

1 compares to the FPO rate approved for the 2018/2019 winter period of \$0.7611 per therm
2 for residential customers. This represents a \$0.1208 per therm, or 15.8% decrease in the
3 residential FPO rate. The total bill impact on the winter period bills for an average FPO
4 heating customer using 666 therms is a decrease of approximately \$82.11 or 16.2%
5 compared to last winter. The total bill impact reflects the overall rates in effect following
6 implementation of the increases approved in Docket No. DG 19-054, effective July 1,
7 2019, relating to the cast iron/bare steel main replacement program. The estimated
8 winter period bill for an average residential heating customer opting for the FPO would
9 be approximately \$13.32 (or 1.45%) higher than the bill under the proposed cost of gas
10 rates, assuming no monthly adjustments to the COG rate during the course of the winter.
11 Schedule 23 (Bates 196) contains the historical results of the FPO program.

12 **V. LOCAL DELIVERY ADJUSTMENT CLAUSE (“LDAC”)**

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

14 A. As shown on Proposed Second Revised Page 97 (Bates 054), the Company is submitting
15 for approval an LDAC of \$0.0635 per therm for the residential non-heating class and
16 residential heating class, and \$0.0494 per therm for the commercial/industrial bundled
17 sales classes, effective November 1, 2019. The surcharges proposed to be billed under
18 the LDAC are the Energy Efficiency Charge, the Revenue Decoupling Adjustment
19 Factor, the Energy Efficiency Resource Standard Lost Revenue Adjustment Mechanism,
20 the Environmental Surcharge for Manufactured Gas Plant (“MGP”) remediation, the
21 Residential Low Income Assistance Program charge, and the rate case expense
22 reconciliation surcharge from Docket No. DG 17-048.

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

2 A. All EnergyNorth customers including those in Keene are billed an LDAC charge. When
3 calculating the LDAC charge, the November 1, 2019, through October 31, 2020,
4 forecasted Keene therm sales of 1,542,677 are added to the EnergyNorth therm sales
5 forecast of 185,636,009 for a total therm sales forecast of 187,178,686 (slightly off due to
6 rounding).

7 **Q. Please explain the Energy Efficiency Charge.**

8 A. The Energy Efficiency Charge is designed to recover the projected expenses associated
9 with the Company's energy efficiency programs for Calendar Year 2019 that will be filed
10 with the Commission in the near future. In the calculation of the Energy Efficiency
11 Charge, the Company has also included the projected prior period under-recovery of the
12 Company's residential and commercial energy efficiency programs as of October 2019.
13 As shown on Schedule 19 Energy Efficiency (Bates 132-134), the proposed Energy
14 Efficiency charge is \$0.0640 per therm for Residential customers and \$0.0426 per therm
15 for commercial and industrial customers.

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

17 A. This is the initial calculation of the RDAF since the implementation of decoupling on
18 November 1, 2019. The purpose of the RDAF is to recover or refund, on an annual basis,
19 the difference between the Actual Base Revenue per Customer and the Benchmark Base
20 Revenue per Customer. While in the process of preparing the necessary calculations, it
21 was discovered that with respect to low-income customers the formulas approved in the

1 Company's tariff to calculate the Actual Base Revenue per Customer and the Benchmark
2 Base Revenue per Customer do not use the same basis between the two formulas to
3 calculate the revenue per customer. The approved Benchmark Base Revenue per
4 Customer calculation uses low income residential heating revenue (rate R-4) in the
5 calculation while the Actual Base Revenue per Customer calculation uses the residential
6 heating rate (rate R-3) to calculate the rate R-4 revenue. In other words, the formulas in
7 the tariff use the R-4 rate to calculate the benchmark R-4 revenue per customer and use
8 the R-3 rate to calculate the actual R-4 revenue per customer. Schedule 19 RDAF (Bates
9 118-123) shows the proposed Actual Base Revenue per Customer and the Benchmark
10 Base Revenue per Customer calculation of a total over-collection of \$4,691,932 effective
11 November 1, 2019, through October 31, 2020. In that calculation, the Company has
12 aligned the Base Revenue per Customer and Benchmark Revenue per Customer
13 calculations related to low income customers. Schedule 19 RDAF (Bates 124–129)
14 shows the Actual Base Revenue per Customer and the Benchmark Base Revenue per
15 Customer calculation reflecting the current language in the tariff, which results in a total
16 over-collection of \$6,642,895 effective November 1, 2019, through October 31, 2020,
17 based on the formulas in the Company's tariff.

18 Q. **What would be the effect of using the calculation based on the current tariff
19 language?**

20 A. The net effect would be that the dollars collected to recover the costs of the low-income
21 program would effectively be returned to customers through the RDAF mechanism.

1 Q. Please explain the Energy Efficiency Resource Standard Lost Revenue Adjustment
2 Mechanism (“LRAM”).

3 A. As shown on Schedule 19 LRAM (Bates 116–117), the proposed LRAM charge is
4 \$0.0001 per therm for residential customers and \$0.0001 per therm for commercial and
5 industrial customers. It is designed to recover lost revenues associated with energy
6 efficiency measures installed under the EERS programs. Since the Company
7 implemented decoupling effective November 1, 2019, the Company will continue to
8 implement its Lost Revenue Adjustment only as a prior period true-up mechanism
9 effective November 1, 2019, and ending October 31, 2020.

10 Q. What is the proposed Residential Low Income Assistance Program (“RLIAP”)
11 charge?

12 A. As shown on Schedule 19 RLIAP (Bates 130–131), the proposed RLIAP charge is
13 \$0.0123 per therm. It is designed to recover administrative costs, revenue shortfall, and
14 the prior period reconciliation adjustment relating to this program. For the 2019/2020
15 Winter Period, the Company is providing a 60% base rate discount, consistent with the
16 settlement agreement approved by the Commission in Order No. 24,669 (Sept. 22, 2006)
17 in Docket No. DG 06-120. The proposed RLIAP charge is designed to recover
18 \$2,307,356, of which \$1,861,760 is for the revenue shortfall resulting from 5,932
19 customers receiving a 60% discount off their base rates, and \$445,596 for the prior year
20 reconciling adjustment.

Liberty Utilities (Energy North Natural Gas) Corp. d/b/a Liberty Utilities
Revenue Decoupling Adjustment Factor (RDAF)
Allowed Base Revenue based on the intent of the RDAF

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	(1)	(2)	(3)
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Residential Revenue Decoupling Adjustment Factor

1. Allowed Base Revenue	\$ 40,989,509		
2. less: Actual and Estimated Base Revenue	<u>42,940,615</u>		
3. Revenue Deficiency / (Excess)	\$ (1,951,106)		
4. divided by: Forecasted Residential Sales	<u>65,525,887</u>		
5. Residential Revenue Decoupling Adjustment Factor	<u>\$ (0.0298)</u>		

Commercial Revenue Decoupling Adjustment Factor

6. Allowed Base Revenue	\$ 31,757,813		
7. less: Actual and Estimated Base Revenue	<u>34,498,640</u>		
8. Revenue Deficiency / (Excess)	\$ (2,740,826)		
9. divided by: Forecasted Commercial Sales	<u>121,652,799</u>		
10. Commercial Revenue Decoupling Adjustment Factor	<u>\$ (0.0225)</u>		

Liberty Utilities (Energy North Natural Gas) Corp. d/b/a Liberty Utilities
Revenue Decoupling Adjustment Factor (RDAF)
Allowed Base Revenue based on the intent of the RDAF

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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	3,491	3,605	3,608	3,255	3,606	3,486	3,603	3,430	3,574	3,586	35,243
R-3	71,744	74,476	74,664	67,581	74,916	72,404	74,610	70,766	73,357	73,234	727,751
R-4	5,946	6,203	6,207	5,598	6,168	5,874	5,954	5,603	5,777	5,675	59,006
Total Resid.	81,181	84,284	84,479	76,434	84,690	81,764	84,167	79,799	82,708	82,495	822,000
G-41	9,279	9,683	9,716	8,804	9,751	9,385	9,524	8,882	9,125	9,104	93,253
G-42	1,388	1,439	1,441	1,303	1,442	1,386	1,427	1,351	1,452	1,415	14,042
G-43	57	60	60	54	59	56	58	56	55	56	571
G-51	1,292	1,340	1,341	1,210	1,340	1,293	1,329	1,266	1,261	1,298	12,970
G-52	378	391	390	352	392	381	396	378	396	391	3,846
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	12,459	12,981	13,014	11,784	13,049	12,564	12,798	11,994	12,357	12,331	125,332
Total All	93,640	97,265	97,493	88,218	97,740	94,328	96,965	91,793	95,065	94,825	947,332

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	\$ 23,630	\$ 25,588	\$ 26,326	\$ 26,064	\$ 24,359	\$ 21,665	\$ 20,932	\$ 19,551	\$ 18,581	\$ 18,520
R-3	\$ 58,483	\$ 78,412	\$ 89,883	\$ 84,877	\$ 72,716	\$ 45,931	\$ 33,622	\$ 25,883	\$ 22,855	\$ 22,974
R-4	\$ 22,321	\$ 29,930	\$ 33,822	\$ 31,446	\$ 28,720	\$ 19,784	\$ 13,134	\$ 10,516	\$ 9,239	\$ 9,352
G-41	\$ 141,061	\$ 187,336	\$ 213,824	\$ 204,320	\$ 174,282	\$ 120,172	\$ 89,749	\$ 73,104	\$ 67,581	\$ 67,203
G-42	\$ 831,437	\$ 1,139,248	\$ 1,275,090	\$ 1,181,586	\$ 995,503	\$ 692,940	\$ 478,158	\$ 353,842	\$ 296,514	\$ 289,956
G-43	\$ 6,630,216	\$ 7,593,280	\$ 8,769,856	\$ 7,718,973	\$ 6,633,048	\$ 4,338,262	\$ 2,120,739	\$ 1,477,930	\$ 1,276,137	\$ 1,310,918
G-51	\$ 117,110	\$ 128,843	\$ 132,447	\$ 127,517	\$ 117,280	\$ 101,009	\$ 95,963	\$ 86,858	\$ 86,305	\$ 87,102
G-52	\$ 635,041	\$ 672,436	\$ 670,683	\$ 657,599	\$ 601,232	\$ 521,003	\$ 376,781	\$ 342,142	\$ 345,377	\$ 356,854
G-53	\$ 5,288,039	\$ 6,482,182	\$ 5,443,345	\$ 5,509,426	\$ 5,382,287	\$ 4,702,462	\$ 2,553,307	\$ 2,163,553	\$ 2,145,270	\$ 2,343,537
G-54	\$ 4,517,444	\$ 5,041,273	\$ 4,376,519	\$ 3,774,254	\$ 2,908,047	\$ 3,287,867	\$ 2,028,236	\$ 2,391,070	\$ 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	\$ 82,502	\$ 92,247	\$ 94,977	\$ 84,845	\$ 87,832	\$ 75,517	\$ 75,412	\$ 67,052	\$ 66,414	\$ 66,407	\$ 793,203
R-3	\$ 4,195,802	\$ 5,839,765	\$ 6,710,987	\$ 5,736,100	\$ 5,447,653	\$ 3,325,556	\$ 2,508,517	\$ 1,831,622	\$ 1,676,542	\$ 1,682,483	\$ 38,955,028
R-4	\$ 132,717	\$ 185,655	\$ 209,952	\$ 176,022	\$ 177,153	\$ 116,217	\$ 78,200	\$ 58,919	\$ 53,370	\$ 53,073	\$ 1,241,278
Total Resid.	\$ 4,411,021	\$ 6,117,667	\$ 7,015,915	\$ 5,996,967	\$ 5,712,638	\$ 3,517,289	\$ 2,662,129	\$ 1,957,593	\$ 1,796,326	\$ 1,801,963	\$ 40,989,509
G-41	\$ 1,308,945	\$ 1,814,017	\$ 2,077,415	\$ 1,798,781	\$ 1,699,390	\$ 1,127,795	\$ 854,774	\$ 649,284	\$ 616,699	\$ 611,821	\$ 12,558,921
G-42	\$ 1,153,793	\$ 1,639,502	\$ 1,837,512	\$ 1,539,599	\$ 1,435,816	\$ 960,108	\$ 682,108	\$ 477,894	\$ 430,461	\$ 410,240	\$ 10,567,033
G-43	\$ 375,050	\$ 458,636	\$ 525,607	\$ 417,853	\$ 392,235	\$ 243,666	\$ 122,720	\$ 82,124	\$ 70,230	\$ 73,193	\$ 2,761,314
G-51	\$ 151,270	\$ 172,662	\$ 177,620	\$ 154,310	\$ 157,132	\$ 130,608	\$ 127,519	\$ 109,924	\$ 108,874	\$ 113,043	\$ 1,402,963
G-52	\$ 239,876	\$ 262,589	\$ 261,676	\$ 231,692	\$ 235,703	\$ 198,747	\$ 149,220	\$ 129,385	\$ 136,923	\$ 139,482	\$ 1,985,293
G-53	\$ 195,657	\$ 243,513	\$ 202,491	\$ 185,116	\$ 190,353	\$ 162,234	\$ 92,004	\$ 75,508	\$ 82,021	\$ 89,601	\$ 1,518,499
G-54	\$ 131,006	\$ 151,069	\$ 128,766	\$ 102,072	\$ 87,144	\$ 92,608	\$ 58,684	\$ 66,711	\$ 68,308	\$ 77,422	\$ 963,790
Total C/I	\$ 3,555,597	\$ 4,741,988	\$ 5,211,088	\$ 4,429,425	\$ 4,197,774	\$ 2,915,765	\$ 2,087,028	\$ 1,590,830	\$ 1,513,516	\$ 1,514,802	\$ 31,757,813
Total All	\$ 7,966,618	\$ 10,859,655	\$ 12,227,003	\$ 10,426,392	\$ 9,910,412	\$ 6,433,055	\$ 4,749,157	\$ 3,548,422	\$ 3,309,842	\$ 3,316,765	\$ 72,747,322

Liberty Utilities (Energy North Natural Gas) Corp. d/b/a Liberty Utilities
Revenue Decoupling Adjustment Factor (RDAF)
Allowed Base Revenue based on the intent of the RDAF

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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	3,491	3,605	3,608	3,255	3,606	3,486	3,603	3,430	3,574	3,586	35,243
R-3	71,744	74,476	74,664	67,581	74,916	72,404	74,610	70,766	73,357	73,234	727,751
R-4	5,946	6,203	6,207	5,598	6,168	5,874	5,954	5,603	5,777	5,675	59,006
Total Resid.	81,181	84,284	84,479	76,434	84,690	81,764	84,167	79,799	82,708	82,495	822,000
G-41	9,279	9,683	9,716	8,804	9,751	9,385	9,524	8,882	9,125	9,104	93,253
G-42	1,388	1,439	1,441	1,303	1,442	1,386	1,427	1,351	1,452	1,415	14,042
G-43	57	60	60	54	59	56	58	56	55	56	571
G-51	1,292	1,340	1,341	1,210	1,340	1,293	1,329	1,266	1,261	1,298	12,970
G-52	378	391	390	352	392	381	396	378	396	391	3,846
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	12,459	12,981	13,014	11,784	13,049	12,564	12,798	11,994	12,357	12,331	125,332
Total All	93,640	97,265	97,493	88,218	97,740	94,328	96,965	91,793	95,065	94,825	947,332

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	\$ 6.01	\$ 6.01	\$ 6.01	\$ 6.01	\$ 6.01	\$ 6.01	\$ 6.01	\$ 6.01	\$ 6.08	\$ 6.08
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	\$ 52,445	\$ 54,153	\$ 54,192	\$ 48,898	\$ 54,162	\$ 52,359	\$ 54,118	\$ 51,517	\$ 54,337	\$ 54,511	\$ 530,690
R-3	\$ 1,077,685	\$ 1,118,719	\$ 1,121,542	\$ 1,015,149	\$ 1,125,335	\$ 1,087,594	\$ 1,120,732	\$ 1,062,992	\$ 1,115,212	\$ 1,113,336	\$ 10,958,296
R-4	\$ 35,713	\$ 37,259	\$ 37,285	\$ 33,622	\$ 37,049	\$ 35,284	\$ 35,763	\$ 33,654	\$ 35,140	\$ 34,523	\$ 355,293
Total Resid.	\$ 1,165,843	\$ 1,210,130	\$ 1,213,019	\$ 1,097,668	\$ 1,216,547	\$ 1,175,237	\$ 1,210,612	\$ 1,148,163	\$ 1,204,688	\$ 1,202,370	\$ 11,844,279
G-41	\$ 516,704	\$ 539,197	\$ 540,996	\$ 490,224	\$ 542,960	\$ 522,582	\$ 530,331	\$ 494,562	\$ 514,272	\$ 513,073	\$ 5,204,902
G-42	\$ 231,832	\$ 240,418	\$ 240,749	\$ 217,679	\$ 240,952	\$ 231,472	\$ 238,317	\$ 225,630	\$ 245,475	\$ 239,235	\$ 2,351,759
G-43	\$ 40,556	\$ 43,304	\$ 42,969	\$ 38,811	\$ 42,396	\$ 40,269	\$ 41,488	\$ 39,830	\$ 39,936	\$ 40,516	\$ 410,082
G-51	\$ 71,926	\$ 74,622	\$ 74,675	\$ 67,383	\$ 74,605	\$ 72,001	\$ 73,994	\$ 70,471	\$ 71,094	\$ 73,141	\$ 723,912
G-52	\$ 63,104	\$ 65,238	\$ 65,181	\$ 58,861	\$ 65,493	\$ 63,728	\$ 66,163	\$ 63,176	\$ 67,035	\$ 66,091	\$ 644,070
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	\$ 20,586	\$ 21,608	\$ 21,608	\$ 213,212
Total C/I	\$ 972,819	\$ 1,012,607	\$ 1,013,726	\$ 917,704	\$ 1,014,611	\$ 976,290	\$ 998,228	\$ 940,014	\$ 987,972	\$ 982,217	\$ 9,816,187
Total All	\$ 2,138,662	\$ 2,222,737	\$ 2,226,745	\$ 2,015,372	\$ 2,231,158	\$ 2,151,527	\$ 2,208,840	\$ 2,088,177	\$ 2,192,661	\$ 2,184,587	\$ 21,660,466

Liberty Utilities (Energy North Natural Gas) Corp. d/b/a Liberty Utilities
Revenue Decoupling Adjustment Factor (RDAF)
Allowed Base Revenue based on the intent of the RDAF

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ENERGY COMPONENT

HEADBLOCK

2018-19 Decoupling Year 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	73,214	85,581	100,416	84,480	82,937	63,662	51,965	39,387	32,303	32,777	646,722
R-3	7,181,583	8,938,769	11,063,248	9,180,015	7,853,803	4,364,796	2,466,296	1,278,121	990,700	989,490	54,306,822
R-4	566,467	708,647	886,285	727,720	628,857	349,111	194,981	104,252	79,984	78,608	4,324,913
Total Resid.	7,821,264	9,732,997	12,049,950	9,992,215	8,565,597	4,777,570	2,713,242	1,421,760	1,102,988	1,100,875	59,278,457
G-41	698,502	844,939	926,433	787,197	813,404	566,171	193,517	73,932	57,112	57,591	5,018,798
G-42	1,241,041	1,392,503	1,480,358	1,260,637	1,375,317	1,112,595	572,599	307,306	259,161	258,161	9,259,678
G-43	1,334,906	1,508,814	1,906,512	1,561,323	1,414,851	895,435	606,273	359,667	250,469	286,024	10,124,273
G-51	89,214	92,375	99,440	84,888	92,376	86,105	84,659	77,880	74,698	80,167	861,803
G-52	367,561	376,192	397,457	337,575	372,348	351,845	342,708	316,265	318,801	332,044	3,512,797
G-53	983,271	1,037,011	1,337,608	1,066,083	1,039,435	827,593	775,816	668,663	645,679	699,789	9,080,950
G-54	1,738,750	1,395,359	1,366,893	1,274,130	1,250,056	1,369,579	1,680,548	1,669,182	1,578,600	1,678,120	15,001,217
Total C/I	6,453,245	6,647,192	7,514,701	6,371,834	6,357,786	5,209,324	4,256,121	3,472,896	3,184,521	3,391,895	52,859,516
Total All	14,274,509	16,380,190	19,564,651	16,364,049	14,923,384	9,986,893	6,969,363	4,894,655	4,287,509	4,492,770	112,137,973
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	\$ 0.3786	\$ 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	\$ 0.2228	\$ 0.2228	\$ 0.2228	\$ 0.2228	\$ 0.2228	\$ 0.2228	\$ 0.2201	\$ 0.2201	\$ 0.2228	\$ 0.2228	
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	\$ 0.1167	\$ 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 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	\$ 27,390	\$ 32,017	\$ 37,568	\$ 31,605	\$ 31,028	\$ 23,817	\$ 19,441	\$ 14,735	\$ 12,231	\$ 12,411	\$ 242,245
R-3	\$ 3,951,110	\$ 4,917,866	\$ 6,086,696	\$ 5,050,593	\$ 4,320,947	\$ 2,401,391	\$ 1,356,889	\$ 703,187	\$ 551,707	\$ 551,033	\$ 29,891,420
R-4	\$ 126,195	\$ 157,869	\$ 197,442	\$ 162,118	\$ 140,093	\$ 77,773	\$ 42,909	\$ 22,943	\$ 17,818	\$ 17,512	\$ 962,672
Total Resid.	\$ 4,104,695	\$ 5,107,752	\$ 6,321,705	\$ 5,244,316	\$ 4,492,069	\$ 2,502,982	\$ 1,419,239	\$ 740,865	\$ 581,757	\$ 580,956	\$ 31,096,336
G-41	\$ 318,931	\$ 385,793	\$ 423,003	\$ 359,428	\$ 371,394	\$ 258,510	\$ 88,359	\$ 33,757	\$ 26,394	\$ 26,615	\$ 2,292,184
G-42	\$ 515,285	\$ 578,172	\$ 614,650	\$ 523,421	\$ 571,037	\$ 461,954	\$ 237,745	\$ 127,594	\$ 108,911	\$ 108,491	\$ 3,847,260
G-43	\$ 340,667	\$ 385,048	\$ 486,541	\$ 398,448	\$ 361,069	\$ 228,514	\$ 70,750	\$ 41,972	\$ 29,585	\$ 33,785	\$ 2,376,380
G-51	\$ 24,551	\$ 25,420	\$ 27,365	\$ 23,360	\$ 25,421	\$ 23,695	\$ 23,297	\$ 21,432	\$ 20,807	\$ 22,330	\$ 237,677
G-52	\$ 86,863	\$ 88,902	\$ 93,928	\$ 79,776	\$ 87,994	\$ 83,149	\$ 58,675	\$ 54,148	\$ 55,242	\$ 57,537	\$ 746,213
G-53	\$ 162,390	\$ 171,265	\$ 220,910	\$ 176,067	\$ 171,665	\$ 136,679	\$ 61,480	\$ 52,988	\$ 51,759	\$ 56,097	\$ 1,261,300
G-54	\$ 109,528	\$ 87,897	\$ 86,104	\$ 80,260	\$ 78,744	\$ 86,273	\$ 57,511	\$ 57,122	\$ 54,644	\$ 58,089	\$ 756,172
Total C/I	\$ 1,558,214	\$ 1,722,498	\$ 1,952,499	\$ 1,640,761	\$ 1,667,324	\$ 1,278,773	\$ 597,817	\$ 389,013	\$ 347,342	\$ 362,944	\$ 11,517,187
Total All	\$ 5,662,909	\$ 6,830,250	\$ 8,274,205	\$ 6,885,077	\$ 6,159,393	\$ 3,781,755	\$ 2,017,056	\$ 1,129,879	\$ 929,100	\$ 943,900	\$ 42,613,523

Liberty Utilities (Energy North Natural Gas) Corp. d/b/a Liberty Utilities
Revenue Decoupling Adjustment Factor (RDAF)
Allowed Base Revenue based on the intent of the RDAF

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TAILBLOCK

2018-19 Decoupling Year 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	2	-	-	-	-	-	-	-	-	-	-
R-3	-	-	-	-	-	-	-	-	-	-	-
R-4	-	-	-	-	-	-	-	-	-	-	-
Total Resid.	-	-	-	-	-	-	-	-	-	-	-
G-41	2,376,148	3,184,951	4,245,136	3,491,609	2,719,924	1,192,435	669,054	278,366	188,282	175,600	18,521,506
G-42	3,034,449	3,900,272	5,054,919	4,208,686	3,348,855	1,547,302	906,830	383,451	248,064	272,513	22,905,342
G-43	-	-	-	-	-	-	-	-	-	-	-
G-51	286,385	341,285	414,894	352,778	331,416	246,608	213,478	169,297	144,293	154,725	2,655,158
G-52	546,653	632,195	770,652	650,633	604,054	421,063	314,475	244,807	222,157	241,924	4,648,613
G-53	-	-	-	-	-	-	-	-	-	-	-
G-54	-	-	-	-	-	-	-	-	-	-	-
Total C/I	6,243,635	8,058,704	10,485,601	8,703,706	7,004,248	3,407,408	2,103,836	1,075,921	802,796	844,763	48,730,618
Total All	6,243,635	8,058,704	10,485,601	8,703,706	7,004,248	3,407,408	2,103,836	1,075,921	802,796	844,763	48,730,618
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	\$ 0.3741	\$ 0.3786	\$ 0.3786
R-3	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5502	\$ 0.5569	\$ 0.5569
R-4	\$ 0.2201	\$ 0.2201	\$ 0.2201	\$ 0.2201	\$ 0.2201	\$ 0.2201	\$ 0.2201	\$ 0.2201	\$ 0.2201	\$ 0.2228	\$ 0.2228
G-41	\$ 0.3067	\$ 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	\$ 0.2766	\$ 0.2800	\$ 0.2800
G-43	\$ 0.2552	\$ 0.2552	\$ 0.2552	\$ 0.2552	\$ 0.2552	\$ 0.2552	\$ 0.2552	\$ 0.1167	\$ 0.1167	\$ 0.1181	\$ 0.1181
G-51	\$ 0.1789	\$ 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	\$ 0.0973	\$ 0.0973	\$ 0.0985	\$ 0.0985
G-53	\$ 0.1652	\$ 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	\$ 0.0630	\$ 0.0342	\$ 0.0342	\$ 0.0346	\$ 0.0346
2018-19 Decoupling Year 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	\$ 728,725	\$ 976,772	\$ 1,301,913	\$ 1,070,819	\$ 834,156	\$ 365,700	\$ 205,188	\$ 85,370	\$ 58,448	\$ 54,511	\$ 5,681,600
G-42	\$ 839,330	\$ 1,078,817	\$ 1,398,193	\$ 1,164,125	\$ 926,295	\$ 427,985	\$ 250,830	\$ 106,063	\$ 69,448	\$ 76,293	\$ 6,337,379
G-43	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-51	\$ 51,229	\$ 61,050	\$ 74,217	\$ 63,106	\$ 59,284	\$ 44,114	\$ 38,187	\$ 30,284	\$ 26,128	\$ 28,017	\$ 475,615
G-52	\$ 86,032	\$ 99,495	\$ 121,285	\$ 102,396	\$ 95,066	\$ 66,267	\$ 30,603	\$ 23,823	\$ 21,879	\$ 23,825	\$ 670,671
G-53	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-54	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total C/I	\$ 1,705,316	\$ 2,216,133	\$ 2,895,608	\$ 2,400,445	\$ 1,914,801	\$ 904,065	\$ 524,808	\$ 245,541	\$ 175,902	\$ 182,646	\$ 13,165,265
Total All	\$ 1,705,316	\$ 2,216,133	\$ 2,895,608	\$ 2,400,445	\$ 1,914,801	\$ 904,065	\$ 524,808	\$ 245,541	\$ 175,902	\$ 182,646	\$ 13,165,265

Liberty Utilities (Energy North Natural Gas) Corp. d/b/a Liberty Utilities
Revenue Decoupling Adjustment Factor (RDAF)
Allowed Base Revenue based on the intent of the RDAF

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HEADBLOCK + TAILBLOCK

2018-19 Decoupling Year 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	73,214	85,581	100,416	84,480	82,937	63,662	51,965	39,387	32,303	32,777	646,722
R-3	7,181,583	8,938,769	11,063,248	9,180,015	7,853,803	4,364,796	2,466,296	1,278,121	990,700	989,490	54,306,822
R-4	566,467	708,647	886,285	727,720	628,857	349,111	194,981	104,252	79,984	78,608	4,324,913
Total Resid.	7,821,264	9,732,997	12,049,950	9,992,215	8,565,597	4,777,570	2,713,242	1,421,760	1,102,988	1,100,875	59,278,457
G-41	3,074,649	4,029,890	5,171,569	4,278,806	3,533,328	1,758,606	862,571	352,299	245,393	233,191	23,540,304
G-42	4,275,490	5,292,775	6,535,278	5,469,323	4,724,171	2,659,897	1,479,429	690,757	507,225	530,674	32,165,020
G-43	1,334,906	1,508,814	1,906,512	1,561,323	1,414,851	895,435	606,273	359,667	250,469	286,024	10,124,273
G-51	375,599	433,660	514,333	437,666	423,792	332,713	298,137	247,177	218,991	234,892	3,516,961
G-52	914,214	1,008,388	1,168,109	988,208	976,402	772,908	657,183	561,072	540,959	573,969	8,161,411
G-53	983,271	1,037,011	1,337,608	1,066,083	1,039,435	827,593	775,816	668,663	645,679	699,789	9,080,950
G-54	1,738,750	1,395,359	1,366,893	1,274,130	1,250,056	1,369,579	1,680,548	1,669,182	1,578,600	1,678,120	15,001,217
Total C/I	12,696,881	14,705,897	18,000,302	15,075,539	13,362,035	8,616,732	6,359,958	4,548,817	3,987,317	4,236,658	101,590,134
Total All	20,518,144	24,438,894	30,050,252	25,067,754	21,927,632	13,394,301	9,073,200	5,970,576	5,090,305	5,337,533	160,868,592

2018-19 Decoupling Year 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	\$ 27,390	\$ 32,017	\$ 37,568	\$ 31,605	\$ 31,028	\$ 23,817	\$ 19,441	\$ 14,735	\$ 12,231	\$ 12,411	\$ 242,245
R-3	\$ 3,951,110	\$ 4,917,866	\$ 6,086,696	\$ 5,050,593	\$ 4,320,947	\$ 2,401,391	\$ 1,356,889	\$ 703,187	\$ 551,707	\$ 551,033	\$ 29,891,420
R-4	\$ 126,195	\$ 157,869	\$ 197,442	\$ 162,118	\$ 140,093	\$ 77,773	\$ 42,909	\$ 22,943	\$ 17,818	\$ 17,512	\$ 982,672
Total Resid.	\$ 4,104,695	\$ 5,107,752	\$ 6,321,705	\$ 5,244,316	\$ 4,492,069	\$ 2,502,982	\$ 1,419,239	\$ 740,865	\$ 581,757	\$ 580,956	\$ 31,096,336
G-41	\$ 1,047,656	\$ 1,362,565	\$ 1,724,915	\$ 1,430,247	\$ 1,205,550	\$ 624,210	\$ 293,546	\$ 119,127	\$ 84,842	\$ 81,126	\$ 7,973,784
G-42	\$ 1,354,615	\$ 1,656,990	\$ 2,012,844	\$ 1,687,546	\$ 1,497,332	\$ 889,938	\$ 488,575	\$ 233,657	\$ 178,360	\$ 184,784	\$ 10,184,640
G-43	\$ 340,667	\$ 385,048	\$ 486,541	\$ 398,448	\$ 361,069	\$ 228,514	\$ 70,750	\$ 41,972	\$ 29,585	\$ 33,785	\$ 2,376,380
G-51	\$ 75,780	\$ 86,470	\$ 101,581	\$ 86,466	\$ 84,705	\$ 67,809	\$ 61,485	\$ 51,716	\$ 46,934	\$ 50,347	\$ 713,292
G-52	\$ 172,895	\$ 188,397	\$ 215,213	\$ 182,173	\$ 183,060	\$ 149,415	\$ 89,278	\$ 77,971	\$ 77,121	\$ 81,362	\$ 1,416,884
G-53	\$ 162,390	\$ 171,265	\$ 220,910	\$ 176,067	\$ 171,665	\$ 136,679	\$ 61,480	\$ 52,988	\$ 51,759	\$ 56,097	\$ 1,261,300
G-54	\$ 109,528	\$ 87,897	\$ 86,104	\$ 80,260	\$ 78,744	\$ 86,273	\$ 57,511	\$ 57,122	\$ 54,644	\$ 58,089	\$ 756,172
Total C/I	\$ 3,263,530	\$ 3,938,632	\$ 4,848,107	\$ 4,041,207	\$ 3,582,125	\$ 2,182,838	\$ 1,122,625	\$ 634,554	\$ 523,245	\$ 545,590	\$ 24,682,452
Total All	\$ 7,368,225	\$ 9,046,384	\$ 11,169,813	\$ 9,285,522	\$ 8,074,193	\$ 4,685,820	\$ 2,541,864	\$ 1,375,419	\$ 1,105,002	\$ 1,126,546	\$ 55,778,788

TOTAL REVENUE

2018-19 Decoupling Year 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	\$ 79,835	\$ 86,170	\$ 91,759	\$ 80,503	\$ 85,190	\$ 76,176	\$ 73,559	\$ 66,252	\$ 66,568	\$ 66,922	\$ 772,935
R-3	\$ 5,028,795	\$ 6,036,585	\$ 7,208,238	\$ 6,065,742	\$ 5,446,283	\$ 3,488,985	\$ 2,477,620	\$ 1,766,179	\$ 1,666,919	\$ 1,664,369	\$ 40,849,716
R-4	\$ 161,908	\$ 195,127	\$ 234,727	\$ 195,739	\$ 177,143	\$ 113,058	\$ 78,673	\$ 56,596	\$ 52,958	\$ 52,035	\$ 1,317,964
Total Resid.	\$ 5,270,538	\$ 6,317,882	\$ 7,534,725	\$ 6,341,984	\$ 5,708,616	\$ 3,678,219	\$ 2,629,851	\$ 1,889,028	\$ 1,786,446	\$ 1,783,326	\$ 42,940,615
G-41	\$ 1,564,360	\$ 1,901,762	\$ 2,265,911	\$ 1,920,471	\$ 1,748,510	\$ 1,146,792	\$ 823,878	\$ 613,690	\$ 599,114	\$ 594,200	\$ 13,178,686
G-42	\$ 1,586,447	\$ 1,897,408	\$ 2,253,592	\$ 1,905,225	\$ 1,738,283	\$ 1,121,410	\$ 726,892	\$ 459,287	\$ 423,835	\$ 424,019	\$ 12,536,399
G-43	\$ 381,223	\$ 428,352	\$ 529,510	\$ 437,259	\$ 403,465	\$ 268,783	\$ 112,238	\$ 81,811	\$ 69,520	\$ 74,301	\$ 2,786,462
G-51	\$ 147,706	\$ 161,092	\$ 176,257	\$ 153,849	\$ 159,310	\$ 139,809	\$ 135,479	\$ 122,187	\$ 118,028	\$ 123,488	\$ 1,437,204
G-52	\$ 235,999	\$ 253,635	\$ 280,394	\$ 241,033	\$ 248,553	\$ 213,144	\$ 155,441	\$ 141,147	\$ 144,156	\$ 147,453	\$ 2,060,954
G-53	\$ 189,690	\$ 198,983	\$ 248,357	\$ 200,858	\$ 197,760	\$ 162,135	\$ 88,066	\$ 78,739	\$ 80,312	\$ 84,650	\$ 1,529,550
G-54	\$ 130,925	\$ 110,007	\$ 107,812	\$ 100,215	\$ 100,854	\$ 107,055	\$ 78,859	\$ 77,708	\$ 76,252	\$ 79,697	\$ 969,385
Total C/I	\$ 4,236,349	\$ 4,951,239	\$ 5,861,833	\$ 4,958,911	\$ 4,596,736	\$ 3,159,128	\$ 2,120,853	\$ 1,574,568	\$ 1,511,217	\$ 1,527,807	\$ 34,498,640
Total All	\$ 9,506,887	\$ 11,269,121	\$ 13,396,557	\$ 11,300,895	\$ 10,305,351	\$ 6,837,347	\$ 4,750,704	\$ 3,463,596	\$ 3,297,663	\$ 3,311,133	\$ 77,439,254

Liberty Utilities (Energy North Natural Gas) Corp. d/b/a Liberty Utilities
Revenue Decoupling Adjustment Factor (RDAF)
Allowed Base Revenue based on the formula in the tariff

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(1)	(2)	(3)
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Residential Revenue Decoupling Adjustment Factor

1. Allowed Base Revenue	\$ 40,989,509	
2. less: Actual and Estimated Base Revenue	<u>44,891,577</u>	
3. Revenue Deficiency / (Excess)	\$ (3,902,069)	
4. divided by: Forecasted Residential Sales	<u>65,525,887</u>	
5. Residential Revenue Decoupling Adjustment Factor	<u>\$ (0.0596)</u>	

Commercial Revenue Decoupling Adjustment Factor

6. Allowed Base Revenue	\$ 31,757,813	
7. less: Actual and Estimated Base Revenue	<u>34,498,640</u>	
8. Revenue Deficiency / (Excess)	\$ (2,740,826)	
9. divided by: Forecasted Commercial Sales	<u>121,652,799</u>	
10. Commercial Revenue Decoupling Adjustment Factor	<u>\$ (0.0225)</u>	

Liberty Utilities (Energy North Natural Gas) Corp. d/b/a Liberty Utilities
Revenue Decoupling Adjustment Factor (RDAF)
Allowed Base Revenue based on the formula in the tariff

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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	3,491	3,605	3,608	3,255	3,606	3,486	3,603	3,430	3,574	3,586	35,243
R-3	71,744	74,476	74,664	67,581	74,916	72,404	74,610	70,766	73,357	73,234	727,751
R-4	5,946	6,203	6,207	5,598	6,168	5,874	5,954	5,603	5,777	5,675	59,006
Total Resid.	81,181	84,284	84,479	76,434	84,690	81,764	84,167	79,799	82,708	82,495	822,000
G-41	9,279	9,683	9,716	8,804	9,751	9,385	9,524	8,882	9,125	9,104	93,253
G-42	1,388	1,439	1,441	1,303	1,442	1,386	1,427	1,351	1,452	1,415	14,042
G-43	57	60	60	54	59	56	58	56	55	56	571
G-51	1,292	1,340	1,341	1,210	1,340	1,293	1,329	1,266	1,261	1,298	12,970
G-52	378	391	390	352	392	381	396	378	396	391	3,846
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	12,459	12,981	13,014	11,784	13,049	12,564	12,798	11,994	12,357	12,331	125,332
Total All	93,640	97,265	97,493	88,218	97,740	94,328	96,965	91,793	95,065	94,825	947,332

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	\$ 23,630	\$ 25,588	\$ 26,326	\$ 26,064	\$ 24,359	\$ 21,665	\$ 20,932	\$ 19,551	\$ 18,581	\$ 18,520
R-3	\$ 58,483	\$ 78,412	\$ 89,883	\$ 84,877	\$ 72,716	\$ 45,931	\$ 33,622	\$ 25,883	\$ 22,855	\$ 22,974
R-4	\$ 22,321	\$ 29,930	\$ 33,822	\$ 31,446	\$ 28,720	\$ 19,784	\$ 13,134	\$ 10,516	\$ 9,239	\$ 9,352
G-41	\$ 141,061	\$ 187,336	\$ 213,824	\$ 204,320	\$ 174,282	\$ 120,172	\$ 89,749	\$ 73,104	\$ 67,581	\$ 67,203
G-42	\$ 831,437	\$ 1,139,248	\$ 1,275,090	\$ 1,181,586	\$ 995,503	\$ 692,940	\$ 478,158	\$ 353,842	\$ 296,514	\$ 289,956
G-43	\$ 6,630,216	\$ 7,593,280	\$ 8,769,856	\$ 7,718,973	\$ 6,633,048	\$ 4,338,262	\$ 2,120,739	\$ 1,477,930	\$ 1,276,137	\$ 1,310,918
G-51	\$ 117,110	\$ 128,843	\$ 132,447	\$ 127,517	\$ 117,280	\$ 101,009	\$ 95,963	\$ 86,858	\$ 86,305	\$ 87,102
G-52	\$ 635,041	\$ 672,436	\$ 670,683	\$ 657,599	\$ 601,232	\$ 521,003	\$ 376,781	\$ 342,142	\$ 345,377	\$ 356,854
G-53	\$ 5,288,039	\$ 6,482,182	\$ 5,443,345	\$ 5,509,426	\$ 5,382,287	\$ 4,702,462	\$ 2,553,307	\$ 2,163,553	\$ 2,145,270	\$ 2,343,537
G-54	\$ 4,517,444	\$ 5,041,273	\$ 4,376,519	\$ 3,774,254	\$ 2,908,047	\$ 3,287,867	\$ 2,028,236	\$ 2,391,070	\$ 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	\$ 82,502	\$ 92,247	\$ 94,977	\$ 84,845	\$ 87,832	\$ 75,517	\$ 75,412	\$ 67,052	\$ 66,414	\$ 66,407	\$ 793,203
R-3	\$ 4,195,802	\$ 5,839,765	\$ 6,710,987	\$ 5,736,100	\$ 5,447,653	\$ 3,325,556	\$ 2,508,517	\$ 1,831,622	\$ 1,676,542	\$ 1,682,483	\$ 38,955,028
R-4	\$ 132,717	\$ 185,655	\$ 209,952	\$ 176,022	\$ 177,153	\$ 116,217	\$ 78,200	\$ 58,919	\$ 53,370	\$ 53,073	\$ 1,241,278
Total Resid.	\$ 4,411,021	\$ 6,117,667	\$ 7,015,915	\$ 5,996,967	\$ 5,712,638	\$ 3,517,289	\$ 2,662,129	\$ 1,957,593	\$ 1,796,326	\$ 1,801,963	\$ 40,989,509
G-41	\$ 1,308,945	\$ 1,814,017	\$ 2,077,415	\$ 1,798,781	\$ 1,699,390	\$ 1,127,795	\$ 854,774	\$ 649,284	\$ 616,699	\$ 611,821	\$ 12,558,921
G-42	\$ 1,153,793	\$ 1,639,502	\$ 1,837,512	\$ 1,539,599	\$ 1,435,816	\$ 960,108	\$ 682,108	\$ 477,894	\$ 430,461	\$ 410,240	\$ 10,567,033
G-43	\$ 375,050	\$ 458,636	\$ 525,607	\$ 417,853	\$ 392,235	\$ 243,666	\$ 122,720	\$ 82,124	\$ 70,230	\$ 73,193	\$ 2,761,314
G-51	\$ 151,270	\$ 172,662	\$ 177,620	\$ 154,310	\$ 157,132	\$ 130,608	\$ 127,519	\$ 109,924	\$ 108,874	\$ 113,043	\$ 1,402,963
G-52	\$ 239,876	\$ 262,589	\$ 261,676	\$ 231,692	\$ 235,703	\$ 198,747	\$ 149,220	\$ 129,385	\$ 136,923	\$ 139,482	\$ 1,985,293
G-53	\$ 195,657	\$ 243,513	\$ 202,491	\$ 185,116	\$ 190,353	\$ 162,234	\$ 92,004	\$ 75,508	\$ 82,021	\$ 89,601	\$ 1,518,499
G-54	\$ 131,006	\$ 151,069	\$ 128,766	\$ 102,072	\$ 87,144	\$ 92,608	\$ 58,684	\$ 66,711	\$ 68,308	\$ 77,422	\$ 963,790
Total C/I	\$ 3,555,597	\$ 4,741,988	\$ 5,211,088	\$ 4,429,425	\$ 4,197,774	\$ 2,915,765	\$ 2,087,028	\$ 1,590,830	\$ 1,513,516	\$ 1,514,802	\$ 31,757,813
Total All	\$ 7,966,618	\$ 10,859,655	\$ 12,227,003	\$ 10,426,392	\$ 9,910,412	\$ 6,433,055	\$ 4,749,157	\$ 3,548,422	\$ 3,309,842	\$ 3,316,765	\$ 72,747,322

Liberty Utilities (Energy North Natural Gas) Corp. d/b/a Liberty Utilities
Revenue Decoupling Adjustment Factor (RDAF)
Allowed Base Revenue based on the formula in the tariff

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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	3,491	3,605	3,608	3,255	3,606	3,486	3,603	3,430	3,574	3,586	35,243
R-3	71,744	74,476	74,664	67,581	74,916	72,404	74,610	70,766	73,357	73,234	727,751
R-4	5,946	6,203	6,207	5,598	6,168	5,874	5,954	5,603	5,777	5,675	59,006
Total Resid.	81,181	84,284	84,479	76,434	84,690	81,764	84,167	79,799	82,708	82,495	822,000
G-41	9,279	9,683	9,716	8,804	9,751	9,385	9,524	8,882	9,125	9,104	93,253
G-42	1,388	1,439	1,441	1,303	1,442	1,386	1,427	1,351	1,452	1,415	14,042
G-43	57	60	60	54	59	56	58	56	55	56	571
G-51	1,292	1,340	1,341	1,210	1,340	1,293	1,329	1,266	1,261	1,298	12,970
G-52	378	391	390	352	392	381	396	378	396	391	3,846
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	12,459	12,981	13,014	11,784	13,049	12,564	12,798	11,994	12,357	12,331	125,332
Total All	93,640	97,265	97,493	88,218	97,740	94,328	96,965	91,793	95,065	94,825	947,332

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	\$ 52,445	\$ 54,153	\$ 54,192	\$ 48,898	\$ 54,162	\$ 52,359	\$ 54,118	\$ 51,517	\$ 54,337	\$ 54,511	\$ 530,690
R-3	\$ 1,077,685	\$ 1,118,719	\$ 1,121,542	\$ 1,015,149	\$ 1,125,335	\$ 1,087,594	\$ 1,120,732	\$ 1,062,992	\$ 1,115,212	\$ 1,113,336	\$ 10,958,296
R-4	\$ 89,314	\$ 93,178	\$ 93,244	\$ 84,082	\$ 92,654	\$ 88,241	\$ 89,438	\$ 84,163	\$ 87,820	\$ 86,280	\$ 888,413
Total Resid.	\$ 1,219,443	\$ 1,266,049	\$ 1,268,978	\$ 1,148,129	\$ 1,272,152	\$ 1,228,194	\$ 1,264,287	\$ 1,198,672	\$ 1,257,369	\$ 1,254,126	\$ 12,377,400
G-41	\$ 516,704	\$ 539,197	\$ 540,996	\$ 490,224	\$ 542,960	\$ 522,582	\$ 530,331	\$ 494,562	\$ 514,272	\$ 513,073	\$ 5,204,902
G-42	\$ 231,832	\$ 240,418	\$ 240,749	\$ 217,679	\$ 240,952	\$ 231,472	\$ 238,317	\$ 225,630	\$ 245,475	\$ 239,235	\$ 2,351,759
G-43	\$ 40,556	\$ 43,304	\$ 42,969	\$ 38,811	\$ 42,396	\$ 40,269	\$ 41,488	\$ 39,839	\$ 39,936	\$ 40,516	\$ 410,082
G-51	\$ 71,926	\$ 74,622	\$ 74,675	\$ 67,383	\$ 74,605	\$ 72,001	\$ 73,994	\$ 70,471	\$ 71,094	\$ 73,141	\$ 723,912
G-52	\$ 63,104	\$ 65,238	\$ 65,181	\$ 58,861	\$ 65,493	\$ 63,728	\$ 66,163	\$ 63,176	\$ 67,035	\$ 66,091	\$ 644,070
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	\$ 20,586	\$ 21,608	\$ 21,608	\$ 213,212
Total C/I	\$ 972,819	\$ 1,012,607	\$ 1,013,726	\$ 917,704	\$ 1,014,611	\$ 976,290	\$ 998,228	\$ 940,014	\$ 987,972	\$ 982,217	\$ 9,816,187
Total All	\$ 2,192,262	\$ 2,278,656	\$ 2,282,704	\$ 2,065,833	\$ 2,286,763	\$ 2,204,483	\$ 2,262,515	\$ 2,138,686	\$ 2,245,341	\$ 2,236,343	\$ 22,193,587

Liberty Utilities (Energy North Natural Gas) Corp. d/b/a Liberty Utilities
Revenue Decoupling Adjustment Factor (RDAF)
Allowed Base Revenue based on the formula in the tariff

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ENERGY COMPONENT

HEADBLOCK

2018-19 Decoupling Year 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	73,214	85,581	100,416	84,480	82,937	63,662	51,965	39,387	32,303	32,777	646,722
R-3	7,181,583	8,938,769	11,063,248	9,180,015	7,853,803	4,364,796	2,466,296	1,278,121	990,700	989,490	54,306,822
R-4	566,467	708,647	886,285	727,720	628,857	349,111	194,981	104,252	79,984	78,608	4,324,913
Total Resid.	7,821,264	9,732,997	12,049,950	9,992,215	8,565,597	4,777,570	2,713,242	1,421,760	1,102,988	1,100,875	59,278,457
G-41	698,502	844,939	926,433	787,197	813,404	566,171	193,517	73,932	57,112	57,591	5,018,798
G-42	1,241,041	1,392,503	1,480,358	1,260,637	1,375,317	1,112,595	572,599	307,306	259,161	258,161	9,259,678
G-43	1,334,906	1,508,814	1,906,512	1,561,323	1,414,851	895,435	606,273	359,667	250,469	286,024	10,124,273
G-51	89,214	92,375	99,440	84,888	92,376	86,105	84,659	77,880	74,698	80,167	861,803
G-52	367,561	376,192	397,457	337,575	372,348	351,845	342,708	316,265	318,801	332,044	3,512,797
G-53	983,271	1,037,011	1,337,608	1,066,083	1,039,435	827,593	775,816	668,663	645,679	699,789	9,080,950
G-54	1,738,750	1,395,359	1,366,893	1,274,130	1,250,056	1,369,579	1,680,548	1,669,182	1,578,600	1,678,120	15,001,217
Total C/I	6,453,245	6,647,192	7,514,701	6,371,834	6,357,786	5,209,324	4,256,121	3,472,896	3,184,521	3,391,895	52,859,516
Total All	14,274,509	16,380,190	19,564,651	16,364,049	14,923,384	9,986,893	6,969,363	4,894,655	4,287,509	4,492,770	112,137,973

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	\$ 0.3786	\$ 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	\$ 0.4566	\$ 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	\$ 0.1167	\$ 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	\$ 0.2363	\$ 0.1712	\$ 0.1733	\$ 0.1733
G-53	\$ 0.1652	\$ 0.1652	\$ 0.1652	\$ 0.1652	\$ 0.1652	\$ 0.1652	\$ 0.1652	\$ 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 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	\$ 27,390	\$ 32,017	\$ 37,568	\$ 31,605	\$ 31,028	\$ 23,817	\$ 19,441	\$ 14,735	\$ 12,231	\$ 12,411	\$ 242,245
R-3	\$ 3,951,110	\$ 4,917,866	\$ 6,086,696	\$ 5,050,593	\$ 4,320,947	\$ 2,401,391	\$ 1,356,889	\$ 703,187	\$ 551,707	\$ 551,033	\$ 29,891,420
R-4	\$ 311,655	\$ 389,878	\$ 487,610	\$ 400,372	\$ 345,980	\$ 192,072	\$ 107,273	\$ 57,356	\$ 44,542	\$ 43,775	\$ 2,380,514
Total Resid.	\$ 4,290,155	\$ 5,339,762	\$ 6,611,873	\$ 5,482,570	\$ 4,697,955	\$ 2,617,280	\$ 1,483,603	\$ 775,279	\$ 608,481	\$ 607,220	\$ 32,514,178
G-41	\$ 318,931	\$ 385,793	\$ 423,003	\$ 359,428	\$ 371,394	\$ 258,510	\$ 88,359	\$ 33,757	\$ 26,394	\$ 26,615	\$ 2,292,184
G-42	\$ 515,285	\$ 578,172	\$ 614,650	\$ 523,421	\$ 571,037	\$ 461,954	\$ 237,745	\$ 127,594	\$ 108,911	\$ 108,491	\$ 3,847,260
G-43	\$ 340,667	\$ 385,048	\$ 486,541	\$ 398,448	\$ 361,069	\$ 228,514	\$ 70,750	\$ 41,972	\$ 29,585	\$ 33,785	\$ 2,376,380
G-51	\$ 24,551	\$ 25,420	\$ 27,365	\$ 23,360	\$ 25,421	\$ 23,695	\$ 23,297	\$ 21,432	\$ 20,807	\$ 22,330	\$ 237,677
G-52	\$ 86,863	\$ 88,902	\$ 93,928	\$ 79,776	\$ 87,994	\$ 83,149	\$ 58,675	\$ 54,148	\$ 55,242	\$ 57,537	\$ 746,213
G-53	\$ 162,390	\$ 171,265	\$ 220,910	\$ 176,067	\$ 171,665	\$ 136,679	\$ 61,480	\$ 52,988	\$ 51,759	\$ 56,097	\$ 1,261,300
G-54	\$ 109,528	\$ 87,897	\$ 86,104	\$ 80,260	\$ 78,744	\$ 86,273	\$ 57,511	\$ 57,122	\$ 54,644	\$ 58,089	\$ 756,172
Total C/I	\$ 1,558,214	\$ 1,722,498	\$ 1,952,499	\$ 1,640,761	\$ 1,667,324	\$ 1,278,773	\$ 597,817	\$ 389,013	\$ 347,342	\$ 362,944	\$ 11,517,187
Total All	\$ 5,848,369	\$ 7,062,260	\$ 8,564,373	\$ 7,123,331	\$ 6,365,279	\$ 3,896,053	\$ 2,081,420	\$ 1,164,292	\$ 955,823	\$ 970,163	\$ 44,031,365

Liberty Utilities (Energy North Natural Gas) Corp. d/b/a Liberty Utilities
Revenue Decoupling Adjustment Factor (RDAF)
Allowed Base Revenue based on the formula in the tariff

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TAILBLOCK

2018-19 Decoupling Year 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	2,376,148	3,184,951	4,245,136	3,491,609	2,719,924	1,192,435	669,054	278,366	188,282	175,600	18,521,506
G-42	3,034,449	3,900,272	5,054,919	4,208,686	3,348,855	1,547,302	906,830	383,451	248,064	272,513	22,905,342
G-43	-	-	-	-	-	-	-	-	-	-	-
G-51	286,385	341,285	414,894	352,778	331,416	246,608	213,478	169,297	144,293	154,725	2,655,158
G-52	546,653	632,195	770,652	650,633	604,054	421,063	314,475	244,807	222,157	241,924	4,648,613
G-53	-	-	-	-	-	-	-	-	-	-	-
G-54	-	-	-	-	-	-	-	-	-	-	-
Total C/I	6,243,635	8,058,704	10,485,601	8,703,706	7,004,248	3,407,408	2,103,836	1,075,921	802,796	844,763	48,730,618
Total All	6,243,635	8,058,704	10,485,601	8,703,706	7,004,248	3,407,408	2,103,836	1,075,921	802,796	844,763	48,730,618
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	\$ 0.2201	\$ 0.2201	\$ 0.2201	\$ 0.2201	\$ 0.2201	\$ 0.2201	\$ 0.2201	\$ 0.2201	\$ 0.2228	\$ 0.2228	
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	\$ 0.1167	\$ 0.1167	\$ 0.1181	\$ 0.1181
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	\$ 0.0973	\$ 0.0973	\$ 0.0985	\$ 0.0985
G-53	\$ 0.1652	\$ 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	\$ 0.0630	\$ 0.0342	\$ 0.0342	\$ 0.0346	\$ 0.0346
2018-19 Decoupling Year 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	\$ 728,725	\$ 976,772	\$ 1,301,913	\$ 1,070,819	\$ 834,156	\$ 365,700	\$ 205,188	\$ 85,370	\$ 58,448	\$ 54,511	\$ 5,681,600
G-42	\$ 839,330	\$ 1,078,817	\$ 1,398,193	\$ 1,164,125	\$ 926,295	\$ 427,985	\$ 250,830	\$ 106,063	\$ 69,448	\$ 76,293	\$ 6,337,379
G-43	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-51	\$ 51,229	\$ 61,050	\$ 74,217	\$ 63,106	\$ 59,284	\$ 44,114	\$ 38,187	\$ 30,284	\$ 26,128	\$ 28,017	\$ 475,615
G-52	\$ 86,032	\$ 99,495	\$ 121,285	\$ 102,396	\$ 95,066	\$ 66,267	\$ 30,603	\$ 23,823	\$ 21,879	\$ 23,825	\$ 670,671
G-53	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
G-54	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total C/I	\$ 1,705,316	\$ 2,216,133	\$ 2,895,608	\$ 2,400,445	\$ 1,914,801	\$ 904,065	\$ 524,808	\$ 245,541	\$ 175,902	\$ 182,646	\$ 13,165,265
Total All	\$ 1,705,316	\$ 2,216,133	\$ 2,895,608	\$ 2,400,445	\$ 1,914,801	\$ 904,065	\$ 524,808	\$ 245,541	\$ 175,902	\$ 182,646	\$ 13,165,265

Liberty Utilities (Energy North Natural Gas) Corp. d/b/a Liberty Utilities
Revenue Decoupling Adjustment Factor (RDAF)
Allowed Base Revenue based on the formula in the tariff

Schedule 19
RDAF
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HEADBLOCK + TAILBLOCK

2018-19 Decoupling Year 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	73,214	85,581	100,416	84,480	82,937	63,662	51,965	39,387	32,303	32,777	646,722
R-3	7,181,583	8,938,769	11,063,248	9,180,015	7,853,803	4,364,796	2,466,296	1,278,121	990,700	989,490	54,306,822
R-4	566,467	708,647	886,285	727,720	628,857	349,111	194,981	104,252	79,984	78,608	4,324,913
Total Resid.	7,821,264	9,732,997	12,049,950	9,992,215	8,565,597	4,777,570	2,713,242	1,421,760	1,102,988	1,100,875	59,278,457
G-41	3,074,649	4,029,890	5,171,569	4,278,806	3,533,328	1,758,606	862,571	352,299	245,393	233,191	23,540,304
G-42	4,275,490	5,292,775	6,535,278	5,469,323	4,724,171	2,659,897	1,479,429	690,757	507,225	530,674	32,165,020
G-43	1,334,906	1,508,814	1,906,512	1,561,323	1,414,851	895,435	606,273	359,667	250,469	286,024	10,124,273
G-51	375,599	433,660	514,333	437,666	423,792	332,713	298,137	247,177	218,991	234,892	3,516,961
G-52	914,214	1,008,388	1,168,109	988,208	976,402	772,908	657,183	561,072	540,959	573,969	8,161,411
G-53	983,271	1,037,011	1,337,608	1,066,083	1,039,435	827,593	775,816	668,663	645,679	699,789	9,080,950
G-54	1,738,750	1,395,359	1,366,893	1,274,130	1,250,056	1,369,579	1,680,548	1,669,182	1,578,600	1,678,120	15,001,217
Total C/l	12,696,881	14,705,897	18,000,302	15,075,539	13,362,035	8,816,732	6,359,958	4,548,817	3,987,317	4,236,658	101,590,134
Total All	20,518,144	24,438,894	30,050,252	25,067,754	21,927,632	13,394,301	9,073,200	5,970,576	5,090,305	5,337,533	160,868,592

2018-19 Decoupling Year 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	\$ 27,390	\$ 32,017	\$ 37,568	\$ 31,605	\$ 31,028	\$ 23,817	\$ 19,441	\$ 14,735	\$ 12,231	\$ 12,411	\$ 242,245
R-3	\$ 3,951,110	\$ 4,917,866	\$ 6,086,696	\$ 5,050,593	\$ 4,320,947	\$ 2,401,391	\$ 1,356,889	\$ 703,187	\$ 551,707	\$ 551,033	\$ 29,891,420
R-4	\$ 311,655	\$ 389,878	\$ 487,610	\$ 400,372	\$ 345,980	\$ 192,072	\$ 107,273	\$ 57,356	\$ 44,542	\$ 43,775	\$ 2,380,514
Total Resid.	\$ 4,290,155	\$ 5,339,762	\$ 6,611,873	\$ 5,482,570	\$ 4,697,955	\$ 2,617,280	\$ 1,483,603	\$ 775,279	\$ 608,481	\$ 607,220	\$ 32,514,178
G-41	\$ 1,047,656	\$ 1,362,565	\$ 1,724,915	\$ 1,430,247	\$ 1,205,550	\$ 624,210	\$ 293,546	\$ 119,127	\$ 84,842	\$ 81,126	\$ 7,973,784
G-42	\$ 1,354,615	\$ 1,656,990	\$ 2,012,844	\$ 1,687,548	\$ 1,497,332	\$ 889,938	\$ 488,575	\$ 233,657	\$ 178,360	\$ 184,784	\$ 10,184,640
G-43	\$ 340,667	\$ 385,048	\$ 486,541	\$ 398,448	\$ 361,069	\$ 228,514	\$ 70,750	\$ 41,972	\$ 29,585	\$ 33,785	\$ 2,376,380
G-51	\$ 75,780	\$ 86,470	\$ 101,581	\$ 86,466	\$ 84,705	\$ 67,809	\$ 61,485	\$ 51,716	\$ 46,934	\$ 50,347	\$ 713,292
G-52	\$ 172,895	\$ 188,397	\$ 215,213	\$ 182,173	\$ 183,060	\$ 149,415	\$ 89,278	\$ 77,971	\$ 77,121	\$ 81,362	\$ 1,416,884
G-53	\$ 162,390	\$ 171,265	\$ 220,910	\$ 176,067	\$ 171,665	\$ 136,679	\$ 61,480	\$ 52,988	\$ 51,759	\$ 56,097	\$ 1,261,300
G-54	\$ 109,528	\$ 87,897	\$ 86,104	\$ 80,260	\$ 78,744	\$ 86,273	\$ 57,511	\$ 57,122	\$ 54,644	\$ 58,089	\$ 756,172
Total C/l	\$ 3,263,530	\$ 3,938,632	\$ 4,848,107	\$ 4,041,207	\$ 3,582,125	\$ 2,182,838	\$ 1,122,625	\$ 634,554	\$ 523,245	\$ 545,590	\$ 24,682,452
Total All	\$ 7,553,686	\$ 9,278,393	\$ 11,459,980	\$ 9,523,776	\$ 8,280,080	\$ 4,800,118	\$ 2,606,228	\$ 1,409,833	\$ 1,131,726	\$ 1,152,809	\$ 57,196,630

TOTAL REVENUE

2018-19 Decoupling Year 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	\$ 79,835	\$ 86,170	\$ 91,759	\$ 80,503	\$ 85,190	\$ 76,176	\$ 73,559	\$ 66,252	\$ 66,568	\$ 66,922	\$ 772,935
R-3	\$ 5,028,795	\$ 6,036,585	\$ 7,208,238	\$ 6,065,742	\$ 5,446,283	\$ 3,488,985	\$ 2,477,620	\$ 1,766,179	\$ 1,666,919	\$ 1,664,369	\$ 40,849,716
R-4	\$ 400,968	\$ 483,056	\$ 580,854	\$ 484,454	\$ 438,634	\$ 280,312	\$ 196,711	\$ 141,519	\$ 132,363	\$ 130,055	\$ 3,268,927
Total Resid.	\$ 5,509,599	\$ 6,605,811	\$ 7,880,851	\$ 6,630,699	\$ 5,970,107	\$ 3,845,474	\$ 2,747,890	\$ 1,973,951	\$ 1,865,850	\$ 1,861,346	\$ 44,891,577
G-41	\$ 1,564,360	\$ 1,901,762	\$ 2,265,911	\$ 1,920,471	\$ 1,748,510	\$ 1,146,792	\$ 823,878	\$ 613,690	\$ 599,114	\$ 594,200	\$ 13,178,686
G-42	\$ 1,586,447	\$ 1,897,408	\$ 2,253,592	\$ 1,905,225	\$ 1,738,283	\$ 1,121,410	\$ 726,892	\$ 459,287	\$ 423,835	\$ 424,019	\$ 12,536,399
G-43	\$ 381,223	\$ 428,352	\$ 529,510	\$ 437,256	\$ 403,465	\$ 268,783	\$ 112,238	\$ 81,811	\$ 69,520	\$ 74,301	\$ 2,786,462
G-51	\$ 147,706	\$ 161,092	\$ 176,257	\$ 153,849	\$ 159,310	\$ 139,809	\$ 135,479	\$ 122,187	\$ 118,028	\$ 123,488	\$ 1,437,204
G-52	\$ 235,999	\$ 253,635	\$ 280,394	\$ 241,033	\$ 248,553	\$ 213,144	\$ 155,441	\$ 141,147	\$ 144,156	\$ 147,453	\$ 2,060,954
G-53	\$ 189,690	\$ 198,983	\$ 248,357	\$ 200,858	\$ 197,760	\$ 162,135	\$ 88,066	\$ 78,739	\$ 80,312	\$ 84,650	\$ 1,529,550
G-54	\$ 130,925	\$ 110,007	\$ 107,812	\$ 100,215	\$ 100,854	\$ 107,055	\$ 78,855	\$ 77,708	\$ 76,252	\$ 79,697	\$ 969,385
Total C/l	\$ 4,236,349	\$ 4,951,239	\$ 5,861,833	\$ 4,958,911	\$ 4,596,736	\$ 3,159,128	\$ 2,120,853	\$ 1,574,568	\$ 1,511,217	\$ 1,527,807	\$ 34,498,640
Total All	\$ 9,745,948	\$ 11,557,049	\$ 13,742,684	\$ 11,589,610	\$ 10,566,843	\$ 7,004,602	\$ 4,868,743	\$ 3,548,519	\$ 3,377,067	\$ 3,389,153	\$ 79,390,217

Liberty Utilities (EnergyNorth Natural Gas) Corp.

Schedule 19
 RLIAP
 Page 1 of 2

Residential Low Income Assistance Program (RLIAP)

	Customer Charge	Block	Total
1 R-3 Base Rates	\$ 15.20	\$ 0.5569	
3 R-4 Rate at 40% of R-3	\$ 6.08	\$ 0.2228	
4 Program Subsidy	\$ 9.1195	\$ 0.3341	
5 Average Annual Therms			776
7 Estimated Annual Subsidy	\$ 54.72	\$ 259.13	<u>\$ 313.85</u>
9 Number of Estimated 2019/20 Participants			5,932 (a)
11 Annual Subsidy times Number of Participants (Ln 7 * Ln 11)		\$ 1,861,760	
12 Prior Year Ending Balance - RLIAP Page 2		\$ 445,596	
13 Estimated Annual Administrative Costs			-
14 Total Program Costs			<u>\$ 2,307,356</u>
16 Estimated weather normalized firm therms billed for the twelve months ended 10/31/20 sales and transportation			<u>187,178,686</u>
19 Total Residential Low Income Program Charge		\$ 0.0123	

(a) Estimated number of participants for 2019/20 is based on the actual number participants as of June 2019.

Liberty Utilities (EnergyNorth Natural Gas) Corp.

NOVEMBER 2018 THROUGH OCTOBER 2019
RESIDENTIAL LOW INCOME ASSISTANCE PROGRAM RECONCILIATION
ACCOUNT 175.6

		(Actual)	(Estimate)	(Estimate)	(Estimate)	(Estimate)							
1	FOR THE MONTH OF:	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19
2	DAYS IN MONTH	30	31	31	29	31	30	31	30	31	31	30	31
3	Beginning Balance	\$ 559,997	\$ 536,699	\$ 461,166	\$ 422,199	\$ 384,625	\$ 362,946	\$ 382,955	\$ 417,361	\$ 421,995	\$ 437,148	\$ 450,553	\$ 457,662
4	Add: Actual Costs	130,484.2	217,735.6	293,538.4	328,731.0	314,197.5	271,170.0	191,899.5	109,876.6	84,339	80,608	86,637	104,250
5	Less: Collected Revenue	(156,143.5)	(295,491.6)	(334,471.0)	(367,998.0)	(337,621.5)	(252,847.2)	(159,362.0)	(107,138.8)	(71,097)	(69,178)	(81,484)	(118,325)
6	Add: Administrative and Start Up Costs	-	-	-	-	-	-	-	-	-	-	-	-
7	Ending Balance Pre-Interest	\$ 534,338	\$ 458,943	\$ 420,233	\$ 382,932	\$ 361,201	\$ 381,269	\$ 415,492	\$ 420,098	\$ 435,237	\$ 448,579	\$ 455,707	\$ 443,587
8	Month's Average Balance	\$ 547,168	\$ 497,821	\$ 440,700	\$ 402,566	\$ 372,913	\$ 372,107	\$ 399,223	\$ 418,729	\$ 428,616	\$ 442,863	\$ 453,130	\$ 450,624
9	Interest Rate	5.25%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.25%	5.25%	5.25%	5.25%
10	Interest Applied	\$ 2,361	\$ 2,223	\$ 1,966	\$ 1,692	\$ 1,745	\$ 1,686	\$ 1,869	\$ 1,897	\$ 1,911	\$ 1,975	\$ 1,955	\$ 2,009
11	Ending Balance	\$ 536,699	\$ 461,166	\$ 422,199	\$ 384,625	\$ 362,946	\$ 382,955	\$ 417,361	\$ 421,995	\$ 437,148	\$ 450,553	\$ 457,662	\$ 445,596
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