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August 12, 2022

***Via Electronic Mail Only***

Daniel Goldner, Chair  
New Hampshire Public Utilities Commission  
21 South Fruit Street, Suite 10  
Concord, New Hampshire 03301-2429

**Re: Docket No. DG 22-028; Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty  
Petition for Approval of Step Adjustment Filing  
Liberty's Responses to the State of New Hampshire Public Utilities Commission's  
Record Requests – Set 1**

Dear Chair Goldner:

On behalf of Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty, attached please find the Company's responses to the Commission's Set 1 record requests in Docket No. DG 22-028.

Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read 'M. Sheehan'.

Michael J. Sheehan

**Attachments**

Cc: Service List

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

DG 22-028

Petition for Approval of Step Adjustment Filing

NHPUC Record Requests - Set 1

Date Request Received: 8/8/22  
Request No. RR 1-1

Date of Response: 8/12/22  
Respondent: Paul Normand  
Erica Menard

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**REQUEST:**

Reference: McNamara/Menard testimony, Bates pages 007-008. Please provide Schedule A (Bates pages 068-069), Schedule B (Bates pages 073-074), and Attachment CAM/ELM-2 (Bates page 080) for each of the following scenarios. (Please provide all schedules in live Excel format.)

- a. Using a cost of removal (COR) of 7.5% instead of 10% (a reduction of 25% of COR expenses compared to the current level).
- b. Using a COR of 4.74% instead of 10% (a reduction of 52.6% of COR expenses compared to the current level).

**RESPONSE:**

Attachment RR 1-1.A EnergyNorth COR Evaluation.xlsx details the COR levels and related percent of additions for all three COR scenarios requested (10%, 7.5%, 4.74%) since the Company's last depreciation study based on the calendar year 2016. Please note that the 10% COR rate was only applied to certain portions of additions, which results in a much lower level when considering the total additions in these two plant accounts (MAINS 376 and SERVICES 380). In reviewing the two additional levels of 7.5 and 4.74 percent COR, the analysis shows a lower level of COR as compared to the same total plant additions.

- a. Using this information, the originally filed Schedule A, provided in the live Excel file Attachment RR 1-1.B Energy North Natural Gas Co. 14 COL @12-31-21 (10% COR).xlsx for reference, has been recalculated for the 7.5% COR scenario. The reserve imbalance for total depreciable plant from the as filed Schedule A of \$10,918,303 is reduced to \$8,084,813 as shown in Col. 13 in the live Excel file Attachment RR 1-1.C Energy North Natural Gas Co. 14 COL @12-31-21 (7.5%COR).xlsx.
- b. Using this information, the originally filed Schedule A has been recalculated for the 4.74% COR scenario. The reserve imbalance for total depreciable plant from the filed \$10,918,303 is reduced to \$4,956,639 as shown in Col. 13 in the live Excel file

Attachment RR 1-1.D Energy North Natural Gas Co. 14 COL @12-31-21  
(4.74%COR).xlsx.

Note that Schedule B remains unchanged from the filed results as this is a whole life depreciation analysis that has no impact on Schedule B results. In addition, the recommended first step in reducing the COR to 7.5% considered the need for two additional years to establish a more robust average going forward. Also, a major factor in these estimates is that COR is essentially labor-related and with the recent large increase in inflation, the Company would expect that this would have an impact on these results.

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

DG 22-028

Petition for Approval of Step Adjustment Filing

NHPUC Record Requests - Set 1

Date Request Received: 8/8/22  
Request No. RR 1-2

Date of Response: 8/12/22  
Respondent: Paul Normand  
Erica Menard

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**REQUEST:**

Reference: Record Request 1 above.

- a. Schedule A. Please compare the reserve variances among the three COR scenarios (10%, 7.5%, and 4.74%).
- b. Schedule B. Please compare the differences in the annual accruals (column 10) applying a COR of 7.5% and a COR of 4.74%.
- c. Attachment CAM/ELM-2. Please compare the Total Annual Revenue Requirement among the three COR scenarios (10%, 7.5%, and 4.74%).

**RESPONSE:**

- a. Please see the response to RR 1-1, parts a and b.
- b. Schedule B remains unchanged from the filed results as this is a whole life depreciation analysis that has no impact on Schedule B results.
- c. Under the as-filed scenario of 10% COR, the total annual revenue requirement after the Keene Phase I adjustment is \$3,409,119. To perform the requested analysis, the Company calculated an illustrative capital addition amount for each scenario to demonstrate the directional impact on the revenue requirement of increasing the level of additions included in the step adjustment as a result of lowering the cost of removal. Under the 7.5% COR scenario, the distribution mains and services capital spending was adjusted to reflect less cost of removal and higher plant additions resulting in an adjusted annual revenue requirement of \$3,412,715. Under the 4.74% COR scenario, the distribution mains and services capital spending was adjusted to reflect less cost of removal and higher plant additions resulting in an adjusted annual revenue requirement of \$3,416,686. In all scenarios, the revenue requirement is higher than the \$3.2 million cap and would not impact the step adjustment amount. Please see Attachment RR 1-2.xlsx for the revenue requirement under each scenario.

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

DG 22-028

Petition for Approval of Step Adjustment Filing

NHPUC Record Requests - Set 1

Date Request Received: 8/8/22  
Request No. RR 1-3

Date of Response: 8/12/22  
Respondent: Erica Menard

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**REQUEST:**

Please provide a similar analysis for the second step adjustment comparing the rate base on January 1, 2021, to your estimate of the unconstrained rate base on January 1, 2022. Recalculate the rate base to be used for the second step increase by taking into account the level of depreciation that occurred in 2021.

**RESPONSE:**

The Company appreciates the follow-up request and interprets the question to be asking the Company to calculate the Step Adjustment as a one-year rate-base update, rather than following the calculation that the parties agreed upon in the DG 20-105 Settlement Agreement, which calculation the Commission approved in Order No. 26,505 (July 30, 2021).

Specifically, the question asks the Company to compare rate base on January 1, 2021, to rate base on January 1, 2022, updating the rate base for elements including depreciation.

For explanation purposes, it is important to first note that the Company is proposing recovery of the fixed amount of \$3.2 million before any adjustments to depreciation expense, as provided by Section 5(b)(i) of the Settlement Agreement. The provisions of the Settlement Agreement governing the Step Adjustments do not call for the Company to update or reset rate base as part of the Second Step Adjustment. Rate base encompasses all of the Company's plant-in-service and an update to rate base would reset all elements of rate base, as implied by the question.

The Settlement Agreement is not structured to compute the step in this manner. Instead, the agreement reached on the Step Adjustment was that: (1) the Company would calculate the revenue requirement exclusively on the non-growth capital additions completed in 2021 (including depreciation that occurred in 2021 on those additions); and (2) would recover that revenue requirement up to a cap of \$3.2 million. The actual revenue requirement on 2021 capital additions is \$3.4 million. Therefore, to reach consensus for the Settlement Agreement, the Settling Parties agreed to a computational method that *differed from a rate-base update*, but that also required the Company to give up approximately \$400,000 of the total revenue requirement computed for those additions.

This mutual agreement is explicitly captured in Section 5 of the Settlement Agreement, which outlines how the calculation of the step will be made, stating as follows (emphasis added):

- (b) Step 2 shall reflect an increase to account for *certain capital projects* placed in service during calendar year 2021 and shall be effective on August 1, 2022. *This second step adjustment reflects adjustments that have been made to the revenue requirement in order to reach settlement.* The second step shall be subject to the following conditions:
- i. The *revenue requirement* for this step *shall be capped at a \$3.2 million* increase to annual Distribution Revenue from the projects referenced in iii. below.
  - ii. The step shall be based on the projects closed to plant in 2021, and shall exclude new business/growth-related projects.
  - iii. The projects that may be included in the step are identified in the listing attached as Appendix 2 including Keene CNG Phase 1 costs as further described in Section 7.2. The Settling Parties agree that the Company may substitute other similar non-growth projects prior to the commencement of the review period if projects identified in Appendix 2 are not deployed.
  - iv. Local property taxes shall not be included in the calculation and will be recovered through the Property Tax Adjustment Mechanism in Section 6 of the Settlement Agreement. State utility property taxes for all projects listed in Appendix 1, calculated using the statutory tax rate in RSA 83-F:2, shall be included in the step adjustment calculation, shall count toward the cap, and shall be given first priority of recovery.
  - v. The step adjustment shall include adjustments resulting from the updated depreciation study as provided in Section 3.2 of the Settlement Agreement.

Thus, the Settlement Agreement captures the following points:

- Section 5.1(b) states that the Step 2 increase shall account for “certain capital projects” placed in service in 2021.
- Section 5.1(b) states that the “second step adjustment reflects adjustments that have been made to the revenue requirement in order to reach settlement.”
- Sections 5.1(b) and 5.1(b)(i) establish that the step increase is based on the “revenue requirement” for “certain capital projects,” capped at \$3.2 million. There is no reference to any type of rate-base update or similar computation.

Accordingly, the Settlement Agreement does not contemplate or provide for a rate-base update. *See* Appendix 1 to the Settlement Agreement, presenting the actual calculation of the Second Step Adjustment following the steps described above (rather than being executed through a rate-base update) (Exhibit 49 at Bates 031).

However, if calculated as a rate-base update, as suggested by the question, the computation would be as follows:

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty				
Distribution Plant				
CY 2021				
Line	Description	(A)	(B)	
		Year Beginning 1/1/2021	Year Beginning 1/1/2022	
		(A)	(B)	
Reference				
1	Total Utility Plant in Service	\$ 690,099,380	\$ 732,369,591	Revised F-16 Annual Report Page 17 Line 8
2	Accumulated Provision for Depreciation	\$ 213,310,740	\$ 230,310,206	Revised F-16 Annual Report Page 17 Line 14
3	Net Utility Plant	<u>\$ 476,788,640</u>	<u>\$ 502,059,385</u>	Line 1 - Line 2
4	Gross Distribution Plant Change (year over year)		<u>\$ 42,270,211</u>	Line 1 Col. (B) - Line 1 Col. (A)
5	Net Distribution Plant Change (year over year)		<u>\$ 25,270,745</u>	Line 3 Col. (B) - Line 3 Col. (A)
6	Plant in Service (growth related)	\$12,623,219	\$5,612,346	Company calculation
7	Depreciation (growth related)	325,472	156,122	Company calculation
8	Net Utility Plant (growth related)	<u>\$ 12,297,748</u>	<u>\$ 5,456,224</u>	Line 6 - Line 7
9	Total Utility Plant in Service (excluding growth)	\$ 677,476,161	\$ 726,757,245	Line 1 - Line 6
10	Accumulated Provision for Depreciation (excluding growth)	\$ 212,985,268	\$ 230,466,328	Line 2 - Line 7
11	Net Utility Plant	<u>\$ 464,490,892</u>	<u>\$ 496,290,917</u>	Line 9 - Line 10
12	Gross Distribution Plant Change (year over year) (excluding growth)		<u>\$ 49,281,085</u>	Line 9 Col. (B) - Line 9 Col. (A)
13	Net Distribution Plant Change (year over year) (excluding growth)		<u>\$ 31,800,025</u>	Line 11 Col. (B) - Line 11 Col. (A)

Lastly, it should be noted that doing the calculation this way would result in a step of \$3,538,213, capped at the settled amount of \$3.2 million, rather than the actual revenue requirement associated with the 2021 non-growth capital additions of \$3.4 million, or the settled amount of \$3.2 million.

**Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty**  
**Step 2 Adjustment List of Projects**

<u>Line</u>	<u>Project Number</u>	<u>Project Name</u>	<u>Priority</u>	<u>@ 10% COR</u>		<u>FERC</u>
				<u>In service \$\$</u>	<u>In service Date</u>	
1	8840-2011	Main Replacement LPP-Restoration	2. Mandated	\$ 2,045,660.95	various	367
2	8840-2024	Nashua Paving	5. Discretionary	\$ 531,718.59	various	367
3	8840-2102	Meter Protection Program	2. Mandated	\$ 484,377.56	12/31/2021	381
4	8840-2103	Cathodic Protection Program	2. Mandated	\$ 511,290.52	12/31/2021	376
5	8840-2105	Replacement Services Random	2. Mandated	\$ 605,038.33	various	380
6	8840-2110	Leak Repairs	2. Mandated	\$ 1,325,263.84	12/31/21	367
7	8840-2111	Main Replacement LPP	2. Mandated	\$ 8,128,527.75	various	367
8	8840-2113	Main Replacement Fitting LPP	5. Discretionary	\$ 560,974.62	12/31/21	367
9	8840-2114	K Meter Replacement Program	5. Discretionary	\$ 380,281.58	12/31/21	381
10	8840-2115	Aldyl-A Replacement Program	5. Discretionary	\$ 110,184.07	10/11/21	367
11	8840-2116	Main Replacement Reactive	5. Discretionary	\$ 350,593.36	various	367
12	8840-2118	Purchase Misc Capital Equipment & Tools	1. Safety	\$ 247,678.76	12/31/2021	394
13	8840-2123	Main Replacement City/State Construction	2. Mandated	\$ 7,864,635.64	various	367
14	8840-2125	Service Replacement Fitting City/State Construction	2. Mandated	\$ 549,782.02	12/31/21	367
15	8840-2131	Gas System Planning & Reliability	5. Discretionary	\$ 959,389.01	various	367
16	8840-2138	IT	5. Discretionary	\$ 351,408.12	12/31/2021	303
17	8840-2190	Transportation	5. Discretionary	\$ 970,392.57	12/31/2021	392
18	8840-2191	Meters	2. Mandated	\$ 1,541,057.32	various	381
19	8843-1819	Keene Expansion CNG Phase I Expansion*	5. Discretionary	\$ 659,613.20	2019	367
20				<b>\$ 28,177,867.81</b>		

21

22 \*Keene Phase I CNG expansion costs are recovered according to a risk sharing mechanism.

23 The \$660K includes investment made in 2017-2019 related to installation of the temporary CNG facility, but deferred for recovery  
 24 purposes until the second step adjustment.



**Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty  
Step 2 Adjustment - Revenue Requirement @ 10% COR**

Line	Description	IT	Transmission Mains	Distribution Mains	Services	Meters	Transportation	GEN-Tools-Shop- Garage Equip	Total
	<i>FERC Account</i>	<i>303</i>	<i>367</i>	<i>376</i>	<i>380</i>	<i>381</i>	<i>392</i>	<i>394</i>	
1	Capital Spending	\$ 351,408	\$ 23,086,343	\$ 511,291	\$ 605,038	\$ 2,405,716	\$ 970,393	\$ 247,679	\$ 28,177,868
2									
3	<u>Deferred Tax Calculation</u>								
4	Tax Method	MACRS20	MACRS20	MACRS20	MACRS20	MACRS20	MACRS20	MACRS20	
5	Tax Depreciation Rate	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	5.26%	
6									
7	Bonus Depreciation @ 0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8									
9	Tax Basis	\$ 351,408	\$ 23,086,343	\$ 511,291	\$ 605,038	\$ 2,405,716	\$ 970,393	\$ 247,679	\$ 28,177,868
10	MACRS Depreciation	\$ 13,178	\$ 865,738	\$ 19,173	\$ 22,689	\$ 90,214	\$ 36,390	\$ 13,028	\$ 1,060,410
11									
12	Tax Depreciation - Federal	\$ 13,178	\$ 865,738	\$ 19,173	\$ 22,689	\$ 90,214	\$ 36,390	\$ 13,028	\$ 1,060,410
13	Tax Depreciation - State	\$ 13,178	\$ 865,738	\$ 19,173	\$ 22,689	\$ 90,214	\$ 36,390	\$ 13,028	\$ 1,060,410
14									
15	Book Depreciation Rate	20.00%	1.92%	2.00%	2.80%	3.13%	20.00%	20.00%	
16	Book Depreciation	\$ 70,282	\$ 443,258	\$ 10,226	\$ 16,941	\$ 75,299	\$ 194,079	\$ 49,536	\$ 859,619
17									
18	Tax over (under) Book - Federal	\$ (57,104)	\$ 422,480	\$ 8,948	\$ 5,748	\$ 14,915	\$ (157,689)	\$ (36,508)	\$ 200,791
19	Tax over (under) Book - State	(57,104)	422,480	8,948	5,748	14,915	(157,689)	(36,508)	200,791
20	Deferred Taxes - Federal @ 21.00%	(11,992)	88,721	1,879	1,207	3,132	(33,115)	(7,667)	42,166
21	Deferred Taxes - State @ 7.60%	(4,340)	32,108	680	437	1,134	(11,984)	(2,775)	15,260
22	Deferred Tax Balance @ 0.00%	\$ (16,332)	\$ 120,829	\$ 2,559	\$ 1,644	\$ 4,266	\$ (45,099)	\$ (10,441)	\$ 57,426
23									
24	<u>Rate Base Calculation</u>								
25	Plant in Service	\$ 351,408	\$ 23,086,343	\$ 511,291	\$ 605,038	\$ 2,405,716	\$ 970,393	\$ 247,679	\$ 28,177,868
26	Accumulated Depreciation	(70,282)	(443,258)	(10,226)	(16,941)	(75,299)	(194,079)	(49,536)	(859,619)
27	Deferred Tax Balance	16,332	(120,829)	(2,559)	(1,644)	(4,266)	45,099	10,441	(57,426)
28	<b>Rate Base</b>	<b>\$ 297,458</b>	<b>\$ 22,522,256</b>	<b>\$ 498,506</b>	<b>\$ 586,453</b>	<b>\$ 2,326,152</b>	<b>\$ 821,413</b>	<b>\$ 208,584</b>	<b>\$ 27,260,822</b>
29									
30	<u>Revenue Requirement Calculation</u>								
31	Return on Rate Base @ 8.75%	\$ 26,029	\$ 1,970,810	\$ 43,622	\$ 51,318	\$ 203,550	\$ 71,878	\$ 18,252	\$ 2,385,458
32	Depreciation Expense	70,282	443,258	10,226	16,941	75,299	194,079	49,536	859,619
33	Property Tax @ \$6.60 per \$1000	2,319	152,370	3,375	3,993	15,878	6,405	1,635	185,974
34	<b>Annual Revenue Requirement</b>	<b>\$ 98,630</b>	<b>\$ 2,566,438</b>	<b>\$ 57,222</b>	<b>\$ 72,252</b>	<b>\$ 294,727</b>	<b>\$ 272,361</b>	<b>\$ 69,423</b>	<b>\$ 3,431,052</b>

Keene CNG Phase I Expansion Revenue Requirement Adjustment (per risk sharing calculation)

(21,933)

**Total Annual Revenue Requirement**

**\$ 3,409,119**

**Capped at \$3,200,000**

Rate of Return Calculation*	Capital Structure	Cost of Capital	Weighted Cost of Capital	Tax Rate	Pre-Tax WACC
Equity	52.0%	9.30%	4.84%	27.004%	6.63%
Debt	48.0%	4.42%	2.12%		2.12%
	100.0%	13.72%	6.96%		8.75%

\*As approved in the Settlement Agreement in Docket No. DG 20-105 with exception of the effective tax rate

**Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty  
Step 2 Adjustment - Illustrative Revenue Requirement (@ 7.5% COR)**

Line	Description	IT	Transmission Mains	Distribution Mains	Services	Meters	Transportation	GEN-Tools-Shop- Garage Equip	Total
	<i>FERC Account</i>	<i>303</i>	<i>367</i>	<i>376</i>	<i>380</i>	<i>381</i>	<i>392</i>	<i>394</i>	
1	Capital Spending	\$ 361,169	\$ 23,727,630	\$ 525,493	\$ 621,845	\$ 2,472,542	\$ 997,348	\$ 254,559	\$ 28,960,586
2									
3	<u>Deferred Tax Calculation</u>								
4	Tax Method	MACRS20	MACRS20	MACRS20	MACRS20	MACRS20	MACRS20	MACRS20	
5	Tax Depreciation Rate	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	5.26%	
6									
7	Bonus Depreciation @ 0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8									
9	Tax Basis	\$ 361,169	\$ 23,727,630	\$ 525,493	\$ 621,845	\$ 2,472,542	\$ 997,348	\$ 254,559	\$ 28,960,586
10	MACRS Depreciation	\$ 13,544	\$ 889,786	\$ 19,706	\$ 23,319	\$ 92,720	\$ 37,401	\$ 13,390	\$ 1,089,866
11									
12	Tax Depreciation - Federal	\$ 13,544	\$ 889,786	\$ 19,706	\$ 23,319	\$ 92,720	\$ 37,401	\$ 13,390	\$ 1,089,866
13	Tax Depreciation - State	\$ 13,544	\$ 889,786	\$ 19,706	\$ 23,319	\$ 92,720	\$ 37,401	\$ 13,390	\$ 1,089,866
14									
15	Book Depreciation Rate	20.00%	1.92%	2.00%	2.80%	3.13%	20.00%	20.00%	
16	Book Depreciation	\$ 72,234	\$ 455,571	\$ 10,510	\$ 17,412	\$ 77,391	\$ 199,470	\$ 50,912	\$ 883,498
17									
18	Tax over (under) Book - Federal	\$ (58,690)	\$ 434,216	\$ 9,196	\$ 5,908	\$ 15,330	\$ (162,069)	\$ (37,522)	\$ 206,368
19	Tax over (under) Book - State	(58,690)	434,216	9,196	5,908	15,330	(162,069)	(37,522)	206,368
20	Deferred Taxes - Federal @ 21.00%	(12,325)	91,185	1,931	1,241	3,219	(34,034)	(7,880)	43,337
21	Deferred Taxes - State @ 7.60%	(4,460)	33,000	699	449	1,165	(12,317)	(2,852)	15,684
22	Deferred Tax Balance @ 0.00%	\$ (16,785)	\$ 124,186	\$ 2,630	\$ 1,690	\$ 4,384	\$ (46,352)	\$ (10,731)	\$ 59,021
23									
24	<u>Rate Base Calculation</u>								
25	Plant in Service	\$ 361,169	\$ 23,727,630	\$ 525,493	\$ 621,845	\$ 2,472,542	\$ 997,348	\$ 254,559	\$ 28,960,586
26	Accumulated Depreciation	(72,234)	(455,571)	(10,510)	(17,412)	(77,391)	(199,470)	(50,912)	(883,498)
27	Deferred Tax Balance	16,785	(124,186)	(2,630)	(1,690)	(4,384)	46,352	10,731	(59,021)
28	<b>Rate Base</b>	<b>\$ 305,721</b>	<b>\$ 23,147,874</b>	<b>\$ 512,353</b>	<b>\$ 602,744</b>	<b>\$ 2,390,767</b>	<b>\$ 844,230</b>	<b>\$ 214,378</b>	<b>\$ 28,018,067</b>
29									
30	<u>Revenue Requirement Calculation</u>								
31	Return on Rate Base @ 8.75%	\$ 26,752	\$ 2,025,555	\$ 44,833	\$ 52,743	\$ 209,204	\$ 73,874	\$ 18,759	\$ 2,451,721
32	Depreciation Expense	72,234	455,571	10,510	17,412	77,391	199,470	50,912	883,498
33	Property Tax @ \$6.60 per \$1000	2,384	156,602	3,468	4,104	16,319	6,582	1,680	191,140
34	<b>Annual Revenue Requirement</b>	<b>\$ 101,370</b>	<b>\$ 2,637,728</b>	<b>\$ 58,812</b>	<b>\$ 74,259</b>	<b>\$ 302,913</b>	<b>\$ 279,926</b>	<b>\$ 71,351</b>	<b>\$ 3,526,359</b>

Keene CNG Phase I Expansion Revenue Requirement Adjustment (per risk sharing calculation)

(21,933)

**Total Annual Revenue Requirement**

**\$ 3,504,426**

**Capped at \$3,200,000**

Rate of Return Calculation*	Capital Structure	Cost of Capital	Weighted Cost of Capital	Tax Rate	Pre-Tax WACC
Equity	52.0%	9.30%	4.84%	27.004%	6.63%
Debt	48.0%	4.42%	2.12%		2.12%
	100.0%	13.72%	6.96%		8.75%

\*As approved in the Settlement Agreement in Docket No. DG 20-105 with exception of the effective tax rate

**Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty  
Step 2 Adjustment - Illustrative Revenue Requirement (@ 4.74% COR)**

Line	Description	IT	Transmission Mains	Distribution Mains	Services	Meters	Transportation	GEN-Tools-Shop- Garage Equip	Total
	<i>FERC Account</i>	<i>303</i>	<i>367</i>	<i>376</i>	<i>380</i>	<i>381</i>	<i>392</i>	<i>394</i>	
1	Capital Spending	\$ 371,946	\$ 24,435,612	\$ 541,173	\$ 640,399	\$ 2,546,317	\$ 1,027,107	\$ 262,154	\$ 29,824,708
2									
3	<u>Deferred Tax Calculation</u>								
4	Tax Method	MACRS20	MACRS20	MACRS20	MACRS20	MACRS20	MACRS20	MACRS20	
5	Tax Depreciation Rate	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	5.26%	
6									
7	Bonus Depreciation @ 0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8									
9	Tax Basis	\$ 371,946	\$ 24,435,612	\$ 541,173	\$ 640,399	\$ 2,546,317	\$ 1,027,107	\$ 262,154	\$ 29,824,708
10	MACRS Depreciation	\$ 13,948	\$ 916,335	\$ 20,294	\$ 24,015	\$ 95,487	\$ 38,516	\$ 13,789	\$ 1,122,385
11									
12	Tax Depreciation - Federal	\$ 13,948	\$ 916,335	\$ 20,294	\$ 24,015	\$ 95,487	\$ 38,516	\$ 13,789	\$ 1,122,385
13	Tax Depreciation - State	\$ 13,948	\$ 916,335	\$ 20,294	\$ 24,015	\$ 95,487	\$ 38,516	\$ 13,789	\$ 1,122,385
14									
15	Book Depreciation Rate	20.00%	1.92%	2.00%	2.80%	3.13%	20.00%	20.00%	
16	Book Depreciation	\$ 74,389	\$ 469,164	\$ 10,823	\$ 17,931	\$ 79,700	\$ 205,421	\$ 52,431	\$ 909,859
17									
18	Tax over (under) Book - Federal	\$ (60,441)	\$ 447,172	\$ 9,471	\$ 6,084	\$ 15,787	\$ (166,905)	\$ (38,642)	\$ 212,526
19	Tax over (under) Book - State	(60,441)	447,172	9,471	6,084	15,787	(166,905)	(38,642)	212,526
20	Deferred Taxes - Federal @ 21.00%	(12,693)	93,906	1,989	1,278	3,315	(35,050)	(8,115)	44,630
21	Deferred Taxes - State @ 7.60%	(4,594)	33,985	720	462	1,200	(12,685)	(2,937)	16,152
22	Deferred Tax Balance @ 0.00%	\$ (17,286)	\$ 127,891	\$ 2,709	\$ 1,740	\$ 4,515	\$ (47,735)	\$ (11,051)	\$ 60,782
23									
24	<u>Rate Base Calculation</u>								
25	Plant in Service	\$ 371,946	\$ 24,435,612	\$ 541,173	\$ 640,399	\$ 2,546,317	\$ 1,027,107	\$ 262,154	\$ 29,824,708
26	Accumulated Depreciation	(74,389)	(469,164)	(10,823)	(17,931)	(79,700)	(205,421)	(52,431)	(909,859)
27	Deferred Tax Balance	17,286	(127,891)	(2,709)	(1,740)	(4,515)	47,735	11,051	(60,782)
28	<b>Rate Base</b>	<b>\$ 314,843</b>	<b>\$ 23,838,557</b>	<b>\$ 527,641</b>	<b>\$ 620,728</b>	<b>\$ 2,462,102</b>	<b>\$ 869,420</b>	<b>\$ 220,775</b>	<b>\$ 28,854,066</b>
29									
30	<u>Revenue Requirement Calculation</u>								
31	Return on Rate Base @ 8.75%	\$ 27,550	\$ 2,085,993	\$ 46,171	\$ 54,317	\$ 215,446	\$ 76,079	\$ 19,319	\$ 2,524,875
32	Depreciation Expense	74,389	469,164	10,823	17,931	79,700	205,421	52,431	909,859
33	Property Tax @ \$6.60 per \$1000	2,455	161,275	3,572	4,227	16,806	6,779	1,730	196,843
34	<b>Annual Revenue Requirement</b>	<b>\$ 104,394</b>	<b>\$ 2,716,432</b>	<b>\$ 60,566</b>	<b>\$ 76,475</b>	<b>\$ 311,952</b>	<b>\$ 288,279</b>	<b>\$ 73,480</b>	<b>\$ 3,631,578</b>
35									
36	<b>Keene CNG Phase I Expansion Revenue Requirement Adjustment (per risk sharing calculation)</b>								(21,933)
37									
38	<b>Total Annual Revenue Requirement</b>								<b>\$ 3,609,645</b>
39									
40									
41									<b>Capped at \$3,200,000</b>

Rate of Return Calculation*	Capital Structure	Cost of Capital	Weighted Cost of Capital	Tax Rate	Pre-Tax WACC
Equity	52.0%	9.30%	4.84%	27.004%	6.63%
Debt	48.0%	4.42%	2.12%		2.12%
	100.0%	13.72%	6.96%		8.75%

\*As approved in the Settlement Agreement in Docket No. DG 20-105 with exception of the effective tax rate

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

Line No.

<b>ACCOUNT 376 (FERC) / 356 (PUC)</b>				
	<u>YEAR</u>	<u>10% COR \$</u>	<u>ADDITIONS</u>	<u>ACTUAL % OF ADDITIONS</u>
1	2017	\$1,844,577	\$24,208,292	7.62%
2				
3	2018	\$2,120,343	\$26,413,138	8.03%
4				
5	2019	\$2,668,831	\$31,386,745	8.50%
6				
7	2020	\$1,755,461	\$55,196,416	3.18%
8				
9	2021	\$1,596,018	\$24,086,483	6.63%
10				
11	<b>TOTAL</b>	<b>\$9,985,230</b>	<b>\$161,291,074</b>	<b>6.19%</b>
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## LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. d/b/a LIBERTY

Line No.

ACCOUNT 376 (FERC) / 356 (PUC)				
	<u>YEAR</u>	<u>7.5% COR \$</u>	<u>ADDITIONS</u>	<u>ACTUAL % OF ADDITIONS</u>
1	2017	\$1,383,433	\$24,208,292	5.71%
2				
3	2018	\$1,590,257	\$26,413,138	6.02%
4	2019	\$2,001,623	\$31,386,745	6.38%
5				
6	2020	\$1,316,596	\$55,196,416	2.39%
7				
8	2021	\$1,197,014	\$24,086,483	4.97%
9				
10	<b>TOTAL</b>	<b>\$7,488,923</b>	<b>\$161,291,074</b>	<b>4.64%</b>
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## LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. d/b/a LIBERTY

Line No.

<b>ACCOUNT 376 (FERC) / 356 (PUC)</b>				
	<u>YEAR</u>	<u>4.74% COR \$</u>	<u>ADDITIONS</u>	<u>ACTUAL % OF ADDITIONS</u>
1	2017	\$874,329	\$24,208,292	3.61%
2				
3	2018	\$1,005,043	\$26,413,138	3.81%
4				
5	2019	\$1,265,026	\$31,386,745	4.03%
6				
7	2020	\$832,089	\$55,196,416	1.51%
8				
9	2021	\$756,513	\$24,086,483	3.14%
10				
11	<b>TOTAL</b>	<b>\$4,732,999</b>	<b>\$161,291,074</b>	<b>2.93%</b>
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**LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY  
SCHEDULE OF DEPRECIATION ACCRUAL RATES @12/31/2021  
WHOLE LIFE SCHEDULE WITH RESERVE VARIANCE**

**SCHEDULE A**

FERC ACCOUNT NUMBER	DESCRIPTION	PLANT BALANCE @12/31/2021	DISP TYPE	ASL	ACCRUAL RATE W/O NET SALV.	ACCRUAL WITHOUT NET SALV.	NET SALV. %	SALV. FACTOR	ACCRUAL RATE W/ NET SALV.	ACCRUAL WITH NET SALV.	THEO. RSV. WITHOUT NET SALV.	THEO. RSV. WITH NET SALV.	BOOK RSV. @12/31/2021	RESERVE VARIANCE	COR RATE %
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
<b>PRODUCTION PLANT</b>															
305.00	STRUCTURES AND IMPROVEMENTS	852,167	R 1.0	35.0	2.86	24,372	0	1.00	2.86	24,372	415,746	415,746	135,156	280,590	0.00
319.00	GAS MIXING EQUIPMENT	691,821	R 1.0	20.0	5.00	34,591	0	1.00	5.00	34,591	209,352	209,352	301,851	-92,499	0.00
320.00	OTHER EQUIPMENT-LNG	461,363	R 1.0	35.0	2.86	13,195	0	1.00	2.86	13,195	76,738	76,738	-13,334	90,072	0.00
320.10	OTHER EQUIPMENT	<u>3,426,407</u>	R 1.0	35.0	2.86	<u>97,995</u>	0	1.00	2.86	<u>97,995</u>	<u>2,140,520</u>	<u>2,140,520</u>	<u>404,978</u>	<u>1,735,542</u>	0.00
	<b>TOTAL DEPREC. PRODUCTION PLANT</b>	5,431,758		31.9	3.13	170,153			3.13	170,153	2,842,356	2,842,356	828,651	2,013,705	
<b>STORAGE PLANT</b>															
361.00	STRUCTURES AND IMPROVEMENTS-LNG	96,980	R 1.0	35.0	2.86	2,774	0	1.00	2.86	2,774	23,372	23,372	24,172	-800	0.00
363.50	OTHER EQUIPMENT-LNG	<u>7,646</u>	R 1.0	35.0	2.86	<u>219</u>	0	1.00	2.86	<u>219</u>	<u>2,513</u>	<u>2,513</u>	<u>2,553</u>	<u>-40</u>	0.00
	<b>TOTAL DEPREC. STORAGE PLANT</b>	104,626		35.0	2.86	2,993			2.86	2,993	25,885	25,885	26,725	-840	
<b>LNG GAS TERMINATING AND PROCESSING PLANT</b>															
364.20	STRUCTURES AND IMPROVEMENTS-LNG	952,003	R 1.0	35.0	2.86	27,227	0	1.00	2.86	27,227	218,338	218,338	474,687	-256,349	0.00
364.80	OTHER EQUIPMENT	<u>3,896,019</u>	R 1.0	35.0	2.86	<u>111,426</u>	0	1.00	2.86	<u>111,426</u>	<u>1,661,847</u>	<u>1,661,847</u>	<u>2,623,007</u>	<u>-961,160</u>	0.00
	<b>TOTAL DEPREC. LNG TERM. AND PROCESS. PLANT</b>	4,848,022		35.0	2.86	138,653			2.86	138,653	1,880,185	1,880,185	3,097,694	-1,217,509	
<b>TRANSMISSION PLANT</b>															
367.00	MAINS	11,710,542	R 3.0	60.0	1.67	195,566	-15	1.15	1.92	224,842	3,750,667	4,313,267	3,894,029	419,238	0.25
369.00	MEASURING AND REGULATING STATION EQUIP.	<u>138,182</u>	S 4.0	35.0	2.86	<u>3,952</u>	0	1.00	2.86	<u>3,952</u>	<u>69,417</u>	<u>69,417</u>	<u>-72,870</u>	<u>142,287</u>	0.00
	<b>TOTAL DEPREC. TRANSMISSION PLANT</b>	11,848,724		59.5	1.68	199,518			1.93	228,794	3,820,084	4,382,684	3,821,159	561,525	
<b>DISTRIBUTION PLANT</b>															
375.00	STRUCTURES AND IMPROVEMENTS	1,761,490	R 1.0	35.0	2.86	50,379	0	1.00	2.86	50,379	216,622	216,622	309,313	-92,691	0.00
376.00	MAINS	366,964,216	R 3.0	60.0	1.67	6,128,302	-15	1.15	1.92	7,045,713	73,034,778	83,989,995	68,131,515	15,858,480	0.25
377.00	COMPRESSOR STATION EQUIPMENT	2,246,186	R 1.0	35.0	2.86	64,241	0	1.00	2.86	64,241	256,266	256,266	321,205	-64,939	0.00
378.00	MEAS. AND REG. STATION EQUIPMENT-GENERAL	8,592,345	S 2.0	35.0	2.86	245,741	0	1.00	2.86	245,741	3,819,817	3,819,817	4,662,297	-842,480	0.00
379.00	MEAS. AND REG. STATION EQUIPMENT-CITY GATE	5,431,082	S 3.0	35.0	2.86	155,329	0	1.00	2.86	155,329	1,490,217	1,490,217	1,612,222	-122,005	0.00
380.00	SERVICES	198,967,012	R 4.0	50.0	2.00	3,979,340	-60	1.60	3.20	6,366,944	54,642,755	87,428,408	93,924,182	-6,495,774	1.20
381.00	METERS	19,992,831	S 3.0	30.0	3.33	665,761	0	1.00	3.33	665,761	6,124,130	6,124,130	4,661,801	1,462,329	0.00
381.10	METERS-INSTRUMENT	254,439	S 3.0	30.0	3.33	8,473	0	1.00	3.33	8,473	111,711	111,711	113,219	-1,508	0.00
381.20	METERS-ERTS	6,347,958	SQ	15.0	6.67	423,409	0	1.00	6.67	423,409	4,768,023	4,768,023	4,456,153	311,870	0.00
382.00	METER INSTALLATIONS	27,070,444	R 3.0	30.0	3.33	901,446	0	1.00	3.33	901,446	6,039,287	6,039,287	5,791,940	247,347	0.00
385.00	INDUSTRIAL MEASURING & REGULATING EQUIPMENT	53,375	S 6.0	19.0	5.26	2,808	0	1.00	5.26	2,808	15,451	15,451	7,819	7,632	0.00
387.00	OTHER EQUIPMENT	<u>2,487,707</u>	S 6.0	19.0	5.26	<u>130,853</u>	0	1.00	5.26	<u>130,853</u>	<u>1,306,073</u>	<u>1,306,073</u>	<u>1,355,277</u>	<u>-49,204</u>	0.00
	<b>TOTAL DEPREC. DISTRIBUTION PLANT</b>	640,169,085		50.2	1.99	12,756,082			2.51	16,061,097	151,825,130	195,566,000	185,346,943	10,219,057	
<b>GENERAL PLANT</b>															
390.00	STRUCTURES AND IMPROVEMENTS	25,864,673	R 3.0	40.0	2.50	646,617	0	1.00	2.50	646,617	5,188,262	5,188,262	6,287,342	-1,099,080	0.00
391.00	OFFICE FURNITURE AND EQUIP.	1,871,855	S 4.0	15.0	6.67	124,853	5	0.95	6.34	118,676	317,133	301,276	225,753	75,523	0.00
391.10	OFFICE FURNITURE AND EQUIP.-COMPUTERS	883,183	S 4.0	10.0	10.00	88,318	0	1.00	10.00	88,318	600,581	600,581	66,754	533,827	0.00
391.20	OFFICE FURNITURE AND EQUIP.-LAPTOP COMP.	878,732	S 4.0	5.0	20.00	175,746	0	1.00	20.00	175,746	777,138	777,138	866,695	-89,557	0.00
393.00	STORES EQUIPMENT	107,831	SQ	30.0	3.33	3,591	0	1.00	3.33	3,591	37,401	37,401	38,003	-602	0.00
394.00	TOOLS, SHOP & GARAGE EQUIPMENT	4,359,715	S 6.0	19.0	5.26	229,321	0	1.00	5.26	229,321	1,188,607	1,188,607	1,147,390	41,217	0.00
397.00	COMMUNICATION EQUIPMENT	941,816	SQ	10.0	10.00	94,182	0	1.00	10.00	94,182	556,907	556,907	652,209	-95,302	0.00
398.00	MISCELLANEOUS GENERAL EQUIPMENT	<u>869,377</u>	S 5.0	15.0	6.67	<u>57,987</u>	0	1.00	6.67	<u>57,987</u>	<u>298,865</u>	<u>298,865</u>	<u>322,526</u>	<u>-23,661</u>	0.00
	<b>TOTAL DEPREC. GENERAL PLANT</b>	35,777,182		25.2	3.97	1,420,615			3.95	1,414,438	8,964,894	8,949,037	9,606,672	-657,635	
	<b>TOTAL DEPREC. GAS PLANT</b>	698,179,397		47.6	2.10	14,688,014			2.58	18,016,128	169,358,534	213,646,147	202,727,844	10,918,303	
													Note: Col.13/Col. 11	5.11%	

**LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY  
SCHEDULE OF DEPRECIATION ACCRUAL RATES @12/31/2021  
WHOLE LIFE SCHEDULE WITH RESERVE VARIANCE**

**SCHEDULE A**

FERC ACCOUNT NUMBER	DESCRIPTION	PLANT BALANCE @12/31/2021	DISP TYPE	ASL	ACCRUAL RATE W/O NET SALV.	ACCRUAL WITHOUT NET SALV.	NET SALV. %	SALV. FACTOR	ACCRUAL RATE W/ NET SALV.	ACCRUAL WITH NET SALV.	THEO. RSV. WITHOUT NET SALV.	THEO. RSV. WITH NET SALV.	BOOK RSV. @12/31/2021	RESERVE VARIANCE	COR RATE %
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
<b>AMORTIZED PLANT</b>															
<b>CAPITALIZED SOFTWARE</b>															
303.10	CAPITALIZED SOFTWARE- 3 YEARS	2,332,280		3.0	33.33	777,349	0	1.00	33.33	777,349			1,019,860		0.00
303.20	CAPITALIZED SOFTWARE- 5 YEARS	12,961,962		5.0	20.00	2,592,392	0	1.00	20.00	2,592,392			13,365,176		0.00
303.40	CAPITALIZED SOFTWARE- 10 YEARS	3,893,722		10.0	10.00	389,372	0	1.00	10.00	389,372			3,173,692		0.00
303.50	CAPITALIZED SOFTWARE- 10 YEARS	779,858		10.0	10.00	77,986	0	1.00	10.00	77,986			537,439		0.00
303.60	CAPITALIZED SOFTWARE- 10 YEARS	<u>1,034,809</u>		10.0	10.00	<u>103,481</u>	0	1.00	10.00	<u>103,481</u>			<u>671,164</u>		0.00
	<b>TOTAL ACCOUNT 303</b>	21,002,631		5.3	18.76	3,940,580			18.76	3,940,580			18,767,331		
392	TRANSPORTATION EQUIPMENT	11,420,704		5.0	20.00	2,284,141	0	1.00	20.00	2,284,141			7,944,855		0.00
396	POWER OPERATED EQUIPMENT	<u>862,889</u>		5.0	20.00	<u>172,578</u>	0	1.00	20.00	<u>172,578</u>			<u>691,862</u>		0.00
	<b>TOTAL AMORTIZED PLANT</b>	33,286,224		5.2	19.22	6,397,299			19.22	6,397,299			27,404,048		
	<b>TOTAL DEPREC. &amp; AMORTIZED GAS PLANT</b>	731,465,621		34.7	2.88	21,085,313			3.34	24,413,427			230,131,892		
1050	PLANT HELD FOR FUTURE USE	852,305													
1210	OPI-LAND-RETAINED	13,665													
1211	OPI-STRUCTURES-RETAINED	133,284											133,284		
3020	FRANCHISES AND CONSENTS	250,950													
3040	LAND RIGHTS OWNED	97,504													
3641	LNG PROCSS LAND AND LAND RIGHTS	57,315													
3740	DISTR LAND & LAND RIGHTS	376,710													
3890	GNL LAND RIGHTS	121,489													
	DIFF. IN BOOK RSV VS. PUC ANNUAL REPORT												45,029		
	<b>TOTAL GAS PLANT IN SERVICE</b>	733,368,843											230,310,205		



LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY  
 SCHEDULE OF DEPRECIATION ACCRUAL RATES @12/31/2021  
 WHOLE LIFE SCHEDULE WITH RESERVE VARIANCE

7.5% COR ADJ.

SCHEDULE A

FERC ACCOUNT NUMBER	DESCRIPTION	PLANT BALANCE @12/31/2021	DISP TYPE	ASL	ACCRUAL RATE W/O NET SALV.	ACCRUAL WITHOUT NET SALV.	NET SALV. %	SALV. FACTOR	ACCRUAL RATE W/ NET SALV.	ACCRUAL WITH NET SALV.	THEO. RSV. WITHOUT NET SALV.	THEO. RSV. WITH NET SALV.	BOOK RSV. @12/31/2021	RESERVE VARIANCE	COR RATE %
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
<b>PRODUCTION PLANT</b>															
305.00	STRUCTURES AND IMPROVEMENTS	852,167	R 1.0	35.0	2.86	24,372	0	1.00	2.86	24,372	415,746	415,746	135,156	280,590	0.00
319.00	GAS MIXING EQUIPMENT	691,821	R 1.0	20.0	5.00	34,591	0	1.00	5.00	34,591	209,352	209,352	301,851	-92,499	0.00
320.00	OTHER EQUIPMENT-LNG	461,363	R 1.0	35.0	2.86	13,195	0	1.00	2.86	13,195	76,738	76,738	-13,334	90,072	0.00
320.10	OTHER EQUIPMENT	<u>3,426,407</u>	R 1.0	35.0	2.86	<u>97,995</u>	0	1.00	2.86	<u>97,995</u>	<u>2,140,520</u>	<u>2,140,520</u>	<u>404,978</u>	<u>1,735,542</u>	0.00
	<b>TOTAL DEPREC. PRODUCTION PLANT</b>	5,431,758		31.9	3.13	170,153			3.13	170,153	2,842,356	2,842,356	828,651	2,013,705	
<b>STORAGE PLANT</b>															
361.00	STRUCTURES AND IMPROVEMENTS-LNG	96,980	R 1.0	35.0	2.86	2,774	0	1.00	2.86	2,774	23,372	23,372	24,172	-800	0.00
363.50	OTHER EQUIPMENT-LNG	<u>7,646</u>	R 1.0	35.0	2.86	<u>219</u>	0	1.00	2.86	<u>219</u>	<u>2,513</u>	<u>2,513</u>	<u>2,553</u>	<u>-40</u>	0.00
	<b>TOTAL DEPREC. STORAGE PLANT</b>	104,626		35.0	2.86	2,993			2.86	2,993	25,885	25,885	26,725	-840	
<b>LNG GAS TERMINATING AND PROCESSING PLANT</b>															
364.20	STRUCTURES AND IMPROVEMENTS-LNG	952,003	R 1.0	35.0	2.86	27,227	0	1.00	2.86	27,227	218,338	218,338	474,687	-256,349	0.00
364.80	OTHER EQUIPMENT	<u>3,896,019</u>	R 1.0	35.0	2.86	<u>111,426</u>	0	1.00	2.86	<u>111,426</u>	<u>1,661,847</u>	<u>1,661,847</u>	<u>2,623,007</u>	<u>-961,160</u>	0.00
	<b>TOTAL DEPREC. LNG TERM. AND PROCESS. PLANT</b>	4,848,022		35.0	2.86	138,653			2.86	138,653	1,880,185	1,880,185	3,097,694	-1,217,509	
<b>TRANSMISSION PLANT</b>															
367.00	MAINS	11,710,542	R 3.0	60.0	1.67	195,566	-15	1.15	1.92	224,842	3,750,667	4,313,267	3,894,029	419,238	0.25
369.00	MEASURING AND REGULATING STATION EQUIP.	<u>138,182</u>	S 4.0	35.0	2.86	<u>3,952</u>	0	1.00	2.86	<u>3,952</u>	<u>69,417</u>	<u>69,417</u>	<u>-72,870</u>	<u>142,287</u>	0.00
	<b>TOTAL DEPREC. TRANSMISSION PLANT</b>	11,848,724		59.5	1.68	199,518			1.93	228,794	3,820,084	4,382,684	3,821,159	561,525	
<b>DISTRIBUTION PLANT</b>															
375.00	STRUCTURES AND IMPROVEMENTS	1,761,490	R 1.0	35.0	2.86	50,379	0	1.00	2.86	50,379	216,622	216,622	309,313	-92,691	0.00
376.00	MAINS	366,964,216	R 3.0	60.0	1.67	6,128,302	-15	1.15	1.92	7,045,713	73,034,778	83,989,995	70,627,822	13,362,173	0.25
377.00	COMPRESSOR STATION EQUIPMENT	2,246,186	R 1.0	35.0	2.86	64,241	0	1.00	2.86	64,241	256,266	256,266	321,205	-64,939	0.00
378.00	MEAS. AND REG. STATION EQUIPMENT-GENERAL	8,592,345	S 2.0	35.0	2.86	245,741	0	1.00	2.86	245,741	3,819,817	3,819,817	4,662,297	-842,480	0.00
379.00	MEAS. AND REG. STATION EQUIPMENT-CITY GATE	5,431,082	S 3.0	35.0	2.86	155,329	0	1.00	2.86	155,329	1,490,217	1,490,217	1,612,222	-122,005	0.00
380.00	SERVICES	198,967,012	R 4.0	50.0	2.00	3,979,340	-60	1.60	3.20	6,366,944	54,642,755	87,428,408	94,261,365	-6,832,957	1.20
381.00	METERS	19,992,831	S 3.0	30.0	3.33	665,761	0	1.00	3.33	665,761	6,124,130	6,124,130	4,661,801	1,462,329	0.00
381.10	METERS-INSTRUMENT	254,439	S 3.0	30.0	3.33	8,473	0	1.00	3.33	8,473	111,711	111,711	113,219	-1,508	0.00
381.20	METERS-ERTS	6,347,958	SQ	15.0	6.67	423,409	0	1.00	6.67	423,409	4,768,023	4,768,023	4,456,153	311,870	0.00
382.00	METER INSTALLATIONS	27,070,444	R 3.0	30.0	3.33	901,446	0	1.00	3.33	901,446	6,039,287	6,039,287	5,791,940	247,347	0.00
385.00	INDUSTRIAL MEASURING & REGULATING EQUIPMENT	53,375	S 6.0	19.0	5.26	2,808	0	1.00	5.26	2,808	15,451	15,451	7,819	7,632	0.00
387.00	OTHER EQUIPMENT	<u>2,487,707</u>	S 6.0	19.0	5.26	<u>130,853</u>	0	1.00	5.26	<u>130,853</u>	<u>1,306,073</u>	<u>1,306,073</u>	<u>1,355,277</u>	<u>-49,204</u>	0.00
	<b>TOTAL DEPREC. DISTRIBUTION PLANT</b>	640,169,085		50.2	1.99	12,756,082			2.51	16,061,097	151,825,130	195,566,000	188,180,433	7,385,567	
<b>GENERAL PLANT</b>															
390.00	STRUCTURES AND IMPROVEMENTS	25,864,673	R 3.0	40.0	2.50	646,617	0	1.00	2.50	646,617	5,188,262	5,188,262	6,287,342	-1,099,080	0.00
391.00	OFFICE FURNITURE AND EQUIP.	1,871,855	S 4.0	15.0	6.67	124,853	5	0.95	6.34	118,676	317,133	301,276	225,753	75,523	0.00
391.10	OFFICE FURNITURE AND EQUIP.-COMPUTERS	883,183	S 4.0	10.0	10.00	88,318	0	1.00	10.00	88,318	600,581	600,581	66,754	533,827	0.00
391.20	OFFICE FURNITURE AND EQUIP.-LAPTOP COMP.	878,732	S 4.0	5.0	20.00	175,746	0	1.00	20.00	175,746	777,138	777,138	866,695	-89,557	0.00
393.00	STORES EQUIPMENT	107,831	SQ	30.0	3.33	3,591	0	1.00	3.33	3,591	37,401	37,401	38,003	-602	0.00
394.00	TOOLS, SHOP & GARAGE EQUIPMENT	4,359,715	S 6.0	19.0	5.26	229,321	0	1.00	5.26	229,321	1,188,607	1,188,607	1,147,390	41,217	0.00
397.00	COMMUNICATION EQUIPMENT	941,816	SQ	10.0	10.00	94,182	0	1.00	10.00	94,182	556,907	556,907	652,209	-95,302	0.00
398.00	MISCELLANEOUS GENERAL EQUIPMENT	<u>869,377</u>	S 5.0	15.0	6.67	<u>57,987</u>	0	1.00	6.67	<u>57,987</u>	<u>298,865</u>	<u>298,865</u>	<u>322,526</u>	<u>-23,661</u>	0.00
	<b>TOTAL DEPREC. GENERAL PLANT</b>	35,777,182		25.2	3.97	1,420,615			3.95	1,414,438	8,964,894	8,949,037	9,606,672	-657,635	
	<b>TOTAL DEPREC. GAS PLANT</b>	698,179,397		47.6	2.10	14,688,014			2.58	18,016,128	169,358,534	213,646,147	205,561,334	8,084,813	
													Note: Col.13/Col. 11	3.78%	

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY  
 SCHEDULE OF DEPRECIATION ACCRUAL RATES @12/31/2021  
 WHOLE LIFE SCHEDULE WITH RESERVE VARIANCE

7.5% COR ADJ.

SCHEDULE A

FERC ACCOUNT NUMBER	DESCRIPTION	PLANT BALANCE @12/31/2021	DISP TYPE	ASL	ACCRUAL RATE W/O NET SALV.	ACCRUAL WITHOUT NET SALV.	NET SALV. %	SALV. FACTOR	ACCRUAL RATE W/ NET SALV.	ACCRUAL WITH NET SALV.	THEO. RSV. WITHOUT NET SALV.	THEO. RSV. WITH NET SALV.	BOOK RSV. @12/31/2021	RESERVE VARIANCE	COR RATE %
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
<b>AMORTIZED PLANT</b>															
<b>CAPITALIZED SOFTWARE</b>															
303.10	CAPITALIZED SOFTWARE- 3 YEARS	2,332,280		3.0	33.33	777,349	0	1.00	33.33	777,349			1,019,860		0.00
303.20	CAPITALIZED SOFTWARE- 5 YEARS	12,961,962		5.0	20.00	2,592,392	0	1.00	20.00	2,592,392			13,365,176		0.00
303.40	CAPITALIZED SOFTWARE- 10 YEARS	3,893,722		10.0	10.00	389,372	0	1.00	10.00	389,372			3,173,692		0.00
303.50	CAPITALIZED SOFTWARE- 10 YEARS	779,858		10.0	10.00	77,986	0	1.00	10.00	77,986			537,439		0.00
303.60	CAPITALIZED SOFTWARE- 10 YEARS	<u>1,034,809</u>		10.0	10.00	<u>103,481</u>	0	1.00	10.00	<u>103,481</u>			<u>671,164</u>		0.00
	<b>TOTAL ACCOUNT 303</b>	21,002,631		5.3	18.76	3,940,580			18.76	3,940,580			18,767,331		
392	TRANSPORTATION EQUIPMENT	11,420,704		5.0	20.00	2,284,141	0	1.00	20.00	2,284,141			7,944,855		0.00
396	POWER OPERATED EQUIPMENT	<u>862,889</u>		5.0	20.00	<u>172,578</u>	0	1.00	20.00	<u>172,578</u>			<u>691,862</u>		0.00
	<b>TOTAL AMORTIZED PLANT</b>	33,286,224		5.2	19.22	6,397,299			19.22	6,397,299			27,404,048		
	<b>TOTAL DEPREC. &amp; AMORTIZED GAS PLANT</b>	731,465,621		34.7	2.88	21,085,313			3.34	24,413,427			232,965,382		
1050	PLANT HELD FOR FUTURE USE	852,305													
1210	OPI-LAND-RETAINED	13,665													
1211	OPI-STRUCTURES-RETAINED	133,284											133,284		
3020	FRANCHISES AND CONSENTS	250,950													
3040	LAND RIGHTS OWNED	97,504													
3641	LNG PROCSS LAND AND LAND RIGHTS	57,315													
3740	DISTR LAND & LAND RIGHTS	376,710													
3890	GNL LAND RIGHTS	121,489													
	DIFF. IN BOOK RSV VS. PUC ANNUAL REPORT												45,029		
	<b>TOTAL GAS PLANT IN SERVICE</b>	733,368,843											233,143,695		

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY  
 SCHEDULE OF DEPRECIATION ACCRUAL RATES @12/31/2021  
 WHOLE LIFE SCHEDULE WITH RESERVE VARIANCE

4.74% COR ADJ.

SCHEDULE A

FERC ACCOUNT NUMBER	DESCRIPTION	PLANT BALANCE @12/31/2021	DISP TYPE	ASL	ACCRUAL RATE W/O NET SALV.	ACCRUAL WITHOUT NET SALV.	NET SALV. %	SALV. FACTOR	ACCRUAL RATE W/ NET SALV.	ACCRUAL WITH NET SALV.	THEO. RSV. WITHOUT NET SALV.	THEO. RSV. WITH NET SALV.	BOOK RSV. @12/31/2021	RESERVE VARIANCE	COR RATE %
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
<b>PRODUCTION PLANT</b>															
305.00	STRUCTURES AND IMPROVEMENTS	852,167	R 1.0	35.0	2.86	24,372	0	1.00	2.86	24,372	415,746	415,746	135,156	280,590	0.00
319.00	GAS MIXING EQUIPMENT	691,821	R 1.0	20.0	5.00	34,591	0	1.00	5.00	34,591	209,352	209,352	301,851	-92,499	0.00
320.00	OTHER EQUIPMENT-LNG	461,363	R 1.0	35.0	2.86	13,195	0	1.00	2.86	13,195	76,738	76,738	-13,334	90,072	0.00
320.10	OTHER EQUIPMENT	<u>3,426,407</u>	R 1.0	35.0	2.86	<u>97,995</u>	0	1.00	2.86	<u>97,995</u>	<u>2,140,520</u>	<u>2,140,520</u>	<u>404,978</u>	<u>1,735,542</u>	0.00
	<b>TOTAL DEPREC. PRODUCTION PLANT</b>	5,431,758		31.9	3.13	170,153			3.13	170,153	2,842,356	2,842,356	828,651	2,013,705	
<b>STORAGE PLANT</b>															
361.00	STRUCTURES AND IMPROVEMENTS-LNG	96,980	R 1.0	35.0	2.86	2,774	0	1.00	2.86	2,774	23,372	23,372	24,172	-800	0.00
363.50	OTHER EQUIPMENT-LNG	<u>7,646</u>	R 1.0	35.0	2.86	<u>219</u>	0	1.00	2.86	<u>219</u>	<u>2,513</u>	<u>2,513</u>	<u>2,553</u>	<u>-40</u>	0.00
	<b>TOTAL DEPREC. STORAGE PLANT</b>	104,626		35.0	2.86	2,993			2.86	2,993	25,885	25,885	26,725	-840	
<b>LNG GAS TERMINATING AND PROCESSING PLANT</b>															
364.20	STRUCTURES AND IMPROVEMENTS-LNG	952,003	R 1.0	35.0	2.86	27,227	0	1.00	2.86	27,227	218,338	218,338	474,687	-256,349	0.00
364.80	OTHER EQUIPMENT	<u>3,896,019</u>	R 1.0	35.0	2.86	<u>111,426</u>	0	1.00	2.86	<u>111,426</u>	<u>1,661,847</u>	<u>1,661,847</u>	<u>2,623,007</u>	<u>-961,160</u>	0.00
	<b>TOTAL DEPREC. LNG TERM. AND PROCESS. PLANT</b>	4,848,022		35.0	2.86	138,653			2.86	138,653	1,880,185	1,880,185	3,097,694	-1,217,509	
<b>TRANSMISSION PLANT</b>															
367.00	MAINS	11,710,542	R 3.0	60.0	1.67	195,566	-15	1.15	1.92	224,842	3,750,667	4,313,267	3,894,029	419,238	0.25
369.00	MEASURING AND REGULATING STATION EQUIP.	<u>138,182</u>	S 4.0	35.0	2.86	<u>3,952</u>	0	1.00	2.86	<u>3,952</u>	<u>69,417</u>	<u>69,417</u>	<u>-72,870</u>	<u>142,287</u>	0.00
	<b>TOTAL DEPREC. TRANSMISSION PLANT</b>	11,848,724		59.5	1.68	199,518			1.93	228,794	3,820,084	4,382,684	3,821,159	561,525	
<b>DISTRIBUTION PLANT</b>															
375.00	STRUCTURES AND IMPROVEMENTS	1,761,490	R 1.0	35.0	2.86	50,379	0	1.00	2.86	50,379	216,622	216,622	309,313	-92,691	0.00
376.00	MAINS	366,964,216	R 3.0	60.0	1.67	6,128,302	-15	1.15	1.92	7,045,713	73,034,778	83,989,995	73,383,746	10,606,249	0.25
377.00	COMPRESSOR STATION EQUIPMENT	2,246,186	R 1.0	35.0	2.86	64,241	0	1.00	2.86	64,241	256,266	256,266	321,205	-64,939	0.00
378.00	MEAS. AND REG. STATION EQUIPMENT-GENERAL	8,592,345	S 2.0	35.0	2.86	245,741	0	1.00	2.86	245,741	3,819,817	3,819,817	4,662,297	-842,480	0.00
379.00	MEAS. AND REG. STATION EQUIPMENT-CITY GATE	5,431,082	S 3.0	35.0	2.86	155,329	0	1.00	2.86	155,329	1,490,217	1,490,217	1,612,222	-122,005	0.00
380.00	SERVICES	198,967,012	R 4.0	50.0	2.00	3,979,340	-60	1.60	3.20	6,366,944	54,642,755	87,428,408	94,633,615	-7,205,207	1.20
381.00	METERS	19,992,831	S 3.0	30.0	3.33	665,761	0	1.00	3.33	665,761	6,124,130	6,124,130	4,661,801	1,462,329	0.00
381.10	METERS-INSTRUMENT	254,439	S 3.0	30.0	3.33	8,473	0	1.00	3.33	8,473	111,711	111,711	113,219	-1,508	0.00
381.20	METERS-ERTS	6,347,958	SQ	15.0	6.67	423,409	0	1.00	6.67	423,409	4,768,023	4,768,023	4,456,153	311,870	0.00
382.00	METER INSTALLATIONS	27,070,444	R 3.0	30.0	3.33	901,446	0	1.00	3.33	901,446	6,039,287	6,039,287	5,791,940	247,347	0.00
385.00	INDUSTRIAL MEASURING & REGULATING EQUIPMENT	53,375	S 6.0	19.0	5.26	2,808	0	1.00	5.26	2,808	15,451	15,451	7,819	7,632	0.00
387.00	OTHER EQUIPMENT	<u>2,487,707</u>	S 6.0	19.0	5.26	<u>130,853</u>	0	1.00	5.26	<u>130,853</u>	<u>1,306,073</u>	<u>1,306,073</u>	<u>1,355,277</u>	<u>-49,204</u>	0.00
	<b>TOTAL DEPREC. DISTRIBUTION PLANT</b>	640,169,085		50.2	1.99	12,756,082			2.51	16,061,097	151,825,130	195,566,000	191,308,607	4,257,393	
<b>GENERAL PLANT</b>															
390.00	STRUCTURES AND IMPROVEMENTS	25,864,673	R 3.0	40.0	2.50	646,617	0	1.00	2.50	646,617	5,188,262	5,188,262	6,287,342	-1,099,080	0.00
391.00	OFFICE FURNITURE AND EQUIP.	1,871,855	S 4.0	15.0	6.67	124,853	5	0.95	6.34	118,676	317,133	301,276	225,753	75,523	0.00
391.10	OFFICE FURNITURE AND EQUIP.-COMPUTERS	883,183	S 4.0	10.0	10.00	88,318	0	1.00	10.00	88,318	600,581	600,581	66,754	533,827	0.00
391.20	OFFICE FURNITURE AND EQUIP.-LAPTOP COMP.	878,732	S 4.0	5.0	20.00	175,746	0	1.00	20.00	175,746	777,138	777,138	866,695	-89,557	0.00
393.00	STORES EQUIPMENT	107,831	SQ	30.0	3.33	3,591	0	1.00	3.33	3,591	37,401	37,401	38,003	-602	0.00
394.00	TOOLS, SHOP & GARAGE EQUIPMENT	4,359,715	S 6.0	19.0	5.26	229,321	0	1.00	5.26	229,321	1,188,607	1,188,607	1,147,390	41,217	0.00
397.00	COMMUNICATION EQUIPMENT	941,816	SQ	10.0	10.00	94,182	0	1.00	10.00	94,182	556,907	556,907	652,209	-95,302	0.00
398.00	MISCELLANEOUS GENERAL EQUIPMENT	<u>869,377</u>	S 5.0	15.0	6.67	<u>57,987</u>	0	1.00	6.67	<u>57,987</u>	<u>298,865</u>	<u>298,865</u>	<u>322,526</u>	<u>-23,661</u>	0.00
	<b>TOTAL DEPREC. GENERAL PLANT</b>	35,777,182		25.2	3.97	1,420,615			3.95	1,414,438	8,964,894	8,949,037	9,606,672	-657,635	
	<b>TOTAL DEPREC. GAS PLANT</b>	698,179,397		47.6	2.10	14,688,014			2.58	18,016,128	169,358,534	213,646,147	208,689,508	4,956,639	
													Note: Col.13/Col. 11	2.32%	

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. D/B/A LIBERTY  
 SCHEDULE OF DEPRECIATION ACCRUAL RATES @12/31/2021  
 WHOLE LIFE SCHEDULE WITH RESERVE VARIANCE

4.74% COR ADJ.

SCHEDULE A

FERC ACCOUNT NUMBER	DESCRIPTION	PLANT BALANCE @12/31/2021	DISP TYPE	ASL	ACCRUAL RATE W/O NET SALV.	ACCRUAL WITHOUT NET SALV.	NET SALV. %	SALV. FACTOR	ACCRUAL RATE W/ NET SALV.	ACCRUAL WITH NET SALV.	THEO. RSV. WITHOUT NET SALV.	THEO. RSV. WITH NET SALV.	BOOK RSV. @12/31/2021	RESERVE VARIANCE	COR RATE %
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
<b>AMORTIZED PLANT</b>															
<b>CAPITALIZED SOFTWARE</b>															
303.10	CAPITALIZED SOFTWARE- 3 YEARS	2,332,280		3.0	33.33	777,349	0	1.00	33.33	777,349			1,019,860		0.00
303.20	CAPITALIZED SOFTWARE- 5 YEARS	12,961,962		5.0	20.00	2,592,392	0	1.00	20.00	2,592,392			13,365,176		0.00
303.40	CAPITALIZED SOFTWARE- 10 YEARS	3,893,722		10.0	10.00	389,372	0	1.00	10.00	389,372			3,173,692		0.00
303.50	CAPITALIZED SOFTWARE- 10 YEARS	779,858		10.0	10.00	77,986	0	1.00	10.00	77,986			537,439		0.00
303.60	CAPITALIZED SOFTWARE- 10 YEARS	<u>1,034,809</u>		10.0	10.00	<u>103,481</u>	0	1.00	10.00	<u>103,481</u>			<u>671,164</u>		0.00
	<b>TOTAL ACCOUNT 303</b>	21,002,631		5.3	18.76	3,940,580			18.76	3,940,580			18,767,331		
392	TRANSPORTATION EQUIPMENT	11,420,704		5.0	20.00	2,284,141	0	1.00	20.00	2,284,141			7,944,855		0.00
396	POWER OPERATED EQUIPMENT	<u>862,889</u>		5.0	20.00	<u>172,578</u>	0	1.00	20.00	<u>172,578</u>			<u>691,862</u>		0.00
	<b>TOTAL AMORTIZED PLANT</b>	33,286,224		5.2	19.22	6,397,299			19.22	6,397,299			27,404,048		
	<b>TOTAL DEPREC. &amp; AMORTIZED GAS PLANT</b>	731,465,621		34.7	2.88	21,085,313			3.34	24,413,427			236,093,556		
1050	PLANT HELD FOR FUTURE USE	852,305													
1210	OPI-LAND-RETAINED	13,665													
1211	OPI-STRUCTURES-RETAINED	133,284											133,284		
3020	FRANCHISES AND CONSENTS	250,950													
3040	LAND RIGHTS OWNED	97,504													
3641	LNG PROCSS LAND AND LAND RIGHTS	57,315													
3740	DISTR LAND & LAND RIGHTS	376,710													
3890	GNL LAND RIGHTS	121,489													
	DIFF. IN BOOK RSV VS. PUC ANNUAL REPORT												45,029		
	<b>TOTAL GAS PLANT IN SERVICE</b>	733,368,843											236,271,869		