

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Docket No. DG 17-048

Liberty Utilities (EnergyNorth)

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NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Docket No. DG 17-048
 Schedule EN-1

Liberty Utilities (EnergyNorth)

Twelve Months Ending December 31, 2016

Summary Comparison of Computation of Revenue Requirement and Revenue Deficiency

Line	Description	Company Application (A)	Company Rebuttal (C)	Staff Testimony 11/30/17 (D)	Staff Supplemental (E)	Difference (F)
1	Rate Base	\$ 249,876,373	\$ 249,741,831	\$ 240,514,539	\$ 240,633,555	\$ (9,108,276)
2	Rate of Return	7.36%	7.36%	6.42%	6.85%	-0.51%
3	Return Requirement	18,390,901	18,380,999	15,441,033	16,483,399	(1,897,600)
4	Adjusted Net Operating Income	10,491,807	10,103,650	12,760,015	12,793,851	2,690,201
5	Deficiency	7,899,094	8,277,349	2,681,018	3,689,548	(4,587,801)
6	Income Tax Effect	5,137,864	5,383,897	1,743,835	2,399,820	(2,984,077)
7	Revenue Deficiency	<u>\$ 13,036,958</u>	\$ 13,661,246	\$ 4,424,853	\$ 6,089,367	\$ (7,571,878)
8	iNATGAS Adjustment			<u>\$ (379,264)</u>	<u>\$ (396,576)</u>	<u>\$ (396,576)</u>
9	Revenue Deficiency with iNATGAS Adjustment			<u>\$ 4,045,589</u>	\$ 5,692,791	<u>\$ (7,968,454)</u>
11	Calculated Tax-Change Effect		<u>\$ (2,285,010)</u>		<u>\$ (2,708,200)</u>	
12	Revenue Deficiency with Tax-Change Effect		<u>\$ 11,376,235</u>		<u>\$ 2,984,591</u>	

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Liberty Utilities (EnergyNorth)

Twelve Months Ending December 31, 2016

Revenue Requirements and Revenue Deficiency with Staff's Recommended Adjustments

Line	Description	Energy North Application (A)	Energy North Rebuttal (B)	Adjustments (C)	Total (D)
1	Rate Base				
2	Plant in Service	\$ 475,493,896	\$ 473,265,618	\$ (3,674,047)	\$ 469,591,571
3	Accumulated Depreciation & Amortization	(156,434,621)	(154,364,970)	833,397	(153,531,573)
4	Net Plant in Service	\$ 319,059,274	\$ 318,900,647	\$ (2,840,650)	\$ 316,059,998
5	Material and Supplies	\$ 6,833,143	\$ 6,833,143	\$ (3,662,176)	\$ 3,170,967
6	Prepayments	2,704,979	2,704,979	(2,704,979)	-
7	Cash Working Capital	2,635,735	2,659,819	99,530	2,759,349
8	Accumulated Deferred Income Tax	(79,581,891)	(79,581,891)	-	(79,581,891)
9	Customer Deposits	(1,774,868)	(1,774,868)	-	(1,774,868)
10	Total Rate Base	\$ 249,876,373	\$ 249,741,831	\$ (9,108,275)	\$ 240,633,555
11	Rate of Return	7.36%	7.36%		6.85%
12	Return Requirement	\$ 18,390,901	\$ 18,380,999	\$ (1,897,600)	\$ 16,483,399
13	Revenues				
14	Operating Revenue	\$ 69,349,431	\$ 69,514,131	\$ 929,551	\$ 70,443,682
15	Other Revenues	869,284	869,284	(96,764)	772,520
16	Total Revenues	\$ 70,218,715	\$ 70,383,415	\$ 832,787	\$ 71,216,202
17	Expenses				
18	O&M-Gas	\$ (882,338)	\$ (878,406)	\$ -	\$ (878,406)
19	O&M-Distribution	12,473,595	12,539,232	-	12,539,232
20	Customer Accounting	5,957,352	6,106,019	-	6,106,019
21	Sales and New Business	163,302	163,927	-	163,927
22	Administration & General	11,585,769	11,728,833	(440,125)	11,288,708
23	Depreciation and Amortization	18,668,924	18,890,493	(3,226,471)	15,664,022
24	Taxes other than Income Taxes	10,718,820	10,938,721	(56,061)	10,882,660
25	Income Taxes	2,366,482	2,115,945	1,865,243	3,981,188
26	Ratemaking Adjustment per DG 11-040	(1,325,000)	(1,325,000)	-	(1,325,000)
27	Total Operating Expenses	\$ 59,726,907	\$ 60,279,765	\$ (1,857,414)	\$ 58,422,350
28	Net Operating Income	\$ 10,491,807	\$ 10,103,650	\$ 2,690,201	\$ 12,793,851
29	Income Deficiency	\$ 7,899,094	\$ 8,277,349	\$ (4,587,801)	\$ 3,689,548
30	Revenue Conversion Factor	1.65044	1.65044		1.65044
31	Revenue Deficiency	\$ 13,036,958	\$ 13,661,246	\$ (7,571,878)	\$ 6,089,367
32	iNATGAS Adjustment			\$ (396,576)	(396,576)
33	Revenue Deficiency with iNATGAS Adjustment			\$ (7,968,454)	\$ 5,692,791
34	Change in Revenue Deficiency from Original Filing		\$ 624,288		
35	Percent of Original Request				43.67%

Check 13,036,958 13,661,246

Notes and Sources

Column A-B, lines 1-10: Attachment DBS/DSD-2, Schedule RR-EN-5
 Column A-B, lines 13-26: Attachment DBS/DSD-2, Schedule RR-EN-2
 Line 11: Schedule 2
 Line 30: Schedule 3
 Column D: Schedule 3
 Line 32: See the Testimony of Stephen P. Frink

Distribution Revenue	\$ 70,218,715	\$ 70,383,415	\$ 71,216,202
Revenue Deficiency	\$ 13,036,958	\$ 13,661,246	\$ 5,692,791
% Increase over Test Year Distribution Revenue	18.6%	19.4%	8.0%

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Liberty Utilities (EnergyNorth)

Twelve Months Ending December 31, 2016
 Computation of Gross Up for Income Taxes

Line	Description	Company	Adjustment	Adjusted Amount	Tax-Change Effect
		(A)	(B)	(C)	(D)
1	NH Tax Rate	8.20%		8.20%	7.90%
2	Federal Statutory Tax rate	34.00%		34.00%	21.00%
3	Federal Effective Tax rate (1-State rate*Federal rate)	31.21%		31.21%	19.34%
4	Total Composite Tax rate	39.41%		39.41%	27.24%
5	Revenue Requirement Gross-Up Factor	60.590%		60.590%	72.760%
6	Revenue Conversion Factor	1.65044		1.65044	1.37438

Notes and Sources

Column A - Attachment DBS/DSD-2, Schedule RR-1 (Revised 9/20/17 and 11/21/17)

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Liberty Utilities (EnergyNorth)

Twelve Months Ending December 31, 2016
 Tax-Change Effect Comparing EnergyNorth vs. FERC Methodology

Line	Description	EnergyNorth Method Settlement (A)	EnergyNorth Method Rebuttal (B)	Staff Using EnergyNorth Method (C)	EnergyNorth Rebuttal Using FERC Method (D)	Staff using FERC Method (E)
<u>Adjust Gross Up on Income Deficiency</u>						
1	Income Deficiency	\$ 6,240,911	\$ 8,277,349	\$ 3,689,548		
2	Old Revenue Conversion Factor	1,6504	1,6504	1,650437		
3	Revenue Deficiency Using Old Conversion Factor	\$ 10,300,000	\$ 13,661,246	\$ 6,089,367		
4	iNATGAS Adjustment			(396,576)		
5	Revenue Deficiency Old Tax Rate with iNATGAS Adjustment	\$ 10,300,000	\$ 13,661,246	\$ 5,692,791		
6	Income Deficiency	\$ 6,240,911	\$ 8,277,349	\$ 3,689,548		
7	New Revenue Conversion Factor	1,3789	1,3744	1,374382		
8	Revenue Deficiency Using New Conversion Factor	\$ 8,605,593	\$ 11,376,235	\$ 5,070,846		
9	iNATGAS Adjustment			(396,576)		
10	Revenue Deficiency with New Tax Rate iNATGAS Adjustment	\$ 8,605,593	\$ 11,376,235	\$ 4,674,270		
11	Rate Reduction of Gross Up of Income Deficiency	\$ (1,694,407)	\$ (2,285,010)	\$ (1,018,521)		
12	Excess DIT (amortized over 39.05 years)	\$ (699,657)				
13	Rate Reduction Associated with Change to Tax Rates	\$ (2,394,065)				
<u>FERC Methodology</u>						
14	Income Taxes				\$ 2,115,945	\$ 3,981,188
15	Income Taxes included in Revenue Deficiency Gross Up				5,383,897	2,399,820
16	Composite Income Taxes				\$ 7,499,842	\$ 6,381,008
17	New Effective Tax Rate Factor				0.3744	0.3744
18	Old Effective Tax Rate Factor				0.6504	0.6504
19	New Effective Tax Rate / Old Effective Tax Rate				0.57558	0.57558
20	Income Taxes				\$ 4,316,791	\$ 3,672,808
21	Revenue Reduction				\$ (3,183,051)	\$ (2,708,200)
22	Revenue Deficiency (using Old Tax Rate)	\$ 10,300,000	\$ 13,661,246	\$ 5,692,791	13,661,246	6,089,367
23	iNATGAS Adjustment			(396,576)		(396,576)
24	Revenue Deficiency with iNATGAS Adjustment			5,296,215		5,692,791
25	Revenue Deficiency after Lower State and Federal Tax Rates	\$ 8,605,593	\$ 11,376,235	\$ 4,277,694	\$ 10,478,195	\$ 2,984,591

Notes and Sources

Column A: Methodology Presented in Settlement using Company's Rebuttal Position (Schedule 1.1)
 Column B: Settlement Agreement OCA and Company, filed 2/27/18, Attachment E
 Column C: Staff's Revenue Requirement using Company Method
 Column D: Company Rebuttal Revenue Requirement using FERC Order 475, July 2, 1987, Method

Line 15: Calculation of Income Taxes Reflected in Gross Up Revenue Deficiency (Line 15)						
Revenue Deficiency				\$ 13,661,246	\$ 6,089,367	
Income Deficiency				(8,277,349)	(3,689,548)	
Income Taxes Reflected in Crossed Up Revenue Deficiency				\$ 5,383,897	\$ 2,399,820	

Column D, Line 16: Agrees with Attachment DBS/DSD Rebuttal, Schedule RR-EN-2 (R) (Bates 027)

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Liberty Utilities (EnergyNorth)

Twelve Months Ending December 31, 2016
 Rate of Return Calculation - **Modified**

<u>Line</u>	<u>Description</u>	<u>Capital Structure</u>	<u>Cost %</u>	<u>Weighted Cost %</u>
		(A)	(B)	(C)
<u>Company Proposed Rate of Return</u>				
1	Common Stock	50.00%	10.30%	5.15%
2	Long-Term Debt	50.00%	4.425%	2.21%
3	Total	<u>100.00%</u>		7.36%

<u>Staff Recommended Rate of Return</u>				
4	Common Stock	49.21%	9.40%	4.63%
5	Long-Term Debt	49.85%	4.42%	2.20%
6	Short-Term Debt	0.95%	2.49%	0.02%
7	Total	<u>100.00%</u>		6.85%

As Filed	
49.21%	8.55%
49.85%	4.39%
0.95%	2.49%

Notes and Sources

Column A and B, lines 1-3: Attachment DBS/DSD-2, Schedule RR-4 (Revised 9/20/17 and 11/21/17)
 Line 4-7: See Testimony of J. Randall Woolridge

Adjusted to reflect Settlement, page 4.

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Liberty Utilities (EnergyNorth)

Twelve Months Ending December 31, 2016

Impact of Staff's Recommended **Rate of Return** on Company's Revenue Deficiency

Line	Description	Company Proposed (A)	Adjustment (B)	Staff Recommended (C)
1	Total Rate Base	\$ 249,741,831		\$ 249,741,831
2	Rate of Return	7.36%	-0.51%	6.85%
3	Return Requirement	\$ 18,380,999	\$ (1,273,683)	\$ 17,107,315
4	Net Operating Income	\$ 10,103,650		\$ 10,103,650
5	Income Deficiency	\$ 8,277,349		\$ 7,003,665
6	Revenue Conversion Factor	1.65044		1.65044
7	Revenue Deficiency	\$ 13,661,245	\$ (2,102,135)	\$ 11,559,110
		<i>Check</i> 13,661,246		

Notes and Sources

Column A: Summary Totals from Schedule 1

Line 2: Schedule 2

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Liberty Utilities (EnergyNorth)
 Twelve Months Ending December 31, 2016
 Ratemaking Adjustments

Line	Description	Company Rebuttal (A)	Staff Adjustment 1 (B)	Staff Adjustment 2 (C)	Staff Adjustment 3 (D)	Staff Adjustment 4 (E)	Staff Adjustment 5 (F)	Staff Adjustment 6 (G)	Staff Adjustment 7 (H)	Staff Adjustment 8 (I)	Adjustment Subtotal (J)
	Reference Schedule		Schedule EN 3.1	Schedule EN 3.2	Schedule EN 3.3	Schedule EN 3.4	Schedule EN 3.5	Schedule EN 3.6	Schedule EN 3.7	Schedule EN 3.8	
1	Rate Base										
2	Plant in Service	\$ 473,265,618				\$ (3,674,047)					\$ (3,674,047)
3	Accumulated Depreciation & Amortization	(154,364,970)				218,377					218,377
4	Net Plant in Service	318,900,648	-	-	-	(3,455,670)	-	-	-	-	(3,455,670)
5	Material and Supplies	6,833,143			(3,662,176)						(3,662,176)
6	Prepayments	2,704,979		(2,704,979)							(2,704,979)
7	Cash Working Capital	2,659,819	99,530								99,530
8	Accumulated Deferred Income Tax	(79,581,891)									-
9	Customer Deposits	(1,774,868)									-
10	Total Rate Base	\$ 249,741,830	\$ 99,530	\$ (2,704,979)	\$ (3,662,176)	\$ (3,455,670)	\$ -	\$ -	\$ -	\$ -	\$ (9,723,295)
11	Rate of Return	7.36%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%
12	Return Requirement	\$ 18,380,999	\$ 6,818	\$ (185,291)	\$ (250,859)	\$ (236,713)	\$ -	\$ -	\$ -	\$ -	\$ (666,046)
13	Revenues										
14	Operating Revenue	\$ 69,514,131									\$ -
15	Other Revenues	869,284				(96,764)					(96,764)
16	Total Revenues	\$ 70,383,415	\$ -	\$ -	\$ -	\$ (96,764)	\$ -	\$ -	\$ -	\$ -	\$ (96,764)
17	Operating Expenses										
18	O&M-Gas	\$ (878,406)									\$ -
19	O&M-Distribution	12,539,232									-
20	Customer Accounting	6,106,019									-
21	Sales and New Business	163,927									-
22	Administration & General	11,728,833				(71,709)		(28,395)	(209,833)	(52,008)	(361,944)
23	Depreciation and Amortization	18,890,493				(124,757)	(2,486,695)				(2,611,451)
24	Taxes other than Income Taxes	10,938,721				(28,516)			(18,960)		(47,476)
25	Income Taxes	2,115,945				50,533	980,056	11,192	90,172	20,498	1,152,451
26	Ratemaking Adjustment per DG 11-040	(1,325,000)									-
27	Total Operating Expenses	\$ 60,279,764	\$ -	\$ -	\$ -	\$ (174,449)	\$ (1,506,639)	\$ (17,203)	\$ (138,621)	\$ (31,510)	\$ (1,868,421)
28	Net Operating Income	\$ 10,103,651	\$ -	\$ -	\$ -	\$ 77,685	\$ 1,506,639	\$ 17,203	\$ 138,621	\$ 31,510	\$ 1,771,657
29	Income Deficiency	\$ 8,277,348	\$ 6,818	\$ (185,291)	\$ (250,859)	\$ (314,399)	\$ (1,506,639)	\$ (17,203)	\$ (138,621)	\$ (31,510)	\$ (2,437,703)
30	Revenue Conversion Factor	1.65044	1.65044	1.65044	1.65044	1.65044	1.65044	1.65044	1.65044	1.65044	1.65044
31	Revenue Deficiency	\$ 13,661,245	\$ 11,252	\$ (305,811)	\$ (414,027)	\$ (518,895)	\$ (2,486,612)	\$ (28,392)	\$ (228,785)	\$ (52,005)	\$ (4,023,275)
32	Percent of Total	Check \$ 13,661,246	-0.1%	2.2%	3.0%	3.8%	18.2%	0.2%	1.7%	0.4%	

Adjustment 1 Cash Working Capital
 Adjustment 2 Remove Prepayments Included in Cash Working Capital
 Adjustment 3 Adjust Materials and Supplies
 Adjustment 4 Remove Concord Training Center - Corrected
 Adjustment 5 Modify Recovery Period of Theoretical Reserve Imbalance
 Adjustment 6 Staff Audit Issue #17 Non-Recurring Expense
 Adjustment 7 Modify Payroll, Payroll Taxes, and Benefits for Vacancies - Corrected
 Adjustment 8 Remove LTIP (PSU) Related to Shareholder Goals

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Liberty Utilities (EnergyNorth)

Twelve Months Ending December 31, 2016
 Ratemaking Adjustments

(in thousands)

Line	Description (A)	Carry Forward (B)	Staff Adjustment 9 (C)	Staff Adjustment 10 (D)	Staff Adjustment 11 (E)	Staff Adjustment 12 (F)	Staff Adjustment 13 (G)	Staff Adjustment 14 (G)	Staff Adjustment 15 (H)	Adjustment Subtotal (J)	Approved Totals (K)
	Reference Schedule		Schedule EN 3.9	Schedule EN 3.10	Schedule EN 3.11	Schedule EN 3.12	Schedule EN 3.13	Schedule EN 3.14	Schedule EN 3.15		
1	Rate Base										
2	Plant in Service	\$ (3,674,047)		\$ -						\$ (3,674,047)	\$ 469,591,571
3	Accumulated Depreciation & Amortization	218,377						\$ 615,020		833,397	(153,531,573)
4	Net Plant in Service	(3,455,670)	-	-	-	-	-	615,020	-	(2,840,650)	316,059,998
5	Material and Supplies	(3,662,176)								(3,662,176)	3,170,967
6	Prepayments	(2,704,979)								(2,704,979)	-
7	Cash Working Capital	99,530								99,530	2,759,349
8	Accumulated Deferred Income Tax	-								-	(79,581,891)
9	Customer Deposits	-								-	(1,774,868)
10	Total Rate Base	\$ (9,723,295)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 615,020	\$ -	\$ (9,108,275)	\$ 240,633,555
11	Rate of Return	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%
12	Return Requirement	\$ (666,046)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 42,129	\$ -	\$ (1,897,600)	\$ 16,483,399
13	Revenues										
14	Operating Revenue	\$ -	\$ -		\$ 929,551					\$ 929,551	\$ 70,443,682
15	Other Revenues	(96,764)								(96,764)	772,520
16	Total Revenues	\$ (96,764)	\$ -	\$ -	\$ 929,551	\$ -	\$ -	\$ -	\$ -	\$ 832,787	\$ 71,216,202
17	Operating Expenses										
18	O&M-Gas	\$ -								\$ -	\$ (878,406)
19	O&M-Distribution	-								-	12,539,232
20	Customer Accounting	-								-	6,106,019
21	Sales and New Business	-								-	163,927
22	Administration & General	(361,944)		-			(78,181)			(440,125)	11,288,708
23	Depreciation and Amortization	(2,611,451)						(615,020)		(3,226,471)	15,664,022
24	Taxes other than Income Taxes	(47,476)					(8,585)			(56,061)	10,882,660
25	Income Taxes	1,152,451	-	-	366,354	-	34,196	242,392	69,850	1,865,243	3,981,188
26	Ratemaking Adjustment per DG 11-040	-								-	(1,325,000)
27	Total Operating Expenses	\$ (1,868,421)	\$ -	\$ -	\$ 366,354	\$ -	\$ (52,569)	\$ (372,628)	\$ 69,850	\$ (1,857,414)	\$ 58,422,350
28	Net Operating Income	\$ 1,771,657	\$ -	\$ -	\$ 563,197	\$ -	\$ 52,569	\$ 372,628	\$ (69,850)	\$ 2,690,201	\$ 12,793,852
29	Income Deficiency	\$ (2,437,703)	\$ -	\$ -	\$ (563,197)	\$ -	\$ (52,569)	\$ (330,499)	\$ 69,850	\$ (4,587,801)	\$ 3,689,547
30	Revenue Conversion Factor	1.65044	1.65044	1.65044	1.65044	1.65044	1.65044	1.65044	1.65044	1.65044	1.65044
31	Revenue Deficiency	\$ (4,023,275)	\$ -	\$ -	\$ (929,521)	\$ -	\$ (86,762)	\$ (545,468)	\$ 115,283	\$ (7,571,878)	\$ 6,089,367
32	Percent of Total		0.0%	0.0%	6.8%	0.0%	0.6%	4.0%	-0.8%		

Check

- Adjustment 9 iNATGAS Minimum Annual Transportation Quantity Adjustment
- Adjustment 10 Modify Employee Pensions and Benefits - Modified
- Adjustment 11 Adjust Revenue to Year-End Customer Count
- Adjustment 12 Remove Out of Test Year Legal Fees and Degradation Fees
- Adjustment 13 Remove Severance Associated with Resignations
- Adjustment 14 Modify Amortization and Depreciation Accrual Rates
- Adjustment 15 Interest Synchronization

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Liberty Utilities (EnergyNorth)

Adjustment 1

Cash Working Capital

<u>Line</u>	<u>Description</u>	<u>Company Proposed (A)</u>	<u>Adjustment (B)</u>	<u>Adjusted Amount (C)</u>
1	Distribution Expenses			
2	O&M-Gas	\$ (878,406)	\$ -	\$ (878,406)
3	O&M-Distribution	12,539,232	-	12,539,232
4	Customer Accounting	6,106,019	-	6,106,019
5	Sales and New Business	163,927	-	163,927
6	Administration & General	11,728,833	(440,125)	11,288,708
7	Total O&M Expense for CWC Calculation	<u>\$ 29,659,605</u>	<u>\$ (440,125)</u>	<u>\$ 29,219,480</u>
8	Taxes and Interest Expense			
9	Taxes other than Income Taxes	10,938,721	(56,061)	10,882,660
10	Income Taxes	2,115,945	-	2,115,945
11	Less Deferred Income Taxes	(6,128,035)	-	(6,128,035)
12	Income Taxes (Staff's Adjustments)	-	1,795,393	1,795,393
13	Interest Synchronization	-	69,850	69,850
14	Total Taxes and Interest Expense	<u>\$ 6,926,631</u>	<u>\$ 1,809,182</u>	<u>\$ 8,735,813</u>
15	Total Distribution Expenses Taxes and Interest	\$ 36,586,236	\$ 1,369,057	\$ 37,955,293
16	Lead/Lag Days Ratio	<u>7.27%</u>		<u>7.27%</u>
17	Total Cash Working Capital	<u>\$ 2,659,819</u>	<u>\$ 99,530</u>	<u>\$ 2,759,350</u>
18	Impact to Rate Base	<u>\$ 2,659,819</u>	<u>\$ 99,530</u>	<u>\$ 2,759,350</u>

Check 2,653,317

Notes and Sources

Column A: Attachment DBS/DSD-2, Schedule RR-EN-5-2 and Schedule RR-EN-2-1 (Revised 11/21/17)
 Column A, line 11: RR-EN-2-1 WP from Data Response Staff Tech 1-1 (misabeled as Schedule RR-K-1-08 when printed)

Interest Synchronization

	<u>w/o Int Sync</u>	<u>w/ Int Sync</u>	<u>Int Sync</u>
Income Taxes	1,795,393	1,865,243	69,850
		Check	\$ 69,850

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Docket No. DG 17-048
 Schedule EN 3.2
 Page 1 of 1

Liberty Utilities (EnergyNorth)

Adjustment 2

Remove Prepayments Included in Cash Working Capital

Line	Description	Company Proposed (A)	Adjustment (B)	Adjusted Amount (C)
1	Prepaid Municipal Property Taxes	\$ 2,431,418	\$ (2,431,418)	\$ -
2	Prepays	273,561	(273,561)	-
3	Total Prepayments	\$ 2,704,979	\$ (2,704,979)	\$ -
4	Impact to Rate Base	\$ 2,704,979	\$ (2,704,979)	\$ -

Notes and Sources

Column A: Attachment DBS/DSD-2, Schedule RR-EN-5-1 (Revised 11/21/17)
 Attachment DBS/DSD-2, Schedule RR-EN-2-1 (Revised 11/21/17), line 80 - Property Taxes included in CWC \$9,259,4

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Docket No. DG 17-048
 Schedule EN 3.3
 Page 1 of 1

Liberty Utilities (EnergyNorth)

Adjustment 3

Adjust Materials and Supplies

Line	Description	Company Proposed (A)	Adjustment (B)	Adjusted Amount (C)
1	Plant Supplies	\$ 3,170,967	\$ -	\$ 3,170,967
2	Gas Stored Underground	2,710,013	(2,710,013)	-
3	Fuel Stock - Propane	884,306	(884,306)	-
4	UG Storage - LNG	67,857	(67,857)	-
6	5-Quarter Average	<u>\$ 6,833,143</u>	<u>\$ (3,662,176)</u>	<u>\$ 3,170,967</u>
7	Impact to Rate Base	<u>\$ 6,833,143</u>	<u>\$ (3,662,176)</u>	<u>\$ 3,170,967</u>

Notes and Sources

Column A: Attachment DBS/DSD-2, Schedule RR-EN-5-1 (Revised 11/21/17)

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Docket No. DG 17-048
 Schedule EN 3.3 WP
 Page 1 of 1

Liberty Utilities (EnergyNorth)

Adjustment 3

Materials and Supplies Comparison of 5 Qtr vs. 13 Month Average

Line	Period	Plant Supplies			Gas Stored Underground			Fuel Stock Propane			UG Storage - LNG		
		Monthly	5 Quarter Average	13 Month Average	Monthly	5 Quarter Average	13 Month Average	Monthly	5 Quarter Average	13 Month Average	Monthly	5 Quarter Average	13 Month Average
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
1	Dec-15	3,090,778	3,090,778	3,090,778	3,650,875	3,650,875	3,650,875	1,116,257	1,116,257	1,116,257	80,382	80,382	80,382
2	Jan-16	3,110,360		3,110,360	3,268,995		3,268,995	1,078,857		1,078,857	66,910		66,910
3	Feb-16	3,166,027		3,166,027	2,596,598		2,596,598	694,991		694,991	52,788		52,788
4	Mar-16	3,270,930	3,270,930	3,270,930	1,867,638	1,867,638	1,867,638	697,834	697,834	697,834	57,759	57,759	57,759
5	Apr-16	3,209,265		3,209,265	1,664,768		1,664,768	690,916		690,916	61,360		61,360
6	May-16	3,304,686		3,304,686	1,890,868		1,890,868	686,571		686,571	47,902		47,902
7	Jun-16	3,237,327	3,237,327	3,237,327	2,185,128	2,185,128	2,185,128	681,382	681,382	681,382	62,938	62,938	62,938
8	Jul-16	3,176,962		3,176,962	2,611,479		2,611,479	685,131		685,131	52,614		52,614
9	Aug-16	3,244,604		3,244,604	2,846,480		2,846,480	870,817		870,817	76,987		76,987
10	Sep-16	3,147,194	3,147,194	3,147,194	3,049,886	3,049,886	3,049,886	950,850	950,850	950,850	66,426	66,426	66,426
11	Oct-16	3,180,737		3,180,737	3,236,914		3,236,914	943,510		943,510	90,286		90,286
12	Nov-16	3,158,124		3,158,124	3,207,859		3,207,859	938,796		938,796	80,301		80,301
13	Dec-16	3,108,605	3,108,605	3,108,605	2,796,536	2,796,536	2,796,536	975,209	975,209	975,209	71,783	71,783	71,783
14	Averages		<u>3,170,967</u>	<u>3,185,046</u>		<u>2,710,013</u>	<u>2,682,617</u>		<u>884,306</u>	<u>847,009</u>		<u>67,857</u>	<u>66,803</u>
15													
16	Difference			14,079			(27,395)			(37,297)			(1,055)

Notes and Sources

Response to Staff 8-31

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Docket No. DG 17-048
 Schedule EN 3.4
 Page 1 of 1

Liberty Utilities (EnergyNorth)

Adjustment 4

Remove Concord Training Center - Corrected

Line	Description	Company Proposed (A)	Adjustment (B)	Adjusted Amount (C)	
1	Rate Base				
2	Concord Training Center	\$ 3,674,047	\$ (3,674,047)	\$ -	
3	Accumulated Depreciation	(218,377)	218,377	-	
4	Impact to Rate Base	\$ 3,455,670	\$ (3,455,670)	\$ -	
5	Operating Income				
6	Revenue				
7	Granite State Lease Payments Concord Training Center	\$ 96,764	\$ (96,764)	\$ -	
8	Expense				
9	Depreciation Expense	\$ 124,757	\$ (124,757)	\$ -	
10	Admin and General				
11	Property and Liability Insurance	350	(350)	-	
12	Utilities	20,031	(20,031)	-	
13	All Other Admin and O&M	51,329	(51,329)	-	
14	Total Admin and General		(71,709)		
15	Property Taxes	28,516	(28,516)	-	
16	Total Expenses	224,982	(224,982)	-	
17	Total Operating Income	\$ (128,218)	\$ 128,218	\$ -	As Filed \$ (128,218)
18	NH Income Tax	8.20%	0.00%	8.20%	8.20%
19	Effect on NH income tax expense	\$ (10,514)	\$ 10,514	\$ -	\$ (10,514)
20	Federal Taxable	\$ (117,704)		\$ -	\$ (138,732)
21	Federal Income Tax Rate	34%	0.00%	34%	34%
22	Effect on Federal income tax expense	\$ (40,019)	\$ 40,019	\$ -	\$ (47,169)
23	Total Taxes	\$ (50,533)	\$ 50,533	\$ -	\$ (57,683)
24	Impact to Operating Income	\$ (77,685)	\$ 77,685	\$ -	\$ (70,535)

Notes and Sources

See Testimony of Al-Azad Iqbal
 Column A, Line 2: Audit Issue #5
 Column A, Line 3: Response to OCA 4-26

Column B, Line 9: Audit Report, page 33 (Note: Unitized out of CWIP 12/31/16)

	Plant in Service	Depreciation Rate	Annual Depreciation
390 General Structures/Equipment	\$ 3,743,921		
Fast Track Costs Removed in 11/21/17 Update	(158,627)		
Adjusted 390	\$ 3,585,294	3.33%	119,390
394 Tools, Shop, Garage Equipment	39,231	5.26%	2,064
397 Communications Equipment	18,313	6.67%	1,221
398 Miscellaneous Equipment	31,209	6.67%	2,082
	<u>\$ 3,674,047</u>		<u>\$ 124,757</u>

Column A, Lines 10-13: Response to Staff 2-26

Staff Correction - Federal Taxable Income formula corrected

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Docket No. DG 17-048
 Schedule EN 3.5
 Page 1 of 1

Liberty Utilities (EnergyNorth)

Adjustment 5

Modify Recovery Period of Theoretical Reserve Imbalance

Line	Description	Company Proposed (A)	Adjustment (B)	Adjusted Amount (C)
1	Depreciation per Books	\$ 156,434,621	-	\$ 156,434,621
2	Theoretical Reserve with Net Salvage	165,193,965	-	165,193,965
3	Accumulated Reserve on Accounts 392, 396, and 121	1,187,434	-	1,187,434
4	Depreciation, Theoretical Reserve with Net Salvage	166,381,399		166,381,399
5	Difference	9,946,778		9,946,778
6	Recovery Period	3.00	9.00	12.00
7	Reserve Imbalance Annual Recovery	\$ 3,315,593	\$ (2,486,695)	\$ 828,898
18	NH Income Tax	8.20%	0.00%	8.20%
19	Effect on NH income tax expense	\$ (271,879)	\$ 203,909	\$ (67,970)
20	Federal Taxable	\$ 3,043,714		\$ 760,928
21	Federal Income Tax Rate	34%	0.00%	34%
22	Effect on Federal income tax expense	\$ (1,034,863)	\$ 776,147	\$ (258,716)
23	Total Taxes	\$ (1,306,742)	\$ 980,056	\$ (326,686)
24	Impact to Operating Income	\$ (2,008,851)	\$ 1,506,639	\$ (502,212)

Notes and Sources

See Testimony of Al-Azad Iqbal
 Column A: Attachment DBS/DSD-2, Schedule RR-EN-3-6 (Revised 11/21/17)

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Docket No. DG 17-048
 Schedule EN 3.6
 Page 1 of 1

Liberty Utilities (EnergyNorth)

Adjustment 6

Staff Audit Issue #17 Non-Recurring Expense

<u>Line</u>	<u>Description</u>	<u>Company Proposed</u>	<u>Adjustment</u>	<u>Adjusted Amount</u>
		(A)	(B)	(C)
1	Staff Audit Issue #17 Non-Recurring			
2	923 Outside Services-Sussex Economic Advisors NED Supply Pipeline Capacity Analysis	\$ 42,592	\$ -	\$ 42,592
3	Amortization Period	1.00	2.00	3.00
4	Annual Recovery	\$ 42,592	(28,395)	\$ 14,197
5	Total Audit Issues	\$ 42,592	\$ (28,395)	\$ 14,197
6	NH Income Tax	8.20%	0.00%	8.20%
7	Effect on NH income tax expense	<u>\$ (3,493)</u>	<u>\$ 2,329</u>	<u>\$ (1,164)</u>
8	Federal Taxable	\$ 39,099		\$ 13,033
9	Federal Income Tax Rate	34%	0.00%	34%
10	Effect on Federal income tax expense	<u>\$ (13,294)</u>	<u>\$ 8,863</u>	<u>\$ (4,431)</u>
11	Total Taxes	<u>\$ (16,787)</u>	<u>\$ 11,192</u>	<u>\$ (5,595)</u>
12	Impact to Operating Income	<u>\$ (25,805)</u>	<u>\$ 17,203</u>	<u>\$ (8,602)</u>

Notes and Sources

Lines 1: Commission Audit of Liberty Utilities dated August 22, 2017, pages 101-102, 151

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Docket No. DG 17-048
 Schedule EN 3.7
 Page 1 of 1

Liberty Utilities (EnergyNorth)

Adjustment 7

Modify Payroll, Payroll Taxes, and Benefits for Vacancies - Corrected

Line	Description	Company Proposed (A)	Adjustment (B)	Adjusted Amount (C)
1	Payroll			
2	Proforma Total Salary and Wages	\$ 29,788,526		\$ 29,788,526
3	Less Salaries for Average Vacancies			
4	Average Vacant Positions during 2017		3.50	
5	Average Salaries and Wages per Position		\$ 96,092	
6	Adjusted Total Salaries and Wages	\$ 29,788,526	\$ (336,322)	\$ 29,452,204
7	Allocation factor to EN	71.2%		71.2%
8	Salaries and Wages to EN	\$ 21,203,848		\$ 20,964,450
9	Allocation factor to EN OpEx	72.1%		72.1%
10	Salaries and Wages to EN OpEx	15,293,697	(172,671)	15,121,026
11	Payroll Taxes			
12	Proforma Total Salary and Wages	\$ 29,788,526	\$ (336,322)	\$ 29,452,204
13	Payroll Tax Rate (%)	10.98%		10.98%
14	Adjusted Total Payroll Taxes	3,270,922		3,233,992
15	Allocation factor to EN	71.2%		71.2%
16	Payroll Taxes to EN	\$ 2,328,284		\$ 2,301,997
17	Allocation factor to EN OpEx	72.1%		72.1%
18	Payroll Taxes to EN OpEx	1,679,321	(18,960)	1,660,361
19	Employer Benefits			
20	Proforma Total Salary and Wages	\$ 29,788,526	(336,322)	\$ 29,452,204
21	Health Care and Other / Proforma Total Salaries and Wages	17.5%		17.5%
22	Health Care and Other	5,203,308	(58,747)	5,144,561
23	Proforma Total Salary and Wages	\$ 29,788,526		\$ 29,452,204
24	401(k) Matching / Proforma Total Salaries and Wages	4.00%		4.00%
25	401(k) Matching	1,191,541		1,178,088
26	Adjusted Total Health Care and 401(k) Match	\$ 6,394,849		\$ 6,322,649
27	Allocation factor to EN	71.4%		71.4%
28	Health Care and 401(k) Match to EN	\$ 4,563,252		\$ 4,511,731
29	Allocation factor to EN OpEx	72.1%		72.1%
30	Health Care and 401(k) Match to EN OpEx	3,291,474	(37,162)	3,254,312
31	Total Payroll, Payroll Taxes, and Benefits	\$ 20,264,491	\$ (228,793)	\$ 20,035,699
32	NH Income Tax	8.20%	0%	8.20%
33	Effect on NH income tax expense	(1,661,688)	18,761	(1,642,927)
34	Federal Taxable	\$ 18,602,803		\$ 18,392,772
35	Federal Income Tax Rate	34%	0%	34%
36	Effect on Federal income tax expense	(6,324,953)	71,411	(6,253,542)
37	Total Income Taxes	(7,986,641)	90,172	(7,896,469)
38	Impact to Operating Income	\$ (12,277,850)	\$ 138,621	\$ (12,139,230)

Staff Tech 1-1 Updates	
9/20/17	11/21/17
6,394,849	6,394,849
72.8%	71.4%
4,657,336	4,563,252
72.1%	72.1%
3,359,337	3,291,474

Notes and Sources

Column A, Line 1: Attachment DBS/DSD-2, Schedule RR-EN-3-2 (Revised 11/21/17)
 Column B, Line 3 Calculation
 Average Vacancies
 As of 1/1/16 (Staff Tech 3-13) 3.00
 As of 11/1/17 (Staff Tech 3-13) 4.00
 Average vacancies 3.50
 Column B, Line 4: Calculation
 Total Salaries and Wages (Att DBS/DSD-2, Sch RR-EN-3-2 Rev 11/21/17) \$ 29,788,526
 Number of Employees Att DBS/DSD-2, Sch RR-EN-3-2 Rev 11/21/17) 310
 Average Salaries and Wages per position \$ 96,092
 Column A, Lines 7 and 9: Attachment DBS/DSD-2, Schedule RR-EN-3-2 (Revised 11/21/17)
 Column A, Lines 12-18: Attachment DBS-DSD-2, Schedule RR-EN-3-3 (Revised 11/21/17)
 Column A, Lines 20-30: Attachment DBS-DSD-2, Schedule RR-EN-3-4 (Revised 11/21/17)
 Salaries and Wages to EN OpEx (172,671)
 Health Care and 401(k) Match to EN OpEx (37,162)
 Adjustment to Carryforward to Schedule 3 (209,833)

Modification reflects Company's Updated Allocation Factor to EN included in Rebuttal

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Docket No. DG 17-048
 Schedule EN 3.7 WP
 Page 1 of 1

Liberty Utilities (EnergyNorth)
Adjustment 7

Comparison of Test Year with Increase vs. Adjustment for Average Vacancies

Line	Description	Company Methodology (A)	Adjustment (B)	Staff Methodology (C)
1	Test Year Payroll	\$ 14,518,377		\$ 14,518,377
2	Percentage Increase	5.3%		2.7%
3	Increase	775,320	(383,324)	391,996
4	Payroll To EN OpEx (based on % Increase)	\$ 15,293,697		\$ 14,910,373
5	Staff's Average Vacancy Methodology	15,121,026		15,121,026
6	Difference	<u>(172,671)</u>	383,324	<u>210,653</u>

Notes and Sources

Column A, Line 1 and 2: Attachment DBS/DSD-2, Schedule RR-EN-3-2 (Revised 9/20/17)
 Column C, Line 5: Adjustment 3.7, line 10

Payroll Increase per Response to Staff 5-15

Average wage increase for 2014, 2015, and 2016 non-union 3.0%, union 2.6%. 2017 budget non-union 3%, union 2.6%.

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

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 Schedule EN 3.8
 Page 1 of 1

Liberty Utilities (EnergyNorth)

Adjustment 8

Remove LTIP (PSU) Related to Shareholder Goals

Line	Description	Company Proposed (A)	Adjustment (B)	Adjusted Amount (C)
1	PSU / Long Term Incentive Plan	\$ 81,581		\$ 81,581
2	Performance Criteria	100%	-63.75%	36.25%
3	Adjusted PSU / Long Term Incentive Plan	\$ 81,581	\$ (52,008)	\$ 29,573
4	NH Income Tax	8.20%	0.00%	8.20%
5	Effect on NH income tax expense	<u>\$ (6,690)</u>	<u>\$ 4,265</u>	<u>\$ (2,425)</u>
6	Federal Taxable	\$ 74,891		\$ 27,148
7	Federal Income Tax Rate	34%	0.00%	34%
8	Effect on Federal income tax expense	<u>\$ (25,463)</u>	<u>\$ 16,233</u>	<u>\$ (9,230)</u>
9	Total Taxes	<u>\$ (32,153)</u>	<u>\$ 20,498</u>	<u>\$ (11,655)</u>
10	Impact to Operating Income	<u>\$ (49,428)</u>	<u>\$ 31,510</u>	<u>\$ (17,918)</u>

Notes and Sources

Column A, Line 1: Response to Staff 8-27
 Column B: See Schedule 3.8 WP

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Docket No. DG 17-048
 Schedule EN 3.9
 Page 1 of 1

Liberty Utilities (EnergyNorth)

Adjustment 9

iNATGAS Minimum Annual Transportation Quantity Adjustment - *DELETED*

Line	Description	Company REBUTTAL (A)	Adjustment (B)	Adjusted Amount (C)
1	iNATGAS Minimum Annual Transportation Quantity	\$ 183,000	\$ -	\$ 183,000
2	NH Income Tax	8.20%	0.00%	8.20%
3	Effect on NH income tax expense	\$ 15,006	\$ -	\$ 15,006
4	Federal Taxable	\$ 167,994		\$ 167,994
5	Federal Income Tax Rate	34%	0.00%	34%
6	Effect on Federal income tax expense	\$ 57,118	\$ -	\$ 57,118
7	Total Taxes	\$ 72,124	\$ -	\$ 72,124
8	Impact to Operating Income	\$ 110,876	\$ -	\$ 110,876

Notes and Sources

See the Testimony of Stephen P. Frink
 Column A, Line 1: Attachment DBS/DSD-2, Schedule RR-EN-3-1 (Revised 11/21/17)

ACCEPTED BY COMPANY AND INCLUDED IN REBUTTAL

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

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 Schedule EN 3.10
 Page 1 of 1

**Liberty Utilities (EnergyNorth)
 Adjustment 10**

Modify Employee Pensions and Benefits - DELETED

<u>Line</u>	<u>Description</u>	<u>Company Proposed (A)</u>	<u>Adjustment (B)</u>	<u>Adjusted Amount (C)</u>	<u>As Filed (D)</u>
1	Rate Base				
2	Capitalized Portion of Employee Benefits and Pensions	\$ 2,072,794		\$ 2,072,794	\$ (125,622)
3	Composite Depreciation Rate	3.30%		3.30%	
4	Accumulated Depreciation	(68,402)		(68,402)	4,146
5	Impact to Rate Base	\$ 2,004,392	\$ -	\$ 2,004,392	\$ (121,476)
6	Operating Income				
7	Pension Expense	\$ 965,003		\$ 965,003	\$ (636,204)
8	OPEB Expense	597,726		597,726	(271,698)
9	401(k) Matching	786,115		786,115	-
10	Group Benefits	2,858,542		2,858,542	806,847
11	Other Group Life	9,895		9,895	-
12	Pension Amortization (DG 14-080 Settlement)	2,055,680		2,055,680	-
13	Subtotal including Capitalized Portion	7,272,961	-	7,272,961	(101,055)
14	Less Capitalized Portion				
15	Capitalization Rate	28.50%		28.50%	-1.35%
16	Capitalized Portion to Account 922	(2,072,794)	-	(2,072,794)	125,622
17	Employee Pension and Benefits Expense	\$ 5,200,167	\$ -	\$ 5,200,167	\$ 24,567
18	NH Income Tax	8.20%	0.00%	8.20%	0.00%
19	Effect on NH income tax expense	\$ (426,414)	\$ -	\$ (426,414)	\$ (2,014)
20	Federal Taxable	\$ 4,773,753		\$ 4,773,753	
21	Federal Income Tax Rate	34%	0.00%	34%	0.00%
22	Effect on Federal income tax expense	\$ (1,623,076)	\$ -	\$ (1,623,076)	\$ (7,668)
23	Total Taxes	\$ (2,049,490)	\$ -	\$ (2,049,490)	\$ (9,682)
24	Impact to Operating Income	\$ (3,150,677)	\$ -	\$ (3,150,677)	\$ (14,885)

Notes and Sources

See Direct Testimony of James J. Cunningham, Jr.
 Column A, Line 2: Line 16
 Column A, Line 3: Attachment DBS/DSD-2, Schedule RR-EN-3-5 (Revised 9/20/17) Proforma Depr Expense / PIS Balance

Removed - most recent Actuarial Study is included in Company Rebuttal

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Docket No. DG 17-048
 Schedule EN 3.11
 Page 1 of 1

Liberty Utilities (EnergyNorth)

Adjustment 11

Adjust Revenue to Year-End Customer Count

Line	Description	Company Proposed (A)	Adjustment (B)	Adjusted Amount (C)
1	Operating Revenue	\$ 83,244,364	\$ 929,551	\$ 84,173,915
2	NH Income Tax	8.20%	0.00%	8.20%
3	Effect on NH income tax expense	\$ 6,826,038	\$ 76,223	\$ 6,902,261
4	Federal Taxable	\$ 76,418,326		\$ 77,271,654
5	Federal Income Tax Rate	34%	0%	34%
6	Effect on Federal income tax expense	\$ 25,982,231	\$ 290,131	\$ 26,272,362
7	Total Taxes	\$ 32,808,269	\$ 366,354	\$ 33,174,623
8	Impact to Operating Income	\$ 50,436,095	\$ 563,197	\$ 50,999,292

Notes and Sources

Column A: Attachment DBS/DSD-2, Schedule RR-EN-2 (Revised 11/21/17)
 Column B: Response to Staff 8-17

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

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 Schedule EN 3.12
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Liberty Utilities (EnergyNorth)

Adjustment 12

Remove Out of Test Year Legal Fees and Degradation Fees - Deleted

Line	Description	Company REBUTTAL (A)	Adjustment (B)	Adjusted Amount (C)
1	Manchester / Concord Legal Fees	\$ 227,233		\$ 227,233
2	Legal Fees Outside Test Year			
3	McLane-Middleton Invoice # 2017070584 / 07/13/17	\$ (1,063)		
4	McLane-Middleton Invoice # 2017080512 / 08/08/17	(2,379)		
5	McLane-Middleton Invoice # 2017091725 / 09/15/17	(1,217)		
6	Superior Court Stipulation - City of Concord / 08/04/17	(42,358)		
7	Supreme Court Stipulation - City of Concord / 08/04/17	(5,714)		
8	Superior/Supreme Court Stipulation-City of Manchester / 08/04/17	(119,785)		
9	Adjusted Manchester/Concord Legal Fees	54,716	\$ -	54,716
10	Amortization Period	3		3
11	Manchester / Concord Legal Fees Amortization	\$ 18,239	\$ -	\$ 18,239
12	Degradation Fees	\$ 3,267,713		\$ 3,267,713
13	Degradation Fees Outside Test Year			
14	City of Manchester Invoice # 1005802 / 01/31/17	\$ (8,015)		
15	City of Manchester Invoice # 1007948 / 03/31/17	(6,075)		
16	City of Manchester Invoice # 1009325 / 05/12/17	(29,165)		
17	City of Manchester Invoice # 1010222 / 05/31/17	(90,310)		
18	City of Manchester Invoice # 1011164 / 06/30/17	(52,500)		
19	Adjusted Degradation Fees	\$ 3,081,648	\$ -	\$ 3,081,648
20	Amortization Period	20		20
21	Degradation Fees Amortization	\$ 154,082	\$ -	\$ 154,082
22	Total Amortization of Legal Fees and Degradation Fees	\$ 172,321	\$ -	\$ 172,321
23	NH Income Tax	8.20%	0.00%	8.20%
24	Effect on NH income tax expense	\$ (14,130)	\$ -	\$ (14,130)
25	Federal Taxable	\$ 158,191		\$ 158,191
26	Federal Income Tax Rate	34%	0.00%	34%
27	Effect on Federal income tax expense	\$ (53,785)	\$ -	\$ (53,785)
28	Total Taxes	\$ (67,915)	\$ -	\$ (67,915)
29	Impact to Operating Income	\$ (104,406)	\$ -	\$ (104,406)

Notes and Sources

Column A, Line 1: Attachment DBS/DSD-2, Schedule RR-EN-3-10 (Revised 11/21/17)
 Column A, Line 6: Attachment DBS/DSD-2, Schedule RR-EN-3-10 (Revised 11/21/17)
 Column B, Lines 3,4, 6, 8: Response to Staff 8-6
 Column B, Lines 5,7: Response to Staff 3-3
 Column B, Line 14-18: Response Staff 3-4

ACCEPTED BY COMPANY AND INCLUDED IN REBUTTAL

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

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Liberty Utilities (EnergyNorth)

Adjustment 13

Remove Severance Associated with Resignations

Line	Description	Company Proposed (A)	Adjustment (B)	Adjusted Amount (C)
1	Payroll - Severance	\$ 144,130	\$ (78,181)	\$ 65,949
2	Payroll Tax Rate (%)	10.98%		10.98%
3	Payroll Taxes	15,826	\$ (8,585)	7,242
4	Total Severance Payroll and Payroll Taxes	\$ 159,956	\$ (86,765)	\$ 73,191
5	NH Income Tax	8.20%	0.00%	8.20%
6	Effect on NH income tax expense	\$ (13,116)	\$ 7,114	\$ (6,002)
7	Federal Taxable	\$ 146,840		\$ 67,189
8	Federal Income Tax Rate	34%	0.00%	34%
9	Effect on Federal income tax expense	\$ (49,926)	\$ 27,082	\$ (22,844)
10	Total Taxes	\$ (63,042)	\$ 34,196	\$ (28,846)
11	Impact to Operating Income	\$ (96,914)	\$ 52,569	\$ (44,345)

Notes and Sources

Line 1: Response to Staff 8-23 with Confidential Attachment

Line 2: Attachment DBS-DSD-2. Schedule RR-EN-3-3 (Revised 9/20/17)

Column B, Line 1: See Confidential Version of Direct Testimony for support

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

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Liberty Utilities (EnergyNorth)

Adjustment 14

Modify Amortization and Depreciation Accrual Rates

Line	Description	Company Proposed (A)	Adjustment (B)	Adjusted Amount (C)
1	<u>Rate Base</u>			
2	Accumulated Depreciation	<u>\$(154,364,970)</u>	<u>\$ 615,020</u>	<u>\$(153,749,950)</u>
3	Impact to Rate Base	<u>\$ 154,364,970</u>	<u>\$ (615,020)</u>	<u>\$ 153,749,950</u>
4	<u>Operating Income</u>			
5	Amortization Expense	\$ 2,378,512	\$ (271,324)	\$ 2,107,188
6	Depreciation Expense	<u>13,238,439</u>	<u>(343,695)</u>	<u>12,894,744</u>
7	Depreciation and Amortization Expense	\$ 15,616,951	<u>\$ (615,020)</u>	\$ 15,001,931
8	NH Income Tax	<u>8.20%</u>	<u>0.00%</u>	<u>8.20%</u>
9	Effect on NH income tax expense	<u>\$ (1,280,590)</u>	<u>\$ 50,432</u>	<u>\$ (1,230,158)</u>
10	Federal Taxable	\$ 14,336,361		\$ 13,771,773
11	Federal Income Tax Rate	<u>34%</u>	<u>0.00%</u>	<u>34%</u>
12	Effect on Federal income tax expense	<u>\$ (4,874,363)</u>	<u>\$ 191,960</u>	<u>\$ (4,682,403)</u>
13	Total Taxes	<u>\$ (6,154,953)</u>	<u>\$ 242,392</u>	<u>\$ (5,912,561)</u>
14	Impact to Operating Income	<u>\$ (9,461,998)</u>	<u>\$ 372,628</u>	<u>\$ (9,089,370)</u>

Notes and Sources

See Testimony of Al-Azad Iqbal
 See 3.14 WP Depreciation Workpaper

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

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Liberty Utilities (EnergyNorth)

Adjustment 14

Modify Amortization and Depreciation Accrual Rates

Line	Description	Company Proposed				Staff Recommendation			Difference
		Account Number	Accrual Rate	Balance	Depreciation	Accrual Rate	Balance	Depreciation	
				(less CIBS) 12/31/16	Expense		(less CIBS) 12/31/16	Expense	
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)		
1	Miscellaneous Intangible Plant	303	16.13%	\$ 14,745,889	\$ 2,378,512	14.29%	\$ 14,745,889	\$ 2,107,188	\$ (271,324)
2	<u>Subtotal - INTANGIBLE PLANT</u>			<u>\$ 14,745,889</u>	<u>\$ 2,378,512</u>		<u>\$ 14,745,889</u>	<u>\$ 2,107,188</u>	<u>\$ (271,324)</u>
3	Land & Land Rights	304		\$ 394,087	\$ -		\$ 394,087	\$ -	\$ -
4	Structures and Improvements	305	2.86%	1,975,163	56,490	2.86%	1,975,163	56,490	-
5	Liquefied Petroleum Gas Equipment	311	2.86%	258,481	7,393	2.86%	258,481	7,393	-
6	Other Equipment	320	2.86%	11,333,515	324,139	2.86%	11,333,515	324,139	-
7	Purification Equipment	361	2.86%	57,345	1,640	2.86%	57,345	1,640	-
8	<u>Other Equipment</u>	363	2.86%	<u>7,646</u>	<u>219</u>	2.86%	<u>7,646</u>	<u>219</u>	<u>-</u>
9	<u>Subtotal - PRODUCTION PLANT</u>			<u>\$ 14,026,237</u>	<u>\$ 389,879</u>		<u>\$ 14,026,237</u>	<u>\$ 389,879</u>	<u>\$ -</u>
10	Land & Land Rights	365		\$ 197,931	\$ -		\$ 197,931	\$ -	\$ -
11	Structures and Improvements	366	2.86%	623,659	17,837	2.86%	623,659	17,837	\$ -
12	Mains	367	1.92%	227,111,541	4,360,542	1.92%	227,111,541	4,360,542	-
13	Measuring and Regulating Station Equipment	369	2.86%	4,909,208	140,403	2.86%	4,909,208	140,403	-
14	Services	380	3.55%	146,186,416	5,189,618	3.56%	146,186,416	5,204,236	14,619
15	Meters	381.0	3.13%	14,628,345	457,867	2.86%	14,628,345	418,371	(39,497)
16	Meters - Instrument	381.1	3.13%	188,398	5,897	2.86%	188,398	5,388	(509)
17	Meters - ERTS	381.2	6.67%	5,647,769	376,706	4.00%	5,647,769	225,911	(150,795)
18	Meter Installations	382	3.13%	14,360,005	449,468	2.86%	14,360,005	410,696	(38,772)
19	<u>Other Equipment</u>	387	5.26%	<u>908,013</u>	<u>47,761</u>	5.26%	<u>908,013</u>	<u>47,761</u>	<u>-</u>
20	<u>Subtotal - DISTRIBUTION PLANT</u>			<u>\$414,761,285</u>	<u>\$ 11,046,099</u>		<u>\$414,761,285</u>	<u>\$ 10,831,145</u>	<u>\$ (214,954)</u>
21	Land & Land Rights	389		\$ 16,806	\$ -		\$ 16,806	\$ -	\$ -
22	Structures and Improvements	390	3.33%	21,912,075	729,672	2.86%	21,912,075	626,685	(102,987)
23	Office Furniture and Equipment	391.0	5.28%	285,566	15,078	5.28%	285,566	15,078	-
24	Office Furniture and Equipment - Computers	391.1	10.00%	1,840,911	184,091	9.09%	1,840,911	167,339	(16,752)
25	Office Furniture and Equipment - Laptop Computers	391.2	20.00%	679,916	135,983	20.00%	679,916	135,983	-
26	Transportation Equipment - Auto	392.0	20.00%	2,566,139	513,228	20.00%	2,566,139	513,228	-
27	Transportation Equipment - Truck	392.1	20.00%	-	-	20.00%	-	-	-
28	Stores Equipment	393	3.33%	99,421	3,311	3.33%	99,421	3,311	-
29	Tools, Shop, and Garage Equipment	394	5.26%	1,047,162	55,081	5.26%	1,047,162	55,081	-
30	Power Operated Equipment	396	20.00%	491,943	98,389	20.00%	491,943	98,389	-
31	Communications Equipment	397	10.00%	443,965	44,396	6.67%	443,965	29,612	(14,784)
32	<u>Miscellaneous Equipment</u>	398	6.67%	<u>348,302</u>	<u>23,232</u>	8.33%	<u>348,302</u>	<u>29,014</u>	<u>5,782</u>
33	<u>Subtotal - GENERAL PLANT</u>			<u>\$ 29,732,207</u>	<u>\$ 1,802,461</u>		<u>\$ 29,732,207</u>	<u>\$ 1,673,719</u>	<u>\$ (128,741)</u>
34	<u>TOTAL</u>			<u>\$473,265,618</u>	<u>\$ 15,616,951</u>		<u>\$473,265,618</u>	<u>\$ 15,001,931</u>	<u>\$ (615,020)</u>
35	OPI-STRUCTURES-RETAINED	121							
36	<u>GRAND TOTAL</u>			<u>\$473,265,618</u>	<u>\$ 15,616,951</u>		<u>\$473,265,618</u>	<u>\$ 15,001,931</u>	
37	Less: Amortization expense included above				\$ (2,378,512)			\$ (2,107,188)	
38	Amortization of Reserve Surplus				\$ (933,588)			\$ (933,588)	
39	Pro Forma Depreciation Expense				\$ 12,304,851			\$ 11,961,156	

Notes and Sources

See Testimony of Al-Azad Iqbal
 Column A: Attachment DBS/DSD-2, Schedule RR-EN-3-5 (Revised 11/21/17)

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Liberty Utilities (EnergyNorth)

Adjustment 15

Interest Synchronization

Line	Description	Company Proposed (A)	Adjustment (B)	Adjusted Amount (C)
1	Rate Base	\$ 249,741,831	(9,108,276)	240,633,555
2	Interest Component of Rate of Return	2.21%		2.22%
3	Interest Attributable to Rate Base	5,519,294		5,342,065
4	NH Income Tax	8.20%	0.0%	8.20%
5	Effect on NH income tax expense	\$ (452,582)	\$ 14,533	\$ (438,049)
6	Federal Taxable	\$ 5,066,712		\$ 4,904,016
7	Federal Income Tax Rate	34%	0.0%	34%
8	Effect on Federal income tax expense	\$ (1,722,682)	\$ 55,317	\$ (1,667,365)
9	Total Taxes	\$ (2,175,264)	\$ 69,850	\$ (2,105,414)
10	Impact to Operating Income	\$ 2,175,264	\$ (69,850)	\$ 2,105,414

Notes and Sources

Column A, Lines 2-3: Attachment DBS/DSD-2, Schedule RR-EN-3-8
 Column B, Lines 1: Schedule 1.1

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Liberty Utilities (EnergyNorth)

Step Adjustment

Adjustment to Step Increase-Modified

Line	Description	Company Proposed (A)	Adjustment (B)	Adjusted Amount (C)	As Filed Amount (D)
1	Step Increase - Application	\$ 5,920,512			
2	Step Increase - Revised 9/20/17	6,082,417			
3	Step Increase - Revised 11/21/17	4,317,133			
4	Rate Base				
5	Capital Spending	\$ 27,464,521	\$ (350,000)	\$ 27,114,521	\$ 27,114,521
6	Accumulated Depreciation	(1,305,603)	55,099	(1,250,504)	(1,250,504)
7	Deferred Tax Calculation	(3,796,939)	3,752,419	(44,520)	(3,760,909)
8	Total Rate Base	<u>\$ 22,361,979</u>	<u>\$ 3,457,518</u>	<u>\$ 25,819,497</u>	<u>\$ 22,103,108</u>
9	Revenue Requirements				
10	Return on Rate Base	\$ 2,394,968	148,252	\$ 2,543,220	\$ 2,022,434
11	Depreciation Expense	1,305,603	(55,099)	1,250,504	1,250,504
12	Property Tax	405,483	(7,193)	398,290	398,290
13	Insurance	50,001	(690)	49,311	49,311
14	Annual Revenue Requirements	4,156,055		4,241,325	3,720,539
15	Carry Over per DG-17-063				
16	Annual Revenue Requirement for FY16	5,375		5,375	5,375
17	Paving Costs for FY17	155,703		155,703	155,703
18	Total Carry Over	<u>\$ 4,317,133</u>		<u>\$ 4,402,403</u>	<u>\$ 3,881,617</u>
19	Manchester / Concord Legal Fees				
20	Legal Fees Outside Test Year				
21	McLane-Middleton Invoice # 2017070584 / 07/13/17		\$ 1,063	\$ 1,063	\$ 1,063
22	McLane-Middleton Invoice # 2017080512 / 08/08/17		2,379	2,379	2,379
23	McLane-Middleton Invoice # 2017091725 / 09/15/17		1,217	1,217	1,217
24	Superior Court Stipulation - City of Concord / 08/04/17		42,358	42,358	42,358
25	Supreme Court Stipulation - City of Concord / 08/04/17		5,714	5,714	5,714
26	Superior/Supreme Court Stipulation-City of Manchester / 08/04/17		119,785	119,785	119,785
27	Total Legal Fees Outside Test Year		<u>\$ 172,517</u>	<u>\$ 172,517</u>	<u>\$ 172,517</u>
28	Degradation Fees				
29	Degradation Fees Outside Test Year				
30	City of Manchester Invoice # 1005802 / 01/31/17		\$ 8,015	\$ 8,015	\$ 8,015
31	City of Manchester Invoice # 1007948 / 03/31/17		6,075	6,075	6,075
32	City of Manchester Invoice # 1009325 / 05/12/17		29,165	29,165	29,165
33	City of Manchester Invoice # 1010222 / 05/31/17		90,310	90,310	90,310
34	City of Manchester Invoice # 1011164 / 06/30/17		52,500	52,500	52,500
35	Total Degradation Fees Outside Test Year		<u>\$ 186,065</u>	<u>\$ 186,065</u>	<u>\$ 186,065</u>
36	Manchester / Concord Legal and Degradation Fees (2017)	<u>\$ -</u>	<u>\$ 358,582</u>	<u>\$ 358,582</u>	<u>\$ 358,582</u>
37	NH Income Tax	8.20%			8.20%
38	Effect on NH income tax expense	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (29,404)</u>
39	Federal Taxable	\$ -		\$ 358,582	\$ 329,178
40	Federal Income Tax Rate	34%			34%
41	Effect on Federal income tax expense	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (111,921)</u>
42	Total Taxes	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (141,325)</u>
43	Step Adjustment	<u>\$ 4,317,133</u>	<u>\$ (358,582)</u>	<u>\$ 4,760,985</u>	<u>\$ 4,098,874</u>

Notes and Sources

Column A, Line 1: Attachment DBS/DSD-2, Schedule STEP-EN (Revised 11/21/17)

Rebuttal Simek/Dan, page 6 (Bates 010) - Staff removed tax effect to reflect no gross up on revenue deficiency

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Liberty Utilities (EnergyNorth)

Step Adjustment

Adjustment to Step Increase - Company Proposal

Line	Description	Misc. Intangible Plant	LNG Plant	Mains	Station Equipment	General-Structures	Mains	Meas. & Reg. Station Equip.	Services	Meters	Structures and Improvements	Office Equipment	Vehicles	Tools	Total
1	Capital Spending	\$ 2,105,141	\$ 2,020,000	\$ 14,414,334	\$ 300,000	\$ 1,215,000	\$ 300,000	\$ 325,000	\$ 1,115,000	\$ 1,600,000	\$ 1,156,662	\$ 760,384	\$ 1,978,000	\$ 175,000	\$ 27,464,521
3	Deferred Tax Calculation														
4	Tax Method	MACRS15	MACRS20	MACRS20	MACRS20	MACRS39	MACRS20	MACRS20	MACRS20	MACRS20	MACRS39	MACRS7	MACRS5	MACRS7	
5	Tax Depreciation Rate	5.00%	3.75%	3.75%	3.75%	1.28%	3.75%	3.75%	3.75%	3.75%	1.28%	14.29%	20.00%	14.29%	
7	Bonus Depreciation @ 50.00%		\$ 1,010,000	\$ 7,207,167	\$ 150,000	\$ 607,500	\$ 150,000	\$ 162,500	\$ 557,500	\$ 800,000	\$ 578,331	\$ 380,192	\$ 989,000	\$ 87,500	\$ 12,679,690
9	Tax Basis	\$ 2,105,141	\$ 1,010,000	\$ 7,207,167	\$ 150,000	\$ 607,500	\$ 150,000	\$ 162,500	\$ 557,500	\$ 800,000	\$ 578,331	\$ 380,192	\$ 989,000	\$ 87,500	\$ 14,784,831
10	MACRS Depreciation	\$ 105,257	\$ 37,875	\$ 270,269	\$ 5,625	\$ 7,788	\$ 5,625	\$ 6,094	\$ 20,906	\$ 30,000	\$ 7,415	\$ 54,313	\$ 197,800	\$ 12,500	\$ 761,467
12	Tax Depreciation - Federal	\$ 105,257	\$ 1,047,875	\$ 7,477,436	\$ 155,625	\$ 615,288	\$ 155,625	\$ 168,594	\$ 578,406	\$ 830,000	\$ 585,746	\$ 434,505	\$ 1,186,800	\$ 100,000	\$ 13,441,157
13	Tax Depreciation - State	\$ 105,257	\$ 75,750	\$ 540,538	\$ 11,250	\$ 15,577	\$ 11,250	\$ 12,188	\$ 41,813	\$ 60,000	\$ 14,829	\$ 108,626	\$ 395,600	\$ 25,000	\$ 1,300,000
15	Book Depreciation Rate	16.13%	2.86%	1.92%	2.86%	2.86%	1.92%	2.86%	3.55%	3.13%	3.33%	5.28%	20.00%	5.26%	
16	Book Depreciation	\$ 339,559	\$ 57,772	\$ 276,755	\$ 8,580	\$ 34,749	\$ 5,760	\$ 9,295	\$ 39,583	\$ 50,080	\$ 38,517	\$ 40,148	\$ 395,600	\$ 9,205	\$ 1,305,603
18	Tax over (under) Book - Federal	\$ (234,302)	\$ 990,103	\$ 7,200,680	\$ 147,045	\$ 580,539	\$ 149,865	\$ 159,299	\$ 538,824	\$ 779,920	\$ 547,229	\$ 394,357	\$ 791,200	\$ 90,795	\$ 12,135,554
19	Tax over (under) Book - State	\$ (234,302)	\$ 19,978	\$ 263,782	\$ 2,670	\$ (19,172)	\$ 5,490	\$ 2,893	\$ 2,230	\$ 9,920	\$ (23,688)	\$ 68,478	\$ 0	\$ 15,795	\$ 112,074
20	Deferred Taxes - Federal @ 31.21%	\$ (73,130)	\$ 309,031	\$ 2,247,476	\$ 45,896	\$ 181,198	\$ 46,776	\$ 49,720	\$ 168,178	\$ 243,429	\$ 170,801	\$ 123,087	\$ 246,949	\$ 28,339	\$ 3,787,749
21	Deferred Taxes - State @ 8.20%	\$ (19,213)	\$ 1,474	\$ 21,630	\$ 219	\$ (1,572)	\$ 450	\$ 237	\$ 183	\$ 813	\$ (1,942)	\$ 5,615	\$ 0	\$ 1,295	\$ 9,190
22	Deferred Tax Balance @ 39.41%	\$ (92,343)	\$ 310,505	\$ 2,269,107	\$ 46,115	\$ 179,626	\$ 47,226	\$ 49,958	\$ 168,361	\$ 244,242	\$ 168,859	\$ 128,702	\$ 246,949	\$ 29,634	\$ 3,796,939
25	Rate Base Calculation														
25	Plant in Service	\$ 2,105,141	\$ 2,020,000	\$ 14,414,334	\$ 300,000	\$ 1,215,000	\$ 300,000	\$ 325,000	\$ 1,115,000	\$ 1,600,000	\$ 1,156,662	\$ 760,384	\$ 1,978,000	\$ 175,000	\$ 27,464,521
26	Accumulated Depreciation	\$ (339,559)	\$ (57,772)	\$ (276,755)	\$ (8,580)	\$ (34,749)	\$ (5,760)	\$ (9,295)	\$ (39,583)	\$ (50,080)	\$ (38,517)	\$ (40,148)	\$ (395,600)	\$ (9,205)	\$ (1,305,603)
27	Deferred Tax Balance	\$ 92,343	\$ (310,505)	\$ (2,269,107)	\$ (46,115)	\$ (179,626)	\$ (47,226)	\$ (49,958)	\$ (168,361)	\$ (244,242)	\$ (168,859)	\$ (128,702)	\$ (246,949)	\$ (29,634)	\$ (3,796,939)
28	Rate Base	\$ 1,857,925	\$ 1,651,723	\$ 11,868,472	\$ 245,305	\$ 1,000,625	\$ 247,014	\$ 265,747	\$ 907,057	\$ 1,305,678	\$ 949,287	\$ 591,534	\$ 1,335,451	\$ 136,161	\$ 22,361,979
30	Revenue Requirement Calculation														
31	Return on Rate Base @ 10.71%	\$ 198,984	\$ 176,900	\$ 1,271,113	\$ 26,272	\$ 107,167	\$ 26,455	\$ 28,462	\$ 97,146	\$ 139,838	\$ 101,669	\$ 63,353	\$ 143,027	\$ 14,583	\$ 2,394,968
32	Depreciation Expense	\$ 339,559	\$ 57,772	\$ 276,755	\$ 8,580	\$ 34,749	\$ 5,760	\$ 9,295	\$ 39,583	\$ 50,080	\$ 38,517	\$ 40,148	\$ 395,600	\$ 9,205	\$ 1,305,603
33	Property Tax @ 2.06%	\$ (73,130)	\$ 309,031	\$ 2,247,476	\$ 45,896	\$ 181,198	\$ 46,776	\$ 49,720	\$ 168,178	\$ 243,429	\$ 170,801	\$ 123,087	\$ 246,949	\$ 28,339	\$ 3,787,749
34	Insurance @ 0.20%	\$ 3,983	\$ 28,421	\$ 592	\$ 2,396	\$ 592	\$ 2,396	\$ 592	\$ 2,198	\$ 3,155	\$ 2,281	\$ 1,499	\$ 3,900	\$ 345	\$ 50,001
35	Annual Revenue Requirement	\$ 538,543	\$ 280,166	\$ 1,872,512	\$ 41,609	\$ 169,280	\$ 38,972	\$ 45,076	\$ 138,927	\$ 193,073	\$ 166,236	\$ 105,001	\$ 542,527	\$ 24,133	\$ 4,317,133

Rate of Return Calculation	Portion	After-Tax Cost	Tax	Pre-Tax WACC
Equity	50.0%	10.30%	39.41%	8.50%
Debt	50.0%	4.425%		2.21%
	100.0%			10.71%

"Carry Over Cost Provision Adjustments" per DG 17-063, Knepper Direct Testimony

Unadjusted annual revenue requirement for FY 16	694,182
Adjusted annual revenue requirement for FY 16	688,807
Difference to be recovered	5,375
Estimated paving cost for FY 17	2,301,960
Recoverable paving cost for FY 17	899,390
Difference to be recovered	1,402,570
Revenue Requirement of the Difference, per CIBS model	155,703

Description	Reference	Amount
Property taxes (Account 408-P)	RR-StepWP2	\$ 9,386,306
Property insurance (Account 924)	RR-EN-2-1	\$ 38,113
Injuries and Damage (Casualty Insurance) (Account 925)	RR-EN-2-1	\$ 877,844
		\$ 9,386,306
Plant at Cost	RR-Step-EN-WP2	\$ 456,742,424
As % of Plant Cost		2.06%

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Docket No. DG 17-048
 Schedule EN 4.2 WP
 Page 1 of 1

Liberty Utilities (EnergyNorth)
 Step Adjustment
 Adjustment to Step Increase - Staff Adjustment - Modified

Line	Description	Misc. Intangible Plant	LNG Plant	Mains	Station Equipment	General-Structures	Mains	Meas. & Reg. Station Equip.	Services	Meters	Structures and Improvements	Office Equipment	Vehicles	Tools	Total
	<i>FERC Account</i>	303	320	367	369	375	376	378	380	381	390	391	392	394	
1	Capital Spending	\$ 2,105,141	\$ 2,020,000	\$ 14,064,334	\$ 300,000	\$ 1,215,000	\$ 300,000	\$ 325,000	\$ 1,115,000	\$ 1,600,000	\$ 1,156,662	\$ 760,384	\$ 1,978,000	\$ 175,000	\$ 27,114,521
3	Deferred Tax Calculation														
4	Tax Method	MACRS15	MACRS20	MACRS20	MACRS20	MACRS39	MACRS20	MACRS20	MACRS20	MACRS20	MACRS39	MACRS7	MACRS5	MACRS7	
5	Tax Depreciation Rate	5.00%	3.75%	3.75%	3.75%	1.28%	3.75%	3.75%	3.75%	3.75%	1.28%	14.29%	20.00%	14.29%	
7	Bonus Depreciation @ 50.00%		\$ 1,010,000	\$ 7,032,167	\$ 150,000	\$ 607,500	\$ 150,000	\$ 162,500	\$ 557,500	\$ 800,000	\$ 578,331	\$ 380,192	\$ 989,000	\$ 87,500	\$ 12,504,690
9	Tax Basis	\$ 2,105,141	\$ 1,010,000	\$ 7,032,167	\$ 150,000	\$ 607,500	\$ 150,000	\$ 162,500	\$ 557,500	\$ 800,000	\$ 578,331	\$ 380,192	\$ 989,000	\$ 87,500	\$ 14,609,831
10	MACRS Depreciation	\$ 105,257	\$ 37,875	\$ 263,706	\$ 5,625	\$ 7,788	\$ 5,625	\$ 6,094	\$ 20,906	\$ 30,000	\$ 7,415	\$ 54,313	\$ 197,800	\$ 12,500	\$ 754,904
12	Tax Depreciation - Federal	\$ 105,257	\$ 1,047,875	\$ 7,295,873	\$ 155,625	\$ 615,288	\$ 155,625	\$ 168,594	\$ 578,406	\$ 830,000	\$ 585,746	\$ 434,505	\$ 1,186,800	\$ 100,000	\$ 13,259,594
13	Tax Depreciation - State	\$ 105,257	\$ 75,750	\$ 527,413	\$ 11,250	\$ 15,577	\$ 11,250	\$ 12,188	\$ 41,813	\$ 60,000	\$ 14,829	\$ 108,626	\$ 395,600	\$ 25,000	
15	Book Depreciation Rate	14.29%	2.86%	1.92%	2.86%	2.86%	1.92%	2.86%	3.56%	2.86%	2.86%	5.28%	20.00%	5.26%	
16	Book Depreciation	\$ 300,825	\$ 57,772	\$ 270,035	\$ 8,580	\$ 34,749	\$ 5,760	\$ 9,295	\$ 39,694	\$ 45,760	\$ 33,081	\$ 40,148	\$ 395,600	\$ 9,205	\$ 1,250,504
18	Tax over (under) Book - Federal	\$ (195,568)	\$ 990,103	\$ 7,025,838	\$ 147,045	\$ 580,539	\$ 149,865	\$ 159,299	\$ 538,712	\$ 784,240	\$ 552,665	\$ 394,357	\$ 791,200	\$ 90,795	\$ 12,009,091
19	Tax over (under) Book - State	(195,568)	17,978	257,377	2,670	(19,172)	5,490	2,893	2,119	14,240	(18,252)	68,478	0	15,795	154,048
20	Deferred Taxes - Federal @ 31.21%	(61,041)	309,031	2,192,905	45,896	181,198	46,776	49,720	168,143	244,777	172,498	123,087	246,949	28,339	3,748,277
21	Deferred Taxes - State @ 8.20%	(16,037)	1,474	21,105	219	(1,572)	450	237	174	1,168	(1,497)	5,615	0	1,295	12,632
22	Deferred Tax Balance @ 39.41%	\$ (77,077)	\$ 310,505	\$ 2,214,009	\$ 46,115	\$ 179,626	\$ 47,226	\$ 49,958	\$ 168,317	\$ 245,945	\$ 171,001	\$ 128,702	\$ 246,949	\$ 29,634	\$ 3,760,909
24	Rate Base Calculation														
25	Plant in Service	\$ 2,105,141	\$ 2,020,000	\$ 14,064,334	\$ 300,000	\$ 1,215,000	\$ 300,000	\$ 325,000	\$ 1,115,000	\$ 1,600,000	\$ 1,156,662	\$ 760,384	\$ 1,978,000	\$ 175,000	\$ 27,114,521
26	Accumulated Depreciation	(300,825)	(57,772)	(2,700,035)	(8,580)	(34,749)	(5,760)	(9,295)	(39,694)	(45,760)	(33,081)	(40,148)	(395,600)	(9,205)	(1,250,504)
27	Deferred Tax Balance	77,077	(310,505)	(2,214,009)	(46,115)	(179,626)	(47,226)	(49,958)	(168,317)	(245,945)	(171,001)	(128,702)	(246,949)	(29,634)	(3,760,909)
28	Rate Base	\$ 1,881,393	\$ 1,651,723	\$ 11,580,289	\$ 245,305	\$ 1,000,625	\$ 247,014	\$ 265,747	\$ 906,989	\$ 1,308,295	\$ 952,580	\$ 591,534	\$ 1,335,451	\$ 136,161	\$ 22,103,108
29															
30	Revenue Requirement Calculation														
31	Return on Rate Base @ 9.85%	\$ 185,317	\$ 162,695	\$ 1,140,658	\$ 24,163	\$ 98,562	\$ 24,331	\$ 26,176	\$ 89,338	\$ 128,867	\$ 93,829	\$ 58,266	\$ 131,542	\$ 13,412	\$ 2,177,156
32	Depreciation Expense	300,825	57,772	270,035	8,580	34,749	5,760	9,295	39,694	45,760	33,081	40,148	395,600	9,205	1,250,504
33	Property Tax @ 2.06%		41,512	289,030	6,165	24,969	6,165	6,679			23,770				398,290
34	Insurance @ 0.20%		3,983	27,731	592	2,396	592	641	2,198	3,155	2,281	1,499	3,900	345	49,311
35	Annual Revenue Requirement	\$ 486,142	\$ 265,962	\$ 1,727,454	\$ 39,499	\$ 160,675	\$ 36,848	\$ 42,791	\$ 131,231	\$ 177,782	\$ 152,960	\$ 99,914	\$ 531,042	\$ 22,962	\$ 4,036,339
36															
37	Rate of Return Calculation														
38	Equity		Portion	After-Tax Cost	Tax	Pre-Tax WACC									Check
39	Long Term Debt		49.21%	9.40%	39.41%										4.63%
40	Short Term Debt		49.85%	4.420%											2.20%
41			0.95%	2.490%											0.02%
42			100.0%												6.85%
43	Description														
44	Property taxes (Account 408-P)					Reference	Amount								
45	Property insurance (Account 924)					RR-StepWP2	\$ 9,386,306								
46	Injuries and Damage (Casualty Insurance) (Account 925)					RR-EN-2-1	\$	38,113							
47						RR-EN-2-1	\$	877,844							
48	Plant at Cost					RR-Step-EN-WP2	\$ 456,742,424	\$ 464,553,396							
	As % of Plant Cost						2.06%	0.20%							

"Carry Over Cost Provision Adjustments" per DG 17-063, Knepper Direct Testimony

Unadjusted annual revenue requirement for FY 16	694,182
Adjusted annual revenue requirement for FY 16	688,807
Difference to be recovered	5,375
Estimated paving cost for FY 17	2,301,960
Recoverable paving cost for FY 17	899,390
Difference to be recovered	1,402,570
Revenue Requirement of the Difference, per CIBS model	155,703

Response to Staff Tech 3-10: Varney, Worthely, and Reklund Project removed

Modified to reflect revised WACC

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Liberty Utilities (Energy/North)
 Step Adjustment

Adjustment to Step Increase - Staff Adjustment - Modified for Tax-Change Effect

Line	Description	Misc. Intangible Plant	LNG Plant	Mains	Station Equipment	General-Structures	Mains	Meas. & Reg. Station Equip.	Services	Meters	Structures and Improvements	Office Equipment	Vehicles	Tools	Total
1	Capital Spending	\$ 2,105,141	\$ 2,020,000	\$ 14,064,334	\$ 300,000	\$ 1,215,000	\$ 300,000	\$ 325,000	\$ 1,115,000	\$ 1,600,000	\$ 1,156,662	\$ 760,384	\$ 1,978,000	\$ 175,000	\$ 27,114,521
4	Tax Method	MACRS15	MACRS20	MACRS20	MACRS20	MACRS39	MACRS20	MACRS20	MACRS20	MACRS20	MACRS39	MACRS7	MACRS5	MACRS7	
5	Tax Depreciation Rate	5.00%	3.75%	3.75%	3.75%	1.28%	3.75%	3.75%	3.75%	3.75%	1.28%	14.29%	20.00%	14.29%	
7	Bonus Depreciation @ 0.00%														0.00%
9	Tax Basis	\$ 2,105,141	\$ 2,020,000	\$ 14,064,334	\$ 300,000	\$ 1,215,000	\$ 300,000	\$ 325,000	\$ 1,115,000	\$ 1,600,000	\$ 1,156,662	\$ 760,384	\$ 1,978,000	\$ 175,000	\$ 27,114,521
10	MACRS Depreciation	\$ 105,257	\$ 75,750	\$ 527,413	\$ 11,250	\$ 15,577	\$ 11,250	\$ 12,188	\$ 41,813	\$ 60,000	\$ 14,829	\$ 108,626	\$ 395,600	\$ 25,000	\$ 1,404,552
12	Tax Depreciation - Federal	\$ 105,257	\$ 75,750	\$ 527,413	\$ 11,250	\$ 15,577	\$ 11,250	\$ 12,188	\$ 41,813	\$ 60,000	\$ 14,829	\$ 108,626	\$ 395,600	\$ 25,000	\$ 1,404,552
13	Tax Depreciation - State	\$ 105,257	\$ 75,750	\$ 527,413	\$ 11,250	\$ 15,577	\$ 11,250	\$ 12,188	\$ 41,813	\$ 60,000	\$ 14,829	\$ 108,626	\$ 395,600	\$ 25,000	\$ 1,404,552
15	Book Depreciation Rate	14.29%	2.86%	1.92%	2.86%	2.86%	1.92%	2.86%	3.56%	2.86%	2.86%	5.28%	20.00%	5.28%	
16	Book Depreciation	\$ 300,825	\$ 57,772	\$ 270,035	\$ 8,580	\$ 34,749	\$ 5,760	\$ 9,295	\$ 39,694	\$ 45,760	\$ 33,081	\$ 40,148	\$ 395,600	\$ 9,205	\$ 1,250,504
18	Tax over (under) Book - Federal	\$ (195,568)	\$ 17,978	\$ 257,377	\$ 2,670	\$ (19,172)	\$ 5,490	\$ 2,893	\$ 2,119	\$ 14,240	\$ (18,252)	\$ 68,478	\$ -	\$ 15,795	\$ 154,048
19	Tax over (under) Book - State	\$ (195,568)	\$ 17,978	\$ 257,377	\$ 2,670	\$ (19,172)	\$ 5,490	\$ 2,893	\$ 2,119	\$ 14,240	\$ (18,252)	\$ 68,478	\$ 0	\$ 15,795	\$ 154,048
20	Deferred Taxes - Federal @ 21.00%	\$ (41,069)	\$ 3,775	\$ 54,049	\$ 561	\$ (4,026)	\$ 1,153	\$ 607	\$ 445	\$ 2,990	\$ (3,833)	\$ 14,380	\$ 0	\$ 3,317	\$ 32,350
21	Deferred Taxes - State @ 7.90%	\$ (15,450)	\$ 1,420	\$ 20,333	\$ 211	\$ (1,515)	\$ 434	\$ 229	\$ 167	\$ 1,125	\$ (1,442)	\$ 5,410	\$ 0	\$ 1,248	\$ 12,170
22	Deferred Tax Balance @27.24%	\$ (56,519)	\$ 5,196	\$ 74,382	\$ 772	\$ (5,541)	\$ 1,587	\$ 836	\$ 612	\$ 4,115	\$ (5,275)	\$ 19,790	\$ -	\$ 4,565	\$ 44,520
25	Rate Base Calculation														
25	Plant in Service	\$ 2,105,141	\$ 2,020,000	\$ 14,064,334	\$ 300,000	\$ 1,215,000	\$ 300,000	\$ 325,000	\$ 1,115,000	\$ 1,600,000	\$ 1,156,662	\$ 760,384	\$ 1,978,000	\$ 175,000	\$ 27,114,521
26	Accumulated Depreciation	\$ (300,825)	\$ (57,772)	\$ (270,035)	\$ (8,580)	\$ (34,749)	\$ (5,760)	\$ (9,295)	\$ (39,694)	\$ (45,760)	\$ (33,081)	\$ (40,148)	\$ (395,600)	\$ (9,205)	\$ (1,250,504)
27	Deferred Tax Balance	\$ 56,519	\$ (5,196)	\$ (74,382)	\$ (772)	\$ 5,541	\$ (1,587)	\$ (836)	\$ (612)	\$ (4,115)	\$ 5,275	\$ (19,790)	\$ 0	\$ (4,565)	\$ (44,520)
28	Rate Base	\$ 1,860,835	\$ 1,957,032	\$ 13,719,917	\$ 290,648	\$ 1,185,792	\$ 292,653	\$ 314,869	\$ 1,074,694	\$ 1,550,125	\$ 1,128,856	\$ 700,446	\$ 1,582,400	\$ 161,230	\$ 25,819,497
30	Revenue Requirement Calculation														
31	Return on Rate Base @ 9.85%	\$ 183,292	\$ 192,768	\$ 1,351,412	\$ 28,629	\$ 116,800	\$ 28,826	\$ 31,015	\$ 105,857	\$ 152,687	\$ 111,192	\$ 68,994	\$ 155,866	\$ 15,881	\$ 2,543,220
32	Depreciation Expense	\$ 300,825	\$ 57,772	\$ 270,035	\$ 8,580	\$ 34,749	\$ 5,760	\$ 9,295	\$ 39,694	\$ 45,760	\$ 33,081	\$ 40,148	\$ 395,600	\$ 9,205	\$ 1,250,504
33	Property Tax @ 2.06%		\$ 41,512	\$ 289,030	\$ 6,165	\$ 24,969	\$ 6,165	\$ 6,679		\$ 445	\$ 2,990	\$ 23,770			\$ 398,290
34	Insurance @ 0.20%		\$ 3,983	\$ 27,731	\$ 592	\$ 2,396	\$ 641	\$ 2,198	\$ 3,155		\$ 2,281	\$ 1,499	\$ 3,900	\$ 345	\$ 49,311
35	Annual Revenue Requirement	\$ 484,117	\$ 296,035	\$ 1,938,207	\$ 43,966	\$ 178,914	\$ 41,343	\$ 47,629	\$ 147,750	\$ 201,602	\$ 170,323	\$ 110,641	\$ 555,366	\$ 25,431	\$ 4,402,403
37	Rate of Return Calculation		Portion	After-Tax Cost	Tax	Pre-Tax WACC	Check								
38	Equity		49.21%	9.40%	39.41%	7.63%	4.63%								
39	Long Term Debt		49.85%	4.420%		2.20%	2.20%								
40	Short Term Debt		0.95%	2.490%		0.02%	0.02%								
41			100.0%			9.85%	6.85%								
42	Description				Reference	Amount									
43	Property taxes (Account 408-P)				RR-StepWP2	\$ 9,386,306									
44	Property insurance (Account 924)				RR-EN-2-1	\$ 38,113									2,301,960
45	Injuries and Damage (Casualty Insurance) (Account 925)				RR-EN-2-1	\$ 877,844									899,390
46						\$ 9,386,306	\$ 915,957								1,402,570
47	Plant at Cost				RR-Step-EN-WP2	\$ 456,742,424	\$ 464,553,396								155,703
48	As % of Plant Cost					2.06%	0.20%								

"Carry Over Cost Provision Adjustments" per DG 17-063, Knepper Direct Testimony

Unadjusted annual revenue requirement for FY 16 694,182
 Adjusted annual revenue requirement for FY 16 688,807
 Difference to be recovered 5,375

Estimated paving cost for FY 17 2,301,960
 Recoverable paving cost for FY 17 899,390
 Difference to be recovered 1,402,570
 Revenue Requirement of the Difference, per CIBS model 155,703

Response to Staff Tech 3-10: Varney, Worthy, and Reklard Project removed

Modified to reflect revised WACC



Michael J. Sheehan, Esq.
Senior Counsel
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Email: Michael.Sheehan@libertyutilities.com

March 1, 2018

Via Electronic Mail and Hand-Delivery

Debra A. Howland, Executive Director
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, NH 03301-2429

**Re: DG 17-048 Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities
Request for Change in Rates**

Dear Ms. Howland:

On behalf of Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities, enclosed for filing in the above matter please find an original and six copies of a revised version of the *Agreement Regarding Permanent Rates* that we filed on February 27.

The only changes were to add Bates numbering and to include a new version of Attachment F. We updated some information in Attachment F and rearranged the columns for the winter period to make it more readable. Nothing else has changed from the original filing.

Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "M Sheehan", written in a cursive style.

Michael J. Sheehan

Enclosures
cc: Service List

State of New Hampshire
Public Utilities Commission

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

Docket No. DG 17-048

Agreement Regarding Permanent Rates

This Agreement Regarding Permanent Rates (the “Agreement”) is entered into this 27th day of February, 2018, by Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities (“Liberty” or the “Company”) and the Office of the Consumer Advocate (“OCA”) (together, the “Settling Parties”). This Agreement resolves all issues between the Settling Parties in this proceeding, the approval of which would discharge the Commission’s duty to “be the arbiter between the interests of the customer and the interests of the regulated utilities.” RSA 363:17-a.

I. INTRODUCTION

On March 28, 2017, Liberty filed its notice of intent to file rate schedules seeking an increase in its annual distribution revenues. The Company filed its proposed rate schedules on April 28, 2017, seeking, as updated later in the proceeding and through its rebuttal testimony, a \$14.5 million permanent increase in annual distribution revenues and a \$5.2 million step increase to recover an annual revenue deficiency based on additional net rate base of approximately \$252 million for the twelve-month period ending December 31, 2017. The Company requested approval of a 10.3% return on equity (ROE), and a capital structure consisting of 50% equity and 50% debt. Liberty also proposed consolidating the Keene Division’s distribution rates into EnergyNorth’s distribution rates (while maintaining a separate cost of gas (“COG”) rate for Keene) and implementing a full decoupling mechanism to sever the connection between sales

and revenue. The Company supported its filing with the direct testimony of a number of witnesses from the Company and expert consultants. The Commission suspended the rate schedules by Order No. 26,015 (May 8, 2017).

The OCA notified the Commission that it would participate in the docket on behalf of residential customers consistent with RSA 363:28. No party sought intervention.

The Company's filing also included a request for a temporary rate increase of \$7.8 million. The Settling Parties and Staff reached a settlement as to temporary rates, and the Commission approved the agreed \$6.75 temporary rate increase, effective July 1, 2017. Order No. 26,035 (June 30, 2017). The order provides that any permanent rates approved by the Commission would be fully reconcilable back to the July 1, 2017, effective date of temporary rates.

Following the temporary rate order, the Company responded to numerous sets of data requests from the parties, the Commission's Audit Staff reviewed the Company's filing and issued its audit report, and the OCA and Staff filed testimony.

Staff's testimony recommended the following: (1) an ROE of 8.55%; (2) a capital structure of 49.85% long term debt, 0.95% short term debt, and 49.21% equity; (3) a permanent increase to distribution revenue of \$4.045 million; (4) a step increase of \$4.1 million for 2017 capital additions and recovery of certain costs related to pensions, benefits, and 2017 degradation fees; (5) that the Commission deny the Company's request to consolidate the Keene Division's distribution rates with the rest of the Company; and (6) a limited decoupling mechanism to account only for energy efficiency gains, as opposed to the Company's (and OCA's) proposed "full" decoupling proposals that remove all incentives for the Company to encourage higher sales per customer.

The OCA's testimony recommended an ROE of 8.4%, a 50/50 capital structure, a permanent increase to distribution revenue of \$9.2 million, a separate rate proceeding for the Keene Division, and a full "real time" decoupling proposal that adjusts each customer's bill based on their actual use and actual heating degree days during the current billing month and periodically adjusts for other decoupling variables.

The Company conducted discovery on Staff's and OCA's testimony, and the Company filed rebuttal testimony. The parties then engaged in settlement discussions that resulted in this Agreement, which is intended to resolve all issues in this case as between the OCA and Liberty. The Settling Parties recommend and request that the Commission approve this Agreement without modification.

II. TERMS OF AGREEMENT

A. Revenue Requirement, Rate Base, Rate of Return

The Settling Parties agree and recommend that the Commission authorize an annual distribution revenue increase of \$10.3 million effective May 1, 2018, based on an overall cost of capital of 6.85%. The overall cost of capital was calculated utilizing a cost of equity of 9.4%, the actual weighted average cost of long-term debt, and a capital structure of 0.945% short-term debt, 49.845% long-term debt, and 49.209% common equity capital, which is the Company's proforma capital structure based on the recent long-term debt issuance and short-term debt approved in Order No. 26,084 (Dec. 15, 2017). The calculation of the overall cost of capital is as follows:

Description	Capital Structure	Cost of Capital	Weighted Cost of Capital
Common Stock	49.21%	9.40%	4.63%
Long-Term Debt	49.85%	4.42%	2.20%
Short-Term Debt	0.95%	2.49%	0.02%
	<u>100.00%</u>		<u>6.85%</u>

The Settling Parties agree that the above distribution revenue increase represents a reasonable compromise of all the issues relating to the revenue requirement pending before the Commission for the purpose of permanent rates, as itemized below. Because the above revenue increase is the result of compromise and settlement, it is a liquidation of all revenue requirement issues. The Settling Parties agree that the revenue requirement recommended to the Commission in this Agreement results in permanent rates for Liberty’s customers that are just and reasonable. The permanent rate increase described in this Section A shall be reconcilable to the effective date of temporary rates in this case, July 1, 2017, per Order No. 26,035, in accordance with Section C below.

The liquidated revenue requirement in this Agreement reflects consideration, negotiation, and resolution as between the Settling Parties of all the issues raised by the OCA and by Staff in their direct testimony that impacted the revenue requirement. Some of the more significant topics are discussed below.

1. Prepayments Included in Cash Working Capital

The Company included prepayments of certain costs (mostly property taxes and insurance) in its cash working capital calculation. Staff recommended that the Company remove all prepayments claiming those costs were double counted because they were included in rate base and were also used to determine cash working capital. The Company acknowledged that

there may be some double-counting in theory, but it did not warrant a dollar-for-dollar offset as Staff testified. The Settling parties have negotiated and compromised this issue in reaching this Agreement.

2. Materials and Supplies

Staff recommended that Liberty move \$3.66 million in “materials and supplies” (which consists of fuel supply inventories) from rate base and instead recover the associated revenue requirement through the Company’s COG rate. The Settling Parties agree with this adjustment and these costs were removed from the distribution revenue requirement.

3. Concord Training Center

The Training Center located on the Company’s property in Concord has been in use since March 2015. The facility provides a centralized location for simultaneous training of multiple employees in a controlled environment and has been and is being used to, among other things, train and test gas field workers and supervisors whose Operator Qualification requirements continue to increase, train electrical field workers and supervisors, and train office staff so they may better perform their jobs (e.g., training call center employees on the basics of the Company’s gas and electric systems makes them better able to respond to customer questions) The Training Center also serves as a call center back-up facility, has been used for industry training in conjunction with other utilities, has been used to host meetings with first responders, and for other related purposes. With respect to electric training, the Company currently receives revenue from its affiliate, Granite State Electric, pursuant to a lease agreement that is on file with the Commission in Docket No. DA 16-560, which docket was consolidated into the current docket. The Settling Parties agree that the lease should continue under its existing terms and conditions.

The revenue requirement in this Agreement allows the Training Center costs and revenues to be included in the determination of the revenue requirement, but also reflects consideration and compromise of the issues related to the Training Center raised by Staff and the OCA in their testimony.

4. Depreciation and Amortization

- a. The depreciation and amortization rates to be used by Liberty on a going-forward basis are the rates set forth in Attachment A.
- b. The depreciation and amortization rates applied to the assets for EnergyNorth and the Keene Division will be aligned so they conform with the rates in Attachment A.
- c. Plant assets for the Keene Division will become subject to group depreciation.
- d. As a housekeeping matter, certain EnergyNorth plant assets that are currently recorded in transmission-related plant accounts will be reclassified to distribution-related plant accounts.
- e. The depreciation reserve variance is an under-recovery of \$8.9 million, and will be amortized over a five-year period, resulting in annual amortization of \$1,780,000.
- f. As part of its next rate case, Liberty will prepare an updated analysis of the status of the depreciation reserve variance, with determination of the disposition of the updated variance and the appropriate amortization period to be determined in that proceeding.

5. iNATGAS

In Docket No. DG 14-091 the Commission approved a special contract with iNATGAS, which included the construction of a CNG facility in Concord. The Company ultimately built a larger facility, at greater cost, essentially accelerating the construction of Phase 2. Staff recommended that the Company not recover some of the costs of the facility because, in Staff's view, it was not appropriate to build Phase 2 so soon, because the actual costs exceeded the original budget, and because the current revenue from the project did not support the costs. Liberty explained how the higher costs were reasonable, that it was more cost effective to complete Phase 2 early, and that iNATGAS is now buying CNG from the facility at a rate that exceeds the minimum take-or-pay amounts in the Special Contract so as to support all the direct costs of the facility.

The revenue requirement in this Agreement reflects a compromise of these issues related to iNATGAS.

6. Keene Production Costs and Emergency Response Costs

The Settling Parties agree that the emergency response costs related to the December 2015 incident and the Keene production costs should be recovered through the Keene specific COG rates over five years during the winter COG period, and beginning November 1, 2018.

B. Step Increase

The Settling Parties agree that the Company shall be permitted to implement a step increase to its distribution revenue, as calculated in Attachment B, effective May 1, 2018, to recover the following items:

1. The revenue requirement associated with 2017 non-growth related capital additions placed in service as of December 31, 2017;

2. The increase to operating expenses resulting from the Financial Accounting Standards Board's ("FASB") issuance in March 2017 of Accounting Standards Update No. 2017-07 ("ASU 2017-07");¹ and
3. The costs incurred during 2017 for degradation fees paid to the City of Manchester and legal costs incurred by the Company associated with a lawsuit that began in 2012 against the Cities of Concord and Manchester to challenge the "degradation fees" that the cities charged Liberty to dig in municipal streets.
4. Certain "carryover" costs related to the Company's Cast Iron/Bare Steel replacement program as discussed during the hearing in Docket No. DG 17-063.²

The 2017 non-growth related capital additions referenced in Section B.1. above and included in Attachment B are based on Liberty's 2017 capital budget. On or before March 30, 2018, Liberty will submit its actual capital costs for its 2017 non-growth related capital additions and update Attachment B. In the event that the resulting revenue requirement is lower than \$5,044,835, the lower amount will be used for the step adjustment. If the updated calculation of the revenue requirement exceeds \$5,044,835, the revenue requirement will be limited to \$5,044,835.

C. Effective Date for Permanent Rates and Recoupment

The permanent rate increase agreed to in Section II.A shall be effective for all service rendered on and after May 1, 2018. The difference between the distribution revenues obtained

¹ Among other things, ASU 2017-07 amended the accounting for pension and OPEB costs, effective January 1, 2018, to limit the components of net periodic pension and postretirement benefit costs that are eligible for capitalization to only the service costs component. Previously, all components of net periodic pension and postretirement benefit costs (i.e., service cost, interest cost, expected return on plan assets, etc.) were eligible to be capitalized. The result of the accounting changes prescribed in ASU 2017-07 is that the portions of the costs that are no longer eligible to be capitalized increase the Company's operating expenses as compared to prior accounting.

² See transcript of June 19, 2017 hearing in Docket No. DG 17-063 at 41, et seq.

from the rates prescribed in the temporary rate order, Order No. 26,035, and the distribution revenues that would have been obtained under the rates finally determined, if applied during the period such temporary rate order was in effect, shall be recovered from customers over a period of twenty months, beginning with service rendered as of May 1, 2018. The total estimated amount of recoupment is \$3,590,667 as shown on Attachment C, and shall be recovered through a uniform charge per therm through the Local Delivery Adjustment Clause (LDAC) of the Company's tariff. The estimated amount of recoupment has been calculated using actual billing data for July 1, 2017, through December 31, 2017, and estimated billing data for January 1, 2018, through April 30, 2018. On or before June 30, 2018, Liberty will file with the Commission, for its review and approval, the actual recoupment amount based on actual billing data for the period July 1, 2017, through April 30, 2018. Any difference between the actual recoupment amount and the estimated amount shown on Attachment C will be reconciled through the operation of the reconciling mechanism in the LDAC.

D. Rate Case Expenses

Subject to adjustment for the difference between estimated and actual expense, the Company shall recover \$530,000 in rate case expenses over a period of twenty months commencing with service rendered as of May 1, 2018. Details of the actual and estimated rate case expenses are included in Attachment D. The Company agrees to submit by June 30, 2018, an accounting of its rate case expenses, with appropriate supporting documentation, for review by the parties and approval by the Commission. The Company shall recover its just and reasonably incurred rate case expenses through the LDAC in the same manner as it recovers the temporary rate recoupment. Once the final amount of actual, just and reasonable rate case expenses is determined, any difference between the amount recovered commencing May 1,

2018, and the final amount shall be recovered through the operation of the reconciling mechanism in the LDAC. Rate case expenses shall be recovered through uniform charge per therm in accordance with the provisions of the LDAC.

E. Revenue Allocation and Rate Design

The permanent and step increases will be allocated to each class on a proportional basis by increasing each class' revenue responsibility by the same percentage.

For residential rate design, the R-3 customer charge and the R-1 customer charge will both be set at \$14.88 per month, which is \$2.00 per month lower than the currently effective customer charge for Rate R-1. Any revenue shortfall resulting from the reduction to the customer charges, plus the increase resulting from the permanent and step increases, will be recovered through the volumetric delivery per therm rates. In addition, the volumetric head and tail block delivery per therm rates for R-3 will be set at the same level.

The distribution rates for the R-4 Low Income Residential Heating rate class were calculated by multiplying the R-3 proposed base distribution rates by 40 percent to reflect a 60 percent discount. This resulted in a customer charge of \$5.95 (i.e., \$14.88 x 40%) and a volumetric delivery per therm rate of \$0.2400 (i.e., \$0.6000 x 40%).

Rates for commercial and industrial rate classes will be increased proportionally for each billing rate component (e.g., customer charge and volumetric delivery rate) to recover the allocated revenues for that class. The resulting rates are effective May 1, 2018, and continue without modification to rate design until the Company's next rate proceeding.

F. Decoupling

The Settling Parties agree that the Company should implement a "full" decoupling mechanism that contains the following elements: (1) real-time weather normalization, calculated

at the individual customer level; (2) revenue per customer design, with accrual calculations at the rate class level and billing rates aggregated into two rates – Residential and C&I; (3) Managed Expansion Program customers are subject to decoupling, but the expansion surcharge dollars (i.e., the 30% distribution premium) are excluded from the decoupling calculation; and (4) special contract customers are not subject to decoupling and will be excluded entirely from the decoupling calculation.

The real-time weather normalization adjustment is calculated as the difference between actual distribution revenue billed to each customer in each billing cycle for each month, and what distribution revenue for each customer's bill would have been based on normalized therm deliveries. The resulting charge or credit will be added to or subtracted from each customer's bill at the time the bill is rendered (i.e., "real time").

The annual revenue per customer adjustment will be determined by calculating the difference between actual annual distribution revenue per customer and approved annual distribution revenue per customer for two groups of customers: (a) the residential classes and (b) the commercial and industrial classes. Approved annual distribution revenue per customer for each of these two groups will be based on the approved distribution revenues and test year average customer counts for each group. The difference in total distribution revenues is calculated using this revenue per customer variance multiplied times the actual average annual customer count. This amount will be recovered from or refunded to each group over the subsequent 12-month period through a uniform charge per therm for each group.

The Settling Parties agree that the Company may recover up to \$50,000 in costs incurred to upgrade its billing system and related software to implement this decoupling mechanism. Any costs above \$50,000 will be absorbed by the Company.

The Settling Parties agree that the decoupling mechanism shall take effect beginning on November 1, 2018. On that date, decoupling will replace the Lost Revenue Adjustment Mechanism established in Order No. 25,932 (Docket No. DE 15-137), and the Company will cease any and all recovery of lost revenues attributable to energy efficiency programs outside of the decoupling mechanism.

G. Keene Consolidation

The Settling Parties agree that Keene Division customers will pay the same distribution rates and be served under the same terms and conditions as all other Liberty customers, effective May 1, 2018.

Liberty will not commence construction on any phase of its proposed Keene expansion unless a discounted cash flow (“DCF”) analysis of the revenue requirement of the direct cost versus the incremental revenue of the additional load for that phase shows a positive value over a 10-year period.

Liberty agrees to a target amount of additional revenue due to growth in excess of the revenue requirement associated with the direct cost of the investment. If the cumulative excess revenue is less than \$200,000 annually, Liberty will reduce its revenue requirement in its next rate case by the difference between \$200,000 and the excess revenue. Excess revenue shall be based on actual load added as of the effective date of permanent rates following the end of the next rate case, plus reasonably anticipated revenue based on customer commitments to take service, both pro-formed for one year following the effective date of permanent rates in the next rate case. This provision is conditioned on Liberty’s receipt of the Safety Division’s authorization to commence construction of Phase I no later than May 1, 2018, and on acquiring

appropriate authorization to construct a permanent compressed natural gas (“CNG”)/liquefied natural gas (“LNG”) facility by May 1, 2019.

Keene customers will begin paying the LDAC as of May 1, 2018.

Keene shall have a separate COG, which will include: (1) propane purchases; (2) CNG/LNG purchases; (3) production costs; (4) revenue requirement associated with CNG/LNG facilities; and (5) revenue requirement associated with fuel inventory.

H. Impact of Tax Reform

Separate from the revenue requirement described in this Agreement, Liberty will reduce annual distribution revenues by \$2,394,065 to account for the reduction in federal tax rates included in the Tax Cuts and Jobs Act of 2017 (“2017 Tax Act”) that was passed by the United States Congress in December 2017 and a reduction to New Hampshire tax rates, and which reduction will be part of the rate adjustments that occur on May 1, 2018. The calculation of this adjustment is shown in Attachment E. In addition, the tax law changes included in the 2017 Tax Act, including the elimination of bonus depreciation for tax purposes, have been taken into account in the calculation of the step adjustment described in Section B above.

The Settling Parties recommend that the Commission find that this provision fully satisfies the Company’s obligations with respect to Order No. 26,096 (January 3, 2018) in Docket No. IR 18-001.

I. Bill Impacts

Bill impacts for the various rate classes resulting from the adjustments to revenue and rate design as described above are provided in Attachment F.

J. Tariff Changes

Liberty will file revised tariff language to add Keene as a service territory served by Liberty Utilities (EnergyNorth Natural Gas) Corp., and to add a Keene COG tariff specific to Keene customers, as described above.

Liberty will cancel the Keene Division tariff as of May 1, 2018.

K. Residential Low Income Assistance Program

The Settling Parties agree that the Commission should open a generic proceeding to address changes to the Residential Low Income Assistance Program.

L. Next Distribution Rate Case

Liberty shall file its next distribution rate case using a test year ending no later than December 31, 2020.

III. CONDITIONS

This Agreement is expressly conditioned on the Commission's acceptance of all its terms, without change or condition. If the Commission does not accept this Agreement in its entirety, without change or condition, or if the Commission makes any findings that go beyond the scope of this Agreement, and either of the Settling Parties notifies the Commission within five business days of its disagreement with any such changes, conditions, or findings, the Agreement shall be deemed to be withdrawn, in which event it shall be deemed to be null and void and without effect, shall not constitute any part of the record in this proceeding, shall not be relied on by any party to this proceeding or by the Commission for any other purpose.

The Settling Parties agree that the Commission's approval of this Agreement will not constitute continuing approval of, or precedent for, any particular principle or issue related to the revenue requirement, but such acceptance does constitute a determination that the adjustments and provisions stated in their totality are just and reasonable and consistent with the public interest and that the revenues contemplated will be just and reasonable under the circumstances.

The discussions that produced this Agreement have been conducted on the understanding that all offers of settlement and settlement discussions relating to this docket shall be confidential, shall not be admissible as evidence in this proceeding, shall be without prejudice to the position of any party or participant representing any such offer or participating in any such discussion, and are not to be used in connection with any future proceeding or otherwise.

As between the Settling Parties, the information and testimony previously provided in this proceeding are not expected to be subject to cross-examination by the Settling Parties, which would normally occur in a fully litigated case. The Settling Parties agree that they shall not object to the admission as full exhibits of their respective direct and rebuttal testimony and supporting documentation. The Settling Parties' agreement to admit all testimony without challenge does not constitute agreement by the Settling Parties that the content of the written testimony is accurate or what weight, if any, should be given to the views of any witness. The identification of the resolution of any specific issue in this Agreement does not indicate any of the Settling Parties' agreement to that resolution for purposes of any future proceeding, nor does the reference to any other document bind the Settling Parties to the contents of, or recommendations in, that document for purposes of any future proceeding. The Commission's approval of the recommendations in this Agreement shall not constitute a determination or precedent with regard to any specific adjustments to the revenue requirement, but rather shall constitute only a determination that the revenue requirement and rates resulting from, and other specific conditions stated in this Agreement are just and reasonable. The Settling Parties agree to forego cross-examining each others' witnesses regarding their pre-filed testimony and, therefore, the admission into evidence of any such witness's testimony or supporting documentation shall not be deemed in any respect to constitute an admission by any party to this Agreement that any

allegation or contention in this proceeding is true or false, except that the sworn testimony of any witness shall constitute an admission by such witness.

This Agreement may be executed by facsimile and in counterparts, each of which shall be deemed to be an original, and all of which, taken together, shall constitute one agreement binding on all Settling Parties.

Dated: February 27, 2018

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



By its Attorney, Michael J. Sheehan

Dated: February 27, 2018

Office of the Consumer Advocate



By the Consumer Advocate, D. Maurice Kreis

FERC Account		Average Service Lives (Years)	Net Salvage Value (%)	Depreciation Rate
303	Intangible Plant (Amort.)			
	3-Year	3	N/A	33.33%
	5-Year	5	N/A	20.00%
	10-Year	10	N/A	10.00%
	<u>Production Plant</u>			
305	Structures and Improvements	35	0.0	2.86%
311	Liquid Petroleum Gas Equipment	35	0.0	2.86%
319	Gas Mixing Equipment	20	0.0	5.00%
320	Other Equipment - LNG	35	0.0	2.86%
	<u>Storage Plant</u>			
361	Structures and Improvements - LNG	35	0.0	2.86%
363	Other Equipment - LNG	35	0.0	2.86%
	<u>Transmission Plant</u>			
366	Structures and Improvements	35	0.0	2.86% (reclass to 375)
367	Mains	60	-15.0	1.92% (reclass to 376)
369	Measuring and Regulating Station Equipment	35	0.0	2.86% (reclass to 378)
	<u>Distribution Plant</u>			
375	Structures and Improvements	35	0.0	2.86%
376	Mains	60	-15.0	1.92%
378	Measuring and Regulating Station Equipment	35	0.0	2.86%
380	Services	45	-60.0	3.55%
381	Meters	33	0.0	3.03%
381.1	Meters - Instrument	33	0.0	3.03%
381.2	Meters - ERTs	20	0.0	5.00%
382	Meter Installations	33	0.0	3.03%
387	Other Equipment	19	0.0	5.26%
	<u>General Plant</u>			
390	Structures and Improvements	30	0.0	3.33%
391	Office Furniture and Equipment	18	5.0	5.28%
391.1	Office Furniture and Equipment - Computers	11	0.0	9.09%
391.2	Office Furniture and Equipment - Laptop Comp.	5	0.0	20.00%
392	Transportation Equipment	5	0.0	20.00%
393	Stores Equipment	30	0.0	3.33%
394	Tools, Shop and Garage Equipment	19	0.0	5.26%
396	Power Operated Equipment	5	0.0	20.00%
397	Communications Equipment	10	0.0	10.00%
398	Miscellaneous Equipment	12	0.0	8.33%

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Docket No. DG 17-048
 Schedule STEP
 Page 1 of 2

**Liberty Utilities (EnergyNorth)
 Step Increase - EnergyNorth and Keene**

Line	Description	Misc. Intangible Plant	LNG Plant	Mains	Station Equipment	General-Structures	Mains	Meas. & Reg. Station Equip.	Services	Meters	Structures and Improvements	Office Equipment	Vehicles	Stores Equipment	Tools	Total	
	FERC Account	303	320	367	369	375	376	378	380	381	390	391	392	393	394		
1	Capital Spending - EnergyNorth	\$ 2,105,141	\$ 2,020,000	\$ 14,414,334	\$ 300,000	\$ 1,215,000	\$ 300,000	\$ 325,000	\$ 1,115,000	\$ 1,600,000	\$ 1,156,662	\$ 760,384	\$ 1,978,000	\$ 4,000	\$ 4,000	\$ 175,000	\$ 27,464,521
2	Capital Spending - Keene	25,000		236,000				55,000	50,000	10,000		65,000	45,000				\$ 490,000
3	Capital Spending - Total	2,130,141	2,020,000	14,650,334	300,000	1,215,000	300,000	380,000	1,165,000	1,610,000	1,156,662	825,384	2,023,000	4,000	4,000	175,000	\$ 27,954,521
4																	
5	Deferred Tax Calculation																
6	Tax Method	MACRS15	MACRS20	MACRS20	MACRS20	MACRS39	MACRS20	MACRS20	MACRS20	MACRS20	MACRS39	MACRS7	MACRS5	MACRS7	MACRS7	MACRS7	
7	Tax Depreciation Rate	5.00%	3.75%	3.75%	3.75%	1.28%	3.75%	3.75%	3.75%	3.75%	1.28%	14.29%	20.00%	14.29%	14.29%	14.29%	
8	Bonus Depreciation @ 0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	Tax Basis	\$ 2,130,141	\$ 2,020,000	\$ 14,650,334	\$ 300,000	\$ 1,215,000	\$ 300,000	\$ 380,000	\$ 1,165,000	\$ 1,610,000	\$ 1,156,662	\$ 825,384	\$ 2,023,000	\$ 4,000	\$ 4,000	\$ 175,000	\$ 27,954,521
12	MACRS Depreciation	\$ 106,507	\$ 75,750	\$ 549,388	\$ 11,250	\$ 15,577	\$ 11,250	\$ 14,250	\$ 43,688	\$ 60,375	\$ 14,829	\$ 117,912	\$ 404,600	\$ 571	\$ 571	\$ 25,000	\$ 1,450,946
14	Tax Depreciation - Federal	\$ 106,507	\$ 75,750	\$ 549,388	\$ 11,250	\$ 15,577	\$ 11,250	\$ 14,250	\$ 43,688	\$ 60,375	\$ 14,829	\$ 117,912	\$ 404,600	\$ 571	\$ 571	\$ 25,000	\$ 1,450,946
15	Tax Depreciation - State	\$ 106,507	\$ 75,750	\$ 549,388	\$ 11,250	\$ 15,577	\$ 11,250	\$ 14,250	\$ 43,688	\$ 60,375	\$ 14,829	\$ 117,912	\$ 404,600	\$ 571	\$ 571	\$ 25,000	\$ 1,450,946
16																	
17	Book Depreciation Rate - EN	16.13%	2.86%	1.92%	2.86%	2.86%	1.92%	2.86%	3.55%	3.03%	3.33%	5.28%	20.00%	3.33%	5.26%		
18	Book Depreciation - EN	\$ 339,559	\$ 57,772	\$ 276,755	\$ 8,580	\$ 34,749	\$ 5,760	\$ 9,295	\$ 39,583	\$ 48,480	\$ 38,517	\$ 40,148	\$ 395,600	\$ -	\$ 9,205	\$ 1,304,003	
19	Book Depreciation Rate - Keene	16.13%	1.92%														
20	Book Depreciation - Keene	\$ 4,033	\$ 4,531					\$ 1,573	\$ 1,775	\$ 303		\$ 3,432	\$ 9,000	\$ 133		\$ 24,780	
21	Book Depreciation - Total	\$ 343,592	\$ 57,772	\$ 281,286	\$ 8,580	\$ 34,749	\$ 5,760	\$ 10,868	\$ 41,358	\$ 48,783	\$ 38,517	\$ 43,580	\$ 404,600	\$ 133	\$ 9,205	\$ 1,328,783	
22																	
23	Tax over (under) Book - Federal - EN	\$ (237,085)	\$ 17,978	\$ 268,101	\$ 2,670	\$ (19,172)	\$ 5,490	\$ 3,382	\$ 2,330	\$ 11,592	\$ (23,688)	\$ 74,332	\$ -	\$ 438	\$ 15,795	\$ 122,163	
24	Tax over (under) Book - State - EN	\$ (237,085)	\$ 17,978	\$ 268,101	\$ 2,670	\$ (19,172)	\$ 5,490	\$ 3,382	\$ 2,330	\$ 11,592	\$ (23,688)	\$ 74,332	\$ 0	\$ 438	\$ 15,795	\$ 122,163	
25	Deferred Taxes - Federal @ 19.28% - EN	(45,705)	3,466	51,685	515	(3,696)	1,058	652	449	2,235	(4,567)	14,330	0	84	3,045	23,551	
26	Deferred Taxes - State @ 8.20% - EN	(19,441)	1,474	21,984	219	(1,572)	450	277	191	951	(1,942)	6,095	0	36	1,295	10,017	
27	Deferred Tax Balance @ 27.48%	\$ (65,146)	\$ 4,940	\$ 73,669	\$ 734	\$ (5,268)	\$ 1,509	\$ 929	\$ 640	\$ 3,185	\$ (6,509)	\$ 20,425	\$ -	\$ 120	\$ 4,340	\$ 33,568	
28																	
29	Rate Base Calculation																
30	Plant in Service	\$ 2,130,141	\$ 2,020,000	\$ 14,650,334	\$ 300,000	\$ 1,215,000	\$ 300,000	\$ 380,000	\$ 1,165,000	\$ 1,610,000	\$ 1,156,662	\$ 825,384	\$ 2,023,000	\$ 4,000	\$ 4,000	\$ 175,000	\$ 27,954,521
31	Accumulated Depreciation	(343,592)	(57,772)	(281,286)	(8,580)	(34,749)	(5,760)	(10,868)	(41,358)	(48,783)	(38,517)	(43,580)	(404,600)	(133)	(9,205)	(1,328,783)	
32	Deferred Tax Balance	65,146	(4,940)	(73,669)	(734)	5,268	(1,509)	(929)	(640)	(3,185)	6,509	(20,425)	0	(120)	(4,340)	(33,568)	
33	Rate Base	\$ 1,851,695	\$ 1,957,288	\$ 14,295,379	\$ 290,686	\$ 1,185,519	\$ 292,731	\$ 368,203	\$ 1,123,002	\$ 1,558,032	\$ 1,124,654	\$ 761,379	\$ 1,618,400	\$ 3,746	\$ 161,455	\$ 26,592,170	
34																	
35	Revenue Requirement Calculation																
36	Return on Rate Base @ 8.60%	\$ 159,246	\$ 168,327	\$ 1,229,403	\$ 24,999	\$ 101,955	\$ 25,175	\$ 31,665	\$ 96,578	\$ 133,991	\$ 96,720	\$ 65,479	\$ 139,182	\$ 322	\$ 13,885	\$ 2,286,927	
37	Depreciation Expense	343,592	57,772	281,286	8,580	34,749	5,760	10,868	41,358	48,783	38,517	43,580	404,600	133	9,205	1,328,783	
38	Property Tax @ 2.06% - EN Capital		41,512	296,222	6,165	24,969	6,165	6,679			23,770					405,483	
39	Insurance @ 0.20% - EN Capital		3,983	28,421	592	2,396	592	641	2,198	3,155	2,281	1,499	3,900		345	50,001	
40	Property Tax @ 4.17% - Keene Capital			9,838				2,293	2,084	417						14,633	
41	Insurance @ 4.25% - Keene Capital			10,032				2,338	2,125	425		2,763	1,913	170		19,767	
42	Annual Revenue Requirement	\$ 502,837	\$ 271,594	\$ 1,855,203	\$ 40,336	\$ 164,068	\$ 37,692	\$ 54,484	\$ 144,344	\$ 186,770	\$ 161,288	\$ 113,321	\$ 549,595	\$ 625	\$ 23,435	\$ 5,044,835	

Rate of Return Calculation	Portion	After-Tax Cost	Tax	Pre-Tax WACC
Equity	49.20%	9.40%	27.48%	6.38%
Debt (ST)	0.95%	2.49%		0.02%
Debt (LT)	49.85%	4.42%		2.20%
	100.00%			8.60%

"Carry Over Cost Provision Adjustments" per DG 17-063, Knepper Direct Testimony
 Unadjusted annual revenue requirement for FY 16 694,182
 Adjusted annual revenue requirement for FY 16 688,807
 Difference to be recovered 5,375

Description - Property Tax and Insurance Rates for EnergyNorth	Reference	Amount
Property taxes (Account 408-P)	RR-Step-WP2	\$ 9,386,306
Property insurance (Account 924)	RR-EN-2-1	\$ 38,113
Injuries and Damage (Casualty Insurance) (Account 925)	RR-EN-2-1	877,844
		\$ 9,386,306
Plant at Cost	RR-Step-EN-WP2	\$ 456,742,424
As % of Plant Cost		2.06%

Estimated paving cost for FY 17 2,301,960
 Recoverable paving cost for FY 17 899,390
 Difference to be recovered 1,402,570
 Revenue Requirement of the Difference, per CIBS model 155,703

Adjustments Identified in Rebuttal Testimony	Reference	Amount
Increase in Expense Portion of Pension and OPEB Costs	Response to Staff Tech 3-15	419,583
Legal Fees, 2017	Laflamme & Mullinas Direct, Schedule EN 4, Line 27	172,517
Degradation Fees, 2017	Laflamme & Mullinas Direct, Schedule EN 4, Line 35	186,065
Total Additional Expense - Goes to Line 35		778,165

New Tax Rate Analysis	
Federal Tax Rate	21.00%
State Tax Rate	8.20%
Combined Tax Rate	27.48%

Description - Property Tax and Insurance Rates for Keene	Reference	Amount
Property taxes (Account 408-P)	RR-K-2-1	153,854
Property insurance (Account 924)	RR-K-2-1	(2,183)
Injuries and Damage (Casualty Insurance) (Account 925)	RR-K-2-1	187,292
		153,854
Plant at Cost	RR-Step-K-WP2	3,690,589
		4,354,606

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Docket No. DG 17-048
 Step Increase Workpaper
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Priority	Project	Company	Project Description	CY2017 Capital Budget	FERC Account
LU CapEx - Growth	8840-1753	EnergyNorth	Install Main on Varney and Worthely and Rockland	\$ 350,000	367
LU CapEx - Improvement	8840-1721	EnergyNorth	Install Security Equipment - EN Facilities	\$ 125,000	391
LU CapEx - Improvement	TBD	EnergyNorth	Northeast Expansion		367
LU CapEx - Improvement	8840-1722	EnergyNorth	Inactive Service Program	\$ 75,000	380
LU CapEx - Improvement	8840-1723	EnergyNorth	Main & Service Replacement City/State Construction	\$ 5,200,000	367
LU CapEx - Improvement	8840-1725	EnergyNorth	Service Replacement Fitting City/State Construction	\$ 60,000	380
LU CapEx - Improvement	8840-1726	EnergyNorth	LNG/LPG Capital Improvements	\$ 100,000	320
LU CapEx - Improvement	8840-1727	EnergyNorth	Facility Improvements & Additions - Various	\$ 100,000	375
LU CapEx - Improvement	8840-1728	EnergyNorth	Upgrade Hi Line - Concord to Tilton Phase 2	\$ 350,000	367
LU CapEx - Improvement	8840-1729	EnergyNorth	Pre-Code Stee Pipe Protection Program	\$ 175,000	367
LU CapEx - Improvement	8840-1730	EnergyNorth	IT - Software, Equipment & Infrastructure	\$ 50,000	303
LU CapEx - Improvement	8840-1731	EnergyNorth	Gas System Planning & Reliability	\$ 500,000	367
LU CapEx - Improvement	8840-1732	EnergyNorth	Gas System Control & Regulation	\$ 300,000	369
LU CapEx - Improvement	8840-1733	EnergyNorth	Facility Improvements & Additions - Manchester	\$ 200,000	391
LU CapEx - Improvement	8840-1734	EnergyNorth	Facility Improvements & Additions - Nashua	\$ 100,000	391
LU CapEx - Improvement	8840-1735	EnergyNorth	Facility Improvements & Additions - Tilton	\$ 200,384	391
LU CapEx - Improvement	8840-1736	EnergyNorth	Facility Improvements & Additions - Londonderry	\$ 75,000	391
LU CapEx - Improvement	8840-1737	EnergyNorth	Facility Improvements & Additions - Concord	\$ 60,000	391
LU CapEx - Improvement	8840-1738	EnergyNorth	IT Systems Allocations - Corporate	\$ 750,000	303
LU CapEx - Improvement	8840-1739	EnergyNorth	Dresser Coupling Replacement Program	\$ 300,000	376
LU CapEx - Improvement	8840-1740	EnergyNorth	ERP Foundation Year	\$ 536,463	303
LU CapEx - Improvement	8840-1741	EnergyNorth	EAM Foundation Year	\$ 536,463	303
LU CapEx - Improvement	TBD	EnergyNorth	CIS Foundation Year	\$ -	303
LU CapEx - Improvement	8840-1742	EnergyNorth	GIS Gas Upgrade	\$ 118,544	303
LU CapEx - Improvement	8840-1743	EnergyNorth	GIS - One Graphic Card	\$ 15,440	303
LU CapEx - Improvement	8840-1744	EnergyNorth	GIS Marketing Enhancement	\$ 51,177	303
LU CapEx - Improvement	8840-1745	EnergyNorth	Mobiletech Enhancements	\$ 37,054	303
LU CapEx - Improvement	8840-1746	EnergyNorth	Concord Office	\$ 500,000	390
LU CapEx - Improvement	8840-1755	EnergyNorth	Motorized Gate for Concord Plant	\$ 55,000	375
LU CapEx - Improvement	8840-1756	EnergyNorth	Nashua Meter Building Repointing	\$ 150,000	375
LU CapEx - Improvement	8840-1757	EnergyNorth	CNG Fast Fill Station for Manchester and Tilton Yards	\$ 1,920,000	320
LU CapEx - Improvement	8840-1758	EnergyNorth	Manchester Solar Install	\$ 190,000	380
LU CapEx - Improvement	8840-1759	EnergyNorth	Paving Manchester Yard	\$ 900,000	375
LU CapEx - Improvement	TBD	EnergyNorth	Paving Nashua Yard	\$ -	375
LU CapEx - Improvement	8840-1762	EnergyNorth	Tilton Office Refresh	\$ 600,000	390
LU CapEx - Improvement	8840-1763	EnergyNorth	Manchester Kitchen Refresh	\$ 35,000	390
LU CapEx - Improvement	8840-1764	EnergyNorth	Supplemental AC for Londonderry (Dispatch/Training Rms)	\$ 21,000	390
LU CapEx - Improvement	8840-1765	EnergyNorth	Tilton Yard Shelving Replacement	\$ 8,662	390
LU CapEx - Improvement	8840-1766	EnergyNorth	Chestnut Street, Nashua Regulator Station Replacement	\$ 325,000	378
LU CapEx - Improvement	8840-1769	EnergyNorth	Laconia Phase II	\$ 850,000	367
LU CapEx - Improvement	8840-1770	EnergyNorth	Daniel Webster Highway	\$ 650,000	367
LU CapEx - Improvement	8840-C18800	EnergyNorth	Upgrade Hi Line - Concord to Tilton Phase 1	\$ 700,000	367
LU CapEx - Replenishment	8840-1701	EnergyNorth	Reserve for Unidentified Mandated/Growth Projects	\$ 3,139,334	367
LU CapEx - Replenishment	8840-1702	EnergyNorth	Meter Protection Program	\$ 50,000	381
LU CapEx - Replenishment	8840-1703	EnergyNorth	Cathodic Protection Program	\$ 750,000	367
LU CapEx - Replenishment	8840-1704	EnergyNorth	Replacement Services Random (Non Leaks)	\$ 490,000	380
LU CapEx - Replenishment	8840-1705	EnergyNorth	Replacement Services Random (Due to Leaks)	\$ 300,000	380
LU CapEx - Replenishment	8840-1706	EnergyNorth	Meter Work Project (Changes)	\$ 150,000	381
LU CapEx - Replenishment	8840-1707	EnergyNorth	Meter Work Project (Meter Purchases)	\$ 1,300,000	381
LU CapEx - Replenishment	8840-1708	EnergyNorth	Corrosion & Miscellaneous Fitting	\$ 100,000	367
LU CapEx - Replenishment	8840-1709	EnergyNorth	Valve Installation Replacement	\$ 50,000	367
LU CapEx - Replenishment	8840-1710	EnergyNorth	Leak Repairs	\$ 250,000	367
LU CapEx - Replenishment	8840-1713	EnergyNorth	Main Replacement Fitting LPP	\$ 200,000	367
LU CapEx - Replenishment	8840-1714	EnergyNorth	K Meter Replacement Program	\$ 100,000	381
LU CapEx - Replenishment	8840-1715	EnergyNorth	Aldyl-A Replacement Program	\$ 550,000	367
LU CapEx - Replenishment	8840-1716	EnergyNorth	Main Replacement Reactive	\$ 100,000	367
LU CapEx - Replenishment	8840-1717	EnergyNorth	Dispatch and Control Center	\$ 10,000	375
LU CapEx - Replenishment	8840-1718	EnergyNorth	Purchase Misc Capital Equipment & Tools	\$ 175,000	394
LU CapEx - Replenishment	8840-1719	EnergyNorth	Transportation Fleet and Equipment Purchases	\$ 1,978,000	392
LU CapEx - Replenishment	8840-1720	EnergyNorth	SCADA Capital Improvements	\$ 10,000	303
LU CapEx - Replenishment	8840-1767	EnergyNorth	Replace Mueller Stopping Equipment w/ TD Williamson	\$ 500,000	367
		EnergyNorth	Bond Refund for Concord Training Center	\$ (8,000)	390
LU CapEx - Improvement	8843-1704	Keene	Facility Improvements & Additions - Keene	\$ 5,000	391
LU CapEx - Improvement	8843-1705	Keene	IT - Software, Equipment & Infrastructure	\$ 25,000	303
LU CapEx - Improvement	8843-1706	Keene	Facility Improvements & Additions - Keene	\$ 45,000	391
LU CapEx - Improvement	8843-C18750	Keene	Install Security Equipment - Keene	\$ 15,000	391
LU CapEx - Improvement	8843-ENI103	Keene	Main Replacement City/State Construction	\$ 50,000	367
LU CapEx - Improvement	8843-ENI137	Keene	Service Replacement City/State Construction	\$ 20,000	380
LU CapEx - Improvement	8843-REL105	Keene	Gas System Planning & Reliability	\$ 50,000	378
LU CapEx - Replenishment	8843-1701	Keene	Reserve for unidentified projects	\$ 25,000	367
LU CapEx - Replenishment	8843-1702	Keene	Purchase Misc. Capital Tools/Equipment	\$ 4,000	393
LU CapEx - Replenishment	8843-1703	Keene	Transportation Fleet and Equipment Purchases	\$ 45,000	392
LU CapEx - Replenishment	8843-ENI006	Keene	Cathodic Protection/Corrosion Mitigation Program	\$ 5,000	367
LU CapEx - Replenishment	8843-ENI007	Keene	Replacement Services Random	\$ 5,000	380
LU CapEx - Replenishment	8843-ENI100P	Keene	Meter Work Project (Meter Purchases)	\$ 10,000	381
LU CapEx - Replenishment	8843-ENI107	Keene	Main Replacement LPP	\$ 150,000	367
LU CapEx - Replenishment	8843-ENI117	Keene	Service Replacement LPP	\$ 25,000	380
LU CapEx - Replenishment	8843-REL109	Keene	SCADA Capital Improvements	\$ 5,000	378
LU CapEx - Replenishment	8843-REL110	Keene	Valve Installation/Replacement	\$ 6,000	367

Liberty Utilities (EnergyNorth Natural Gas) Corp.

Docket No. DG 17-048

Calculation of Recoupment Amount

	(A)	(B)
1. Settlement Permanent Rate Increase	\$10,300,000	
2. Temporary Rate Increase	<u>\$6,750,000</u>	
3. Annual Recoupment		\$3,550,000
4. divided by: TY Weather Normal Deliveries (th)*		<u>159,761,663</u>
5. Recoupment per Therm		\$0.0222
6. Times: Actual/Estimated Jul-Apr Deliveries (th)**		<u>161,741,745</u>
7. Recoupment		<u><u>\$3,590,667</u></u>

* Test Year Delivery data from initial filing Schedule Rates-2, p.6

** Time Difference is number of months that Temporary Rates were in effect.

Due to colder than normal temperatures, actual therms for the recoupment period exceeded the annual weather normalized sales.

Liberty Utilities (EnergyNorth Natural Gas) Corp.

Docket No. DG 17-048

Actual/Estimated Deliveries (th) for Recoupment Calculation

	<u>Month</u>	<u>Deliveries</u>	<u>*</u>
1.	Jul-17	5,277,399	A
2.	Aug-17	5,724,645	A
3.	Sep-17	5,838,102	A
4.	Oct-17	8,439,912	A
5.	Nov-17	16,780,042	A
6.	Dec-17	26,501,752	A
7.	Jan-18	26,925,176	E
8.	Feb-18	25,940,404	E
9.	Mar-18	23,074,433	E
10.	Apr-18	17,239,880	E
11.	<u>TOTAL</u>	<u>161,741,745</u>	

* Actual data (A), Estimated data (E)

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Rate Case Expense (Through February 15, 2018)
Docket No. DG 17-048

<u>Purpose</u>	<u>Provider</u>	<u>Amount</u>
Revenue Requirement	Concentric	\$ 136,829
Marginal Cost Study	Concentric	70,939
Functional Cost of Service Study	Concentric	14,993
Rate Design	Concentric	35,696
Decoupling	Concentric	29,826
Return on Equity	ScottMadden	39,830
Depreciation Study	MAC	43,444
Legal Notice		1,446
Court Reporter	Patnaude	472
Copying	Minuteman Press	2,753
<u>Staff Consultants</u>		
Revenue Requirement	Blue Ridge Consulting	34,691
Return on Equity	J. Randall Woolridge	-
Follow-Up	Liberty Consulting	<u>57,340</u>
Total through February 15, 2018		\$ 468,259
Additional Estimated Expenses through Conclusion of case		<u>61,741</u>
Total Rate Case Expenses (Actual through Feb. 15 plus estimate)		<u>\$ 530,000</u>

Docket No DG 17-048
Settlement Agreement
Attachment E

Permanent rate increase	10,300,000	
Original gross-up	<u>1.6504</u>	
Increase before gross-up	6,240,911	
Gross-up with new tax rates	<u>1.3789</u>	
Revised Grossed-up increase	8,605,593	
Difference in gross-up	(1,694,407)	
Excess DIT (amort. over 39.05 years) *	<u>(699,657)</u>	(27,321,620 / 39.05)
Total annual amount to return to customers	<u><u>(2,394,065)</u></u>	

* Revaluing the existind deferred tax assets and liabilities at the lower tax rates resulted in a net amount of excess deferred tax liaibility of \$27,321,620 which will be amortized and returned to customers over the average remaining life of the underlying assets which is 39.05 years.

Line
 No

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Bill Impact Analysis - Cost of Gas Filing Methodology

1 Winter Season (Jan. - Apr., Nov. - Dec.)
 2 Residential Non-Heating (R1)

PROPOSED	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	17	24	27	32	31	23	153
Winter:							
Cust. Chg	\$14.88	\$14.88	\$14.88	\$14.88	\$14.88	\$14.88	\$89.28
Headblock	\$0.4200	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tailblock	\$0.4200	\$6.93	\$9.91	\$11.48	\$13.29	\$13.10	\$64.22
HB Threshold	-						
Summer:							
Cust. Chg	\$14.88						
Headblock	\$0.4200						
Tailblock	\$0.4200						
HB Threshold	-						
Total Base Rate Amount	\$21.81	\$24.79	\$26.36	\$28.17	\$27.98	\$24.39	\$153.50
COG Rate - (Winter)	\$0.6445	\$0.6445	\$0.6445	\$0.8056	\$0.8056	\$0.8056	\$0.7346
COG amount - Winter	\$10.64	\$15.20	\$17.62	\$25.50	\$25.12	\$18.24	\$112.33
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037
LDAC amount	\$1.71	\$2.45	\$2.84	\$3.28	\$3.23	\$2.35	\$15.86
Total Bill	\$34.16	\$42.44	\$46.82	\$56.96	\$56.33	\$44.98	\$281.69

32 Winter Season (Jan. - Apr., Nov. - Dec.)
 33 Residential Non-Heating (R1)

CURRENT	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	17	24	27	32	31	23	153
Winter:							
Cust. Chg	\$16.88	\$16.88	\$16.88	\$16.88	\$16.88	\$16.88	\$101.28
Headblock	\$0.2231	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tailblock	\$0.2231	\$3.68	\$5.26	\$6.10	\$7.06	\$5.05	\$34.12
HB Threshold	-						
Summer:							
Cust. Chg	\$16.88						
Headblock	\$0.2231						
Tailblock	\$0.2231						
HB Threshold	-						
Total Base Rate Amount	\$20.56	\$22.14	\$22.98	\$23.94	\$23.84	\$21.93	\$135.40
COG Rate - (Winter)	\$0.6445	\$0.6445	\$0.6445	\$0.8056	\$0.8056	\$0.8056	\$0.7346
COG amount - Winter	\$10.64	\$15.20	\$17.62	\$25.50	\$25.12	\$18.24	\$112.33
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856
LDAC amount	\$1.41	\$2.02	\$2.34	\$2.71	\$2.67	\$1.94	\$13.09
Total Bill	\$32.61	\$39.37	\$42.95	\$52.16	\$51.63	\$42.11	\$260.82

63 DIFFERENCE:

Total Bill	\$1.55	\$3.07	\$3.88	\$4.80	\$4.70	\$2.87	\$20.87
% Change	4.74%	7.80%	9.03%	9.21%	9.11%	6.81%	8.00%
Base Rate	\$1.25	\$2.64	\$3.38	\$4.23	\$4.14	\$2.46	\$18.10
% Change	6.07%	11.94%	14.72%	17.68%	17.36%	11.20%	13.37%
COG & LDAC	\$0.30	\$0.43	\$0.49	\$0.57	\$0.56	\$0.41	\$2.77
% Change	2.48%	2.48%	2.48%	2.03%	2.03%	2.03%	2.21%

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
19	14	11	9	9	11	73	226
\$14.88	\$14.88	\$14.88	\$14.88	\$14.88	\$14.88	\$89.28	\$178.56
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$8.03	\$5.91	\$4.50	\$3.83	\$3.77	\$4.64	\$30.69	\$94.91
\$22.91	\$20.79	\$19.38	\$18.71	\$18.65	\$19.52	\$119.97	\$273.47
\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.5984
\$5.99	\$4.41	\$3.36	\$2.86	\$2.81	\$3.46	\$22.89	\$135.22
\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037
\$1.98	\$1.46	\$1.11	\$0.95	\$0.93	\$1.15	\$7.58	\$23.44
\$30.89	\$26.66	\$23.84	\$22.51	\$22.39	\$24.14	\$150.44	\$432.13

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
19	14	11	9	9	11	73	226
\$16.88	\$16.88	\$16.88	\$16.88	\$16.88	\$16.88	\$101.28	\$202.56
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$4.27	\$3.14	\$2.39	\$2.04	\$2.00	\$2.47	\$16.30	\$50.42
\$21.15	\$20.02	\$19.27	\$18.92	\$18.88	\$19.35	\$117.58	\$252.98
\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.5984
\$5.99	\$4.41	\$3.36	\$2.86	\$2.81	\$3.46	\$22.89	\$135.22
\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856
\$1.64	\$1.21	\$0.92	\$0.78	\$0.77	\$0.95	\$6.25	\$19.35
\$28.78	\$25.64	\$23.54	\$22.55	\$22.46	\$23.76	\$146.73	\$407.55

\$2.11	\$1.03	\$0.30	(\$0.04)	(\$0.07)	\$0.38	\$3.71	\$24.58
7.34%	4.00%	1.28%	-0.17%	-0.32%	1.59%	2.53%	6.03%
\$1.77	\$0.77	\$0.11	(\$0.20)	(\$0.23)	\$0.18	\$2.38	\$20.49
8.35%	3.85%	0.56%	-1.08%	-1.24%	0.91%	2.03%	8.10%
\$0.35	\$0.25	\$0.19	\$0.17	\$0.16	\$0.20	\$1.32	\$4.09
4.54%	4.54%	4.54%	4.54%	4.54%	4.54%	4.54%	2.65%

Line
 No

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Bill Impact Analysis - Cost of Gas Filing Methodology

72 Winter Season (Jan. - Apr., Nov. - Dec.)
 73 Residential Heating (R3)

PROPOSED	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	51	90	117	141	130	89	618
Winter:							
Cust. Chg	\$14.88	\$14.88	\$14.88	\$14.88	\$14.88	\$14.88	\$89.28
Headblock	\$0.5775	\$29.40	\$51.98	\$57.75	\$57.75	\$51.12	\$305.75
Tailblock	\$0.5775	\$0.00	\$0.00	\$10.04	\$23.80	\$17.16	\$51.00
HB Threshold	100						
Summer:							
Cust. Chg	\$14.88						
Headblock	\$0.5775						
Tailblock	\$0.5775						
HB Threshold	20						
Total Base Rate Amount	\$44.28	\$66.86	\$82.67	\$96.43	\$89.79	\$66.00	\$446.03
COG Rate - (Winter)	\$0.6445	\$0.6445	\$0.6445	\$0.8056	\$0.8056	\$0.8056	\$0.7382
COG amount - Winter	\$32.81	\$58.01	\$75.66	\$113.76	\$104.50	\$71.32	\$456.05
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037
LDAC amount	\$5.28	\$9.33	\$12.17	\$14.64	\$13.45	\$9.18	\$64.06
Total Bill	\$82.38	\$134.20	\$170.50	\$224.83	\$207.73	\$146.50	\$966.15

102 Winter Season (Jan. - Apr., Nov. - Dec.)
 103 Residential Heating (R3)

CURRENT	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	51	90	117	141	130	89	618
Winter:							
Cust. Chg	\$24.43	\$24.43	\$24.43	\$24.43	\$24.43	\$24.43	\$146.58
Headblock	\$0.3863	\$19.67	\$34.77	\$38.63	\$38.63	\$34.20	\$204.52
Tailblock	\$0.3197	\$0.00	\$0.00	\$5.56	\$13.18	\$9.50	\$28.23
HB Threshold	100						
Summer:							
Cust. Chg	\$24.43						
Headblock	\$0.3863						
Tailblock	\$0.3197						
HB Threshold	20						
Total Base Rate Amount	\$44.10	\$59.20	\$68.62	\$76.24	\$72.56	\$58.63	\$379.34
COG Rate - (Winter)	\$0.6445	\$0.6445	\$0.6445	\$0.8056	\$0.8056	\$0.8056	\$0.7382
COG amount - Winter	\$32.81	\$58.01	\$75.66	\$113.76	\$104.50	\$71.32	\$456.05
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856
LDAC amount	\$4.36	\$7.70	\$10.05	\$12.09	\$11.10	\$7.58	\$52.88
Total Bill	\$81.27	\$124.91	\$154.32	\$202.08	\$188.16	\$137.52	\$888.27

134 DIFFERENCE:

Total Bill	\$1.11	\$9.29	\$16.18	\$22.75	\$19.58	\$8.98	\$77.88
% Change	1.36%	7.44%	10.48%	11.26%	10.40%	6.53%	8.77%
Base Rate	\$0.18	\$7.66	\$14.05	\$20.19	\$17.23	\$7.38	\$66.70
% Change	0.42%	12.94%	20.48%	26.49%	23.75%	12.58%	17.58%
COG & LDAC	\$0.92	\$1.63	\$2.12	\$2.56	\$2.35	\$1.60	\$11.18
% Change	2.48%	2.48%	2.48%	2.03%	2.03%	2.03%	2.20%

Summer Season (May - Oct.)

PROPOSED	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
average Usage (Therms)	51	25	16	14	14	22	142	760
Winter:								
Cust. Chg	\$14.88	\$14.88	\$14.88	\$14.88	\$14.88	\$14.88	\$89.28	\$178.56
Headblock	\$11.55	\$11.55	\$9.35	\$8.14	\$8.12	\$11.55	\$60.26	\$366.02
Tailblock	\$17.86	\$3.10	\$0.00	\$0.00	\$0.00	\$0.97	\$21.93	\$72.93
Total Base Rate Amount	\$44.29	\$29.53	\$24.23	\$23.02	\$23.00	\$27.40	\$171.47	\$617.50
COG Rate - (Winter)	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.6587
COG amount - Winter	\$15.95	\$7.95	\$5.07	\$4.42	\$4.40	\$6.79	\$44.59	\$500.64
COG Rate - (Summer)	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037
COG amount - Summer	\$5.28	\$2.63	\$1.68	\$1.46	\$1.46	\$2.25	\$14.76	\$78.82
Total Bill	\$65.52	\$40.12	\$30.99	\$28.90	\$28.86	\$36.44	\$230.82	\$1,196.97

Summer Season (May - Oct.)

CURRENT	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
average Usage (Therms)	51	25	16	14	14	22	142	760
Winter:								
Cust. Chg	\$24.43	\$24.43	\$24.43	\$24.43	\$24.43	\$24.43	\$146.58	\$293.16
Headblock	\$7.73	\$7.73	\$6.26	\$5.45	\$5.43	\$7.73	\$40.31	\$244.84
Tailblock	\$9.89	\$1.72	\$0.00	\$0.00	\$0.00	\$0.54	\$12.14	\$40.37
Total Base Rate Amount	\$42.04	\$33.87	\$30.69	\$29.88	\$29.86	\$32.69	\$199.03	\$578.37
COG Rate - (Winter)	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.6587
COG amount - Winter	\$15.95	\$7.95	\$5.07	\$4.42	\$4.40	\$6.79	\$44.59	\$500.64
COG Rate - (Summer)	\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856
COG amount - Summer	\$4.36	\$2.17	\$1.39	\$1.21	\$1.20	\$1.86	\$12.18	\$66.06
Total Bill	\$62.35	\$44.00	\$37.15	\$35.50	\$35.47	\$41.34	\$255.80	\$1,144.07

Total Bill	\$3.17	(\$3.88)	(\$6.16)	(\$6.60)	(\$6.61)	(\$4.90)	(\$24.98)	\$52.89
% Change	5.08%	-8.82%	-16.58%	-18.59%	-18.63%	-11.86%	-9.77%	4.62%
Base Rate	\$2.25	(\$4.34)	(\$6.45)	(\$6.85)	(\$6.86)	(\$5.29)	(\$27.56)	\$39.14
% Change	5.34%	-12.81%	-21.03%	-22.94%	-22.98%	-16.19%	-13.85%	6.77%
COG & LDAC	\$0.92	\$0.46	\$0.29	\$0.26	\$0.25	\$0.39	\$2.58	\$13.76
% Change	4.54%	4.54%	4.54%	4.54%	4.54%	4.54%	4.54%	2.43%

Line
 No

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Bill Impact Analysis - Cost of Gas Filing Methodology

143 Winter Season (Jan. - Apr., Nov. - Dec.)
 144 Low Income Residential Heating (R4)

PROPOSED	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	46	81	105	127	122	87	568
Winter:							
Cust. Chg	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$35.71
Headblock	\$0.2310	\$10.71	\$18.62	\$23.10	\$23.10	\$20.21	\$118.84
Tailblock	\$0.2310	\$0.00	\$0.00	\$1.19	\$6.15	\$5.09	\$12.43
HB Threshold	100						
Summer:							
Cust. Chg	\$5.95						
Headblock	\$0.2310						
Tailblock	\$0.2310						
HB Threshold	20						
Total Base Rate Amount	\$16.66	\$24.57	\$30.24	\$35.20	\$34.14	\$26.16	\$166.98
COG Rate - (Winter)	\$0.6445	\$0.6445	\$0.6445	\$0.8056	\$0.8056	\$0.8056	\$0.7398
COG amount - Winter	\$29.89	\$51.96	\$67.78	\$101.99	\$98.30	\$70.47	\$420.38
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037
LDAC amount	\$4.81	\$8.36	\$10.91	\$13.13	\$12.65	\$9.07	\$58.93
Total Bill	\$51.36	\$84.89	\$108.93	\$150.32	\$145.10	\$105.70	\$646.29

174 Winter Season (Jan. - Apr., Nov. - Dec.)
 175 Low Income Residential Heating (R4)

CURRENT	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	46	81	105	127	122	87	568
Winter:							
Cust. Chg	\$9.77	\$9.77	\$9.77	\$9.77	\$9.77	\$9.77	\$58.62
Headblock	\$0.1545	\$7.16	\$12.45	\$15.45	\$15.45	\$13.51	\$79.48
Tailblock	\$0.1278	\$0.00	\$0.00	\$0.66	\$3.40	\$2.81	\$6.87
HB Threshold	100						
Summer:							
Cust. Chg	\$9.77						
Headblock	\$0.1545						
Tailblock	\$0.1278						
HB Threshold	20						
Total Base Rate Amount	\$16.93	\$22.22	\$25.88	\$28.62	\$28.03	\$23.28	\$144.98
COG Rate - (Winter)	\$0.6445	\$0.6445	\$0.6445	\$0.8056	\$0.8056	\$0.8056	\$0.7398
COG amount - Winter	\$29.89	\$51.96	\$67.78	\$101.99	\$98.30	\$70.47	\$420.38
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856	0.0856
LDAC amount	\$3.97	\$6.90	\$9.00	\$10.84	\$10.45	\$7.49	\$48.64
Total Bill	\$50.79	\$81.08	\$102.66	\$141.45	\$136.78	\$101.24	\$614.00

205 DIFFERENCE:

Total Bill	\$0.57	\$3.81	\$6.27	\$8.87	\$8.31	\$4.46	\$32.28
% Change	1.12%	4.70%	6.11%	6.27%	6.08%	4.40%	5.26%
Base Rate	(\$0.27)	\$2.35	\$4.36	\$6.58	\$6.10	\$2.87	\$22.00
% Change	-1.60%	10.57%	16.86%	22.98%	21.78%	12.34%	15.17%
COG & LDAC	\$0.84	\$1.46	\$1.90	\$2.29	\$2.21	\$1.58	\$10.29
% Change	2.48%	2.48%	2.48%	2.03%	2.03%	2.03%	2.19%

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
58	27	17	14	14	20	150	718
\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$35.71	\$71.42
\$4.62	\$4.62	\$3.90	\$3.31	\$3.23	\$4.62	\$24.30	\$143.14
\$8.71	\$1.55	\$0.00	\$0.00	\$0.00	\$0.09	\$10.35	\$22.77
\$19.28	\$12.12	\$9.85	\$9.27	\$9.18	\$10.66	\$70.36	\$237.34
\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.6507
\$18.08	\$8.37	\$5.29	\$4.49	\$4.38	\$6.38	\$46.99	\$467.38
\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037
\$5.98	\$2.77	\$1.037	\$1.75	\$1.49	\$1.45	\$15.55	\$74.48
\$43.35	\$23.26	\$16.90	\$15.25	\$15.01	\$19.15	\$132.91	\$779.19

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
58	27	17	14	14	20	150	718
\$9.77	\$9.77	\$9.77	\$9.77	\$9.77	\$9.77	\$58.62	\$117.24
\$3.09	\$3.09	\$2.61	\$2.22	\$2.16	\$3.09	\$16.25	\$95.74
\$4.82	\$0.86	\$0.00	\$0.00	\$0.00	\$0.05	\$5.72	\$12.60
\$17.68	\$13.72	\$12.38	\$11.99	\$11.93	\$12.91	\$80.60	\$225.58
\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.3133	\$0.6507
\$18.08	\$8.37	\$5.29	\$4.49	\$4.38	\$6.38	\$46.99	\$467.38
\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856	\$0.0856
\$4.94	\$2.29	\$1.45	\$1.23	\$1.20	\$1.74	\$12.84	\$61.48
\$40.70	\$24.37	\$19.12	\$17.71	\$17.50	\$21.03	\$140.43	\$754.43

\$2.65	(\$1.11)	(\$2.22)	(\$2.46)	(\$2.50)	(\$1.88)	(\$7.52)	\$24.76
6.51%	-4.57%	-11.62%	-13.90%	-14.26%	-8.94%	-5.36%	3.28%
\$1.60	(\$1.60)	(\$2.53)	(\$2.72)	(\$2.75)	(\$2.25)	(\$10.24)	\$11.76
9.07%	-11.64%	-20.41%	-22.70%	-23.04%	-17.43%	-12.70%	5.21%
\$1.04	\$0.48	\$0.31	\$0.26	\$0.25	\$0.37	\$2.71	\$13.00
4.54%	4.54%	4.54%	4.54%	4.54%	4.54%	4.54%	2.46%

Line
 No

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Bill Impact Analysis - Cost of Gas Filing Methodology

214 Winter Season (Jan. - Apr., Nov. - Dec.)
 215 Commercial/Industrial - Low Annual Use, High Winter Use (G-41)

PROPOSED	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	119	248	345	430	391	246	1,778
Winter:							
Cust. Chg	\$57.44	\$57.44	\$57.44	\$57.44	\$57.44	\$57.44	\$344.67
Headblock	\$0.4710	\$47.10	\$47.10	\$47.10	\$47.10	\$47.10	\$282.59
Tailblock	\$0.3163	\$5.97	\$46.84	\$77.40	\$104.32	\$92.07	\$372.71
HB Threshold	100						
Summer:							
Cust. Chg	\$57.44						
Headblock	\$0.4710						
Tailblock	\$0.3163						
HB Threshold	20						
Total Base Rate Amount	\$110.52	\$151.38	\$181.94	\$208.86	\$196.61	\$150.65	\$999.96
COG Rate - (Winter)	\$0.6433	\$0.6433	\$0.6433	\$0.8041	\$0.8041	\$0.8041	\$0.7398
COG amount - Winter	\$76.48	\$159.58	\$221.73	\$345.59	\$314.45	\$197.63	\$1,315.45
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
LDAC amount	\$10.16	\$21.21	\$29.47	\$36.75	\$33.44	\$21.01	\$152.04
Total Bill	\$197.16	\$332.17	\$433.14	\$591.20	\$544.49	\$369.30	\$2,467.45

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
127	53	27	24	23	43	297	2,075
\$57.44	\$57.44	\$57.44	\$57.44	\$57.44	\$57.44	\$344.67	\$689.33
\$9.42	\$9.42	\$9.42	\$9.42	\$9.42	\$9.42	\$56.52	\$339.11
\$33.91	\$10.35	\$2.36	\$1.16	\$0.93	\$7.21	\$55.92	\$428.63
\$100.77	\$77.22	\$69.23	\$68.02	\$67.79	\$74.07	\$457.10	\$1,457.06
\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.6781
\$39.23	\$16.26	\$8.47	\$7.30	\$7.07	\$13.20	\$91.53	\$1,406.98
\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
\$10.88	\$4.51	\$2.35	\$2.02	\$1.96	\$3.66	\$25.38	\$177.42
\$150.87	\$97.99	\$80.05	\$77.34	\$76.82	\$90.93	\$574.01	\$3,041.46

244 Winter Season (Jan. - Apr., Nov. - Dec.)
 245 Commercial/Industrial - Low Annual Use, High Winter Use (G-41)

CURRENT	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	119	248	345	430	391	246	1,778
Winter:							
Cust. Chg	\$53.45	\$53.45	\$53.45	\$53.45	\$53.45	\$53.45	\$320.70
Headblock	\$0.4383	\$43.83	\$43.83	\$43.83	\$43.83	\$43.83	\$262.98
Tailblock	\$0.2944	\$5.56	\$43.59	\$72.03	\$97.09	\$85.69	\$346.87
HB Threshold	100						
Summer:							
Cust. Chg	\$53.45						
Headblock	\$0.4383						
Tailblock	\$0.2944						
HB Threshold	20						
Total Base Rate Amount	\$102.84	\$140.87	\$169.31	\$194.37	\$182.97	\$140.20	\$930.55
COG Rate - (Winter)	\$0.6433	\$0.6433	\$0.6433	\$0.8041	\$0.8041	\$0.8041	\$0.7398
COG amount - Winter	\$76.48	\$159.58	\$221.73	\$345.59	\$314.45	\$197.63	\$1,315.45
COG Rate - (Summer)	\$0.4206						
COG amount - Summer							
LDAC	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674
LDAC amount	\$8.01	\$16.72	\$23.23	\$28.97	\$26.36	\$16.57	\$119.85
Total Bill	\$187.33	\$317.17	\$414.27	\$568.92	\$523.77	\$354.39	\$2,365.86

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
127	53	27	24	23	43	297	2,075
\$53.45	\$53.45	\$53.45	\$53.45	\$53.45	\$53.45	\$320.70	\$641.40
\$8.77	\$8.77	\$8.77	\$8.77	\$8.77	\$8.77	\$52.60	\$315.58
\$31.56	\$9.64	\$2.20	\$1.08	\$0.86	\$6.71	\$52.04	\$398.92
\$93.77	\$71.85	\$64.42	\$63.29	\$63.08	\$68.93	\$425.34	\$1,355.89
\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.6781
\$39.23	\$16.26	\$8.47	\$7.30	\$7.07	\$13.20	\$91.53	\$1,406.98
\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674
\$8.57	\$3.55	\$1.85	\$1.59	\$1.55	\$2.88	\$20.00	\$139.86
\$141.57	\$91.67	\$74.74	\$72.19	\$71.69	\$85.01	\$536.87	\$2,902.73

276 DIFFERENCE:

Total Bill	\$9.83	\$15.00	\$18.87	\$22.27	\$20.72	\$14.91	\$101.59
% Change	5.25%	4.73%	4.55%	3.91%	3.96%	4.21%	4.29%
Base Rate	\$7.68	\$10.51	\$12.63	\$14.49	\$13.64	\$10.46	\$69.41
% Change	7.46%	7.46%	7.46%	7.46%	7.46%	7.46%	7.46%
COG & LDAC	\$2.15	\$4.49	\$6.24	\$7.78	\$7.08	\$4.45	\$32.19
% Change	2.55%	2.55%	2.55%	2.08%	2.08%	2.08%	2.24%

\$9.30	\$6.32	\$5.31	\$5.16	\$5.13	\$5.92	\$37.14	\$138.73
6.57%	6.89%	7.10%	7.14%	7.15%	6.97%	6.92%	4.78%
\$7.00	\$5.37	\$4.81	\$4.73	\$4.71	\$5.15	\$31.76	\$101.17
7.46%	7.47%	7.47%	7.47%	7.47%	7.47%	7.47%	7.46%
\$2.30	\$0.95	\$0.50	\$0.43	\$0.42	\$0.77	\$5.37	\$37.56
4.82%	4.82%	4.82%	4.82%	4.82%	4.82%	4.82%	2.43%

Line
 No

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Bill Impact Analysis - Cost of Gas Filing Methodology

285 **Winter Season (Jan. - Apr., Nov. - Dec.)**
 286 **Commercial/Industrial - Medium Annual Use, High Winter Use (G-42)**
 287 **PROPOSED**

	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
289 average Usage (Therms)	940	1,649	2,259	2,699	2,446	1,639	11,632
290							
291 Winter:							
292 Cust. Chg	\$172.33	\$172.33	\$172.33	\$172.33	\$172.33	\$172.33	\$1,034.00
293 Headblock	\$0.4283	\$402.75	\$428.34	\$428.34	\$428.34	\$428.34	\$2,544.44
294 Tailblock	\$0.2853	\$0.00	\$185.06	\$359.26	\$484.90	\$412.63	\$1,624.06
295 HB Threshold	1,000						
296							
297 Summer:							
298 Cust. Chg	\$172.33						
299 Headblock	\$0.4283						
300 Tailblock	\$0.2853						
301 HB Threshold	400						
302							
303 Total Base Rate Amount	\$575.09	\$785.73	\$959.93	\$1,085.57	\$1,013.30	\$782.89	\$5,202.50
304							
305 COG Rate - (Winter)	\$0.6433	\$0.6433	\$0.6433	\$0.8041	\$0.8041	\$0.8041	\$0.7371
306 COG amount - Winter	\$604.88	\$1,060.55	\$1,453.31	\$2,170.65	\$1,966.98	\$1,317.63	\$8,573.99
307							
308 COG Rate - (Summer)							
309 COG amount - Summer							
310							
311 LDAC	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
312 LDAC amount	\$80.39	\$140.96	\$193.16	\$230.81	\$209.15	\$140.10	\$994.57
313							
314 Total Bill	\$1,260.36	\$1,987.23	\$2,606.39	\$3,487.03	\$3,189.42	\$2,240.62	\$14,771.06

315
 316 **Winter Season (Jan. - Apr., Nov. - Dec.)**
 317 **Commercial/Industrial - Medium Annual Use, High Winter Use (G-42)**
 318 **CURRENT**

	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
319 average Usage (Therms)	940	1,649	2,259	2,699	2,446	1,639	11,632
320							
321							
322 Winter:							
323 Cust. Chg	\$160.36	\$160.36	\$160.36	\$160.36	\$160.36	\$160.36	\$962.16
324 Headblock	\$0.3986	\$374.79	\$398.60	\$398.60	\$398.60	\$398.60	\$2,367.79
325 Tailblock	\$0.2655	\$0.00	\$172.20	\$334.30	\$451.21	\$169.56	\$1,511.24
326 HB Threshold	1,000						
327							
328 Summer:							
329 Cust. Chg	\$160.36						
330 Headblock	\$0.3986						
331 Tailblock	\$0.2655						
332 HB Threshold	400						
333							
334 Total Base Rate Amount	\$535.15	\$731.16	\$893.26	\$1,010.17	\$942.92	\$728.52	\$4,841.19
335							
336 COG Rate - (Winter)	\$0.6433	\$0.6433	\$0.6433	\$0.8041	\$0.8041	\$0.8041	\$0.7371
337 COG amount - Winter	\$604.88	\$1,060.55	\$1,453.31	\$2,170.65	\$1,966.98	\$1,317.63	\$8,573.99
338							
339 COG Rate - (Summer)							
340 COG amount - Summer							
341							
342 LDAC	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674
343 LDAC amount	\$63.37	\$111.12	\$152.27	\$181.95	\$164.87	\$110.44	\$784.02
344							
345 Total Bill	\$1,203.40	\$1,902.83	\$2,498.83	\$3,362.77	\$3,074.77	\$2,156.59	\$14,199.20

346
 347 **DIFFERENCE:**

348 Total Bill	\$56.95	\$84.41	\$107.56	\$124.26	\$114.65	\$84.03	\$571.86
349 % Change	4.73%	4.44%	4.30%	3.70%	3.73%	3.90%	4.03%
350							
351 Base Rate	\$39.93	\$54.57	\$66.67	\$75.40	\$70.38	\$54.37	\$361.31
352 % Change	7.46%	7.46%	7.46%	7.46%	7.46%	7.46%	7.46%
353							
354 COG & LDAC	\$17.02	\$29.84	\$40.89	\$48.86	\$44.28	\$29.66	\$210.55
355 % Change	2.55%	2.55%	2.55%	2.08%	2.08%	2.08%	2.25%

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
1,001	491	269	267	264	437	2,729	14,362
\$172.33	\$172.33	\$172.33	\$172.33	\$172.33	\$172.33	\$1,034.00	\$2,068.00
\$171.34	\$171.34	\$115.22	\$114.42	\$113.10	\$171.34	\$856.75	\$3,401.19
\$171.47	\$25.99	\$0.00	\$0.00	\$0.00	\$10.55	\$208.01	\$1,832.08
\$515.13	\$369.86	\$287.55	\$286.75	\$285.43	\$354.22	\$2,098.76	\$7,301.26
\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.6556
\$308.70	\$151.46	\$82.96	\$82.38	\$81.43	\$134.77	\$841.69	\$9,415.68
\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
\$85.58	\$41.99	\$23.00	\$22.84	\$22.58	\$37.36	\$233.35	\$1,227.92
\$909.41	\$563.11	\$393.51	\$391.98	\$389.44	\$526.35	\$3,173.80	\$17,944.86

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
1,001	491	269	267	264	437	2,729	14,362
\$160.36	\$160.36	\$160.36	\$160.36	\$160.36	\$160.36	\$962.16	\$1,924.32
\$159.44	\$159.44	\$107.22	\$106.48	\$105.25	\$159.44	\$797.27	\$3,165.06
\$159.55	\$24.19	\$0.00	\$0.00	\$0.00	\$9.82	\$193.56	\$1,704.80
\$479.35	\$343.99	\$267.58	\$266.84	\$265.61	\$329.62	\$1,952.99	\$6,794.18
\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.6556
\$308.70	\$151.46	\$82.96	\$82.38	\$81.43	\$134.77	\$841.69	\$9,415.68
\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674
\$67.46	\$33.10	\$18.13	\$18.00	\$17.80	\$29.45	\$183.95	\$967.97
\$855.51	\$528.54	\$368.67	\$367.22	\$364.84	\$493.84	\$2,978.63	\$17,177.83

\$53.90	\$34.56	\$24.84	\$24.75	\$24.60	\$32.51	\$195.17	\$767.03
6.30%	6.54%	6.74%	6.74%	6.74%	6.58%	6.55%	4.47%
\$35.78	\$25.67	\$19.97	\$19.92	\$19.83	\$24.60	\$145.77	\$507.08
7.46%	7.46%	7.46%	7.46%	7.46%	7.46%	7.46%	7.46%
\$18.12	\$8.89	\$4.87	\$4.84	\$4.78	\$7.91	\$49.40	\$259.95
4.82%	4.82%	4.82%	4.82%	4.82%	4.82%	4.82%	2.50%

Line
 No

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Bill Impact Analysis - Cost of Gas Filing Methodology

356 Winter Season (Jan. - Apr., Nov. - Dec.)

357 Commercial/Industrial - High Annual Use, High Winter Use (G-43)

358 PROPOSED	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
359 average Usage (Therms)	6,416	10,639	17,250	12,674	15,438	8,821	71,237
361 Winter:							
362 Cust. Chg	\$739.57	\$739.57	\$739.57	\$739.57	\$739.57	\$739.57	\$4,437.40
363 Headblock	\$0.2632	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
364 Tailblock	\$0.2632	\$1,688.76	\$2,800.47	\$4,540.59	\$3,336.05	\$4,063.64	\$2,321.94
365 HB Threshold	-						\$18,751.44
366 Summer:							
367 Cust. Chg	\$739.57						
368 Headblock	\$0.1203						
369 Tailblock	\$0.1203						
370 HB Threshold	-						
371 Total Base Rate Amount	\$2,428.32	\$3,540.04	\$5,280.15	\$4,075.62	\$4,803.20	\$3,061.51	\$23,188.84
372 COG Rate - (Winter)	\$0.6433	\$0.6433	\$0.6433	\$0.8041	\$0.8041	\$0.8041	\$0.7267
373 COG amount - Winter	\$4,127.15	\$6,844.06	\$11,096.72	\$10,190.88	\$12,413.50	\$7,093.02	\$51,765.33
374 COG Rate - (Summer)							
375 COG amount - Summer							
376 LDAC	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
377 LDAC amount	\$548.54	\$909.64	\$1,474.86	\$1,083.60	\$1,319.94	\$754.21	\$6,090.78
378 Total Bill	\$7,104.01	\$11,293.73	\$17,851.73	\$15,350.10	\$18,536.64	\$10,908.73	\$81,044.95

387 Winter Season (Jan. - Apr., Nov. - Dec.)

388 Commercial/Industrial - High Annual Use, High Winter Use (G-43)

389 CURRENT	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
390 average Usage (Therms)	6,416	10,639	17,250	12,674	15,438	8,821	71,237
391 Winter:							
392 Cust. Chg	\$688.20	\$688.20	\$688.20	\$688.20	\$688.20	\$688.20	\$4,129.20
393 Headblock	\$0.2449	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
394 Tailblock	\$0.2449	\$1,571.18	\$2,605.49	\$4,224.45	\$3,103.78	\$3,780.71	\$2,160.28
395 HB Threshold	-						\$17,445.88
396 Summer:							
397 Cust. Chg	\$688.20						
398 Headblock	\$0.1120						
399 Tailblock	\$0.1120						
400 HB Threshold	-						
401 Total Base Rate Amount	\$2,259.38	\$3,293.69	\$4,912.65	\$3,791.98	\$4,468.91	\$2,848.48	\$21,575.08
402 COG Rate - (Winter)	\$0.6433	\$0.6433	\$0.6433	\$0.8041	\$0.8041	\$0.8041	\$0.7267
403 COG amount - Winter	\$4,127.15	\$6,844.06	\$11,096.72	\$10,190.88	\$12,413.50	\$7,093.02	\$51,765.33
404 COG Rate - (Summer)							
405 COG amount - Summer							
406 LDAC	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674
407 LDAC amount	\$432.41	\$717.07	\$1,162.63	\$854.20	\$1,040.50	\$594.54	\$4,801.36
408 Total Bill	\$6,818.94	\$10,854.81	\$17,172.00	\$14,837.07	\$17,922.91	\$10,536.03	\$78,141.76

417 DIFFERENCE:

418 Total Bill	\$285.07	\$438.92	\$679.73	\$513.04	\$613.73	\$372.70	\$2,903.18
419 % Change	4.18%	4.04%	3.96%	3.46%	3.42%	3.54%	3.72%
420 Base Rate	\$168.95	\$246.35	\$367.50	\$283.64	\$334.30	\$213.03	\$1,613.76
421 % Change	7.48%	7.48%	7.48%	7.48%	7.48%	7.48%	7.48%
422 COG & LDAC	\$116.13	\$192.57	\$312.23	\$229.40	\$279.43	\$159.67	\$1,289.42
423 % Change	2.55%	2.55%	2.55%	2.08%	2.08%	2.08%	2.28%

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
6,834	2,784	1,051	2,379	1,365	1,638	16,052	87,288
\$739.57	\$739.57	\$739.57	\$739.57	\$739.57	\$739.57	\$4,437.40	\$8,874.79
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$822.36	\$335.01	\$126.50	\$286.24	\$164.26	\$197.11	\$1,931.48	\$20,682.93
\$1,561.92	\$1,074.58	\$866.07	\$1,025.81	\$903.83	\$936.68	\$6,368.88	\$29,557.72
\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.6498
\$2,107.68	\$858.63	\$324.21	\$733.64	\$420.99	\$505.20	\$4,950.34	\$56,715.67
\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
\$584.33	\$238.04	\$89.88	\$203.39	\$116.72	\$140.06	\$1,372.43	\$7,463.21
\$4,253.93	\$2,171.25	\$1,280.16	\$1,962.84	\$1,441.54	\$1,581.93	\$12,691.65	\$93,736.60

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
6,834	2,784	1,051	2,379	1,365	1,638	16,052	87,288
\$688.20	\$688.20	\$688.20	\$688.20	\$688.20	\$688.20	\$4,129.20	\$8,258.40
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$765.43	\$311.82	\$117.74	\$266.43	\$152.89	\$183.47	\$1,797.79	\$19,243.67
\$1,453.63	\$1,000.02	\$805.94	\$954.63	\$841.09	\$871.67	\$5,926.99	\$27,502.07
\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.3084	\$0.6498
\$2,107.68	\$858.63	\$324.21	\$733.64	\$420.99	\$505.20	\$4,950.34	\$56,715.67
\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674
\$460.63	\$187.65	\$70.86	\$160.33	\$92.01	\$110.41	\$1,081.88	\$5,883.24
\$4,021.94	\$2,046.30	\$1,201.01	\$1,848.60	\$1,354.09	\$1,487.27	\$11,959.22	\$90,100.98

\$231.99	\$124.95	\$79.15	\$114.24	\$87.44	\$94.66	\$732.44	\$3,635.62
5.77%	6.11%	6.59%	6.18%	6.46%	6.36%	6.12%	4.04%
\$108.29	\$74.56	\$60.12	\$71.18	\$62.74	\$65.01	\$441.89	\$2,055.65
7.45%	7.46%	7.46%	7.46%	7.46%	7.46%	7.46%	7.47%
\$123.70	\$50.39	\$19.03	\$43.06	\$24.71	\$29.65	\$290.54	\$1,579.97
4.82%	4.82%	4.82%	4.82%	4.82%	4.82%	4.82%	2.52%

Line
 No

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Bill Impact Analysis - Cost of Gas Filing Methodology

427 Winter Season (Jan. - Apr., Nov. - Dec.)

428 Commercial/Industrial - Low Annual Use, Low Winter Use (G-51)

PROPOSED	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
430 average Usage (Therms)	174	237	290	343	331	246	1,621
432							
433 Winter:							
434 Cust. Chg \$57.44	\$57.44	\$57.44	\$57.44	\$57.44	\$57.44	\$57.44	\$344.67
435 Headblock \$0.2839	\$28.39	\$28.39	\$28.39	\$28.39	\$28.39	\$28.39	\$170.34
436 Tailblock \$0.1845	\$13.63	\$25.25	\$34.97	\$44.86	\$42.59	\$27.03	\$188.32
437 HB Threshold 100							
438							
439 Summer:							
440 Cust. Chg \$57.44	\$57.44						
441 Headblock \$0.2839	\$28.39						
442 Tailblock \$0.1845	\$13.63						
443 HB Threshold 100							
444							
445 Total Base Rate Amount	\$99.47	\$111.08	\$120.81	\$130.69	\$128.42	\$112.86	\$703.32
446							
447 COG Rate - (Winter)	\$0.6560	\$0.6560	\$0.6560	\$0.8171	\$0.8200	\$0.8200	\$0.7485
448 COG amount - Winter	\$114.08	\$155.38	\$189.96	\$280.39	\$271.30	\$202.13	\$1,213.24
449							
450 COG Rate - (Summer)							
451 COG amount - Summer							
452							
453 LDAC \$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
454 LDAC amount	\$14.87	\$20.25	\$24.76	\$29.34	\$28.29	\$21.08	\$138.58
455							
456 Total Bill	\$228.42	\$286.71	\$335.53	\$440.42	\$428.01	\$336.06	\$2,055.14

457 Winter Season (Jan. - Apr., Nov. - Dec.)

458 Commercial/Industrial - Low Annual Use, Low Winter Use (G-51)

CURRENT	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
460 average Usage (Therms)	174	237	290	343	331	246	1,621
461							
462 Winter:							
463 Cust. Chg \$53.45	\$53.45	\$53.45	\$53.45	\$53.45	\$53.45	\$53.45	\$320.70
464 Headblock \$0.2642	\$26.42	\$26.42	\$26.42	\$26.42	\$26.42	\$26.42	\$158.52
465 Tailblock \$0.1717	\$12.69	\$23.50	\$32.55	\$41.75	\$39.64	\$25.15	\$175.28
466 HB Threshold 100							
467							
468 Summer:							
469 Cust. Chg \$53.45	\$53.45						
470 Headblock \$0.2642	\$26.42						
471 Tailblock \$0.1717	\$12.69						
472 HB Threshold 100							
473							
474 Total Base Rate Amount	\$92.56	\$103.37	\$112.42	\$121.62	\$119.51	\$105.02	\$654.50
475							
476 COG Rate - (Winter)	\$0.6560	\$0.6560	\$0.6560	\$0.8171	\$0.8200	\$0.8200	\$0.7485
477 COG amount - Winter	\$114.08	\$155.38	\$189.96	\$280.39	\$271.30	\$202.13	\$1,213.24
478							
479 COG Rate - (Summer)							
480 COG amount - Summer							
481							
482 LDAC \$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674
483 LDAC amount	\$11.72	\$15.96	\$19.52	\$23.13	\$22.30	\$16.61	\$109.24
484							
485 Total Bill	\$218.36	\$274.71	\$321.90	\$425.14	\$413.11	\$323.77	\$1,976.98

486 DIFFERENCE:

487 Total Bill	\$10.06	\$12.00	\$13.63	\$15.28	\$14.90	\$12.30	\$78.16
488 % Change	4.61%	4.37%	4.23%	3.59%	3.61%	3.80%	3.95%
489							
490 Base Rate	\$6.91	\$7.71	\$8.39	\$9.07	\$8.91	\$7.84	\$48.82
491 % Change	7.46%	7.46%	7.46%	7.46%	7.46%	7.46%	7.46%
492							
493 COG & LDAC	\$3.15	\$4.29	\$5.24	\$6.21	\$5.99	\$4.46	\$29.34
494 % Change	2.50%	2.50%	2.50%	2.05%	2.04%	2.04%	2.22%

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
186	151	125	119	119	134	834	2,455
\$57.44	\$57.44	\$57.44	\$57.44	\$57.44	\$57.44	\$344.67	\$689.33
\$28.39	\$28.39	\$28.39	\$28.39	\$28.39	\$28.39	\$170.34	\$340.67
\$15.81	\$9.43	\$4.65	\$3.58	\$3.51	\$6.20	\$43.19	\$231.51
\$101.65	\$95.27	\$90.48	\$89.41	\$89.35	\$92.03	\$558.19	\$1,261.51
\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.6063
\$61.27	\$49.86	\$41.30	\$39.39	\$39.28	\$44.08	\$275.18	\$1,488.42
\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
\$15.88	\$12.92	\$10.70	\$10.21	\$10.18	\$11.42	\$71.32	\$209.90
\$178.80	\$158.05	\$142.49	\$139.02	\$138.80	\$147.53	\$904.69	\$2,959.83

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
186	151	125	119	119	134	834	2,455
\$53.45	\$53.45	\$53.45	\$53.45	\$53.45	\$53.45	\$320.70	\$641.40
\$26.42	\$26.42	\$26.42	\$26.42	\$26.42	\$26.42	\$158.52	\$317.04
\$14.72	\$8.78	\$4.33	\$3.33	\$3.27	\$5.77	\$40.20	\$215.48
\$94.59	\$88.65	\$84.20	\$83.20	\$83.14	\$85.64	\$519.42	\$1,173.92
\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.6063
\$61.27	\$49.86	\$41.30	\$39.39	\$39.28	\$44.08	\$275.18	\$1,488.42
\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674
\$12.52	\$10.19	\$8.44	\$8.05	\$8.02	\$9.00	\$56.22	\$165.47
\$168.38	\$148.70	\$133.94	\$130.65	\$130.44	\$138.72	\$850.82	\$2,827.80

\$10.42	\$9.35	\$8.55	\$8.37	\$8.36	\$8.81	\$53.87	\$132.03
6.19%	6.29%	6.38%	6.41%	6.41%	6.35%	6.33%	4.67%
\$7.06	\$6.62	\$6.29	\$6.21	\$6.21	\$6.39	\$38.77	\$87.60
7.46%	7.46%	7.47%	7.47%	7.47%	7.47%	7.46%	7.46%
\$3.36	\$2.74	\$2.27	\$2.16	\$2.15	\$2.42	\$15.10	\$44.44
4.56%	4.56%	4.56%	4.56%	4.56%	4.56%	4.56%	2.69%

Line
 No

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Bill Impact Analysis - Cost of Gas Filing Methodology

498 **Winter Season (Jan. - Apr., Nov. - Dec.)**
 499 **Commercial/Industrial - Medium Annual Use, Low Winter Use (G-52)**
 500 **PROPOSED**

	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
501 average Usage (Therms)	1,158	1,463	1,820	1,382	1,954	1,515	9,292
502 Winter:							
503 Cust. Chg	\$172.33	\$172.33	\$172.33	\$172.33	\$172.33	\$172.33	\$1,034.00
504 Headblock	\$0.2437	\$243.75	\$243.75	\$243.75	\$243.75	\$243.75	\$1,462.48
505 Tailblock	\$0.1624	\$25.60	\$75.18	\$133.11	\$62.10	\$154.89	\$83.59
506 HB Threshold	1,000						\$534.48
507 Summer:							
508 Cust. Chg	\$172.33						
509 Headblock	\$0.1766						
510 Tailblock	\$0.1004						
511 HB Threshold	1,000						
512 Total Base Rate Amount	\$441.68	\$491.26	\$549.19	\$478.18	\$570.97	\$499.67	\$3,030.95
513 COG Rate - (Winter)	\$0.6560	\$0.6560	\$0.6560	\$0.8171	\$0.8200	\$0.8200	\$0.7412
514 COG amount - Winter	\$759.43	\$959.72	\$1,193.77	\$1,129.58	\$1,602.20	\$1,242.11	\$6,886.82
515 COG Rate - (Summer)							
516 COG amount - Summer							
517 LDAC	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
518 LDAC amount	\$98.98	\$125.09	\$155.59	\$118.20	\$167.06	\$129.51	\$794.43
519 Total Bill	\$1,300.10	\$1,576.07	\$1,898.56	\$1,725.96	\$2,340.23	\$1,871.30	\$10,712.21

528 **Winter Season (Jan. - Apr., Nov. - Dec.)**
 529 **Commercial/Industrial - Medium Annual Use, Low Winter Use (G-52)**
 530 **CURRENT**

	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
531 average Usage (Therms)	1,158	1,463	1,820	1,382	1,954	1,515	9,292
532 Winter:							
533 Cust. Chg	\$160.36	\$160.36	\$160.36	\$160.36	\$160.36	\$160.36	\$962.16
534 Headblock	\$0.2268	\$226.80	\$226.80	\$226.80	\$226.80	\$226.80	\$1,360.80
535 Tailblock	\$0.1511	\$23.82	\$69.96	\$123.87	\$57.78	\$144.13	\$77.78
536 HB Threshold	1,000						\$497.35
537 Summer:							
538 Cust. Chg	\$160.36						
539 Headblock	\$0.1644						
540 Tailblock	\$0.0934						
541 HB Threshold	1,000						
542 Total Base Rate Amount	\$410.98	\$457.12	\$511.03	\$444.94	\$531.29	\$464.94	\$2,820.31
543 COG Rate - (Winter)	\$0.6560	\$0.6560	\$0.6560	\$0.8171	\$0.8200	\$0.8200	\$0.7412
544 COG amount - Winter	\$759.43	\$959.72	\$1,193.77	\$1,129.58	\$1,602.20	\$1,242.11	\$6,886.82
545 COG Rate - (Summer)							
546 COG amount - Summer							
547 LDAC	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674
548 LDAC amount	\$78.03	\$98.61	\$122.65	\$93.18	\$131.69	\$102.10	\$626.25
549 Total Bill	\$1,248.45	\$1,515.45	\$1,827.45	\$1,667.70	\$2,265.18	\$1,809.15	\$10,333.38

550 **DIFFERENCE:**

551 Total Bill	\$51.65	\$60.62	\$71.10	\$58.26	\$75.04	\$62.14	\$378.82
552 % Change	4.14%	4.00%	3.89%	3.49%	3.31%	3.43%	3.67%
553 Base Rate	\$30.70	\$34.14	\$38.17	\$33.23	\$39.68	\$34.73	\$210.64
554 % Change	7.47%	7.47%	7.47%	7.47%	7.47%	7.47%	7.47%
555 COG & LDAC	\$20.95	\$26.48	\$32.94	\$25.02	\$35.37	\$27.42	\$168.18
556 % Change	2.50%	2.50%	2.50%	2.05%	2.04%	2.04%	2.24%

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
1,188	953	818	759	782	898	5,398	14,690
\$172.33	\$172.33	\$172.33	\$172.33	\$172.33	\$172.33	\$1,034.00	\$2,068.00
\$176.63	\$168.38	\$144.43	\$134.15	\$138.16	\$158.58	\$920.32	\$2,382.80
\$18.83	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$18.83	\$553.31
\$367.80	\$340.71	\$316.76	\$306.48	\$310.49	\$330.91	\$1,973.15	\$5,004.10
\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.5901
\$391.79	\$314.48	\$269.75	\$250.54	\$258.04	\$296.18	\$1,780.79	\$8,667.61
\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
\$101.54	\$81.51	\$69.91	\$64.93	\$66.88	\$76.76	\$461.53	\$1,255.96
\$861.13	\$736.70	\$656.43	\$621.96	\$635.41	\$703.85	\$4,215.47	\$14,927.68

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
1,188	953	818	759	782	898	5,398	14,690
\$160.36	\$160.36	\$160.36	\$160.36	\$160.36	\$160.36	\$962.16	\$1,924.32
\$164.40	\$156.72	\$134.43	\$124.85	\$128.59	\$147.60	\$856.58	\$2,217.38
\$17.52	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$17.52	\$514.87
\$342.28	\$317.08	\$294.79	\$285.21	\$288.95	\$307.96	\$1,836.27	\$4,656.58
\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.5901
\$391.79	\$314.48	\$269.75	\$250.54	\$258.04	\$296.18	\$1,780.79	\$8,667.61
\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674
\$80.04	\$64.25	\$55.11	\$51.19	\$52.72	\$60.51	\$363.82	\$990.07
\$814.12	\$695.81	\$619.65	\$586.95	\$599.71	\$664.64	\$3,980.88	\$14,314.27

\$47.01	\$40.89	\$36.78	\$35.01	\$35.70	\$39.21	\$234.59	\$613.41
5.77%	5.88%	5.93%	5.96%	5.95%	5.90%	5.89%	4.29%
\$25.51	\$23.63	\$21.98	\$21.26	\$21.54	\$22.96	\$136.88	\$347.53
7.45%	7.45%	7.45%	7.46%	7.46%	7.45%	7.45%	7.46%
\$21.50	\$17.25	\$14.80	\$13.75	\$14.16	\$16.25	\$97.71	\$265.89
4.56%	4.56%	4.56%	4.56%	4.56%	4.56%	4.56%	2.75%

Line
 No

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Bill Impact Analysis - Cost of Gas Filing Methodology

569 **Winter Season (Jan. - Apr., Nov. - Dec.)**
 570 **Commercial/Industrial - High Annual Use, Load Factor Less Than 90% (G-53)**

PROPOSED	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	6,008	7,795	10,754	11,944	8,606	19,165	64,272
Winter:							
Cust. Chg	\$761.10	\$761.10	\$761.10	\$761.10	\$761.10	\$761.10	\$4,566.61
Headblock	\$0.1703	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tailblock	\$0.1703	\$1,023.32	\$1,327.73	\$1,831.88	\$2,034.56	\$1,465.90	\$3,264.51
HB Threshold	-						\$10,947.89
Summer:							
Cust. Chg	\$761.10						
Headblock	\$0.0817						
Tailblock	\$0.0817						
HB Threshold	-						
Total Base Rate Amount	\$1,784.42	\$2,088.83	\$2,592.98	\$2,795.66	\$2,227.00	\$4,025.61	\$15,514.51
COG Rate - (Winter)	\$0.6560	\$0.6560	\$0.6560	\$0.8171	\$0.8200	\$0.8200	\$0.7568
COG amount - Winter	\$3,940.99	\$5,113.32	\$7,054.90	\$9,759.69	\$7,056.78	\$15,715.27	\$48,640.95
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
LDAC amount	\$513.65	\$666.45	\$919.51	\$1,021.24	\$735.80	\$1,638.61	\$5,495.27
Total Bill	\$6,239.06	\$7,868.60	\$10,567.39	\$13,576.59	\$10,019.58	\$21,379.50	\$69,650.73

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
6,115	4,271	3,375	2,386	3,068	3,979	23,193	87,465
\$761.10	\$761.10	\$761.10	\$761.10	\$761.10	\$761.10	\$4,566.61	\$9,133.22
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$499.71	\$349.01	\$275.79	\$194.99	\$250.69	\$325.21	\$1,895.40	\$12,843.30
\$1,260.82	\$1,110.11	\$1,036.89	\$956.09	\$1,011.79	\$1,086.31	\$6,462.01	\$21,976.52
\$0.6560	\$0.6560	\$0.6560	\$0.8171	\$0.8200	\$0.8200	\$0.7568	\$0.7568
\$3,940.99	\$5,113.32	\$7,054.90	\$9,759.69	\$7,056.78	\$15,715.27	\$48,640.95	\$48,640.95
\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.6436
\$2,017.22	\$1,408.88	\$1,113.28	\$787.13	\$1,011.98	\$1,312.80	\$7,651.29	\$56,292.24
\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
\$522.81	\$365.14	\$288.53	\$204.00	\$262.28	\$340.24	\$1,892.99	\$7,478.27
\$3,800.85	\$2,884.14	\$2,438.70	\$1,947.22	\$2,286.05	\$2,739.35	\$16,096.30	\$85,747.02

599 **Winter Season (Jan. - Apr., Nov. - Dec.)**
 600 **Commercial/Industrial - High Annual Use, Load Factor Less Than 90% (G-53)**

CURRENT	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	6,008	7,795	10,754	11,944	8,606	19,165	64,272
Winter:							
Cust. Chg	\$708.24	\$708.24	\$708.24	\$708.24	\$708.24	\$708.24	\$4,249.44
Headblock	\$0.1585	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tailblock	\$0.1585	\$952.20	\$1,235.46	\$1,704.58	\$1,893.17	\$1,364.02	\$3,037.65
HB Threshold	-						\$10,187.08
Summer:							
Cust. Chg	\$708.24						
Headblock	\$0.0760						
Tailblock	\$0.0760						
HB Threshold	-						
Total Base Rate Amount	\$1,660.44	\$1,943.70	\$2,412.82	\$2,601.41	\$2,072.26	\$3,745.89	\$14,436.52
COG Rate - (Winter)	\$0.6560	\$0.6560	\$0.6560	\$0.8171	\$0.8200	\$0.8200	\$0.7568
COG amount - Winter	\$3,940.99	\$5,113.32	\$7,054.90	\$9,759.69	\$7,056.78	\$15,715.27	\$48,640.95
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674
LDAC amount	\$404.91	\$525.36	\$724.85	\$805.05	\$580.03	\$1,291.72	\$4,331.92
Total Bill	\$6,006.34	\$7,582.38	\$10,192.56	\$13,166.14	\$9,709.08	\$20,752.88	\$67,409.39

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
6,115	4,271	3,375	2,386	3,068	3,979	23,193	87,465
\$708.24	\$708.24	\$708.24	\$708.24	\$708.24	\$708.24	\$4,249.44	\$8,498.88
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$464.71	\$324.57	\$256.47	\$181.33	\$233.13	\$302.43	\$1,762.65	\$11,949.73
\$1,172.95	\$1,032.81	\$964.71	\$889.57	\$941.37	\$1,010.67	\$6,012.09	\$20,448.61
\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.6436
\$2,017.22	\$1,408.88	\$1,113.28	\$787.13	\$1,011.98	\$1,312.80	\$7,651.29	\$56,292.24
\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674
\$412.13	\$287.84	\$227.45	\$160.81	\$206.75	\$268.21	\$1,563.19	\$5,895.11
\$3,602.31	\$2,729.53	\$2,305.44	\$1,837.51	\$2,160.11	\$2,591.68	\$15,226.57	\$82,635.96

631 **DIFFERENCE:**

Total Bill	\$232.72	\$286.22	\$374.83	\$410.45	\$310.50	\$626.62	\$2,241.34
% Change	3.87%	3.77%	3.68%	3.12%	3.20%	3.02%	3.32%
Base Rate	\$123.98	\$145.13	\$180.17	\$194.25	\$154.73	\$279.73	\$1,077.98
% Change	7.47%	7.47%	7.47%	7.47%	7.47%	7.47%	7.47%
COG & LDAC	\$108.74	\$141.09	\$194.66	\$216.20	\$155.77	\$346.90	\$1,163.35
% Change	2.50%	2.50%	2.50%	2.05%	2.04%	2.04%	2.20%

\$198.54	\$154.61	\$133.26	\$109.71	\$125.94	\$147.67	\$869.73	\$3,111.06
5.51%	5.66%	5.78%	5.97%	5.83%	5.70%	5.71%	3.76%
\$87.86	\$77.31	\$72.18	\$66.52	\$70.42	\$75.64	\$449.92	\$1,527.91
7.49%	7.49%	7.48%	7.48%	7.48%	7.48%	7.48%	7.47%
\$110.68	\$77.30	\$61.08	\$43.19	\$55.52	\$72.03	\$419.80	\$1,583.15
4.56%	4.56%	4.56%	4.56%	4.56%	4.56%	4.56%	2.55%

Line
 No

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Bill Impact Analysis - Cost of Gas Filing Methodology

640 Winter Season (Jan. - Apr., Nov. - Dec.)

641 Commercial/Industrial - High Annual Use, Load Factor Greater Than 90% (G-54)

642 PROPOSED		Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
643 average Usage (Therms)		11,937	12,313	28,452	31,015	31,889	33,999	149,606
644 Winter:								
645 Cust. Chg	\$761.10	\$761.10	\$761.10	\$761.10	\$761.10	\$761.10	\$761.10	\$4,566.61
646 Headblock	\$0.0650	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
647 Tailblock	\$0.0650	\$775.61	\$800.06	\$1,848.71	\$2,015.20	\$2,072.00	\$2,209.12	\$9,720.71
648 HB Threshold	-							
649 Summer:								
650 Cust. Chg	\$761.10							
651 Headblock	\$0.0353							
652 Tailblock	\$0.0353							
653 HB Threshold	-							
654 Total Base Rate Amount		\$1,536.72	\$1,561.16	\$2,609.81	\$2,776.30	\$2,833.10	\$2,970.22	\$14,287.32
655 COG Rate - (Winter)		\$0.6560	\$0.6560	\$0.6560	\$0.8171	\$0.8200	\$0.8200	\$0.7616
656 COG amount - Winter		\$7,830.72	\$8,077.52	\$18,664.84	\$25,342.26	\$26,149.04	\$27,879.53	\$113,943.89
657 COG Rate - (Summer)								
658 COG amount - Summer								
659 LDAC	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
660 LDAC amount		\$1,020.63	\$1,052.79	\$2,432.70	\$2,651.79	\$2,726.53	\$2,906.97	\$12,791.41
661 Total Bill		\$10,388.06	\$10,691.47	\$23,707.35	\$30,770.35	\$31,708.67	\$33,756.72	\$141,022.62

670 Winter Season (Jan. - Apr., Nov. - Dec.)

671 Commercial/Industrial - High Annual Use, Load Factor Greater Than 90% (G-54)

672 CURRENT		Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
673 average Usage (Therms)		11,937	12,313	28,452	31,015	31,889	33,999	149,606
674 Winter:								
675 Cust. Chg	\$708.24	\$708.24	\$708.24	\$708.24	\$708.24	\$708.24	\$708.24	\$4,249.44
676 Headblock	\$0.0605	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
677 Tailblock	\$0.0605	\$722.19	\$744.95	\$1,721.38	\$1,876.40	\$1,929.29	\$2,056.97	\$9,051.18
678 HB Threshold	-							
679 Summer:								
680 Cust. Chg	\$708.24							
681 Headblock	\$0.0328							
682 Tailblock	\$0.0328							
683 HB Threshold	-							
684 Total Base Rate Amount		\$1,430.43	\$1,453.19	\$2,429.62	\$2,584.64	\$2,637.53	\$2,765.21	\$13,300.62
685 COG Rate - (Winter)		\$0.6560	\$0.6560	\$0.6560	\$0.8171	\$0.8200	\$0.8200	\$0.7616
686 COG amount - Winter		\$7,830.72	\$8,077.52	\$18,664.84	\$25,342.26	\$26,149.04	\$27,879.53	\$113,943.89
687 COG Rate - (Summer)								
688 COG amount - Summer								
689 LDAC	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674
690 LDAC amount		\$804.56	\$829.92	\$1,917.70	\$2,090.40	\$2,149.32	\$2,291.56	\$10,083.46
691 Total Bill		\$10,065.71	\$10,360.63	\$23,012.15	\$30,017.30	\$30,935.89	\$32,936.29	\$137,327.97

702 DIFFERENCE:

703 Total Bill		\$322.35	\$330.84	\$695.20	\$753.05	\$772.78	\$820.43	\$3,694.65
704 % Change		3.20%	3.19%	3.02%	2.51%	2.50%	2.49%	2.69%
705 Base Rate		\$106.28	\$107.97	\$180.19	\$191.66	\$195.57	\$205.02	\$986.70
706 % Change		7.43%	7.43%	7.42%	7.42%	7.42%	7.41%	7.42%
707 COG & LDAC		\$216.07	\$222.88	\$515.00	\$561.39	\$577.21	\$615.41	\$2,707.95
708 % Change		2.50%	2.50%	2.50%	2.05%	2.04%	2.04%	2.18%

Summer Season (May - Oct.)

	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
	23,395	12,360	7,196	9,964	10,085	14,348	77,349	226,955
	\$761.10	\$761.10	\$761.10	\$761.10	\$761.10	\$761.10	\$4,566.61	\$9,133.22
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	\$825.35	\$436.07	\$253.87	\$351.52	\$355.80	\$506.18	\$2,728.79	\$12,449.50
	\$1,586.46	\$1,197.17	\$1,014.97	\$1,112.62	\$1,116.90	\$1,267.28	\$7,295.40	\$21,582.72
	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.6145
	\$7,718.02	\$4,077.72	\$2,373.98	\$3,287.12	\$3,327.14	\$4,733.34	\$25,517.30	\$139,461.19
	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
	\$2,000.29	\$1,056.83	\$615.27	\$851.93	\$862.30	\$1,226.74	\$6,613.34	\$19,404.75
	\$11,304.76	\$6,331.71	\$4,004.21	\$5,251.66	\$5,306.34	\$7,227.36	\$39,426.04	\$180,448.66

Summer Season (May - Oct.)

	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
	23,395	12,360	7,196	9,964	10,085	14,348	77,349	226,955
	\$708.24	\$708.24	\$708.24	\$708.24	\$708.24	\$708.24	\$4,249.44	\$8,498.88
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	\$767.36	\$405.42	\$236.03	\$326.82	\$330.80	\$470.61	\$2,537.03	\$11,588.21
	\$1,475.60	\$1,113.66	\$944.27	\$1,035.06	\$1,039.04	\$1,178.85	\$6,786.47	\$20,087.09
	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.3299	\$0.6145
	\$7,718.02	\$4,077.72	\$2,373.98	\$3,287.12	\$3,327.14	\$4,733.34	\$25,517.30	\$139,461.19
	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674	\$0.0674
	\$1,576.82	\$833.10	\$485.01	\$671.57	\$679.75	\$967.04	\$5,213.30	\$15,296.75
	\$10,770.44	\$6,024.48	\$3,803.26	\$4,993.75	\$5,045.92	\$6,879.23	\$37,517.07	\$174,845.04

	\$534.32	\$307.24	\$200.95	\$257.92	\$260.41	\$348.13	\$1,908.97	\$5,603.63
	4.96%	5.10%	5.28%	5.16%	5.16%	5.06%	5.09%	3.20%
	\$110.86	\$83.50	\$70.70	\$77.56	\$77.86	\$88.43	\$508.92	\$1,495.63
	7.51%	7.50%	7.49%	7.49%	7.49%	7.50%	7.50%	7.45%
	\$423.46	\$223.73	\$130.25	\$180.35	\$182.55	\$259.70	\$1,400.05	\$4,108.00
	4.56%	4.56%	4.56%	4.56%	4.56%	4.56%	4.56%	2.65%

Line
 No

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Bill Impact Analysis - Cost of Gas Filing Methodology

711 Winter Season (Jan. - Apr., Nov. - Dec.)
 712 Keene Residential to EnergyNorth Residential Non-Heating (R1)

PROPOSED	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	14	18	18	20	21	16	108
Winter:							
Cust. Chg	\$14.88	\$14.88	\$14.88	\$14.88	\$14.88	\$14.88	\$89.28
Headblock	\$0.4200	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tailblock	\$0.4200	\$6.04	\$7.65	\$7.48	\$8.52	\$6.91	\$45.35
HB Threshold	-						
Summer:							
Cust. Chg	\$14.88						
Headblock	\$0.4200						
Tailblock	\$0.4200						
HB Threshold	-						
Total Base Rate Amount	\$20.92	\$22.53	\$22.36	\$23.40	\$23.61	\$21.79	\$134.63
COG Rate - (Winter)	\$1.2533	\$1.2533	\$1.3008	\$1.5666	\$1.5666	\$1.5666	\$1.4281
COG amount - Winter	\$18.04	\$22.84	\$23.18	\$31.80	\$32.58	\$25.77	\$154.20
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037
LDAC amount	\$1.49	\$1.89	\$1.85	\$2.10	\$2.16	\$1.71	\$11.20
Total Bill	\$40.45	\$47.26	\$47.39	\$57.31	\$58.35	\$49.26	\$300.02

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
15	11	9	8	7	10	60	168
\$14.88	\$14.88	\$14.88	\$14.88	\$14.88	\$14.88	\$89.28	\$178.56
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$6.32	\$4.63	\$3.68	\$3.31	\$2.95	\$4.12	\$25.00	\$70.35
\$21.20	\$19.51	\$18.56	\$18.19	\$17.83	\$19.00	\$114.28	\$248.91
\$0.6281	\$0.6281	\$0.6866	\$0.7766	\$0.7851	\$0.7851	\$0.7007	\$1.1696
\$9.46	\$6.92	\$6.02	\$6.12	\$5.51	\$7.70	\$41.72	\$195.92
\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037
\$1.56	\$1.14	\$0.91	\$0.82	\$0.73	\$1.02	\$6.17	\$17.37
\$32.22	\$27.57	\$25.48	\$25.13	\$24.06	\$27.71	\$162.17	\$462.20

742 Winter Season (Jan. - Apr., Nov. - Dec.)
 743 Keene Residential to EnergyNorth Residential Non-Heating (R1)

CURRENT	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	14	18	18	20	21	16	108
Winter:							
Cust. Chg	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$54.00
Block 1	\$1.1522	\$16.58	\$21.00	\$20.53	\$23.39	\$23.96	\$124.41
Block 2	\$0.9442	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Block 3	\$0.7946	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BL1 Threshold	80						
BL2 Threshold	120						
Summer:							
Cust. Chg	\$9.00						
Block 1	\$1.1522						
Block 2	\$0.9442						
Block 3	\$0.7946						
BL1 Threshold	80						
BL2 Threshold	120						
Total Base Rate Amount	\$25.58	\$30.00	\$29.53	\$32.39	\$32.96	\$27.95	\$178.41
COG Rate - (Winter)	\$1.2533	\$1.2533	\$1.3008	\$1.5666	\$1.5666	\$1.5666	\$1.4281
COG amount - Winter	\$18.04	\$22.84	\$23.18	\$31.80	\$32.58	\$25.77	\$154.20
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	0.0000
LDAC amount	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Bill	\$43.62	\$52.83	\$52.71	\$64.18	\$65.54	\$53.72	\$332.61

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
15	11	9	8	7	10	60	168
\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$54.00	\$108.00
\$17.35	\$12.69	\$10.09	\$9.08	\$8.08	\$11.30	\$68.59	\$193.01
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$26.35	\$21.69	\$19.09	\$18.08	\$17.08	\$20.30	\$122.59	\$301.01
\$0.6281	\$0.6281	\$0.6866	\$0.7766	\$0.7851	\$0.7851	\$0.7007	\$1.1696
\$9.46	\$6.92	\$6.02	\$6.12	\$5.51	\$7.70	\$41.72	\$195.92
\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$35.81	\$28.61	\$25.11	\$24.20	\$22.59	\$27.99	\$164.31	\$496.92

777 DIFFERENCE:

Total Bill	(\$3.17)	(\$5.57)	(\$5.32)	(\$6.88)	(\$7.19)	(\$4.46)	(\$32.59)
% Change	-7.26%	-10.55%	-10.09%	-10.72%	-10.97%	-8.30%	-9.80%
Base Rate	(\$4.66)	(\$7.46)	(\$7.17)	(\$8.98)	(\$9.35)	(\$6.16)	(\$43.79)
% Change	-18.21%	-24.88%	-24.27%	-27.74%	-28.36%	-22.05%	-17.31%
COG & LDAC	\$1.49	\$1.89	\$1.85	\$2.10	\$2.16	\$1.71	\$11.20
% Change	8.27%	8.27%	7.97%	6.62%	6.62%	6.62%	7.26%

(\$3.58)	(\$1.04)	\$0.37	\$0.93	\$1.47	(\$0.28)	(\$2.14)	(\$34.73)
-10.01%	-3.65%	1.49%	3.83%	6.51%	-1.01%	-1.30%	-6.99%
(\$5.15)	(\$2.19)	(\$0.54)	\$0.11	\$0.74	(\$1.30)	(\$8.31)	(\$52.10)
-19.53%	-10.08%	-2.80%	0.61%	4.36%	-6.40%	-6.78%	-17.31%
\$1.56	\$1.14	\$0.91	\$0.82	\$0.73	\$1.02	\$6.17	\$17.37
16.51%	16.51%	15.10%	13.35%	13.21%	13.21%	14.80%	8.87%

Line
No

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Bill Impact Analysis - Cost of Gas Filing Methodology

786 Winter Season (Jan. - Apr., Nov. - Dec.)

787 Keene Residential to EnergyNorth Residential Heating (R3)

PROPOSED	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	34	70	67	93	103	58	424
Winter:							
Cust. Chg	\$14.88	\$14.88	\$14.88	\$14.88	\$14.88	\$14.88	\$89.28
Headblock	\$0.5775	\$19.49	\$40.19	\$38.86	\$53.75	\$37.75	\$243.56
Tailblock	\$0.5775	\$0.00	\$0.00	\$0.00	\$1.48	\$0.00	\$1.48
HB Threshold	100						
Summer:							
Cust. Chg	\$14.88						
Headblock	\$0.5775						
Tailblock	\$0.5775						
HB Threshold	20						
Total Base Rate Amount	\$34.37	\$55.07	\$53.74	\$68.63	\$74.11	\$48.40	\$334.32
COG Rate - (Winter)	\$1.2533	\$1.2533	\$1.3008	\$1.5666	\$1.5666	\$1.5666	\$1.4481
COG amount - Winter	\$42.31	\$87.22	\$87.54	\$145.80	\$160.67	\$90.93	\$614.46
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037
LDAC amount	\$3.50	\$7.22	\$6.98	\$9.65	\$10.64	\$6.02	\$44.00
Total Bill	\$80.18	\$149.50	\$148.26	\$224.08	\$245.41	\$145.34	\$992.78

817 Winter Season (Jan. - Apr., Nov. - Dec.)

818 Keene Residential to EnergyNorth Residential Heating (R3)

CURRENT	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	34	70	67	93	103	58	424
Winter:							
Cust. Chg	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$54.00
Block 1	\$1.1522	\$38.89	\$80.18	\$77.54	\$92.18	\$92.18	\$447.84
Block 2	\$0.9442	\$0.00	\$0.00	\$0.00	\$12.34	\$21.30	\$33.64
Block 3	\$0.7946	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BL1 Threshold	80						
BL2 Threshold	120						
Summer:							
Cust. Chg	\$9.00						
Block 1	\$1.1522						
Block 2	\$0.9442						
Block 3	\$0.7946						
BL1 Threshold	80						
BL2 Threshold	120						
Total Base Rate Amount	\$47.89	\$89.18	\$86.54	\$113.51	\$122.48	\$75.87	\$535.48
COG Rate - (Winter)	\$1.2533	\$1.2533	\$1.3008	\$1.5666	\$1.5666	\$1.5666	\$1.4481
COG amount - Winter	\$42.31	\$87.22	\$87.54	\$145.80	\$160.67	\$90.93	\$614.46
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	0.0000
LDAC amount	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Bill	\$90.20	\$176.40	\$174.08	\$259.31	\$283.15	\$166.80	\$1,149.94
DIFFERENCE:							
Total Bill	(\$10.02)	(\$26.90)	(\$25.82)	(\$35.24)	(\$37.73)	(\$21.46)	(\$157.16)
% Change	-11.11%	-15.25%	-14.83%	-13.59%	-13.33%	-12.86%	-13.67%
Base Rate	(\$13.52)	(\$34.11)	(\$32.79)	(\$44.89)	(\$48.37)	(\$27.48)	(\$201.16)
% Change	-28.23%	-38.25%	-37.90%	-39.54%	-39.49%	-36.21%	-37.57%
COG & LDAC	\$3.50	\$7.22	\$6.98	\$9.65	\$10.64	\$6.02	\$44.00
% Change	8.27%	8.27%	7.97%	6.62%	6.62%	6.62%	7.16%

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
38	14	9	8	7	12	87	511
\$14.88	\$14.88	\$14.88	\$14.88	\$14.88	\$14.88	\$89.28	\$178.56
\$11.55	\$8.14	\$5.15	\$4.42	\$3.81	\$6.62	\$39.89	\$283.45
\$10.42	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10.42	\$11.90
\$36.85	\$23.02	\$20.03	\$19.30	\$18.69	\$21.70	\$139.59	\$473.91
\$0.6281	\$0.6281	\$0.6866	\$0.7766	\$0.7851	\$0.7851	\$0.6803	\$1.3173
\$23.90	\$8.85	\$6.12	\$5.95	\$5.18	\$9.28	\$59.27	\$673.72
\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037	\$0.1037
\$3.95	\$1.46	\$0.92	\$0.79	\$0.68	\$1.23	\$9.03	\$53.04
\$64.69	\$33.33	\$27.07	\$26.04	\$24.55	\$32.20	\$207.89	\$1,200.67

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
38	14	9	8	7	12	87	511
\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$54.00	\$108.00
\$43.83	\$16.24	\$10.27	\$8.82	\$7.60	\$13.61	\$100.37	\$548.21
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$33.64
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$52.83	\$25.24	\$19.27	\$17.82	\$16.60	\$22.61	\$154.37	\$689.85
\$0.6281	\$0.6281	\$0.6866	\$0.7766	\$0.7851	\$0.7851	\$0.6803	\$1.3173
\$23.90	\$8.85	\$6.12	\$5.95	\$5.18	\$9.28	\$59.27	\$673.72
\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$76.73	\$34.09	\$25.38	\$23.77	\$21.77	\$31.89	\$213.64	\$1,363.58
(\$12.04)	(\$0.76)	\$1.68	\$2.27	\$2.77	\$0.31	(\$5.75)	(\$162.91)
-15.69%	-2.23%	6.63%	9.56%	12.74%	0.99%	-2.69%	-11.95%
(\$15.98)	(\$2.22)	\$0.76	\$1.48	\$2.09	(\$0.91)	(\$14.79)	(\$215.95)
-30.25%	-8.80%	3.94%	8.30%	12.60%	-4.03%	-9.58%	-31.30%
\$3.95	\$1.46	\$0.92	\$0.79	\$0.68	\$1.23	\$9.03	\$53.04
16.51%	16.51%	15.10%	13.35%	13.21%	13.21%	15.24%	7.87%

Line
 No

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Bill Impact Analysis - Cost of Gas Filing Methodology

861 Winter Season (Jan. - Apr., Nov. - Dec.)

862 Keene Commercial/Industrial to EnergyNorth Commercial/Industrial - Low Annual Use, High Winter Use (G-41)

PROPOSED	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	64	120	158	251	245	132	970
Winter:							
Cust. Chg	\$57.44	\$57.44	\$57.44	\$57.44	\$57.44	\$57.44	\$344.67
Headblock	\$0.4710	\$29.98	\$47.10	\$47.10	\$47.10	\$47.10	\$265.47
Tailblock	\$0.3163	\$0.00	\$6.42	\$18.40	\$47.73	\$45.93	\$128.48
HB Threshold	100						
Summer:							
Cust. Chg	\$57.44						
Headblock	\$0.4710						
Tailblock	\$0.3163						
HB Threshold	20						
Total Base Rate Amount	\$87.42	\$110.96	\$122.94	\$152.28	\$150.47	\$114.54	\$738.61
COG Rate - (Winter)	\$1.2533	\$1.2533	\$1.3008	\$1.5666	\$1.5666	\$1.5666	\$1.4638
COG amount - Winter	\$79.78	\$150.76	\$205.75	\$393.07	\$384.13	\$206.15	\$1,419.62
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
LDAC amount	\$5.44	\$10.28	\$13.52	\$21.45	\$20.96	\$11.25	\$82.92
Total Bill	\$172.64	\$272.00	\$342.21	\$566.80	\$555.56	\$331.94	\$2,241.16

891 Winter Season (Jan. - Apr., Nov. - Dec.)

892 Keene Commercial/Industrial to EnergyNorth Commercial/Industrial - Low Annual Use, High Winter Use (G-41)

CURRENT	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	64	120	158	251	245	132	970
Winter:							
Cust. Chg	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$108.00
Block 1	\$1.1522	\$73.34	\$92.18	\$92.18	\$92.18	\$92.18	\$534.22
Block 2	\$0.9442	\$0.00	\$38.04	\$73.81	\$113.30	\$48.71	\$387.17
Block 3	\$0.7946	\$0.00	\$0.00	\$0.00	\$40.45	\$35.91	\$76.36
BL1 Threshold	80						
BL2 Threshold	120						
Summer:							
Cust. Chg	\$18.00						
Block 1	\$1.1522						
Block 2	\$0.9442						
Block 3	\$0.7946						
BL1 Threshold	80						
BL2 Threshold	120						
Total Base Rate Amount	\$91.34	\$148.22	\$183.98	\$263.93	\$259.39	\$158.89	\$1,105.75
COG Rate - (Winter)	\$1.2533	\$1.2533	\$1.3008	\$1.5666	\$1.5666	\$1.5666	\$1.4638
COG amount - Winter	\$79.78	\$150.76	\$205.75	\$393.07	\$384.13	\$206.15	\$1,419.62
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	0.0000
LDAC amount	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Bill	\$171.12	\$298.97	\$389.73	\$657.00	\$643.52	\$365.04	\$2,525.38
DIFFERENCE:							
Total Bill	\$1.53	(\$26.97)	(\$47.52)	(\$90.20)	(\$87.96)	(\$33.10)	(\$284.22)
% Change	0.89%	-9.02%	-12.19%	-13.73%	-13.67%	-9.07%	-11.25%
Base Rate	(\$3.92)	(\$37.26)	(\$61.04)	(\$111.65)	(\$108.92)	(\$44.35)	(\$367.14)
% Change	-4.29%	-25.14%	-33.18%	-42.30%	-41.99%	-27.91%	-33.20%
COG & LDAC	\$5.44	\$10.28	\$13.52	\$21.45	\$20.96	\$11.25	\$82.92
% Change	6.82%	6.82%	6.57%	5.46%	5.46%	5.46%	5.84%

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
91	28	14	10	9	20	173	1,143
\$57.44	\$57.44	\$57.44	\$57.44	\$57.44	\$57.44	\$344.67	\$689.33
\$9.42	\$9.42	\$6.78	\$4.73	\$4.32	\$9.42	\$44.08	\$309.55
\$22.36	\$2.62	\$0.00	\$0.00	\$0.00	\$0.08	\$25.06	\$153.54
\$89.22	\$69.49	\$64.22	\$62.17	\$61.76	\$66.95	\$413.81	\$1,152.42
\$0.6281	\$0.6281	\$0.6866	\$0.7766	\$0.7851	\$0.7851	\$0.6683	\$1.3435
\$56.95	\$17.77	\$9.88	\$7.80	\$7.20	\$15.91	\$115.51	\$1,535.13
\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
\$7.75	\$2.42	\$1.23	\$0.86	\$0.78	\$1.73	\$14.78	\$97.70
\$153.93	\$89.68	\$75.33	\$70.83	\$69.74	\$84.59	\$544.10	\$2,785.25

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
91	28	14	10	9	20	173	1,143
\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$108.00	\$216.00
\$92.18	\$32.60	\$16.58	\$11.57	\$10.56	\$23.35	\$186.84	\$721.06
\$10.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10.08	\$397.25
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$76.36
\$120.26	\$50.60	\$34.58	\$29.57	\$28.56	\$41.35	\$304.92	\$1,410.67
\$0.6281	\$0.6281	\$0.6866	\$0.7766	\$0.7851	\$0.7851	\$0.6683	\$1.3435
\$56.95	\$17.77	\$9.88	\$7.80	\$7.20	\$15.91	\$115.51	\$1,535.13
\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$177.21	\$68.37	\$44.46	\$37.37	\$35.76	\$57.26	\$420.42	\$2,945.80
(\$23.28)	\$21.31	\$30.87	\$33.46	\$33.98	\$27.33	\$123.67	(\$160.55)
-13.14%	31.16%	69.44%	89.55%	95.04%	47.73%	29.42%	-5.45%
(\$31.04)	\$18.89	\$29.64	\$32.60	\$33.20	\$25.60	\$108.90	(\$258.24)
-25.81%	37.33%	85.72%	110.26%	116.24%	61.91%	35.71%	-18.31%
\$7.75	\$2.42	\$1.23	\$0.86	\$0.78	\$1.73	\$14.78	\$97.70
13.61%	13.61%	12.45%	11.01%	10.89%	10.89%	12.79%	6.36%

Line
 No

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Bill Impact Analysis - Cost of Gas Filing Methodology

936 Winter Season (Jan. - Apr., Nov. - Dec.)
 937 Keene Commercial/Industrial to EnergyNorth Commercial/Industrial - Medium Annual Use, High Winter Use (G-42)

PROPOSED	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	1,086	1,629	2,089	2,903	2,860	1,797	12,363
Winter:							
Cust. Chg	\$172.33	\$172.33	\$172.33	\$172.33	\$172.33	\$172.33	\$1,034.00
Headblock	\$0.4283	\$428.34	\$428.34	\$428.34	\$428.34	\$428.34	\$2,570.03
Tailblock	\$0.2853	\$24.50	\$179.42	\$310.61	\$542.89	\$530.64	\$227.45
HB Threshold	1,000						
Summer:							
Cust. Chg	\$172.33						
Headblock	\$0.4283						
Tailblock	\$0.2853						
HB Threshold	400						
Total Base Rate Amount	\$625.18	\$780.09	\$911.28	\$1,143.56	\$1,131.31	\$828.12	\$5,419.54
COG Rate - (Winter)	\$1.2533	\$1.2533	\$1.3008	\$1.5666	\$1.5666	\$1.5666	\$1,4529
COG amount - Winter	\$1,360.94	\$2,041.42	\$2,716.89	\$4,547.42	\$4,480.16	\$2,815.43	\$17,962.27
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
LDAC amount	\$92.84	\$139.27	\$178.58	\$248.19	\$244.51	\$153.66	\$1,057.05
Total Bill	\$2,078.96	\$2,960.78	\$3,806.74	\$5,939.17	\$5,855.99	\$3,797.21	\$24,438.85

967 Winter Season (Jan. - Apr., Nov. - Dec.)
 968 Keene Commercial/Industrial to EnergyNorth Commercial/Industrial - Medium Annual Use, High Winter Use (G-42)

CURRENT	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	1,086	1,629	2,089	2,903	2,860	1,797	12,363
Winter:							
Cust. Chg	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$108.00
Block 1	\$1.1522	\$92.18	\$92.18	\$92.18	\$92.18	\$92.18	\$553.06
Block 2	\$0.9442	\$113.30	\$113.30	\$113.30	\$113.30	\$113.30	\$679.82
Block 3	\$0.7946	\$703.92	\$1,135.35	\$1,500.70	\$2,147.59	\$2,113.48	\$1,269.10
BL1 Threshold	80						
BL2 Threshold	120						
Summer:							
Cust. Chg	\$18.00						
Block 1	\$1.1522						
Block 2	\$0.9442						
Block 3	\$0.7946						
BL1 Threshold	80						
BL2 Threshold	120						
Total Base Rate Amount	\$927.40	\$1,358.83	\$1,724.18	\$2,371.07	\$2,336.96	\$1,492.58	\$10,211.03
COG Rate - (Winter)	\$1.2533	\$1.2533	\$1.3008	\$1.5666	\$1.5666	\$1.5666	\$1,4529
COG amount - Winter	\$1,360.94	\$2,041.42	\$2,716.89	\$4,547.42	\$4,480.16	\$2,815.43	\$17,962.27
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	0.0000
LDAC amount	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Bill	\$2,288.34	\$3,400.25	\$4,441.07	\$6,918.50	\$6,817.12	\$4,308.02	\$28,173.30

1002 DIFFERENCE:

Total Bill	(\$209.38)	(\$439.48)	(\$634.33)	(\$979.33)	(\$961.13)	(\$510.81)	(\$3,734.45)
% Change	-9.15%	-12.92%	-14.28%	-14.16%	-14.10%	-11.86%	-13.26%
Base Rate	(\$302.23)	(\$578.74)	(\$812.90)	(\$1,227.51)	(\$1,205.65)	(\$664.47)	(\$4,791.50)
% Change	-32.59%	-42.59%	-47.15%	-51.77%	-51.59%	-44.52%	-46.92%
COG & LDAC	\$92.84	\$139.27	\$178.58	\$248.19	\$244.51	\$153.66	\$1,057.05
% Change	6.82%	6.82%	6.57%	5.46%	5.46%	5.46%	5.88%

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
1,432	746	754	43	377	621	3,971	16,334
\$172.33	\$172.33	\$172.33	\$172.33	\$172.33	\$172.33	\$1,034.00	\$2,068.00
\$171.34	\$171.34	\$171.34	\$18.24	\$161.28	\$171.34	\$864.86	\$3,434.89
\$294.47	\$98.71	\$100.94	\$0.00	\$0.00	\$62.92	\$557.03	\$2,372.54
\$638.14	\$442.37	\$444.61	\$190.57	\$333.62	\$406.59	\$2,455.89	\$7,875.43
\$0.6281	\$0.6281	\$0.6866	\$0.7766	\$0.7851	\$0.7851	\$0.6802	\$1.2650
\$899.47	\$468.53	\$517.54	\$33.07	\$295.62	\$487.17	\$2,701.39	\$20,663.66
\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
\$122.44	\$63.78	\$64.45	\$3.64	\$32.19	\$53.05	\$339.56	\$1,396.60
\$1,660.05	\$974.68	\$1,026.59	\$227.28	\$661.43	\$946.81	\$5,496.84	\$29,935.69

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
1,432	746	754	43	377	621	3,971	16,334
\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$108.00	\$216.00
\$92.18	\$92.18	\$92.18	\$49.06	\$92.18	\$92.18	\$509.94	\$1,063.00
\$113.30	\$113.30	\$113.30	\$0.00	\$113.30	\$113.30	\$566.52	\$1,246.34
\$978.99	\$433.81	\$440.03	\$0.00	\$140.27	\$334.14	\$2,327.24	\$11,197.39
\$1,202.47	\$657.29	\$663.51	\$67.06	\$363.75	\$557.62	\$3,511.70	\$13,722.74
\$0.6281	\$0.6281	\$0.6866	\$0.7766	\$0.7851	\$0.7851	\$0.6802	\$1.2650
\$899.47	\$468.53	\$517.54	\$33.07	\$295.62	\$487.17	\$2,701.39	\$20,663.66
\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$2,101.94	\$1,125.81	\$1,181.05	\$100.13	\$659.37	\$1,044.79	\$6,213.09	\$34,386.39

(\$441.89)	(\$151.14)	(\$154.45)	\$127.15	\$2.06	(\$97.98)	(\$716.26)	(\$4,501.71)
-21.02%	-13.42%	-13.08%	126.98%	0.31%	-9.38%	-11.53%	-12.94%
(\$564.34)	(\$214.91)	(\$218.90)	\$123.51	(\$30.14)	(\$151.04)	(\$1,055.81)	(\$5,847.31)
-46.93%	-32.70%	-32.99%	184.17%	-8.28%	-27.09%	-30.07%	-42.61%
\$122.44	\$63.78	\$64.45	\$3.64	\$32.19	\$53.05	\$339.56	\$1,396.60
13.61%	13.61%	12.45%	11.01%	10.89%	10.89%	12.57%	6.76%

Line
 No

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Bill Impact Analysis - Cost of Gas Filing Methodology

1011 Winter Season (Jan. - Apr., Nov. - Dec.)

1012 Keene Commercial/Industrial to EnergyNorth Commercial/Industrial - Low Annual Use, Low Winter Use (G-51)

PROPOSED	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	143	101	140	178	179	138	878
Winter:							
Cust. Chg	\$57.44	\$57.44	\$57.44	\$57.44	\$57.44	\$57.44	\$344.67
Headblock	\$0.2839	\$28.39	\$28.39	\$28.39	\$28.39	\$28.39	\$170.34
Tailblock	\$0.1845	\$7.93	\$0.22	\$7.29	\$14.32	\$14.50	\$51.34
HB Threshold	100						
Summer:							
Cust. Chg	\$57.44						
Headblock	\$0.2839						
Tailblock	\$0.1845						
HB Threshold	100						
Total Base Rate Amount	\$93.76	\$86.06	\$93.12	\$100.15	\$100.33	\$92.92	\$566.34
COG Rate - (Winter)	\$1.2533	\$1.2533	\$1.3008	\$1.5666	\$1.5666	\$1.5666	\$1.4373
COG amount - Winter	\$179.18	\$126.85	\$181.48	\$278.23	\$279.81	\$216.82	\$1,262.36
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
LDAC amount	\$12.22	\$8.65	\$11.93	\$15.18	\$15.27	\$11.83	\$75.09
Total Bill	\$285.16	\$221.56	\$286.53	\$393.56	\$395.41	\$321.57	\$1,903.80

1042 Winter Season (Jan. - Apr., Nov. - Dec.)

1043 Keene Commercial/Industrial to EnergyNorth Commercial/Industrial - Low Annual Use, Low Winter Use (G-51)

CURRENT	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	143	101	140	178	179	138	878
Winter:							
Cust. Chg	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$108.00
Block 1	\$1.1522	\$92.18	\$92.18	\$92.18	\$92.18	\$92.18	\$553.06
Block 2	\$0.9442	\$59.45	\$20.03	\$56.19	\$92.15	\$93.10	\$376.07
Block 3	\$0.7946	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BL1 Threshold	80						
BL2 Threshold	120						
Summer:							
Cust. Chg	\$18.00						
Block 1	\$1.1522						
Block 2	\$0.9442						
Block 3	\$0.7946						
BL1 Threshold	80						
BL2 Threshold	120						
Total Base Rate Amount	\$169.63	\$130.21	\$166.37	\$202.33	\$203.28	\$165.32	\$1,037.13
COG Rate - (Winter)	\$1.2533	\$1.2533	\$1.3008	\$1.5666	\$1.5666	\$1.5666	\$1.4373
COG amount - Winter	\$179.18	\$126.85	\$181.48	\$278.23	\$279.81	\$216.82	\$1,262.36
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	0.0000
LDAC amount	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Bill	\$348.80	\$257.06	\$347.84	\$480.56	\$483.09	\$382.14	\$2,299.49
DIFFERENCE:							
Total Bill	(\$63.64)	(\$35.50)	(\$61.32)	(\$87.00)	(\$87.67)	(\$60.57)	(\$395.69)
% Change	-18.25%	-13.81%	-17.63%	-18.10%	-18.15%	-15.85%	-17.21%
Base Rate	(\$75.87)	(\$44.15)	(\$73.24)	(\$102.18)	(\$102.95)	(\$72.40)	(\$470.79)
% Change	-44.73%	-33.91%	-44.03%	-50.50%	-50.64%	-43.79%	-45.39%
COG & LDAC	\$12.22	\$8.65	\$11.93	\$15.18	\$15.27	\$11.83	\$75.09
% Change	6.82%	6.82%	6.57%	5.46%	5.46%	5.46%	5.95%

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
137	109	97	98	90	105	635	1,513
\$57.44	\$57.44	\$57.44	\$57.44	\$57.44	\$57.44	\$344.67	\$689.33
\$28.39	\$28.39	\$27.53	\$27.90	\$25.54	\$28.39	\$166.13	\$336.47
\$6.76	\$1.63	\$0.00	\$0.00	\$0.00	\$0.83	\$9.22	\$60.56
\$92.59	\$87.47	\$84.97	\$85.35	\$82.98	\$86.66	\$520.02	\$1,086.36
\$0.6281	\$0.6281	\$0.6866	\$0.7766	\$0.7851	\$0.7851	\$0.7081	\$1.1312
\$85.81	\$68.37	\$66.57	\$76.32	\$70.63	\$82.05	\$449.75	\$1,712.11
\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
\$11.68	\$9.31	\$8.29	\$8.40	\$7.69	\$8.94	\$54.31	\$129.40
\$190.09	\$165.14	\$159.83	\$170.07	\$161.30	\$177.65	\$1,024.07	\$2,927.87

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
137	109	97	98	90	105	635	1,513
\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$108.00	\$216.00
\$92.18	\$92.18	\$92.18	\$92.18	\$92.18	\$92.18	\$553.06	\$1,106.11
\$53.46	\$27.23	\$16.01	\$17.26	\$9.41	\$23.14	\$146.51	\$522.58
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$163.64	\$137.41	\$126.19	\$127.44	\$119.58	\$133.31	\$807.57	\$1,844.70
\$0.6281	\$0.6281	\$0.6866	\$0.7766	\$0.7851	\$0.7851	\$0.7081	\$1.1312
\$85.81	\$68.37	\$66.57	\$76.32	\$70.63	\$82.05	\$449.75	\$1,712.11
\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$249.45	\$205.78	\$192.75	\$203.76	\$190.21	\$215.36	\$1,257.31	\$3,556.80
(\$59.37)	(\$40.64)	(\$32.93)	(\$33.69)	(\$28.91)	(\$37.71)	(\$233.24)	(\$628.93)
-23.80%	-19.75%	-17.08%	-16.53%	-15.20%	-17.51%	-18.55%	-17.68%
(\$71.05)	(\$49.95)	(\$41.22)	(\$42.09)	(\$36.60)	(\$46.65)	(\$287.55)	(\$758.34)
-43.42%	-36.35%	-32.66%	-33.03%	-30.60%	-34.99%	-35.61%	-41.11%
\$11.68	\$9.31	\$8.29	\$8.40	\$7.69	\$8.94	\$54.31	\$129.40
13.61%	13.61%	12.45%	11.01%	10.89%	10.89%	12.08%	7.56%

Line
 No

Liberty Utilities (EnergyNorth Natural Gas) Corp.
 Bill Impact Analysis - Cost of Gas Filing Methodology

1086 Winter Season (Jan. - Apr., Nov. - Dec.)

1087 Keene Commercial/Industrial to EnergyNorth Commercial/Industrial - Medium Annual Use, Low Winter Use (G-52)

PROPOSED	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	1,738	1,988	2,323	2,764	2,724	1,985	13,521
Winter:							
Cust. Chg	\$172.33	\$172.33	\$172.33	\$172.33	\$172.33	\$172.33	\$1,034.00
Headblock	\$0.2437	\$243.75	\$243.75	\$243.75	\$243.75	\$243.75	\$1,462.48
Tailblock	\$0.1624	\$119.80	\$160.41	\$214.77	\$286.47	\$279.96	\$1,221.28
HB Threshold	1,000						
Summer:							
Cust. Chg	\$172.33						
Headblock	\$0.1766						
Tailblock	\$0.1004						
HB Threshold	1,000						
Total Base Rate Amount	\$535.88	\$576.48	\$630.85	\$702.55	\$696.04	\$575.95	\$3,717.76
COG Rate - (Winter)	\$1.2533	\$1.2533	\$1.3008	\$1.5666	\$1.5666	\$1.5666	\$1.4346
COG amount - Winter	\$2,177.97	\$2,491.37	\$3,021.27	\$4,330.43	\$4,267.64	\$3,109.01	\$19,397.68
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
LDAC amount	\$148.58	\$169.96	\$198.59	\$236.34	\$232.92	\$169.68	\$1,156.07
Total Bill	\$2,862.43	\$3,237.81	\$3,850.70	\$5,269.32	\$5,196.60	\$3,854.64	\$24,271.50

1117 Winter Season (Jan. - Apr., Nov. - Dec.)

1118 Keene Commercial/Industrial to EnergyNorth Commercial/Industrial - Medium Annual Use, Low Winter Use (G-52)

CURRENT	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	Winter
average Usage (Therms)	1,738	1,988	2,323	2,764	2,724	1,985	13,521
Winter:							
Cust. Chg	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$108.00
Block 1	\$1.1522	\$92.18	\$92.18	\$92.18	\$92.18	\$92.18	\$553.06
Block 2	\$0.9442	\$113.30	\$113.30	\$113.30	\$113.30	\$113.30	\$679.82
Block 3	\$0.7946	\$1,221.92	\$1,420.62	\$1,686.64	\$2,037.53	\$2,005.68	\$1,418.01
BL1 Threshold	80						
BL2 Threshold	120						
Summer:							
Cust. Chg	\$18.00						
Block 1	\$1.1522						
Block 2	\$0.9442						
Block 3	\$0.7946						
BL1 Threshold	80						
BL2 Threshold	120						
Total Base Rate Amount	\$1,445.40	\$1,644.10	\$1,910.12	\$2,261.01	\$2,229.16	\$1,641.49	\$11,131.29
COG Rate - (Winter)	\$1.2533	\$1.2533	\$1.3008	\$1.5666	\$1.5666	\$1.5666	\$1.4346
COG amount - Winter	\$2,177.97	\$2,491.37	\$3,021.27	\$4,330.43	\$4,267.64	\$3,109.01	\$19,397.68
COG Rate - (Summer)							
COG amount - Summer							
LDAC	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	0.0000
LDAC amount	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Bill	\$3,623.37	\$4,135.47	\$4,931.39	\$6,591.44	\$6,496.80	\$4,750.49	\$30,528.97

1152 DIFFERENCE:

Total Bill	(\$760.94)	(\$897.66)	(\$1,080.69)	(\$1,322.12)	(\$1,300.20)	(\$895.86)	(\$6,257.46)
% Change	-21.00%	-21.71%	-21.91%	-20.06%	-20.01%	-18.86%	-20.50%
Base Rate	(\$909.52)	(\$1,067.62)	(\$1,279.27)	(\$1,558.46)	(\$1,533.12)	(\$1,065.54)	(\$7,413.53)
% Change	-62.93%	-64.94%	-66.97%	-68.93%	-68.78%	-64.91%	-66.60%
COG & LDAC	\$148.58	\$169.96	\$198.59	\$236.34	\$232.92	\$169.68	\$1,156.07
% Change	6.82%	6.82%	6.57%	5.46%	5.46%	5.46%	5.96%

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
1,777	1,318	1,199	1,307	1,127	1,447	8,175	21,696
\$172.33	\$172.33	\$172.33	\$172.33	\$172.33	\$172.33	\$1,034.00	\$2,068.00
\$176.63	\$176.63	\$176.63	\$176.63	\$176.63	\$176.63	\$1,059.80	\$2,522.28
\$78.01	\$31.92	\$19.97	\$30.84	\$12.72	\$44.86	\$218.32	\$1,439.60
\$426.98	\$380.89	\$368.93	\$379.81	\$361.68	\$393.83	\$2,312.12	\$6,029.87
\$0.6281	\$0.6281	\$0.6866	\$0.7766	\$0.7851	\$0.7851	\$0.7099	\$1.1615
\$1,116.26	\$827.84	\$823.20	\$1,015.22	\$884.56	\$1,136.02	\$5,803.09	\$25,200.77
\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855	\$0.0855
\$151.95	\$112.69	\$102.51	\$111.77	\$96.33	\$123.72	\$698.97	\$1,855.04
\$1,695.18	\$1,321.42	\$1,294.64	\$1,506.79	\$1,342.57	\$1,653.57	\$8,814.18	\$33,085.69

Summer Season (May - Oct.)

May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Summer	Total 2017/18
1,777	1,318	1,199	1,307	1,127	1,447	8,175	21,696
\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$18.00	\$108.00	\$216.00
\$92.18	\$92.18	\$92.18	\$92.18	\$92.18	\$92.18	\$553.06	\$1,106.11
\$113.30	\$113.30	\$113.30	\$113.30	\$113.30	\$113.30	\$679.82	\$1,359.65
\$1,253.24	\$888.37	\$793.76	\$879.83	\$736.34	\$990.85	\$5,542.39	\$15,332.80
\$1,476.72	\$1,111.85	\$1,017.24	\$1,103.31	\$959.82	\$1,214.33	\$6,883.27	\$18,014.56
\$0.6281	\$0.6281	\$0.6866	\$0.7766	\$0.7851	\$0.7851	\$0.7099	\$1.1615
\$1,116.26	\$827.84	\$823.20	\$1,015.22	\$884.56	\$1,136.02	\$5,803.09	\$25,200.77
\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
\$2,592.98	\$1,939.69	\$1,840.44	\$2,118.52	\$1,844.38	\$2,350.35	\$12,686.37	\$43,215.33

(\$897.79)	(\$618.27)	(\$545.80)	(\$611.73)	(\$501.81)	(\$696.78)	(\$3,872.19)	(\$10,129.65)
-34.62%	-31.87%	-29.66%	-28.88%	-27.21%	-29.65%	-30.52%	-23.44%
(\$1,049.74)	(\$730.96)	(\$648.31)	(\$723.50)	(\$598.14)	(\$820.50)	(\$4,571.16)	(\$11,984.69)
-71.09%	-65.74%	-63.73%	-65.58%	-62.32%	-67.57%	-66.41%	-66.53%
\$151.95	\$112.69	\$102.51	\$111.77	\$96.33	\$123.72	\$698.97	\$1,855.04
13.61%	13.61%	12.45%	11.01%	10.89%	10.89%	12.04%	7.36%

39 FERC ¶ 61,357

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

[18 C.F.R. Parts 35 and 389]

Rate Changes Relating to Federal
Corporate Income Tax Rates for
Public Utilities

{Docket No. RM87-4-000}

ORDER NO. 475

(Issued June 26, 1987)

AGENCY: Federal Energy Regulatory Commission.

ACTION: Final Rule.

SUMMARY: In the Tax Reform Act of 1986 Congress reduced the maximum Federal corporate income tax rate from 46 percent to 34 percent, effective July 1, 1987. The Federal Energy Regulatory Commission is adopting an abbreviated rate filing procedure that public utilities may use to reduce their rates to reflect this decrease.

EFFECTIVE DATE: June 26, 1987

FOR FURTHER INFORMATION CONTACT:

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SUPPLEMENTARY INFORMATION:

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

[18 C.F.R. Parts 35 and 389]

Before Commissioners: Martha O. Hesse, Chairman;
Anthony G. Sousa, Charles G. Stalon,
Charles A. Trabandt and C. M. Naeve.

Rate Changes Relating to Federal) Docket No. RM87-4-000
Corporate Income Tax Rate for)
Public Utilities)

ORDER NO. 475

FINAL RULE

(Issued June 26, 1987)

I. INTRODUCTION

The Tax Reform Act of 1986 1/ signed on October 22, 1986, significantly lowered the Federal corporate income tax rate from 46 percent to 34 percent. The Federal Energy Regulatory Commission (Commission) is adopting a voluntary, abbreviated rate filing procedure that will allow electric public utilities to file for certain rate decreases under section 205 of the Federal Power Act (FPA), 2/ to reflect this decrease in the Federal income tax rate. 3/

1/ I.R.C. §§ 1-7872 (1986).

2/ 16 U.S.C. § 824d (1982).

3/ Although the reduction in the Federal corporate income tax rate impacts on natural gas and oil pipelines, this rule is limited to electric public utilities. Natural gas pipeline companies' rates will automatically be adjusted since tax trackers have been included in the majority of the natural gas pipeline companies' rate settlements. Changes in oil pipeline rates will be made on a case-by-case basis.

DC-C-54

Docket No. RM87-4-000

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The reduction in rates will be based on a formula using data provided by the utility in its most recent rate filing. Under this procedure, the Commission will consider only the reduction in the Federal corporate tax rate in establishing the new rate. Any other issues which may be raised in the rate filing will be dismissed without prejudice.

For utilities which do not voluntarily reduce their rates either through this abbreviated procedure or through general rate change filings, the Commission intends to undertake a general review of their rates, and where appropriate, to institute formal investigations under section 206 of the FPA ^{4/} on the basis that rates reflecting the 46 percent tax rate or other previously authorized cost allowances may no longer be just and reasonable. ^{5/}

II. BACKGROUND

In response to the Tax Reform Act, the Commission, on March 12, 1987, published a Notice of Proposed Rulemaking (NOPR) ^{6/} which proposed an abbreviated filing procedure that would allow public utilities to voluntarily reduce their rates to account

^{4/} 16 U.S.C. § 824e (1982).

^{5/} Recently, the Commission instituted 206 proceedings involving the formula rates of electric utilities. See, EL87-21-000 Yankee Atomic Electric Company, EL87-22-000 Vermont Yankee Nuclear Power Corporation, EL87-23-000 Connecticut Yankee Atomic Power Company, EL87-30-000 Connecticut Light & Power Company.

^{6/} Rate Changes Relating to Federal Corporate Income Tax Rate for Public Utilities, 52 Fed. Reg. 8616 (Mar. 19, 1987). FERC Stats. and Regs. ¶ 32,437.

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for this reduction in the Federal tax rate. ^{7/} The NOPR proposed two methods of determining the rate reduction. The primary option would permit a utility to reflect the reduction in the tax rate through a formula reduction to its existing rates. The formula would rely on data supplied by the utility in its most recent rate filing. An alternative approach was also suggested under which rates would be reduced using a generically-determined fixed percentage reduction to the demand charge component of a utility's existing rates.

The NOPR proposed to preclude a utility from using the abbreviated filing procedure if it had a rate change application pending before the Commission on a date certain; if it had an accepted tariff providing for automatic adjustments to reflect changes in the Federal tax rate; or if it already had rates in effect which reflected the reduced Federal income tax rate.

The NOPR stated that if a utility wished to reflect in its rates other changes created by the Tax Reform Act or by other cost elements, instead of the abbreviated procedure, it should file a rate change application under section 205 of the FPA. The Commission also proposed that if a utility failed to file for rate reductions, the Commission might institute a proceeding requiring the utility to show cause why its unadjusted rates are just and reasonable under section 206 of the FPA. The NOPR

^{7/} Fifty-two commenters responded to the NOPR. The list of commenters is contained in Appendix A.

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also proposed that such an investigation might not be limited to issues relating to the Tax Reform Act, and might include all components of the utility's rates.

A. Overview

The Commission is concerned that large overcollections on an industry-wide basis may occur unless rates are reduced promptly to reflect the new tax rate since the reduction in the tax rate affects all utilities. The Commission is adopting a generic approach to address this concern. Through a generic reduction in rates based on a formula, a utility would be able to adjust for changes in the corporate tax rate by using an expedited procedure that would provide consumers immediate rate relief.

The Commission realizes that a formula reduction in rates may not be appropriate for all utilities under all circumstances. Therefore, a utility that chooses not to use the abbreviated procedure established in this rule may agree to a settlement with its customers, file a general section 205 rate change application, or if a utility finds that no rate reduction is warranted, it may elect to do nothing.

The Commission encourages settlement agreements and will look favorably on any proposed settlements that take into account the impact of the reduction in the tax rate.

Under a full section 205 rate change application, a utility may raise any other factors which might counterbalance the tax rate reduction. Under a full rate change application customers may also raise any relevant issues.

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If a utility concludes that no rate decrease is warranted, it may refrain from filing any rate reduction. If the Commission institutes a section 206 proceeding, a utility may raise relevant issues to show that its unadjusted rates are just and reasonable.

B. Other Tax and Cost Considerations.

In the NOPR, the Commission identified three provisions of the Tax Reform Act that might affect public utilities on an industry-wide scale. These were changes in the depreciation rates, loss of investment tax credits and the reduction in the Federal income tax rate. The Commission stated in the NOPR that changes in liberalized depreciation and the loss of investment tax credits would have little immediate effect on a utility's rates. ^{8/} It therefore concluded that the only

^{8/} Changes in tax depreciation have little immediate impact on the calculation of income tax allowable because of the Commission's tax normalization policy. Under normalization the calculation of allowable income tax expense is based upon the amount of book depreciation taken, not tax depreciation. The amount of book depreciation is not affected by the Tax Reform Act. See 18 C.F.R. §§ 35.25. "Regulations Implementing Tax Normalization for Certain Items Reflecting Timing Differences in the Recognition of Expenses or Revenues for Rate-making and Income Tax Purposes," Order No. 144, 46 Fed. Reg. 26,613 (May 14, 1981), FERC Stats. and Regs. [Regulations Preambles, 1977-1981] ¶ 30,254 (May 6, 1981). Similarly, loss of investment tax credits will also have a minimal effect on a utility's revenue requirements. Under current regulatory policy, the benefits of investment tax credits

(Footnote continues on next page.)

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changes that a utility should adjust immediately would be those to reflect the reduction in the Federal corporate income tax rate.

Many commenters faulted the Commission for concentrating solely on the reduction of the tax rate. 9/ They argued that other provisions of the Tax Reform Act offset this decrease. 10/

(Footnote 8 continued from previous page.)

are shared between the ratepayer and the stockholders of the regulated entities. The ratepayer benefits by either receiving the time value of the unamortized investment tax credit or the annual amortization amount, but not both, depending upon the optional treatment elected by the utility. The rate reducing effects of previously generated investment tax credits will continue until fully amortized.

9/ See, e.g., Utah Power and Light Company, Philadelphia Electric Company, Kentucky Utilities Company, Electric Utilities, Public Service Electric and Gas Company, Colorado Public Utilities Commission, Public Service Company of Colorado, Sierra Pacific Power Company.

10/ In addition to elimination of investment tax credits and changes in depreciation other provisions of the TRA cited by commenters that addressed this issue were:

- ° recognition of unbilled revenues
- ° capitalization of certain construction overheads
- ° taxability of contributions in aid of construction
- ° alternative minimum tax provisions
- ° timing of deduction for sales tax, property tax, and employee benefits
- ° elimination of accrual accounting for accrued vacation pay and reserve for bad debts

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The Commission recognizes that many of the aspects of the Tax Reform Act cited by the commenters may have an impact on a utility's cash flow. The effect, however, will differ widely from utility to utility depending upon its particular circumstances, and therefore would be inappropriate for a generic formula, which could not account for all the changes made by the Act and their effects on each utility. The one aspect of the Tax Reform Act that will have a significant effect on the rates of electric utilities on an industry-wide basis is the corporate tax rate reduction.

The Commission has determined that, to reflect this one change, the income tax component of rates under the Commission's ratemaking model should be reduced by nearly 40 percent. 11/ Through this procedure, the Commission is enabling a public utility to voluntarily reduce its rates without having to file a full rate change application.

Some commenters suggested that the Commission consider changes in state income taxes. 12/ Others urged the Commission to take into

11/ The percentage change in the income tax component of a jurisdictional company's revenue requirement due to a reduction in the Federal corporate income tax rate can be measured by the incremental change in the "income tax factor." This factor, expressed as the Federal tax rate divided by one minus the Federal tax rate, is 0.85185 at the 46 percent rate and 0.51515 at the 34 percent rate. Thus, the 12 percentage point reduction in the Federal tax rate translates to nearly a 40 percent reduction in a jurisdictional company's income tax allowance.

12/ See Utah Power and Light Company, Idaho Power Company (state tax increases), Cities and Villages of Algoma, et al. (state tax decreases)

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account other increases in cost components which might affect a utility's rates. ^{13/} The Commission disagrees. The purpose of this final rule is to provide utilities with a simple mechanism to voluntarily reduce rates to reflect the reduction in the Federal tax rate. Consideration of these other suggested factors would unnecessarily complicate the abbreviated filing and delay rate relief.

C. Filing Options

The NOPR requested comments on two proposed abbreviated filing methods, and invited suggestions on any other alternatives. The first alternative proposed in the NOPR was a formula reduction in rates, based on data supplied by the utility in its most recent rate filing. Under the alternative option, rates would be reduced automatically, for all utilities, using a fixed percentage reduction to the demand charge.

Most commenters (even those opposed to the rulemaking) favored the formula approach over a fixed percentage reduction. ^{14/} Most utilities favored retaining both approaches, which would enable the filing utility to select the methodology most suited

^{13/} See, e.g., Central Illinois Public Service Company, Utah Power and Light Company.

^{14/} See, e.g., Public Service Company of Oklahoma, Borough of Madison, New Jersey, Consumer Power Company, Saffer Utility Consultants, Inc.

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to its particular situation. ^{15/} Some utilities also suggested that the Commission provide many abbreviated filing options. ^{16/}

The Commission is adopting only the formula alternative. The Commission agrees with many of the commenters that a formula reduction has certain advantages over a fixed percentage reduction. ^{17/} While both may be simple, the formula approach is utility-specific. As such, it can more readily accommodate a utility's specific circumstances and, therefore, more closely approximates the actual cost-of-service impact of the lower tax rate.

Commenters also cited problems with the fixed percentage option. ^{18/} Since it is not utility-specific, but calls for an across-the-board reduction for all utilities, it may be imprecise. In fact, it may produce excessive reductions for some utilities and allow others to receive a windfall. The Commission believes that the fixed percentage approach would be unfair to both the utility and the ratepayers. Additionally, these commenters faulted the method by which the Commission determined the fixed

^{15/} See, e.g., Carolina Power and Light Company, Electric Utilities, Arizona Public Service Company.

^{16/} See, e.g., American Electric Power Service Corporation, Edison Electric Institute, Southwestern Electric Power Company.

^{17/} See, e.g., Department of Water Resources of the State of California, Coast Electric Power Association, et al.

^{18/} See, e.g., Southwestern Electric Power Company, Public Systems

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reduction percentage. The percentage reduction proposed in the NOPR was based on a sampling of eight rate filings which resulted in a five to eight percent reduction in the nonvariable portion of a utility's revenue requirement. Commenters argued that the sampling was too small and was not representative of the industry. The Commission recognizes that there are approximately 175 utilities subject to the Commission's jurisdiction. The Commission agrees that a determination of an appropriate fixed percentage reduction would require extensive sampling. Furthermore, the Commission believes that using any fixed percentage reduction would not yield as accurate a result as a formula reduction.

In view of the disadvantages of the fixed percentage approach, the Commission must reject the argument that a utility should have the option of using either the formula method or the fixed percentage method.

Some commenters wanted the Commission to adopt numerous filing options. 19/ Others suggested that the Commission establish some type of simplified procedure that a utility could use to show that its unadjusted rates remained justified. 20/ The Commission believes that multiple filing options or additional procedures would be unduly cumbersome. Allowing utilities to make simplified

19/ See, e.g., Public Service Company of Oklahoma, Edison Electric Institute.

20/ See, e.g., Pennsylvania Power & Light Company, Central Vermont Public Service Corporation, Public Service Company of New Mexico.

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showings that their rates are just and reasonable also poses evidentiary problems, since a utility would be free to selectively supply the Commission with data in support of its case. A more appropriate forum to make such a showing is a proceeding under either section 205 or 206 of the FPA.

D. The Formula

The adopted formula is:

$$K = \frac{D - D(E/F)}{I}$$

Where

D = Composite income taxes allowable included in rates in effect on the date that the change in the Federal corporate income tax rate becomes effective.

E = Composite income tax factor using the new Federal corporate income tax rate and the effective state income tax rate from the rate application docket upon which existing rates are based. This is computed by the following formula:

$$\frac{\text{composite marginal income tax rate}}{1 - \text{composite marginal income tax rate}}$$

F = Composite income tax factor using the old Federal corporate income tax rate. This is computed by the same formula used for determining E.

I = Test period billing units from the rate application docket upon which the rates that are in effect are based. Absent extraordinary circumstances a public utility shall use demand billing units. This information is usually available in Statement BG of the rate application and/or settlement or compliance documents.

K = Required rate reduction per billing demand unit.

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This formula may be broken down into the following four-step process:

$$\begin{array}{lclcl}
 1) & A & \times & \frac{B}{C} & = & D \\
 2) & D & \times & \frac{E}{F} & = & G \\
 3) & D & - & G & = & H \\
 4) & \frac{H}{I} & = & K & &
 \end{array}$$

Where

- A = Income taxes allowable (exclusive of deferred tax make-up provisions, i.e. "South Georgia" provisions, and investment tax credit amortizations) included in the revenue requirement of the public utility's rate application docket upon which the rates in effect on the date the Federal corporate income tax rate change becomes effective were finally accepted or approved. This information is generally included in Statement BK or BL of the filing as revised after any summary dispositions where revised rates were required to be filed.
- B = Revenue level in effect on the date the change in Federal corporate income tax rate becomes effective using test period billing determinants. This information is generally available from Statement BG of the rate application and/or settlement or compliance filing documents.
- C = Revenue requirement from the rate application docket which includes A. This is generally included in Statement BK or BL of the filing.
- G = Income taxes allowable at the new Federal corporate income tax rate.
- H = Difference between income taxes allowable at the new Federal corporate income tax rate, and at the old Federal corporate income tax rate. This is the revenue reduction required to reflect the reduction in the Federal corporate income tax rate.

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The Commission will use the data provided by a public utility in the rate application supporting its current rates on file to determine the reduction in rates to reflect the change in the Federal corporate tax rate. Since a public utility's rates generally differ, depending on the type of service the utility provides (firm transmission service, full requirements service, or partial requirements service) and for each customer group, the utility must make a separate rate reduction calculation for each type of service and each customer group.

In the first step of the formula, the income tax allowable component (A) from a public utility's last rate application is multiplied by the ratio of: (B) the test period revenues from the rates actually in effect on July 1, 1987 (using billing determinants from Statement BG of the public utility's rate application) to (C) the test period revenue requirement reported by the public utility in its last rate application (Statement BK or BL of the public utility's rate application). The result (D) represents the income tax allowable component which, for purposes of this rule, the Commission is presuming is included in a public utility's rate in effect on the date that the change in Federal corporate income tax rate became effective. This figure is based on the old Federal corporate income tax rate. The calculation recognizes that the public utility's current rate level may be designed to achieve test period revenues lower than the revenue requirement originally supported

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by the public utility in its rate application. The difference between generated rate levels and revenue requirement may be due to a variety of reasons including reductions in rate levels due to settlement agreements, voluntary reductions, Commission orders, and Commission opinions. For those rates that were determined by Commission opinion or equivalent order following a litigated proceeding, the income tax allowance from the company's finally accepted compliance filing, exclusive of deferred tax make-up provisions and investment tax credit amortizations, must be used as (D) in the formula instead of using "A x (B/C)" as (D). For settlement rates where the utility submitted a cost of service supporting the settlement rate level, the utility must use the income tax allowable figure contained in the settlement as (D) in the formula.

In the second step, the income tax allowable component (D) is multiplied by the ratio of: (E) the income tax factor at the new Federal corporate income tax rate to (F) the income tax factor at the old Federal corporate income tax rate. The result (G) represents the income tax allowable based on the new Federal corporate income tax rate.

In the third step of the formula, the income tax allowable component based on the new Federal corporate income tax rate (G) is subtracted from the income tax allowable component based on the old Federal corporate income tax rate (D). The result (H) represents the revenue reduction necessary to reflect the new corporate income tax rate.

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Finally, in the fourth step of the formula, the revenue reduction figure (H) is divided by the demand billing units reported in the public utility's last rate application to determine the revenue reduction per unit of billing demand (K). Some adjustments in the implementation of this aspect of the formula may be allowed if, for example, the utility's rate is entirely energy-based, i.e., on a per kilowatt-hour basis, or if the utility's rate design incorporates unusual features.

In applying this formula, a utility may, by affidavit setting forth the reason, deviate from the use of demand billing units under extraordinary circumstances. Under this filing procedure intervenors may challenge this variation. The utility shall have the burden of proof in showing that a deviation from the use of demand billing units is based on extraordinary circumstances.

In order to expedite filings under this rule, a utility must provide the following in support of its rate reduction:

- (A) Computations showing the application of each step of the formula methodology;
- (B) Supporting workpapers including (1) all intermediate calculations necessary under the formula with narrative explanation where appropriate and (2) details on the derivation of all formula inputs together with copies of all statements and workpapers used as source documents;

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- (C) Detailed explanations of all adjustments to data shown on supporting statements (e.g., adjustments to exclude South Georgia provisions from Federal Income Tax Allowable);
- (D) Form of notice noting that the rates are to be effective as of July 1, 1987;
- (E) Revised rate sheets reflecting the proposed rate reduction for every rate schedule to which the reduction is proposed;
- (F) A list of any customers or services for which no reduction is proposed and the reasons for not reducing these rates.

A number of commenters raised issues regarding application of the formula. The Commission proposed to base the formula reduction on data derived from a utility's most recent rate filing. However, several commenters argued that the Commission should not rely on data in a utility's last rate filing since the data may have been filed several years ago and may no longer reflect a utility's true costs, and a formula based on the data would therefore not be valid. 21/

While a utility's specific costs may have changed since its last rate application, the data contained in this application are the most comprehensive on file at the Commission. A utility that believes that the data supporting its current rates no longer reflect its true costs should file an application for a general rate change.

21/ See, e.g., Idaho Power Company, Public Service Company of New Mexico, Utah Power and Light Company.

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The Iowa Public Service Company suggested that the Commission use data from a utility's most recent FERC annual report. The Commission disagrees since rates currently being collected are based on a utility's last cost-of-service filing and not annual report figures. Furthermore, it may not be possible to derive accurate data such as a utility's income tax allowable figure from its annual report.

In the formula, a utility's deferred tax make-up provision is excluded from the income taxes allowable component. These make-up provisions are designed to recover any deficiencies or to eliminate any excesses in the deferred tax reserves of a utility. Several commenters questioned whether the provision should be excluded in computing the appropriate reduction. 22/ The Commission will consider any corrections to a utility's make-up provision amortization in conjunction with the utility's next full rate change application. The Commission believes that potentially complex questions involving any such adjustments should be dealt with in individual FPA section 205 or 206 proceedings, where all parties may question the necessary adjustment. Until that time, a utility should continue to accrue the deferred tax amortization amount in accordance with its previously approved plan of recovery.

22/ See, e.g., Allegheny Electric Cooperative, Inc., Coast Electric Power Association, et al.

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Similarly, some commenters requested that the Commission establish a method of returning any overaccruals of a utility's unfunded future tax liability to the ratepayers. 23/ The Commission is delaying consideration of any of these excess accruals until a utility's next rate application for the same reasons discussed above with regard to deferred tax make-up provisions. Utilities are required to establish a plan to return any excess accruals in rate applications. Until the next full rate change application a utility would not receive a windfall because any excess funds the utility collects for deferred income taxes are used as a rate base deduction until ultimately returned to the customers. 24/

Under the formula, reductions were to be made on a per billing demand unit basis unless there were "extraordinary circumstances" not to do so. The NOPR requested comments as to the appropriate circumstances under which exceptions to the use of demand billing units should be allowed. Although two commenters addressed this issue, neither provided the Commission with specific examples of

23/ See, e.g., Wholesale Distribution Customers, Arkansas Public Service Commission, Indiana Utility Consumer Counselor.

24/ See Order No. 144, 46 Fed. Reg. 26,613 (May 14, 1981), FERC Stats. & Reg. [Regulations Preambles 1977-1981] ¶ 61,254 (May 6, 1981); Order No. 144-A, 47 Fed. Reg. 8329 (Feb. 26, 1982) and 477 Fed. Reg. 8991 (Mar. 2, 1981), FERC Stats. & Regs. [Regulations Preambles 1982-1985] ¶ 30,340 (Feb. 22, 1982).

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what would constitute an extraordinary circumstance. 25/ Therefore, the Commission will consider these situations on a case-by-case basis. Intervenors may challenge such a deviation. A utility shall have the burden of proof in showing that a variation from the use of demand billing units is based on extraordinary circumstances.

E. Rates Affected

In the NOPR, the Commission proposed to exclude three types of utilities from the abbreviated filing procedure: a utility with rate filings pending before the Commission in which the tax component could be changed and in which the effective date of the rates at issue was no later than July 1, 1987; a utility that tendered rate applications to allow an effective date no later than July 1, 1987; or a utility whose rates already reflected the change in the Federal tax rate.

Some commenters suggested that formula reductions were unwarranted with respect to certain types of rates, specifically wheeling rates 26/ and market-based rates. 27/ Since the Commission is adopting only the formula rate reduction method, only rates which can be reduced by this method are included in this rule. These are requirements service rates (full or partial) and firm wheeling rates.

25/ See Pacific Gas & Electric Company, Iowa Public Service Company.

26/ See Niagara Mohawk Power Corporation.

27/ See Illinois Power Company.

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Several commenters argued that a formula reduction was not appropriate for settlement rates, since the income tax allowable component in these rates may not be readily determinable. ^{28/} The formula assumes, in settlement rates, a pro-rata reduction in all of a utility's costs. For example, if a utility proposed revenues of \$100 but settled for \$75, all of the cost components submitted in support of the rate request to achieve those revenues, including income taxes allowable, would be reduced by 25 percent. The American Electric Power Service Corporation suggested a revision in the formula which would attribute the difference between the rate as filed and the settlement rate solely to a reduction in the rate of return on equity. Since it may be impossible to accurately allocate the reduction among all the different costs in a settlement rate, the Commission believes the best generic approach is to assume a pro-rata reduction in all the costs rather than attributing the reduction to a single factor. A utility that believes that application of the formula would result in inequitable treatment is encouraged to file an application under FPA section 205.

Other commenters questioned whether the formula could be applied to settlement rates subject to moratorium provisions. For moratoriums that prohibit any rate change (increase or decrease), the Commission is adopting a procedure suggested by the Florida Power & Light Company. Adjustment to this type of rate can be

^{28/} See, e.g., Detroit Edison Company, Pennsylvania Power & Light Company, Edison Electric Institute.

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made under the abbreviated procedure, but the Commission will defer the effective date of the reduction until after the moratorium term. However, if a moratorium prohibits only rate increases, the rate can be adjusted using the formula since filing for a rate decrease would not violate the moratorium.

Two commenters stated that a formula reduction in phase-in rates may not be appropriate. ^{29/} Phase-in rates present unique problems since rates are not computed using a conventional cost-of-service. Consequently, the Commission will adjust these rates on a case-by-case basis.

F. Effective Date of Decreased Rates

The Commission proposed that, in order to use the abbreviated filing procedure, a utility would have to file by June 1 1987, so that the proposed rates would become effective July 1, 1987, when the 34 percent tax rate becomes effective.

In this final rule, the Commission is establishing a filing timetable that utilities must use. Rates under this abbreviated filing are to be effective July 1, 1987, regardless of when the rate application is filed. To implement this procedure, the Commission is waiving any notice requirements in order to make July 1 the effective date of the new rate. ^{30/}

If a utility uses the abbreviated filing procedure, it must refund to its customers the difference between the rate unadjusted for the tax change and the new rate that reflects the tax adjustment.

^{29/} See Union Electric Company, Missouri Public Service Commission.

^{30/} See 18 C.F.R. § 35.11 (1987).

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utilities to use this procedure, the
guaranteeing that refunds be made with interest.
expects that many public utilities will file
under this rule. In order to process these
applications, the Commission is establishing the
schedule which utilities must follow. The
purpose of these filing periods will provide the
orderly and efficient basis to initiate its
action with those utilities that do not file under this

Schedule for Filings

Filing Period

- No later than September 15, 1987
- No later than September 30, 1987
- No later than October 15, 1987
- No later than October 31, 1987
- No later than November 15, 1987
- No later than November 30, 1987

suggested that the Commission delay the
implementation of new rates until January 1, 1988. ^{31/} While
administratively simpler, the Commission is unwilling
to allow utilities to overcollect during the
year 1987. They further argued that the June 1 filing
under the NOPR did not allow utilities sufficient time
to file. Idaho Power & Light Company, Idaho Power Company.

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to collect the data necessary to file. The first filing period
in the schedule established in the final rule gives utilities at
least two months to collect this data. The Commission believes
that this is sufficient time for a utility to prepare its filing.
G. Tax Rate for 1987

Since the Tax Reform Act reduced the tax rate to 34 percent
effective July 1, 1987, the NOPR proposed that rate filings under
the abbreviated procedure were to reflect this 34 percent tax rate.

Numerous commenters argued that if a utility were to use a
split tax rate of 46 percent for the first half of 1987 and
34 percent for the remaining half, it would be violating standard
accounting practices and Internal Revenue Service normalization
requirements. ^{32/} They specifically cited section 15 of the
Internal Revenue Code ^{33/} that requires a blended tax rate of

^{32/} See, e.g., Deloitte, Haskins & Sells, Arthur Anderson &
Company, Kentucky Utilities Company, Utah Power & Light
Company, Commonwealth Edison, Southern California Edison
Company.

^{33/} I.R.C. § 15(a) (1986) provides in part:

If any rate of tax imposed by this chapter changes, and
if the taxable year includes the effective date of the
change (unless that date is the first day of the taxable
year), then

- (1) tentative taxes shall be computed by applying the
rate for the period before the effective date of the
change, and the rate for the period on and after such
date, to the taxable income for the entire taxable
year; and
- (2) the tax for such taxable year shall be the sum of
that proportion of each tentative tax which the number
of days in each period bears to the number of days in
the entire taxable year.

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PART 35 - FILING OF RATE SCHEDULES

1. The authority citation for Part 35 is revised to read as follows:

Authority: Department of Energy Organization Act, 42 U.S.C. 7101-7352 (1982); E.O. No. 12009, 3 CFR 1978 Comp., p. 142; Independent Offices Appropriations Act, 31 U.S.C. 9701 (1982); Federal Power Act, 16 U.S.C. 791a-825r (1982); Public Utility Regulatory Policies Act, 16 U.S.C. 2601-2645 (1982).

2. In § 35.13, paragraph (a)(2)(ii) is revised to read as follows:

§ 35.13 Filing of changes in rate schedules.

* * * * *

- (a) General rule. * * *
- (2) Abbreviated filing requirements. * * *
- (ii) For rate schedule changes other than rate increases.

(A) Except as provided in paragraph (a)(2)(ii)(B) of this section, any utility that files a rate schedule change that does not provide for a rate increase or that provides for a rate increase that is based solely on change in delivery points, a change in delivery voltage, or a similar change in service, must submit with its filing only the information required in paragraphs (b) and (c) of this section.

(B) Any utility that files a rate schedule change that provides for a rate decrease under § 35.27 of this part must submit with its filing only the information required by § 35.27 of this part.

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3. Section 35.27 is added to read as follows:

§ 35.27 Changes of rates relating to changes in the Federal corporate income tax rate.

(a) Purpose.

The abbreviated filing procedure and formula for this section are intended to permit a public utility to make an adjustment to its rates to reflect the decrease in the Federal corporate income tax rate pursuant to the Tax Reform Act of 1986. This abbreviated filing procedure and formula would be used by a public utility in lieu of a more comprehensive rate filing under § 35.13 of this part concerning changes in rate schedules.

(b) Applicability.

(1) Except as provided in paragraphs (b)(2), and (b)(3) of this section, a public utility may use the abbreviated filing procedure and formula in this section to adjust its rates to reflect the decrease in the Federal corporate income tax rate.

(2) If a public utility has a rate case currently pending before the Commission in which the change in the Federal corporate income tax rate can be reflected, the public utility may not use this section to adjust its rates.

(3) If a public utility has a rate accepted for filing by the Commission that provides for the automatic adjustment of its rates to reflect, without prior hearing, increases or decreases in the Federal corporate income tax rate, it may not use this section to adjust its rates.

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(ii) Whether or not the formula in § 35.27 has been properly applied, and

(iii) Whether or not the correct information was used in that formula.

(2) Any other issue raised will be severed from the proceeding and dismissed without prejudice.

(f) Effective date.

Rates proposed under the filing are to have a July 1, 1987 effective date. A public utility that chooses to use the abbreviated filing procedure and formula contained in this section must make its filing according to the following schedule:

Schedule for Filings

<u>First Letter of Utility Name</u>	<u>Filing Period</u>
A - B	No later than September 15, 1987
C - E	No later than September 30, 1987
F - L	No later than October 15, 1987
M - N	No later than October 31, 1987
O - S	No later than November 15, 1987
T - Z	No later than November 30, 1987

(g) Refunds.

A utility filing under this procedure must refund to its customers the difference between the rates unadjusted for the tax change and the new rate that reflects the tax adjustment. These refunds will be made without interest.

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(h) Waiver of filing fees.

Any filing under this section may be filed without the filing fee required by § 35.0 of this part.

PART 389 - OMB CONTROL NUMBERS FOR COMMISSION INFORMATION
COLLECTION REQUIREMENTS

4. The authority citation for Part 389 continues to read as follows:

Authority: Paperwork Reduction Act of 1980 (44 U.S.C. 3501-3520) (1982).

5. The Table of OMB Control Numbers in § 389.101(b) is amended by inserting "35.27" in numerical order in the Section column and "0096" in the corresponding position in the OMB Control Number column.

Appendix A
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NOTE: This Appendix will not appear in the Code of Federal Regulations

Appendix A

1. Arthur Young
2. Public Service Company of Oklahoma
3. Cities and Villages of Algoma, et al.
4. American Electric Power Service Corporation
5. Air Transport Association of America
6. Borough of Madison, New Jersey
7. Cincinnati Gas & Electric Company
8. Public Service Company of New Mexico
9. Illinois Power Company
10. Philadelphia Electric Company
11. Consumers Power Company
12. Missouri Public Service Commission
13. Arkansas Public Service Commission
14. Utah Power & Light Company
15. Allegheny Electric Cooperative, Inc.
16. Mississippi Power Company
17. New England Power Company
18. Union Electric Company
19. American Public Power Association
20. Wholesale Distribution Customers
21. Public Systems
22. Niagara Mohawk Power Corporation
23. Iowa Power & Light Company
24. Department of Water Resources of the State of California
25. Kentucky Utilities Company
26. Pacific Gas & Electric Company
27. Central Illinois Public Service Company
28. Carolina Power & Light Company
29. Pennsylvania Power & Light Company
30. Saffer Utility Consultants, Inc.
31. Detroit Edison Company
32. Southwestern Electric Power Company
33. Florida Power & Light Company
34. Idaho Power Company
35. Robert Abrams, Attorney General of New York
36. Public Service Electric & Gas Company
37. Electric Utilities
38. Golden Spread Electric Cooperative, Inc., et al.
39. Central Vermont Public Service Corporation
40. Coast Electric Power Association, et al.
41. Colorado Public Utilities Commission
42. Deloitte, Haskins & Sells
43. Edison Electric Institute
44. Public Service Company of Colorado
45. Arthur Andersen & Company
46. Arizona Public Service Company
47. Iowa Public Service Company
48. Indiana Utility Consumer Counselor
49. Otter Tail Power Company
50. Commonwealth Edison Company
51. Sierra Pacific Power Company
52. Southern California Edison Company