ 3,422,032
Total Resid.	\$ 2,048,277	\$ 3,019,897	\$ 4,712,114	\$ 6,539,586	\$ 7,501,174	\$ 6,642,710	\$ 6,092,744	\$ 3,743,929	\$ 2,847,859	\$ 2,112,029	\$ 1,940,268	\$ 1,947,165	\$ 49,147,752
G-41	\$ 639,934	\$ 866,012	\$ 1,329,324	\$ 1,845,424	\$ 2,116,677	\$ 1,896,072	\$ 1,728,486	\$ 1,145,681	\$ 872,510	\$ 667,785	\$ 634,584	\$ 626,868	\$ 14,369,358
G-42	\$ 493,300	\$ 786,658	\$ 1,192,054	\$ 1,689,567	\$ 1,895,734	\$ 1,646,593	\$ 1,484,906	\$ 999,164	\$ 710,642	\$ 502,140	\$ 435,741	\$ 430,853	\$ 12,267,352
G-43	\$ 88,677	\$ 90,189	\$ 387,205	\$ 482,174	\$ 556,009	\$ 457,992	\$ 419,430	\$ 264,634	\$ 132,900	\$ 88,085	\$ 76,627	\$ 74,662	\$ 3,118,584
G-51	\$ 117,144	\$ 137,262	\$ 153,583	\$ 173,920	\$ 178,445	\$ 160,626	\$ 157,868	\$ 131,160	\$ 128,557	\$ 110,508	\$ 118,379	\$ 120,531	\$ 1,687,983
G-52	\$ 143,140	\$ 178,850	\$ 254,475	\$ 280,270	\$ 280,973	\$ 258,723	\$ 252,859	\$ 211,546	\$ 157,870	\$ 137,540	\$ 141,230	\$ 147,704	\$ 2,445,180
G-53	\$ 77,295	\$ 98,243	\$ 174,505	\$ 221,042	\$ 185,617	\$ 175,751	\$ 183,715	\$ 155,338	\$ 87,153	\$ 71,397	\$ 75,116	\$ 78,952	\$ 1,584,123
G-54	\$ 74,606	\$ 90,348	\$ 117,454	\$ 140,483	\$ 126,627	\$ 96,329	\$ 83,977	\$ 92,060	\$ 57,331	\$ 64,559	\$ 68,417	\$ 73,272	\$ 1,085,462
Total C/I	\$ 1,634,096	\$ 2,247,562	\$ 3,608,600	\$ 4,832,881	\$ 5,340,082	\$ 4,692,086	\$ 4,311,241	\$ 2,999,583	\$ 2,146,964	\$ 1,642,014	\$ 1,550,094	\$ 1,552,841	\$ 36,558,043
Total All	\$ 3,682,373	\$ 5,267,459	\$ 8,320,714	\$ 11,372,466	\$ 12,841,256	\$ 11,334,797	\$ 10,403,985	\$ 6,743,511	\$ 4,994,823	\$ 3,754,043	\$ 3,490,362	\$ 3,500,006	\$ 85,705,796

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Docket DG 20-_____
Revenue Decoupling Adjustment Factor

(1) (2) (3)

Residential Revenue Decoupling Adjustment Factor

1. Allowed Base Revenue	\$ 47,055,148	
2. less: Actual and Estimated Base Revenue	<u>50,205,891</u>	
3. Revenue Deficiency / (Excess)	\$ (3,150,744)	
4. divided by: Forecasted Residential Sales	<u>63,612,499</u>	
5. Residential Revenue Decoupling Adjustment Factor	\$ <u>(0.0495)</u>	

Commercial Revenue Decoupling Adjustment Factor

6. Allowed Base Revenue	\$ 36,558,043	
7. less: Actual and Estimated Base Revenue	<u>38,373,247</u>	
8. Revenue Deficiency / (Excess)	\$ (1,815,203)	
9. divided by: Forecasted Commercial Sales	<u>111,244,381</u>	
10. Commercial Revenue Decoupling Adjustment Factor	\$ <u>(0.0163)</u>	
11. TOTAL Revenue Deficiency / (Excess)	\$ <u>(4,965,947)</u>	

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Docket DG 20-_____
 Revenue Decoupling Adjustment Factor
 Allowed Decoupling Year Revenues

EnergyNorth Natural Gas Inc

2019-20 Customers (Equivalent Bills)

	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19	S&T Total
R-1	3,497	3,611	3,503	3,627	3,630	3,403	3,645	3,520	3,633	3,514	3,605	3,613	42,801
R-3	72,511	75,302	73,218	76,274	76,471	71,695	76,753	74,366	76,831	73,589	74,635	74,652	896,299
R-4	5,314	5,687	5,939	5,943	5,921	5,522	5,814	5,486	5,610	5,356	5,713	5,574	67,879
Total Resid.	81,322	84,600	82,660	85,844	86,022	80,620	86,212	83,372	86,074	82,459	83,953	83,840	1,006,979
G-41	8,868	9,414	9,424	9,851	9,899	9,280	9,918	9,534	9,722	9,135	9,210	9,149	113,403
G-42	1,409	1,467	1,434	1,483	1,487	1,394	1,492	1,442	1,486	1,419	1,441	1,457	17,411
G-43	56	59	58	64	63	59	63	61	63	60	59	56	721
G-51	1,306	1,353	1,311	1,350	1,347	1,260	1,346	1,298	1,340	1,272	1,345	1,357	15,886
G-52	392	409	401	417	419	393	421	406	419	402	401	406	4,886
G-53	33	34	33	34	34	32	34	33	34	33	34	33	402
G-54	26	27	26	28	29	26	29	28	28	27	28	27	329
Total C/I	12,091	12,763	12,687	13,226	13,279	12,443	13,302	12,802	13,092	12,348	12,519	12,485	153,037
Total All	93,413	97,363	95,347	99,070	99,300	93,063	99,514	96,174	99,166	94,807	96,472	96,325	1,160,016

2019-20 Benchmark Base Revenue Per Bill

	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19
R-1	\$ 18,859	\$ 20,743	\$ 23,630	\$ 25,588	\$ 26,326	\$ 26,064	\$ 24,359	\$ 21,665	\$ 20,932	\$ 19,551	\$ 18,941	\$ 18,879
R-3	\$ 25,472	\$ 36,363	\$ 58,483	\$ 78,412	\$ 89,883	\$ 84,877	\$ 72,716	\$ 45,931	\$ 33,622	\$ 25,883	\$ 23,299	\$ 23,420
R-4	\$ 9,916	\$ 14,057	\$ 22,321	\$ 29,930	\$ 33,822	\$ 31,446	\$ 28,720	\$ 19,784	\$ 13,134	\$ 10,516	\$ 9,417	\$ 9,531
G-41	\$ 72,158	\$ 91,992	\$ 141,061	\$ 187,336	\$ 213,824	\$ 204,320	\$ 174,282	\$ 120,172	\$ 89,749	\$ 73,104	\$ 68,903	\$ 68,518
G-42	\$ 350,138	\$ 536,208	\$ 831,437	\$ 1,139,248	\$ 1,275,090	\$ 1,181,586	\$ 995,503	\$ 692,940	\$ 478,158	\$ 353,842	\$ 302,305	\$ 295,617
G-43	\$ 1,571,363	\$ 1,527,764	\$ 6,630,216	\$ 7,593,280	\$ 8,769,856	\$ 7,718,973	\$ 6,633,048	\$ 4,338,262	\$ 2,120,739	\$ 1,477,930	\$ 1,300,970	\$ 1,336,424
G-51	\$ 89,704	\$ 101,446	\$ 117,110	\$ 128,843	\$ 132,447	\$ 127,517	\$ 117,280	\$ 101,009	\$ 95,963	\$ 86,858	\$ 87,995	\$ 88,807
G-52	\$ 364,914	\$ 437,330	\$ 635,041	\$ 672,436	\$ 670,683	\$ 657,599	\$ 601,232	\$ 521,003	\$ 376,781	\$ 342,142	\$ 352,146	\$ 363,849
G-53	\$ 2,344,638	\$ 2,881,035	\$ 5,288,039	\$ 6,482,182	\$ 5,443,345	\$ 5,509,426	\$ 5,382,287	\$ 4,702,462	\$ 2,553,307	\$ 2,163,553	\$ 2,187,837	\$ 2,390,070
G-54	\$ 2,869,470	\$ 3,362,856	\$ 4,517,444	\$ 5,041,273	\$ 4,376,519	\$ 3,774,254	\$ 2,908,047	\$ 2,387,867	\$ 2,028,236	\$ 2,391,070	\$ 2,406,224	\$ 2,727,255

2019-20 Allowed Base Revenue

	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19	S&T Total
R-1	\$ 65,957	\$ 74,907	\$ 82,768	\$ 92,799	\$ 95,563	\$ 88,684	\$ 88,792	\$ 76,262	\$ 76,047	\$ 68,708	\$ 68,278	\$ 68,211	\$ 946,976
R-3	\$ 1,846,975	\$ 2,738,202	\$ 4,282,002	\$ 5,980,759	\$ 6,873,453	\$ 6,085,300	\$ 5,581,209	\$ 3,415,684	\$ 2,583,185	\$ 1,904,687	\$ 1,738,889	\$ 1,748,397	\$ 44,778,744
R-4	\$ 52,692	\$ 79,937	\$ 132,570	\$ 177,882	\$ 200,249	\$ 173,658	\$ 166,968	\$ 108,535	\$ 73,683	\$ 56,324	\$ 53,796	\$ 53,132	\$ 1,329,427
Total Resid.	\$ 1,965,623	\$ 2,893,046	\$ 4,497,340	\$ 6,251,440	\$ 7,169,264	\$ 6,347,643	\$ 5,836,969	\$ 3,600,482	\$ 2,732,916	\$ 2,029,720	\$ 1,860,963	\$ 1,869,741	\$ 47,055,148
G-41	\$ 639,934	\$ 866,012	\$ 1,329,324	\$ 1,845,424	\$ 2,116,677	\$ 1,896,072	\$ 1,728,486	\$ 1,145,681	\$ 872,510	\$ 667,785	\$ 634,584	\$ 626,868	\$ 14,369,358
G-42	\$ 493,300	\$ 786,658	\$ 1,192,054	\$ 1,689,567	\$ 1,895,734	\$ 1,646,593	\$ 1,484,906	\$ 999,164	\$ 710,642	\$ 502,140	\$ 435,741	\$ 430,853	\$ 12,267,352
G-43	\$ 88,677	\$ 90,189	\$ 387,205	\$ 482,174	\$ 556,009	\$ 457,992	\$ 419,430	\$ 264,634	\$ 132,900	\$ 88,085	\$ 76,627	\$ 74,662	\$ 3,118,584
G-51	\$ 117,144	\$ 137,262	\$ 153,583	\$ 173,920	\$ 178,445	\$ 160,626	\$ 157,868	\$ 131,160	\$ 128,557	\$ 110,508	\$ 118,379	\$ 120,531	\$ 1,687,983
G-52	\$ 143,140	\$ 178,850	\$ 254,475	\$ 280,270	\$ 280,973	\$ 258,723	\$ 252,859	\$ 211,546	\$ 157,870	\$ 137,540	\$ 141,230	\$ 147,704	\$ 2,445,180
G-53	\$ 77,295	\$ 98,243	\$ 174,505	\$ 221,042	\$ 185,617	\$ 175,751	\$ 183,715	\$ 155,338	\$ 87,153	\$ 71,397	\$ 75,116	\$ 78,952	\$ 1,584,123
G-54	\$ 74,606	\$ 90,348	\$ 117,454	\$ 140,483	\$ 126,627	\$ 96,329	\$ 83,977	\$ 92,060	\$ 57,331	\$ 64,559	\$ 68,417	\$ 73,272	\$ 1,085,462
Total C/I	\$ 1,634,096	\$ 2,247,562	\$ 3,608,600	\$ 4,832,881	\$ 5,340,082	\$ 4,692,086	\$ 4,311,241	\$ 2,999,583	\$ 2,146,964	\$ 1,642,014	\$ 1,550,094	\$ 1,552,841	\$ 36,558,043
Total All	\$ 3,599,719	\$ 5,140,608	\$ 8,105,940	\$ 11,084,321	\$ 12,509,347	\$ 11,039,729	\$ 10,148,210	\$ 6,600,065	\$ 4,879,879	\$ 3,671,734	\$ 3,411,057	\$ 3,422,582	\$ 83,613,191

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Docket DG 20-_____
 Revenue Decoupling Adjustment Factor
 Actual and Estimated Decoupling Year Revenues

SALES AND TRANSPORT DATA

CUSTOMER COMPONENT

EnergyNorth Natural Gas Inc

2019-20 Customers (Equivalent Bills)

	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19	S&T Total
R-1	3,497	3,611	3,503	3,627	3,630	3,403	3,645	3,520	3,633	3,514	3,605	3,613	42,801
R-3	72,511	75,302	73,218	76,274	76,471	71,695	76,753	74,366	76,831	73,589	74,635	74,652	896,299
R-4	5,314	5,687	5,939	5,943	5,921	5,522	5,814	5,486	5,610	5,356	5,713	5,574	67,879
Total Resid.	81,322	84,600	82,660	85,844	86,022	80,620	86,212	83,372	86,074	82,459	83,953	83,840	1,006,979
G-41	8,868	9,414	9,424	9,851	9,899	9,280	9,918	9,534	9,722	9,135	9,210	9,149	113,403
G-42	1,409	1,467	1,434	1,483	1,487	1,394	1,492	1,442	1,486	1,419	1,441	1,457	17,411
G-43	56	59	58	64	63	59	63	61	63	60	59	56	721
G-51	1,306	1,353	1,311	1,350	1,347	1,260	1,346	1,298	1,340	1,272	1,345	1,357	15,886
G-52	392	409	401	417	419	393	421	406	419	402	401	406	4,886
G-53	33	34	33	34	34	32	34	33	34	33	34	33	402
G-54	26	27	26	28	29	26	29	28	28	27	28	27	329
Total C/I	12,091	12,763	12,687	13,226	13,279	12,443	13,302	12,802	13,092	12,348	12,519	12,485	153,037
Total All	93,413	97,363	95,347	99,070	99,300	93,063	99,514	96,174	99,166	94,807	96,472	96,325	1,160,016

2019-20 Customer Charge

	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19
R-1	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.50	\$ 15.50
R-3	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.50	\$ 15.50
R-4	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.20	\$ 15.50	\$ 15.50
G-41	\$ 56.36	\$ 56.36	\$ 56.36	\$ 56.36	\$ 56.36	\$ 56.36	\$ 56.36	\$ 56.36	\$ 56.36	\$ 56.36	\$ 57.46	\$ 57.46
G-42	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 172.39	\$ 172.39
G-43	\$ 725.66	\$ 725.66	\$ 725.66	\$ 725.66	\$ 725.66	\$ 725.66	\$ 725.66	\$ 725.66	\$ 725.66	\$ 725.66	\$ 739.83	\$ 739.83
G-51	\$ 56.36	\$ 56.36	\$ 56.36	\$ 56.36	\$ 56.36	\$ 56.36	\$ 56.36	\$ 56.36	\$ 56.36	\$ 56.36	\$ 57.46	\$ 57.46
G-52	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 169.09	\$ 172.39	\$ 172.39
G-53	\$ 746.81	\$ 746.81	\$ 746.81	\$ 746.81	\$ 746.81	\$ 746.81	\$ 746.81	\$ 746.81	\$ 746.81	\$ 746.81	\$ 761.39	\$ 761.39
G-54	\$ 746.81	\$ 746.81	\$ 746.81	\$ 746.81	\$ 746.81	\$ 746.81	\$ 746.81	\$ 746.81	\$ 746.81	\$ 746.81	\$ 761.39	\$ 761.39

2019-20 Customer Revenue

	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19	S&T Total
R-1	\$ 53,168	\$ 54,899	\$ 53,249	\$ 55,134	\$ 55,184	\$ 51,727	\$ 55,415	\$ 53,514	\$ 55,232	\$ 53,427	\$ 55,861	\$ 55,991	\$ 652,802
R-3	\$ 1,102,354	\$ 1,144,785	\$ 1,113,099	\$ 1,159,557	\$ 1,162,558	\$ 1,089,947	\$ 1,166,839	\$ 1,130,552	\$ 1,168,020	\$ 1,118,738	\$ 1,156,610	\$ 1,156,878	\$ 13,669,938
R-4	\$ 80,780	\$ 86,454	\$ 90,291	\$ 90,354	\$ 90,008	\$ 83,954	\$ 88,381	\$ 83,403	\$ 85,290	\$ 81,428	\$ 88,531	\$ 86,386	\$ 1,035,261
Total Resid.	\$ 1,236,302	\$ 1,286,137	\$ 1,256,640	\$ 1,305,045	\$ 1,307,750	\$ 1,225,629	\$ 1,310,636	\$ 1,267,470	\$ 1,308,543	\$ 1,253,592	\$ 1,301,003	\$ 1,299,256	\$ 15,358,001
G-41	\$ 499,798	\$ 530,542	\$ 531,092	\$ 555,163	\$ 557,883	\$ 522,986	\$ 558,932	\$ 537,287	\$ 547,879	\$ 514,803	\$ 529,200	\$ 525,705	\$ 6,411,269
G-42	\$ 238,226	\$ 248,068	\$ 242,429	\$ 250,770	\$ 251,394	\$ 235,635	\$ 252,217	\$ 243,814	\$ 251,303	\$ 239,957	\$ 248,486	\$ 251,256	\$ 2,953,556
G-43	\$ 40,952	\$ 42,838	\$ 42,379	\$ 46,080	\$ 46,007	\$ 43,056	\$ 45,886	\$ 44,265	\$ 45,475	\$ 43,250	\$ 43,576	\$ 41,332	\$ 525,095
G-51	\$ 73,596	\$ 76,253	\$ 73,908	\$ 76,074	\$ 75,929	\$ 70,989	\$ 75,860	\$ 73,179	\$ 75,498	\$ 71,702	\$ 77,302	\$ 77,987	\$ 898,278
G-52	\$ 66,327	\$ 69,151	\$ 67,758	\$ 70,476	\$ 70,838	\$ 66,526	\$ 71,114	\$ 68,657	\$ 70,848	\$ 67,974	\$ 69,139	\$ 69,982	\$ 828,790
G-53	\$ 24,620	\$ 25,466	\$ 24,645	\$ 25,466	\$ 25,466	\$ 23,823	\$ 25,491	\$ 24,669	\$ 25,491	\$ 24,645	\$ 26,141	\$ 25,151	\$ 301,074
G-54	\$ 19,417	\$ 20,064	\$ 19,417	\$ 20,811	\$ 21,607	\$ 19,060	\$ 21,566	\$ 20,911	\$ 21,110	\$ 20,164	\$ 21,649	\$ 20,456	\$ 246,232
Total C/I	\$ 962,935	\$ 1,012,382	\$ 1,001,628	\$ 1,044,840	\$ 1,049,125	\$ 982,075	\$ 1,051,066	\$ 1,012,782	\$ 1,037,604	\$ 982,494	\$ 1,015,492	\$ 1,011,869	\$ 12,164,293
Total All	\$ 2,199,237	\$ 2,298,519	\$ 2,258,268	\$ 2,349,885	\$ 2,356,875	\$ 2,207,704	\$ 2,361,701	\$ 2,280,252	\$ 2,346,147	\$ 2,236,086	\$ 2,316,495	\$ 2,311,125	\$ 27,522,294

ENERGY COMPONENT

HEADBLOCK

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Docket DG 20-_____
 Revenue Decoupling Adjustment Factor
 Actual and Estimated Decoupling Year Revenues

2019-20 Decoupling Year Weather Normalized Volume Headblock													
	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19	S&T Total
R-1	36,731	48,388	69,360	92,468	104,854	92,558	89,084	67,481	52,537	39,414	33,122	33,964	759,961
R-3	1,280,794	2,898,865	6,121,788	9,184,431	10,850,958	9,128,626	7,762,529	4,580,874	2,576,646	1,261,056	997,806	1,016,132	57,660,505
R-4	93,668	213,998	481,354	694,312	815,920	691,531	582,047	338,974	192,040	94,713	78,973	78,238	4,355,768
Total Resid.	1,411,193	3,161,252	6,672,502	9,971,211	11,771,732	9,912,715	8,433,660	4,987,329	2,821,223	1,395,183	1,109,901	1,128,334	62,776,234
G-41	74,799	209,649	733,442	893,521	830,230	759,572	608,019	194,465	69,054	56,478	58,580	5,361,461	
G-42	329,468	610,332	1,346,658	1,506,100	1,457,141	1,398,849	1,372,481	1,201,362	558,194	290,156	250,065	269,471	10,590,277
G-43	340,995	636,413	1,151,415	1,659,544	1,906,071	1,685,067	1,483,942	985,854	612,022	315,153	280,486	298,376	11,355,337
G-51	79,183	82,502	91,524	96,336	93,497	89,808	86,858	79,485	73,811	74,090	79,240	82,164	1,008,498
G-52	326,367	348,508	388,555	406,464	393,850	378,934	353,154	305,641	281,593	287,617	324,745	340,851	4,136,279
G-53	647,891	784,055	911,462	1,063,920	1,182,334	1,094,828	997,437	851,193	671,329	607,780	663,087	697,645	10,172,962
G-54	1,645,786	1,690,625	1,568,828	1,319,924	1,350,879	1,270,260	1,165,460	1,369,310	1,245,619	1,299,608	1,786,988	1,783,439	17,496,726
Total C/I	3,444,489	4,362,084	6,191,884	6,945,808	7,257,425	6,747,976	6,218,905	5,400,863	3,637,033	2,943,458	3,441,088	3,530,527	60,121,539
Total All	4,855,682	7,523,336	12,864,386	16,917,019	19,029,157	16,660,691	14,652,565	10,388,192	6,458,256	4,338,641	4,550,988	4,658,861	122,897,773
2019-20 Headblock Charge													
	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19	
R-1	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3860	\$ 0.3860	
R-3	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5678	\$ 0.5678	
R-4	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5678	\$ 0.5678	
G-41	\$ 0.4621	\$ 0.4621	\$ 0.4621	\$ 0.4621	\$ 0.4621	\$ 0.4621	\$ 0.4621	\$ 0.4621	\$ 0.4621	\$ 0.4621	\$ 0.4711	\$ 0.4711	
G-42	\$ 0.4202	\$ 0.4202	\$ 0.4202	\$ 0.4202	\$ 0.4202	\$ 0.4202	\$ 0.4202	\$ 0.4202	\$ 0.4202	\$ 0.4202	\$ 0.4284	\$ 0.4284	
G-43	\$ 0.1181	\$ 0.1181	\$ 0.2583	\$ 0.2583	\$ 0.2583	\$ 0.2583	\$ 0.2583	\$ 0.2583	\$ 0.2583	\$ 0.1181	\$ 0.1204	\$ 0.1204	
G-51	\$ 0.2785	\$ 0.2785	\$ 0.2785	\$ 0.2785	\$ 0.2785	\$ 0.2785	\$ 0.2785	\$ 0.2785	\$ 0.2785	\$ 0.2785	\$ 0.2839	\$ 0.2839	
G-52	\$ 0.1733	\$ 0.1733	\$ 0.2392	\$ 0.2392	\$ 0.2392	\$ 0.2392	\$ 0.2392	\$ 0.2392	\$ 0.1733	\$ 0.1733	\$ 0.1767	\$ 0.1767	
G-53	\$ 0.0802	\$ 0.0802	\$ 0.1672	\$ 0.1672	\$ 0.1672	\$ 0.1672	\$ 0.1672	\$ 0.1672	\$ 0.0802	\$ 0.0802	\$ 0.0818	\$ 0.0818	
G-54	\$ 0.0346	\$ 0.0346	\$ 0.0638	\$ 0.0638	\$ 0.0638	\$ 0.0638	\$ 0.0638	\$ 0.0638	\$ 0.0346	\$ 0.0346	\$ 0.0353	\$ 0.0353	
2019-20 Decoupling Year Weather Normalized Volume Headblock Revenue													
	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19	S&T Total
R-1	\$ 13,908	\$ 18,322	\$ 26,263	\$ 35,013	\$ 39,703	\$ 35,047	\$ 33,731	\$ 25,551	\$ 19,893	\$ 14,924	\$ 12,785	\$ 13,110	\$ 288,249
R-3	\$ 713,256	\$ 1,614,337	\$ 3,409,139	\$ 5,114,682	\$ 6,042,748	\$ 5,083,604	\$ 4,322,844	\$ 2,551,025	\$ 1,434,898	\$ 702,264	\$ 566,530	\$ 576,935	\$ 32,132,263
R-4	\$ 52,163	\$ 119,173	\$ 268,059	\$ 386,652	\$ 454,374	\$ 385,104	\$ 324,134	\$ 188,770	\$ 106,944	\$ 52,744	\$ 44,839	\$ 44,422	\$ 2,427,378
Total Resid.	\$ 779,327	\$ 1,751,832	\$ 3,703,461	\$ 5,536,347	\$ 6,536,825	\$ 5,503,755	\$ 4,680,710	\$ 2,765,346	\$ 1,561,735	\$ 769,933	\$ 624,154	\$ 634,466	\$ 34,847,890
G-41	\$ 34,568	\$ 96,889	\$ 338,959	\$ 412,939	\$ 403,757	\$ 383,690	\$ 351,035	\$ 280,995	\$ 89,872	\$ 31,913	\$ 26,608	\$ 27,599	\$ 2,478,824
G-42	\$ 138,458	\$ 256,489	\$ 565,927	\$ 632,932	\$ 612,357	\$ 587,860	\$ 576,779	\$ 504,867	\$ 234,579	\$ 121,937	\$ 107,129	\$ 115,443	\$ 4,454,756
G-43	\$ 40,278	\$ 75,172	\$ 297,412	\$ 428,662	\$ 429,340	\$ 435,255	\$ 383,304	\$ 254,647	\$ 72,291	\$ 37,225	\$ 33,772	\$ 35,926	\$ 2,586,285
G-51	\$ 22,056	\$ 22,980	\$ 25,494	\$ 26,834	\$ 26,043	\$ 25,016	\$ 24,194	\$ 22,140	\$ 20,560	\$ 20,637	\$ 22,499	\$ 23,329	\$ 281,782
G-52	\$ 56,553	\$ 60,390	\$ 92,931	\$ 97,215	\$ 94,198	\$ 90,630	\$ 84,464	\$ 73,101	\$ 48,795	\$ 49,838	\$ 57,377	\$ 60,223	\$ 865,715
G-53	\$ 51,937	\$ 62,852	\$ 152,403	\$ 177,895	\$ 197,695	\$ 183,063	\$ 166,779	\$ 142,326	\$ 53,815	\$ 48,721	\$ 54,218	\$ 57,044	\$ 1,348,749
G-54	\$ 56,970	\$ 58,522	\$ 100,037	\$ 84,166	\$ 86,140	\$ 80,999	\$ 74,316	\$ 87,315	\$ 43,118	\$ 44,987	\$ 63,037	\$ 62,912	\$ 842,518
Total C/I	\$ 400,819	\$ 633,294	\$ 1,573,163	\$ 1,860,643	\$ 1,912,530	\$ 1,786,513	\$ 1,660,872	\$ 1,365,391	\$ 563,029	\$ 355,259	\$ 364,641	\$ 382,477	\$ 12,858,630
Total All	\$ 1,180,145	\$ 2,385,126	\$ 5,276,624	\$ 7,396,990	\$ 8,449,355	\$ 7,290,268	\$ 6,341,581	\$ 4,130,737	\$ 2,124,764	\$ 1,125,191	\$ 988,795	\$ 1,016,943	\$ 47,706,520

TAILBLOCK

	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19	S&T Total
R-1													

Liberty Utilities (EnergyNorth Natural Gas) Corp.
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R-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Resid.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
G-41	277,772	809,829	1,851,896	3,226,174	4,035,398	3,265,464	2,506,133	1,109,761	638,769	232,279	178,925	182,811	18,315,211		
G-42	443,620	1,147,212	2,345,406	4,047,790	4,989,598	4,016,550	3,161,515	1,355,483	784,627	274,034	252,166	266,614	23,084,615		
G-43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
G-51	175,101	203,971	275,989	357,064	393,882	355,701	276,025	183,551	149,408	131,432	152,609	176,304	2,831,038		
G-52	262,870	354,834	507,742	669,104	768,970	678,576	470,278	289,301	199,161	179,551	217,018	240,158	4,837,564		
G-53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
G-54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total C/I	1,159,363	2,515,846	4,981,033	8,300,132	10,187,848	8,316,290	6,413,950	2,938,096	1,771,966	817,297	800,719	865,888	49,068,428		
Total All	1,159,363	2,515,846	4,981,033	8,300,132	10,187,848	8,316,290	6,413,950	2,938,096	1,771,966	817,297	800,719	865,888	49,068,428		

2019-20 Tailblock Charg

2019-20 Tamblor Charge		S&T Sep-19		S&T Oct-19		S&T Nov-19		S&T Dec-19		S&T Jan-20		S&T Feb-20		S&T Mar-20		S&T Apr-20		S&T May-20		S&T Jun-20		S&T Jul-19		S&T Aug-19	
R-1	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3786	\$ 0.3860	\$ 0.3860		
R-3	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5678	\$ 0.5678			
R-4	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5569	\$ 0.5678	\$ 0.5678			

G-41	\$ 0.3104	\$ 0.3104	\$ 0.3104	\$ 0.3104	\$ 0.3104	\$ 0.3104	\$ 0.3104	\$ 0.3104	\$ 0.3104	\$ 0.3104	\$ 0.3104	\$ 0.3104	\$ 0.3104	\$ 0.3104	\$ 0.3165	\$ 0.3165
G-42	\$ 0.2800	\$ 0.2800	\$ 0.2800	\$ 0.2800	\$ 0.2800	\$ 0.2800	\$ 0.2800	\$ 0.2800	\$ 0.2800	\$ 0.2800	\$ 0.2800	\$ 0.2800	\$ 0.2800	\$ 0.2800	\$ 0.2855	\$ 0.2855
G-43	\$ 0.1181	\$ 0.1181	\$ 0.2583	\$ 0.2583	\$ 0.2583	\$ 0.2583	\$ 0.2583	\$ 0.2583	\$ 0.2583	\$ 0.2583	\$ 0.2583	\$ 0.1181	\$ 0.1181	\$ 0.1204	\$ 0.1204	\$ 0.1204
G-51	\$ 0.1811	\$ 0.1811	\$ 0.1811	\$ 0.1811	\$ 0.1811	\$ 0.1811	\$ 0.1811	\$ 0.1811	\$ 0.1811	\$ 0.1811	\$ 0.1811	\$ 0.1811	\$ 0.1811	\$ 0.1846	\$ 0.1846	\$ 0.1846
G-52	\$ 0.0985	\$ 0.0985	\$ 0.1593	\$ 0.1593	\$ 0.1593	\$ 0.1593	\$ 0.1593	\$ 0.1593	\$ 0.1593	\$ 0.1593	\$ 0.0985	\$ 0.0985	\$ 0.0985	\$ 0.1004	\$ 0.1004	\$ 0.1004
G-53	\$ 0.0802	\$ 0.0802	\$ 0.1672	\$ 0.1672	\$ 0.1672	\$ 0.1672	\$ 0.1672	\$ 0.1672	\$ 0.1672	\$ 0.1672	\$ 0.0802	\$ 0.0802	\$ 0.0802	\$ 0.0818	\$ 0.0818	\$ 0.0818
G-54	\$ 0.0346	\$ 0.0346	\$ 0.0638	\$ 0.0638	\$ 0.0638	\$ 0.0638	\$ 0.0638	\$ 0.0638	\$ 0.0638	\$ 0.0638	\$ 0.0346	\$ 0.0346	\$ 0.0353	\$ 0.0353	\$ 0.0353	\$ 0.0353

2019-20 Decoupling Year Weather Normalized Volume Tailblock Revenue

	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19	S&T Total
R-1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
R-3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
R-4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Resid.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-41	\$ 86,228	\$ 251,393	\$ 574,879	\$ 1,001,492	\$ 1,252,697	\$ 1,013,688	\$ 777,972	\$ 344,500	\$ 198,291	\$ 72,106	\$ 56,623	\$ 57,853	\$ 5,687,720
G-42	\$ 124,197	\$ 321,175	\$ 656,623	\$ 1,133,224	\$ 1,396,894	\$ 1,124,478	\$ 885,102	\$ 379,483	\$ 219,665	\$ 76,719	\$ 71,985	\$ 76,110	\$ 6,465,655
G-43	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-51	\$ 31,706	\$ 36,934	\$ 49,974	\$ 64,655	\$ 71,322	\$ 64,408	\$ 49,981	\$ 33,236	\$ 27,054	\$ 23,799	\$ 28,177	\$ 32,552	\$ 513,799
G-52	\$ 25,888	\$ 34,945	\$ 80,890	\$ 106,597	\$ 122,507	\$ 108,106	\$ 74,921	\$ 46,089	\$ 19,614	\$ 17,683	\$ 21,794	\$ 24,118	\$ 683,150
G-53	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-54	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total C/I	\$ 268,019	\$ 644,446	\$ 1,362,366	\$ 2,305,968	\$ 2,843,419	\$ 2,310,681	\$ 1,787,975	\$ 803,308	\$ 464,624	\$ 190,306	\$ 178,579	\$ 190,632	\$ 13,350,324
Total All	\$ 268,019	\$ 644,446	\$ 1,362,366	\$ 2,305,968	\$ 2,843,419	\$ 2,310,681	\$ 1,787,975	\$ 803,308	\$ 464,624	\$ 190,306	\$ 178,579	\$ 190,632	\$ 13,350,324

HEADBLOCK + TAILBLOCK

2019-20 Decoupling Year Weather Normalized Volume Headblock + Tailblock

	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19	S&T Total
R-1	36,731	48,388	69,360	92,468	104,854	92,558	89,084	67,481	52,537	39,414	33,122	33,964	759,961
R-3	1,280,794	2,898,865	6,121,788	9,184,431	10,850,958	9,128,626	7,762,529	4,580,874	2,576,646	1,261,056	997,806	1,016,132	57,660,505
R-4	93,668	213,998	481,354	694,312	815,920	691,531	582,047	338,974	192,040	94,713	78,973	78,238	4,355,768
Total Resid.	1,411,193	3,161,252	6,672,502	9,971,211	11,771,732	9,912,715	8,433,660	4,987,329	2,821,223	1,395,183	1,109,901	1,128,334	62,776,234
G-41	352,570	1,019,478	2,585,337	4,119,695	4,909,051	4,095,694	3,265,706	1,717,780	833,234	301,334	235,403	241,391	23,676,672

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Docket DG 20-_____
 Revenue Decoupling Adjustment Factor
 Actual and Estimated Decoupling Year Revenues

G-42	773,089	1,757,544	3,692,064	5,553,890	6,446,739	5,415,399	4,533,996	2,556,844	1,342,821	564,190	502,231	536,086	33,674,892
G-43	340,995	636,413	1,151,415	1,659,544	1,906,071	1,685,067	1,483,942	985,854	612,022	315,153	280,486	298,376	11,355,337
G-51	254,284	286,473	367,513	453,400	487,379	445,509	362,883	263,036	223,219	205,522	231,849	258,468	3,839,535
G-52	589,237	703,342	896,297	1,075,568	1,162,819	1,057,510	823,431	594,942	480,755	467,168	541,763	581,009	8,973,842
G-53	647,891	784,055	911,462	1,063,920	1,182,334	1,094,828	997,437	851,193	671,329	607,780	663,087	697,645	10,172,962
G-54	1,645,786	1,690,625	1,568,828	1,319,924	1,350,879	1,270,260	1,165,460	1,369,310	1,245,619	1,299,608	1,786,988	1,783,439	17,496,726
Total C/I	4,603,853	6,877,930	11,172,917	15,245,940	17,445,273	15,064,266	12,632,855	8,338,958	5,408,999	3,760,755	4,241,806	4,396,414	109,189,967
Total All	6,015,045	10,039,182	17,845,419	25,217,151	29,217,005	24,976,981	21,066,515	13,326,287	8,230,222	5,155,938	5,351,707	5,524,748	171,966,201

2019-20 Decoupling Year Weather Normalized Volume Headblock + Tailblock Revenue

	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19	S&T Total
R-1	\$ 13,908	\$ 18,322	\$ 26,263	\$ 35,013	\$ 39,703	\$ 35,047	\$ 33,731	\$ 25,551	\$ 19,893	\$ 14,924	\$ 12,785	\$ 13,110	\$ 288,249
R-3	\$ 713,256	\$ 1,614,337	\$ 3,409,139	\$ 5,114,682	\$ 6,042,748	\$ 5,083,604	\$ 4,322,844	\$ 2,551,025	\$ 1,434,898	\$ 702,264	\$ 566,530	\$ 576,935	\$ 32,132,263
R-4	\$ 52,163	\$ 119,173	\$ 268,059	\$ 386,652	\$ 454,374	\$ 385,104	\$ 324,134	\$ 188,770	\$ 106,944	\$ 52,744	\$ 44,839	\$ 44,422	\$ 2,427,378
Total Resid.	\$ 779,327	\$ 1,751,832	\$ 3,703,461	\$ 5,536,347	\$ 6,536,825	\$ 5,503,755	\$ 4,680,710	\$ 2,765,346	\$ 1,561,735	\$ 769,933	\$ 624,154	\$ 634,466	\$ 34,847,890
G-41	\$ 120,796	\$ 348,282	\$ 913,838	\$ 1,414,431	\$ 1,656,454	\$ 1,397,378	\$ 1,129,007	\$ 625,495	\$ 288,163	\$ 104,019	\$ 83,231	\$ 85,451	\$ 8,166,544
G-42	\$ 262,654	\$ 577,664	\$ 1,222,550	\$ 1,766,156	\$ 2,009,251	\$ 1,712,338	\$ 1,461,881	\$ 884,350	\$ 454,244	\$ 198,656	\$ 179,115	\$ 191,553	\$ 10,920,411
G-43	\$ 40,278	\$ 75,172	\$ 297,412	\$ 428,662	\$ 492,340	\$ 435,255	\$ 383,304	\$ 254,647	\$ 72,291	\$ 37,225	\$ 33,772	\$ 35,926	\$ 2,586,285
G-51	\$ 53,762	\$ 59,914	\$ 75,468	\$ 91,489	\$ 97,365	\$ 89,424	\$ 74,175	\$ 55,376	\$ 47,613	\$ 44,436	\$ 50,677	\$ 55,882	\$ 795,581
G-52	\$ 82,441	\$ 95,334	\$ 173,821	\$ 203,811	\$ 216,704	\$ 198,736	\$ 159,386	\$ 119,190	\$ 68,408	\$ 67,521	\$ 79,171	\$ 84,341	\$ 1,548,865
G-53	\$ 51,937	\$ 62,852	\$ 152,403	\$ 177,895	\$ 197,695	\$ 183,063	\$ 166,779	\$ 142,326	\$ 53,815	\$ 48,721	\$ 54,218	\$ 57,044	\$ 1,348,749
G-54	\$ 56,970	\$ 58,522	\$ 100,037	\$ 84,166	\$ 86,140	\$ 80,999	\$ 74,316	\$ 87,315	\$ 43,118	\$ 44,987	\$ 63,037	\$ 62,912	\$ 842,518
Total C/I	\$ 668,838	\$ 1,277,740	\$ 2,935,529	\$ 4,166,611	\$ 4,755,950	\$ 4,097,193	\$ 3,448,847	\$ 2,168,699	\$ 1,027,653	\$ 545,565	\$ 543,221	\$ 573,109	\$ 26,208,954
Total All	\$ 1,448,164	\$ 3,029,573	\$ 6,638,990	\$ 9,702,957	\$ 11,292,774	\$ 9,600,948	\$ 8,129,557	\$ 4,934,045	\$ 2,589,388	\$ 1,315,498	\$ 1,167,374	\$ 1,207,575	\$ 61,056,844

TOTAL REVENUE

2019-20 Decoupling Year Weather Normalized Base Revenue

	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19	S&T Total
R-1	\$ 67,076	\$ 73,221	\$ 79,512	\$ 90,147	\$ 94,887	\$ 86,774	\$ 89,147	\$ 79,066	\$ 75,125	\$ 68,351	\$ 68,646	\$ 69,101	\$ 941,051
R-3	\$ 1,815,610	\$ 2,759,122	\$ 4,522,238	\$ 6,274,239	\$ 7,205,306	\$ 6,173,552	\$ 5,489,684	\$ 3,681,577	\$ 2,602,918	\$ 1,821,002	\$ 1,723,140	\$ 1,733,813	\$ 45,802,201
R-4	\$ 132,942	\$ 205,627	\$ 358,351	\$ 477,006	\$ 544,382	\$ 469,058	\$ 412,515	\$ 272,173	\$ 192,234	\$ 134,172	\$ 133,370	\$ 130,808	\$ 3,462,639
Total Resid.	\$ 2,015,628	\$ 3,037,969	\$ 4,960,101	\$ 6,841,392	\$ 7,844,574	\$ 6,729,384	\$ 5,991,345	\$ 4,032,816	\$ 2,870,278	\$ 2,023,525	\$ 1,925,156	\$ 1,933,722	\$ 50,205,891
G-41	\$ 620,594	\$ 878,823	\$ 1,444,929	\$ 1,969,594	\$ 2,214,338	\$ 1,920,364	\$ 1,687,938	\$ 1,162,782	\$ 836,042	\$ 618,822	\$ 612,431	\$ 611,156	\$ 14,577,813
G-42	\$ 500,881	\$ 825,732	\$ 1,464,979	\$ 2,016,926	\$ 2,260,645	\$ 1,947,973	\$ 1,714,098	\$ 1,128,164	\$ 705,547	\$ 438,613	\$ 427,600	\$ 442,809	\$ 13,873,967
G-43	\$ 81,229	\$ 118,010	\$ 339,791	\$ 474,742	\$ 538,347	\$ 478,311	\$ 429,190	\$ 298,913	\$ 117,766	\$ 80,475	\$ 77,348	\$ 77,258	\$ 3,111,380
G-51	\$ 127,358	\$ 136,168	\$ 149,376	\$ 167,563	\$ 173,294	\$ 160,413	\$ 150,035	\$ 128,555	\$ 123,112	\$ 116,138	\$ 127,978	\$ 133,869	\$ 1,693,859
G-52	\$ 148,768	\$ 164,485	\$ 241,579	\$ 274,288	\$ 287,542	\$ 265,262	\$ 230,500	\$ 187,846	\$ 139,257	\$ 135,495	\$ 148,310	\$ 154,323	\$ 2,377,655
G-53	\$ 76,556	\$ 88,318	\$ 177,048	\$ 203,361	\$ 223,161	\$ 206,887	\$ 192,270	\$ 166,995	\$ 79,306	\$ 73,366	\$ 80,359	\$ 82,195	\$ 1,649,823
G-54	\$ 76,387	\$ 78,586	\$ 119,454	\$ 104,977	\$ 107,747	\$ 100,059	\$ 95,882	\$ 108,225	\$ 64,227	\$ 65,150	\$ 84,686	\$ 83,368	\$ 1,088,750
Total C/I	\$ 1,631,773	\$ 2,290,123	\$ 3,937,157	\$ 5,211,450	\$ 5,805,074	\$ 5,079,268	\$ 4,499,913	\$ 3,181,481	\$ 2,065,257	\$ 1,528,059	\$ 1,558,713	\$ 1,584,978	\$ 38,373,247
Total All	\$ 3,647,401	\$ 5,328,092	\$ 8,897,257	\$ 12,052,843	\$ 13,649,649	\$ 11,808,652	\$ 10,491,258	\$ 7,214,297	\$ 4,935,535	\$ 3,551,584	\$ 3,483,870	\$ 3,518,700	\$ 88,579,138

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Docket DG 20-
Revenue Decoupling Adjustment Factor

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(1) (2) (3)

Residential Revenue Decoupling Adjustment Factor

1. Allowed Base Revenue	\$	(2,092,605)
2. less: Actual and Estimated Base Revenue	\$	-
3. Revenue Deficiency / (Excess)	\$	(2,092,605)
4. divided by: Forecasted Residential Sales	\$	-
5. Residential Revenue Decoupling Adjustment Factor	\$	<u>(0.0329)</u>

Commercial Revenue Decoupling Adjustment Factor

6. Allowed Base Revenue	\$	-
7. less: Actual and Estimated Base Revenue	\$	-
8. Revenue Deficiency / (Excess)	\$	-
9. divided by: Forecasted Commercial Sales	\$	-
10. Commercial Revenue Decoupling Adjustment Factor	\$	-
11. TOTAL Revenue Deficiency / (Excess)	\$	<u>(2,092,605)</u>

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Docket DG 20-
 Revenue Decoupling Adjustment Factor
 Allowed Decoupling Year Revenues

EnergyNorth Natural Gas Inc

2019-20 Customers (Equivalent Bills)

	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19	S&T Total
R-1	-	-	-	-	-	-	-	-	-	-	-	-	-
R-3	-	-	-	-	-	-	-	-	-	-	-	-	-
R-4	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Resid.	-	-	-	-	-	-	-	-	-	-	-	-	-
G-41	-	-	-	-	-	-	-	-	-	-	-	-	-
G-42	-	-	-	-	-	-	-	-	-	-	-	-	-
G-43	-	-	-	-	-	-	-	-	-	-	-	-	-
G-51	-	-	-	-	-	-	-	-	-	-	-	-	-
G-52	-	-	-	-	-	-	-	-	-	-	-	-	-
G-53	-	-	-	-	-	-	-	-	-	-	-	-	-
G-54	-	-	-	-	-	-	-	-	-	-	-	-	-
Total C/I	-	-	-	-	-	-	-	-	-	-	-	-	-
Total All	-	-	-	-	-	-	-	-	-	-	-	-	-

2019-20 Benchmark Base Revenue Per Bill

	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19
R-1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
R-3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
R-4	\$ (15,555)	\$ (22,306)	\$ (36,162)	\$ (48,482)	\$ (56,060)	\$ (53,431)	\$ (43,996)	\$ (26,147)	\$ (20,488)	\$ (15,367)	\$ (13,882)	\$ (13,889)
G-41	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-42	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-43	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-51	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-52	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-53	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-54	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

2019-20 Allowed Base Revenue

	S&T Sep-19	S&T Oct-19	S&T Nov-19	S&T Dec-19	S&T Jan-20	S&T Feb-20	S&T Mar-20	S&T Apr-20	S&T May-20	S&T Jun-20	S&T Jul-19	S&T Aug-19	S&T Total
R-1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
R-3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
R-4	\$ (82,654)	\$ (126,851)	\$ (214,774)	\$ (288,145)	\$ (331,909)	\$ (295,067)	\$ (255,775)	\$ (143,447)	\$ (114,944)	\$ (82,309)	\$ (79,305)	\$ (77,424)	\$ (2,092,605)
Total Resid.	\$ (82,654)	\$ (126,851)	\$ (214,774)	\$ (288,145)	\$ (331,909)	\$ (295,067)	\$ (255,775)	\$ (143,447)	\$ (114,944)	\$ (82,309)	\$ (79,305)	\$ (77,424)	\$ (2,092,605)
G-41	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-42	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-43	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-51	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-52	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-53	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-54	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total C/I	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total All	\$ (82,654)	\$ (126,851)	\$ (214,774)	\$ (288,145)	\$ (331,909)	\$ (295,067)	\$ (255,775)	\$ (143,447)	\$ (114,944)	\$ (82,309)	\$ (79,305)	\$ (77,424)	\$ (2,092,605)

Liberty Utilities (EnergyNorth Natural Gas) Corp.

1 d/b/a Liberty

2 Peak 2021 - 2022 Winter Cost of Gas Filing

3 Annual Bill Comparisons, Nov 19 - Apr 20 vs Nov 20 - Apr 21 - Residential Heating Rate R-3 Excluding the RDAF adjustment

Attachment Energy 1-3.b

4 Bill Comparisons excluding proposed RDAF Adjustment

5 Schedule 8

6 November 1, 2021 - April 30, 2022

7 Residential Heating (R3)

8 **PROPOSED**

9 **average Usage (Therms)**

10 **8/1/2021 - Current**

11 **62 110 123 148 132 92 667**

12 **Winter:**

13 Cust. Chg \$ 15.39 \$ 15.39 \$ 15.39 \$ 15.39 \$ 15.39 \$ 15.39 \$ 15.39 \$ 92.34

14 Headblock \$ 0.5632 \$ 0.5632 \$ 0.5632 \$ 0.5632 \$ 0.5632 \$ 0.5632 \$ 0.5632 \$ 375.65

15 Tailblock \$ 0.5632 \$ 34.92 \$ 61.95 \$ 69.27 \$ 83.35 \$ 74.34 \$ 51.81 \$ 375.65

16 HB Threshold - - - - - - - -

17 Total Base Rate Amount \$ 50.31 \$ 77.34 \$ 84.66 \$ 98.74 \$ 89.73 \$ 67.20 \$ 467.99

18 COG Rate - (Seasonal) \$ 0.9056 \$ 0.9056 \$ 0.9056 \$ 0.9056 \$ 0.9056 \$ 0.9056 \$ 0.9056 \$ 0.9056

19 COG amount \$ 56.15 \$ 99.62 \$ 111.39 \$ 134.03 \$ 119.54 \$ 83.32 \$ 604.04

20 LDAC \$ 0.1426 \$ 0.1426 \$ 0.1426 \$ 0.1426 \$ 0.1426 \$ 0.1426 \$ 0.1426 \$ 0.1426

21 LDAC amount \$ 8.84 \$ 15.69 \$ 17.54 \$ 21.11 \$ 18.83 \$ 13.12 \$ 95.13

22 **Total Bill** \$ 115.30 \$ 192.65 \$ 213.60 \$ 253.88 \$ 228.10 \$ 163.64 \$ 1,167.16

23

24 **November 1, 2020 - April 30, 2021**

25 **Residential Heating (R3)**

26 **CURRENT**

27 **average Usage (Therms)**

28 **8/1/2021 - Current**

29 **62 110 123 148 132 92 667**

30 **Winter:**

31 **7/1/20 - 7/31/21 8/1/2021 - Current**

32 Cust. Chg \$ 15.50 \$ 15.50 \$ 15.50 \$ 15.50 \$ 15.50 \$ 15.50 \$ 15.50 \$ 93.00

33 Headblock \$ 0.5678 \$ 0.5678 \$ 0.5678 \$ 0.5678 \$ 0.5678 \$ 0.5678 \$ 0.5678 \$ 378.72

34 Tailblock \$ 0.5678 \$ 35.20 \$ 62.46 \$ 69.84 \$ 84.03 \$ 74.95 \$ 52.24 \$ 378.72

35 HB Threshold - - - - - - - -

36 Total Base Rate Amount \$ 50.70 \$ 77.96 \$ 85.34 \$ 99.53 \$ 90.45 \$ 67.74 \$ 471.72

37 COG Rate - (Seasonal) \$ 0.5571 \$ 0.5571 \$ 0.4664 \$ 0.4276 \$ 0.5156 \$ 0.6050 \$ 0.5100

38 COG amount \$ 34.54 \$ 61.28 \$ 57.37 \$ 63.28 \$ 68.06 \$ 55.66 \$ 340.19

39 LDAC \$ 0.0589 \$ 0.0589 \$ 0.0589 \$ 0.0589 \$ 0.0589 \$ 0.0589 \$ 0.0589 \$ 0.0589

40 LDAC amount \$ 3.65 \$ 6.48 \$ 7.24 \$ 8.72 \$ 7.77 \$ 5.42 \$ 39.29

41 **Total Bill** \$ 88.90 \$ 145.72 \$ 149.95 \$ 171.54 \$ 166.28 \$ 128.82 \$ 851.20

42

43 **DIFFERENCE:**

44 **Total Bill** \$ 26.40 \$ 46.93 \$ 63.64 \$ 82.34 \$ 61.81 \$ 34.82 \$ 315.96

45 % Change 29.70% 32.21% 42.44% 48.00% 37.17% 27.03% 37.12%

46 **Base Rate** \$ (0.40) \$ (0.62) \$ (0.68) \$ (0.79) \$ (0.72) \$ (0.53) \$ (3.73)

47 % Change -0.78% -0.79% -0.79% -0.79% -0.79% -0.79% -0.79%

48 **COG & LDAC** \$ 26.80 \$ 47.54 \$ 64.32 \$ 83.14 \$ 62.53 \$ 35.36 \$ 319.69

49 % Change 77.59% 77.59% 112.12% 131.37% 91.88% 63.53% 93.97%

Liberty Utilities (EnergyNorth Natural Gas) Corp.

1 d/b/a Liberty

2 Peak 2021 - 2022 Winter Cost of Gas Filing

3 Annual Bill Comparisons, Nov 19 - Apr 20 vs Nov 20 - Apr 21 - Commercial Rate G-41

4
 5
 6

7 November 1, 2021 - April 30, 2022

8 Commercial Rate (G-41)

PROPOSED		Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	Winter Nov-Apr
average Usage (Therms)		89	277	504	457	331	297	1,955
Winter:	8/1/2021 - Current							
Cust. Chg	\$ 57.06	\$ 57.06	\$ 57.06	\$ 57.06	\$ 57.06	\$ 57.06	\$ 57.06	\$ 342.36
Headblock	\$ 0.4688	\$ 41.72	\$ 46.88	\$ 46.88	\$ 46.88	\$ 46.88	\$ 46.88	\$ 276.12
Tailblock	\$ 0.3149	\$ -	\$ 55.74	\$ 127.22	\$ 112.42	\$ 72.74	\$ 62.04	\$ 430.15
HB Threshold	100							
Total Base Rate Amount		\$ 98.78	\$ 159.68	\$ 231.16	\$ 216.36	\$ 176.68	\$ 165.98	\$ 1,048.64
COG Rate - (Seasonal)		\$ 0.9058	\$ 0.9058	\$ 0.9058	\$ 0.9058	\$ 0.9058	\$ 0.9058	\$ 0.9058
COG amount		\$ 80.62	\$ 250.91	\$ 456.52	\$ 413.95	\$ 299.82	\$ 269.02	\$ 1,770.84
LDAC		\$ 0.0860	\$ 0.0860	\$ 0.0860	\$ 0.0860	\$ 0.0860	\$ 0.0860	\$ 0.0860
LDAC amount		\$ 7.66	\$ 23.83	\$ 43.35	\$ 39.31	\$ 28.47	\$ 25.55	\$ 168.16
Total Bill		\$187.05	\$434.41	\$731.03	\$669.62	\$504.97	\$460.54	\$2,987.63

35 November 1, 2020 - April 30, 2021

36 Commercial Rate (G-41)

CURRENT		Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	Winter Nov-Apr
average Usage (Therms)		89	277	504	457	331	297	1,955
Winter:	7/1/20 - 7/31/21 8/1/2021 - Current							
Cust. Chg	\$ 57.46	\$ 57.46	\$ 57.46	\$ 57.46	\$ 57.46	\$ 57.46	\$ 57.46	\$ 344.76
Headblock	\$ 0.4711	\$ 41.93	\$ 47.11	\$ 47.11	\$ 47.11	\$ 47.11	\$ 47.11	\$ 277.48
Tailblock	\$ 0.3165	\$ 0.3149	\$ -	\$ 56.02	\$ 127.87	\$ 112.99	\$ 73.11	\$ 432.34
HB Threshold	100	100						
Total Base Rate Amount		\$ 99.39	\$ 160.59	\$ 232.44	\$ 217.56	\$ 177.68	\$ 166.92	\$ 1,054.58
COG Rate - (Seasonal)		\$ 0.5552	\$ 0.5552	\$ 0.4645	\$ 0.4257	\$ 0.5137	\$ 0.6031	\$ 0.5018
COG amount		\$ 49.41	\$ 153.79	\$ 234.11	\$ 194.54	\$ 170.03	\$ 179.12	\$ 981.01
LDAC		\$ 0.0555	\$ 0.0555	\$ 0.0555	\$ 0.0555	\$ 0.0555	\$ 0.0555	\$ 0.0555
LDAC amount		\$ 4.94	\$ 15.37	\$ 27.97	\$ 25.36	\$ 18.37	\$ 16.48	\$ 108.50
Total Bill		\$153.74	\$329.75	\$494.52	\$437.47	\$366.09	\$362.52	\$2,144.09

63 DIFFERENCE:

Total Bill	\$ 33.31	\$ 104.66	\$ 236.52	\$ 232.15	\$ 138.89	\$ 98.02	\$ 843.54
% Change	21.67%	31.74%	47.83%	53.07%	37.94%	27.04%	39.34%
Base Rate	\$ (0.60)	\$ (0.91)	\$ (1.28)	\$ (1.20)	\$ (1.00)	\$ (0.95)	\$ (5.94)
% Change	-0.61%	-0.57%	-0.55%	-0.55%	-0.56%	-0.57%	-0.56%

Liberty Utilities (EnergyNorth Natural Gas) Corp.

1 **1 d/b/a Liberty**

2 **Peak 2021 - 2022 Winter Cost of Gas Filing**

70 COG & LDAC	\$ 33.92	\$ 105.57	\$ 237.79	\$ 233.35	\$ 139.88	\$ 98.96	\$ 849.48
71 % Change	68.64%	68.64%	101.57%	119.95%	82.27%	55.25%	86.59%

3 **Annual Bill Comparisons, Nov 19 - Apr 20 vs Nov 20 - Apr 21 - Commercial Rate G-42**

Attachment Energy 1-3b

Bill Comparisons excluding proposed RDAF Adjustment

Schedule 8

Page 3 of 5

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5

6 November 1, 2021 - April 30, 2022

7 C&I High Winter Use Medium G-42

8 PROPOSED	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	Winter Nov-Apr
9 average Usage (Therms)	830	2,189	3,708	3,406	2,603	2,395	15,131
10	8/1/2021 - Current						
11							
12 Winter:							
13 Cust. Chg	\$ 171.19	\$ 171.19	\$ 171.19	\$ 171.19	\$ 171.19	\$ 171.19	\$ 1,027.14
14 Headblock	\$ 0.4261	\$ 353.66	\$ 426.10	\$ 426.10	\$ 426.10	\$ 426.10	\$ 2,484.16
15 Tailblock	\$ 0.2839	\$ -	\$ 337.56	\$ 768.80	\$ 683.06	\$ 455.09	\$ 2,640.55
16 HB Threshold	1,000						
17							
24 Total Base Rate Amount	\$ 524.85	\$ 934.85	\$ 1,366.09	\$ 1,280.35	\$ 1,052.38	\$ 993.33	\$ 6,151.86
25							
26 COG Rate - (Seasonal)	\$ 0.9058	\$ 0.9058	\$ 0.9058	\$ 0.9058	\$ 0.9058	\$ 0.9058	\$ 0.9058
27 COG amount	\$ 751.81	\$ 1,982.80	\$ 3,358.71	\$ 3,085.15	\$ 2,357.80	\$ 2,169.39	\$ 13,705.66
28							
29 LDAC	\$ 0.0860	\$ 0.0860	\$ 0.0860	\$ 0.0860	\$ 0.0860	\$ 0.0860	\$ 0.0860
30 LDAC amount	\$ 71.39	\$ 188.28	\$ 318.94	\$ 292.96	\$ 223.89	\$ 206.00	\$ 1,301.46
31							
32 Total Bill	\$ 1,348.06	\$ 3,105.93	\$ 5,043.73	\$ 4,658.47	\$ 3,634.07	\$ 3,368.72	\$ 21,158.98
33							

34 November 1, 2020 - April 30, 2021

35 C&I High Winter Use Medium G-42

36 CURRENT	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	Winter Nov-Apr
37 average Usage (Therms)	830	2,189	3,708	3,406	2,603	2,395	15,131
38	8/1/2020 - 7/31/21	8/1/2021 - Current					
39							
40 Winter:							
41 Cust. Chg	\$ 172.39	\$ 171.19	\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 1,034.34
42 Headblock	\$ 0.4284	\$ 0.4261	\$ 355.57	\$ 428.40	\$ 428.40	\$ 428.40	\$ 2,497.57
43 Tailblock	\$ 0.2855	\$ 0.2839	\$ -	\$ 339.46	\$ 773.13	\$ 686.91	\$ 2,655.44
44 HB Threshold	1,000	1,000					
45							
52 Total Base Rate Amount	\$ 527.96	\$ 940.25	\$ 1,373.92	\$ 1,287.70	\$ 1,058.45	\$ 999.06	\$ 6,187.35
53							
54 COG Rate - (Seasonal)	\$ 0.5552	\$ 0.5552	\$ 0.4645	\$ 0.4257	\$ 0.5137	\$ 0.6031	\$ 0.5043
55 COG amount	\$ 460.82	\$ 1,215.33	\$ 1,722.37	\$ 1,449.93	\$ 1,337.16	\$ 1,444.42	\$ 7,630.03
56							
57 LDAC	\$ 0.0555	\$ 0.0555	\$ 0.0555	\$ 0.0555	\$ 0.0555	\$ 0.0555	\$ 0.0555
58 LDAC amount	\$ 46.07	\$ 121.49	\$ 205.79	\$ 189.03	\$ 144.47	\$ 132.92	\$ 839.77
59							
60 Total Bill	\$ 1,034.84	\$ 2,277.07	\$ 3,302.08	\$ 2,926.67	\$ 2,540.07	\$ 2,576.41	\$ 14,657.15
61							

62 DIFFERENCE:

63 Total Bill	\$ 313.21	\$ 828.85	\$ 1,741.65	\$ 1,731.80	\$ 1,094.00	\$ 792.31	\$ 6,501.82
64 % Change	30.27%	36.40%	52.74%	59.17%	43.07%	30.75%	44.36%
65							
66 Base Rate	\$ (3.11)	\$ (5.40)	\$ (7.83)	\$ (7.35)	\$ (6.06)	\$ (5.73)	\$ (35.49)

Liberty Utilities (EnergyNorth Natural Gas) Corp.

1 d/b/a Liberty

2 Peak 2021 - 2022 Winter Cost of Gas Filing

67 % Change	-0.59%	-0.57%	-0.57%	-0.57%	-0.57%	-0.57%	-0.57%	-0.57%
68 COG & LDAC	\$ 316.32	\$ 834.26	\$ 1,749.48	\$ 1,739.15	\$ 1,100.06	\$ 798.04	\$ 6,537.31	
70 % Change	68.64%	68.64%	101.57%	119.95%	82.27%	55.25%	85.68%	

3 Annual Bill Comparisons, Nov 19 - Apr 20 vs Nov 20 - Apr 21 - Commercial Rate G-52

Attachment Energy 1-3b

4 Bill Comparisons excluding proposed RDAF Adjustment
 5 Schedule 8
 6 Page 4 of 5

7 November 1, 2021 - April 30, 2022

8 Commercial Rate (G-52)

9 PROPOSED	10	11 average Usage (Therms)	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	Winter
			1,352	1,866	2,284	2,160	1,886	1,760	Nov-Apr
13 Winter:	14 Cust. Chg	8/1/2021 - Current	\$ 171.19	\$ 171.19	\$ 171.19	\$ 171.19	\$ 171.19	\$ 171.19	\$ 1,027.14
	15 Headblock		\$ 0.2428	\$ 242.80	\$ 242.80	\$ 242.80	\$ 242.80	\$ 242.80	\$ 1,456.80
	16 Tailblock		\$ 0.1617	\$ 56.92	\$ 140.03	\$ 207.62	\$ 187.57	\$ 143.27	\$ 858.30
	17 HB Threshold		1,000						
25 Total Base Rate Amount			\$ 470.91	\$ 554.02	\$ 621.61	\$ 601.56	\$ 557.26	\$ 536.88	\$ 3,342.24
27 COG Rate - (Seasonal)			\$ 0.9041	\$ 0.9041	\$ 0.9041	\$ 0.9041	\$ 0.9041	\$ 0.9041	\$ 0.9041
28 COG amount			\$ 1,222.34	\$ 1,687.05	\$ 2,064.96	\$ 1,952.86	\$ 1,705.13	\$ 1,591.22	\$ 10,223.56
30 LDAC			\$ 0.0860	\$ 0.0860	\$ 0.0860	\$ 0.0860	\$ 0.0860	\$ 0.0860	\$ 0.0860
31 LDAC amount			\$ 116.29	\$ 160.50	\$ 196.45	\$ 185.79	\$ 162.22	\$ 151.38	\$ 972.63
33 Total Bill			\$ 1,809.54	\$ 2,401.57	\$ 2,883.03	\$ 2,740.21	\$ 2,424.61	\$ 2,279.48	\$ 14,538.44

34

35 November 1, 2020 - April 30, 2021

36 Commercial Rate (G-52)

37 CURRENT	38	39 average Usage (Therms)	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	Winter
			1,352	1,866	2,284	2,160	1,886	1,760	Nov-Apr
41 Winter:	42 Cust. Chg	7/1/20 - 7/31/21 8/1/2021 - Current	\$ 172.39	\$ 171.19	\$ 172.39	\$ 172.39	\$ 172.39	\$ 172.39	\$ 1,034.34
	43 Headblock		\$ 0.2439	\$ 0.2428	\$ 243.90	\$ 243.90	\$ 243.90	\$ 243.90	\$ 1,463.40
	44 Tailblock		\$ 0.1624	\$ 0.1617	\$ 57.16	\$ 140.64	\$ 208.52	\$ 188.38	\$ 123.42
	45 HB Threshold		1,000	1,000					
53 Total Base Rate Amount			\$ 473.45	\$ 556.93	\$ 624.81	\$ 604.67	\$ 560.18	\$ 539.71	\$ 3,359.76
55 COG Rate - (Seasonal)			\$ 0.5660	\$ 0.5660	\$ 0.4753	\$ 0.4365	\$ 0.5245	\$ 0.6139	\$ 0.5235
56 COG amount			\$ 765.23	\$ 1,056.16	\$ 1,085.59	\$ 942.84	\$ 989.21	\$ 1,080.46	\$ 5,919.48
58 LDAC			\$ 0.0555	\$ 0.0555	\$ 0.0555	\$ 0.0555	\$ 0.0555	\$ 0.0555	\$ 0.0555
59 LDAC amount			\$ 75.04	\$ 103.56	\$ 126.76	\$ 119.88	\$ 104.67	\$ 97.68	\$ 627.59
61 Total Bill			\$ 1,313.72	\$ 1,716.65	\$ 1,837.16	\$ 1,667.39	\$ 1,654.06	\$ 1,717.86	\$ 9,906.84

63 DIFFERENCE:

64 Total Bill	\$ 495.82	\$ 684.93	\$ 1,045.87	\$ 1,072.81	\$ 770.55	\$ 561.62	\$ 4,631.60
65 % Change	37.74%	39.90%	56.93%	64.34%	46.59%	32.69%	46.75%

Liberty Utilities (EnergyNorth Natural Gas) Corp.

1 d/b/a Liberty

2 Peak 2021 - 2022 Winter Cost of Gas Filing

66	Base Rate	\$ (2.55)	\$ (2.91)	\$ (3.20)	\$ (3.11)	\$ (2.92)	\$ (2.83)	\$ (17.52)
67	% Change	-0.54%	-0.52%	-0.51%	-0.51%	-0.52%	-0.52%	-0.52%
68								
69	COG & LDAC	\$ 498.36	\$ 687.83	\$ 1,049.07	\$ 1,075.92	\$ 773.47	\$ 564.45	\$ 4,649.12
70	% Change	65.13%	65.13%	96.64%	114.12%	78.19%	52.24%	78.54%
71								

3 Residential Heating

	<u>Winter 2020-21</u>	<u>Winter 2021-22</u>
6 Customer Charge	\$ 15.50	\$ 15.39
7 First 100 Therms	\$ 0.5678	\$ 0.5632
8 Excess 100 Therms	\$ 0.5678	\$ 0.5632
9 LDAC	\$ 0.0589	\$ 0.1426
10 COG	\$ 0.5100	\$ 0.9056
11 Total Adjust	\$ 0.5689	\$ 1.0482

12

13

14

	Winter 2020-21 COG @	Winter 2021-22 @	Total		Base Rate		COG		LDAC		
			\$ Impact	% Impact							
17	\$ 0.5689	\$ 1.0482	\$ 0.48	84%							
18											
19	Cooking alone	5 \$21.05	\$23.45	\$2.40	11.38%	\$0.00	0%	\$1.98	8%	\$0.42	1.99%
20											
21		10 \$26.71	\$31.50	\$4.79	17.94%	\$0.00	0%	\$3.96	13%	\$0.84	3.13%
22											
23		20 \$38.03	\$47.62	\$9.59	25.20%	\$0.00	0%	\$7.91	17%	\$1.67	4.40%
24											
25	Water Heating alone	30 \$49.35	\$63.73	\$14.38	29.13%	\$0.00	0%	\$11.87	19%	\$2.51	5.09%
26											
27		45 \$66.34	\$87.90	\$21.57	32.51%	\$0.00	0%	\$17.80	20%	\$3.77	5.68%
28											
29		50 \$72.00	\$95.96	\$23.96	33.29%	\$0.00	0%	\$19.78	21%	\$4.19	5.81%
30											
31	Heating Alone	80 \$100.30	\$136.25	\$35.95	35.84%	\$0.00	0%	\$29.67	22%	\$6.28	6.26%
32											
33		125 \$165.96	\$229.71	\$63.75	38.41%	\$0.00	0%	\$52.61	23%	\$11.14	6.71%
34											
35		150 \$185.21	\$257.10	\$71.89	38.82%	\$0.00	0%	\$59.33	23%	\$12.56	6.78%
36											
37		200 \$241.82	\$337.68	\$95.86	39.64%	\$0.00	0%	\$79.11	23%	\$16.75	6.92%
38											

Attachment Energy 1-3b
 Bill Comparisons excluding proposed RDAF Adjustment
 Schedule 8
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Attachment Energy 1-3c
 Comparison by rate clas excluding proposed RDAF adjustment

	Original Filing Rates Effective November 1, 2021 - April 30, 2022 Winter Period				Per Energy Data Request 1-3 Excluding Proposed RDAF Refund Rates Effective November 1, 2021 - April 30, 2022 Winter Period				Change Rates Effective November 1, 2021 - April 30, 2022 Winter Period			
	Delivery Charge	Cost of Gas Rate Page 95	LDAC Page 101	Total Rate	Delivery Charge	Cost of Gas Rate Page 95	LDAC Page 101	Total Rate	Delivery Charge	Cost of Gas Rate Page 95	LDAC Page 101	Total Rate
Residential Non Heating - R-1												
Customer Charge per Month per Meter All therms	\$ 15.39 \$ 0.3844	\$ 0.9056	\$ 0.1733	\$ 1.4633	\$ 15.39 \$ 0.3844	\$ 0.9056	\$ 0.1426	\$ 1.4326	\$ - \$ -	\$ (0.0307)	\$ (0.0307)	\$ -
Residential Heating - R-3												
Customer Charge per Month per Meter Size of the first block Therms in the first block per month at	\$ 15.39 all therms \$ 0.5632	\$ 0.9056	\$ 0.1733	\$ 1.6421	\$ 15.39 all therms \$ 0.5632	\$ 0.9056	\$ 0.1426	\$ 1.6114	\$ - \$ -	\$ (0.0307)	\$ (0.0307)	\$ -
Residential Heating - R-4												
Customer Charge per Month per Meter Size of the first block Therms in the first block per month at	\$ 8.47 all therms \$ 0.3098	\$ 0.4981	\$ 0.1733	\$ 0.9812	\$ 8.47 all therms \$ 0.3098	\$ 0.4981	\$ 0.1426	\$ 0.9505	\$ - \$ -	\$ (0.0307)	\$ (0.0307)	\$ -
Commercial/Industrial - G-41												
Customer Charge per Month per Meter Size of the first block Therms in the first block per month at All therms over the first block per month at	\$ 57.06 100 therms \$ 0.4688	\$ 0.9058	\$ 0.0860	\$ 1.4606	\$ 57.06 100 therms \$ 0.3149	\$ 0.9058	\$ 0.0860	\$ 1.3067	\$ - \$ -	\$ - \$ -	\$ - \$ -	\$ -
Commercial/Industrial - G-42												
Customer Charge per Month per Meter Size of the first block Therms in the first block per month at All therms over the first block per month at	\$ 171.19 1000 therms \$ 0.4261	\$ 0.9058	\$ 0.0860	\$ 1.4179	\$ 171.19 1000 therms \$ 0.2839	\$ 0.9058	\$ 0.0860	\$ 1.2757	\$ - \$ -	\$ - \$ -	\$ - \$ -	\$ -
Commercial/Industrial - G-43												
Customer Charge per Month per Meter All therms over the first block per month at	\$ 734.69 \$ 0.2620	\$ 0.9058	\$ 0.0860	\$ 1.2538	\$ 734.69 \$ 0.2620	\$ 0.9058	\$ 0.0860	\$ 1.2538	\$ - \$ -	\$ - \$ -	\$ - \$ -	\$ -
Commercial/Industrial - G-51												
Customer Charge per Month per Meter Size of the first block Therms in the first block per month at All therms over the first block per month at	\$ 57.06 100 therms \$ 0.2819	\$ 0.9041	\$ 0.0860	\$ 1.2720	\$ 57.06 100 therms \$ 0.1833	\$ 0.9041	\$ 0.0860	\$ 1.1734	\$ - \$ -	\$ - \$ -	\$ - \$ -	\$ -
Commercial/Industrial - G-52												
Customer Charge per Month per Meter Size of the first block Therms in the first block per month at All therms over the first block per month at	\$ 171.19 1000 therms \$ 0.2428	\$ 0.9041	\$ 0.0860	\$ 1.2329	\$ 171.19 1000 therms \$ 0.1617	\$ 0.9041	\$ 0.0860	\$ 1.1518	\$ - \$ -	\$ - \$ -	\$ - \$ -	\$ -
Commercial/Industrial - G-53												
Customer Charge per Month per Meter All therms over the first block per month at	\$ 756.10 \$ 0.1697	\$ 0.9041	\$ 0.0860	\$ 1.1598	\$ 756.10 \$ 0.1697	\$ 0.9041	\$ 0.0860	\$ 1.1598	\$ - \$ -	\$ - \$ -	\$ - \$ -	\$ -
Commercial/Industrial - G-54												
Customer Charge per Month per Meter All therms over the first block per month at	\$ 756.10 \$ 0.0648	\$ 0.9041	\$ 0.0860	\$ 1.0549	\$ 756.10 \$ 0.0648	\$ 0.9041	\$ 0.0860	\$ 1.0549	\$ - \$ -	\$ - \$ -	\$ - \$ -	\$ -
Residential Non Heating - R-5												
Customer Charge per Month per Meter All Therms	\$ 20.01 \$ 0.4997	\$ 0.9056	\$ 0.1733	\$ 1.5786	\$ 20.01 \$ 0.4997	\$ 0.9056	\$ 0.1426	\$ 1.5479	\$ - \$ -	\$ (0.0307)	\$ (0.0307)	\$ -
Residential Heating - R-6												
Customer Charge per Month per Meter Therms in the first block per month at	\$ 20.01 \$ 0.7322	\$ 0.9056	\$ 0.1733	\$ 1.8111	\$ 20.01 \$ 0.7322	\$ 0.9056	\$ 0.1426	\$ 1.7804	\$ - \$ -	\$ (0.0307)	\$ (0.0307)	\$ -
Residential Heating - R-7												

Attachment Energy 1-3c
 Comparison by rate clas excluding proposed RDAF adjustment

	Original Filing Rates Effective November 1, 2021 - April 30, 2022 Winter Period				Per Energy Data Request 1-3 Excluding Proposed RDAF Refund Rates Effective November 1, 2021 - April 30, 2022 Winter Period				Change Rates Effective November 1, 2021 - April 30, 2022 Winter Period			
	Delivery Charge	Cost of Gas Rate Page 95	LDAC Page 101	Total Rate	Delivery Charge	Cost of Gas Rate Page 95	LDAC Page 101	Total Rate	Delivery Charge	Cost of Gas Rate Page 95	LDAC Page 101	Total Rate
		\$ 11.01	\$ 0.4981	\$ 0.1733	\$ 11.01	\$ 0.4981	\$ 0.1426	\$ 11.01	\$ -	\$ -	\$ (0.0307)	\$ -
Customer Charge per Month per Meter	\$ 11.01				\$ 11.01				\$ -			
Therms in the first block per month at	\$ 0.4027	\$ 0.4981	\$ 0.1733	\$ 1.0741	\$ 0.4027	\$ 0.4981	\$ 0.1426	\$ 1.0434	\$ -	\$ -	\$ (0.0307)	\$ -
<u>Commercial/Industrial - G-44</u>												
Customer Charge per Month per Meter	\$ 74.18				\$ 74.18				\$ -			
Size of the first block	100 therms				100 therms				\$ -			
Therms in the first block per month at	\$ 0.6094	\$ 0.9058	\$ 0.0860	\$ 1.6012	\$ 0.6094	\$ 0.9058	\$ 0.0860	\$ 1.6012	\$ -	\$ -	\$ -	\$ -
All therms over the first block per month at	\$ 0.4094	\$ 0.9058	\$ 0.0860	\$ 1.4012	\$ 0.4094	\$ 0.9058	\$ 0.0860	\$ 1.4012	\$ -	\$ -	\$ -	\$ -
<u>Commercial/Industrial - G-45</u>												
Customer Charge per Month per Meter	\$ 222.55				\$ 222.55				\$ -			
Size of the first block	1000 therms				1000 therms				\$ -			
Therms in the first block per month at	\$ 0.5539	\$ 0.9058	\$ 0.0860	\$ 1.5457	\$ 0.5539	\$ 0.9058	\$ 0.0860	\$ 1.5457	\$ -	\$ -	\$ -	\$ -
All therms over the first block per month at	\$ 0.3691	\$ 0.9058	\$ 0.0860	\$ 1.3609	\$ 0.3691	\$ 0.9058	\$ 0.0860	\$ 1.3609	\$ -	\$ -	\$ -	\$ -
<u>Commercial/Industrial - G-46</u>												
Customer Charge per Month per Meter	\$ 955.10				\$ 955.10				\$ -			
All therms over the first block per month at	\$ 0.3406	\$ 0.9058	\$ 0.0860	\$ 1.3324	\$ 0.3406	\$ 0.9058	\$ 0.0860	\$ 1.3324	\$ -	\$ -	\$ -	\$ -
<u>Commercial/Industrial - G-55</u>												
Customer Charge per Month per Meter	\$ 74.18				\$ 74.18				\$ -			
Size of the first block	100 therms				100 therms				\$ -			
Therms in the first block per month at	\$ 0.3665	\$ 0.9041	\$ 0.0860	\$ 1.3566	\$ 0.3665	\$ 0.9041	\$ 0.0860	\$ 1.3566	\$ -	\$ -	\$ -	\$ -
All therms over the first block per month at	\$ 0.2383	\$ 0.9041	\$ 0.0860	\$ 1.2284	\$ 0.2383	\$ 0.9041	\$ 0.0860	\$ 1.2284	\$ -	\$ -	\$ -	\$ -
<u>Commercial/Industrial - G-56</u>												
Customer Charge per Month per Meter	\$ 222.55				\$ 222.55				\$ -			
Size of the first block	1000 therms				1000 therms				\$ -			
Therms in the first block per month at	\$ 0.3157	\$ 0.9041	\$ 0.0860	\$ 1.3058	\$ 0.3157	\$ 0.9041	\$ 0.0860	\$ 1.3058	\$ -	\$ -	\$ -	\$ -
All therms over the first block per month at	\$ 0.2102	\$ 0.9041	\$ 0.0860	\$ 1.2003	\$ 0.2102	\$ 0.9041	\$ 0.0860	\$ 1.2003	\$ -	\$ -	\$ -	\$ -
<u>Commercial/Industrial - G-57</u>												
Customer Charge per Month per Meter	\$ 982.93				\$ 982.93				\$ -			
All therms over the first block per month at	\$ 0.2207	\$ 0.9041	\$ 0.0860	\$ 1.2108	\$ 0.2207	\$ 0.9041	\$ 0.0860	\$ 1.2108	\$ -	\$ -	\$ -	\$ -
<u>Commercial/Industrial - G-58</u>												
Customer Charge per Month per Meter	\$ 982.93				\$ 982.93				\$ -			
All therms over the first block per month at	\$ 0.0842	\$ 0.9041	\$ 0.0860	\$ 1.0743	\$ 0.0842	\$ 0.9041	\$ 0.0860	\$ 1.0743	\$ -	\$ -	\$ -	\$ -