

Liberty Utilities (EnergyNorth)
Index to Revenue Requirement Schedules
Test Year Ended December 31, 2019

Line	Title	Reference
1	Summary Schedules	
2	Index to Revenue Requirement Schedules	Index
3	Rebuttal Revenue Impact Summary	Schedule RR-Summary
4	Revenue Deficiency and Revenue Requirement	Schedule RR-1
5	Operating Income Statement - EnergyNorth	Schedule RR-EN-2
6	Operating Income Statement - Detail - EnergyNorth	Schedule RR-EN-2-1
7	Summary of Adjustments	Schedule RR-EN-3
8		
9		
10	Adjustments - EnergyNorth	
11	Adjustment 1 - Revenue Adjustments	Schedule RR-EN-3-1
12	Adjustment 2 - Salary and Wage Expense	Schedule RR-EN-3-2
13	Adjustment 3 - Payroll Tax Expense	Schedule RR-EN-3-3
14	Adjustment 4 - Pension and Benefits Expense	Schedule RR-EN-3-4
15	Adjustment 5 - Depreciation Expense	Schedule RR-EN-3-5
16	Adjustment 6 - Amortization Expense	Schedule RR-EN-3-6
17	Adjustment 7 - Property Tax	Schedule RR-EN-3-7
18	Adjustment 8 - Income Tax Expense - Historical Test Year	Schedule RR-EN-3-8
19	Adjustment 9 - Income Tax Expense - Pro Forma Test Year at Current Rates	Schedule RR-EN-3-9
20	Adjustment 10 - Other Adjustments	Schedule RR-EN-3-10
21		
22		
23	Cost of Capital	
24	Weighted Average Cost of Capital	Schedule RR-EN-4
25		
26	Rate Base	
27	Rate Base - EnergyNorth	Schedule RR-EN-5
28	Rate Base Quarterly Balances - EnergyNorth	Schedule RR-EN-5-1
29	Cash Working Capital - EnergyNorth	Schedule RR-EN-5-2
30		
31	Step Increase	
32	Step Increase - EnergyNorth	Schedule Step-EN
33		
34	Rate Case Expense	
35	Rate Case Expense	Schedule RC

Adjustment No.	Source	Schedule Changed	Description	Adjustment Amount - Rate Base	Change in Revenue Increase
1	Staff Adjustment 4	RR-EN-3-2	Payroll rate increase to 2.47%	\$ -	\$ (108,956)
2	Staff Adjustment 5	RR-EN-3-2	Normalize CSR 2019 Ratificaiton Bonus	-	(14,400)
3	Staff Adjustment 9	RR-EN-3-7	Remove Double Count NH True Up	-	(230,708)
4	Staff Adjustment 10	RR-EN-3-10	Remove Additional Keene Costs	-	(5,313)
5	Clark/Mullen Rebuttal	RR-EN-3-1	Pelham Risk Sharing Change	-	2,712
6	n/a	RR-EN-5-2	Cash Working Capital True-up	(18,519)	(1,746)
				<u>\$ (18,519)</u>	<u>\$ (358,410)</u>

Liberty Utilities (EnergyNorth)
Revenue Deficiency and Revenue Requirement
Test Year With Known and Measurable Changes

Line	Description	Reference	EnergyNorth
1	Rate Base	RR-5	\$ 346,131,311
2			
3	Target Rate of Return on Rate Base	RR-4	7.47%
4			
5	Operating Income Requirement	Line 1 X Line 3	\$ 25,856,009
6			
7	Operating Income at Present Rates	RR-2	\$ 22,519,695
8			
9	Operating Income Deficiency	Line 5 - Line 7	\$ 3,336,314
10			
11	Gross-up Factor for Additional Income Taxes	Line 19	1.3714
12			
13	Revenue Deficiency	Line 9 X Line 11	\$ 4,575,308
14			
15	<u>Gross-up Factor for Income Taxes</u>		
16	Federal Income Tax Rate		21.00%
17	New Hampshire State Income Tax Rate		7.70%
18	Combined Income Tax Rate	Line 16 + Line 17 - (Line 16 X Line 17)	27.08%
19	Gross-up Factor	1 / (1 - Line 18)	1.3714
20			
21	Additional Income Tax Required	Line 13 - Line 9	\$ 1,238,993
22			
23	Distribution Revenue at Present Rates	RR-2	\$ 94,850,554
24			
25	% Increase Needed	Line 13 / Line 23	4.82%
26			
27	Revenue with Increase	RR-2	\$ 99,425,862
28			
29	% Increase Needed - Total Revenue		2.79%

Liberty Utilities (EnergyNorth)
Operating Income Statement - EnergyNorth
Test Year With Known and Measurable Changes

Line Account	<i>Source</i>		<i>RR-EN-3</i>		<i>RR-1</i>		Distribution Operating Income with Proposed Increase
	Test Year Ended December 31, 2019	Cost of Gas & LDAC	Distribution Operating Income	Known and Measurable Adjustments	Test Year at Current Rates	Proposed Increase	
1 Revenue							
2 Operating Revenue	\$ 157,984,809	\$ (72,649,313)	\$ 85,335,497	\$ 1,348,864	\$ 86,684,361	\$ 2,561,517	\$ 89,245,877
3 Decoupling	4,965,231	-	4,965,231	-	4,965,231	-	4,965,231
4 COG Revenue (credit to Account 846)	-	1,993,587	1,993,587	-	1,993,587	2,013,791	4,007,378
5 Other Revenue	1,207,376	-	1,207,376	-	1,207,376	-	1,207,376
6	\$ 164,157,416	\$ (70,655,726)	\$ 93,501,690	\$ 1,348,864	\$ 94,850,554	\$ 4,575,308	\$ 99,425,862
7							
8 Operating Expenses							
9 Operations and Maintenance - Gas	\$ 70,188,045	\$ (68,365,777)	\$ 1,822,267	\$ (152,771)	\$ 1,669,496		\$ 1,669,496
10 Operations and Maintenance - Distribution	14,187,750	-	14,187,750	117,974	14,305,724		14,305,724
11 Customer Accounting	4,011,638	983,441	4,995,080	30,109	5,025,189		5,025,189
12 Sales and New Business	663,477	-	663,477	(33,575)	629,902		629,902
13 Administrative & General	8,719,450	-	8,719,450	(643,667)	8,075,783		8,075,783
14 Depreciation and Amortization	25,339,396	(3,025,052)	22,314,344	586,182	22,900,526		22,900,526
15 Taxes other than Income Taxes	14,030,617	-	14,030,617	162,818	14,193,436		14,193,436
16 Income Taxes	3,709,928	-	3,709,928	1,820,876	5,530,804	1,238,993	6,769,798
18	\$ 140,850,302	\$ (70,407,388)	\$ 70,442,914	\$ 1,887,946	\$ 72,330,860	\$ 1,238,993	\$ 73,569,853
19							
20 Utility Net Income	\$ 23,307,114	\$ (248,338)	\$ 23,058,776	\$ (539,082)	\$ 22,519,695	\$ 3,336,314	\$ 25,856,009
21							
22 Rate Base			\$ 346,131,311		\$ 346,131,311		\$ 346,131,311
23							
24 Rate of Return on Rate Base			6.66%		6.51%		7.47%

Liberty Utilities (EnergyNorth)
Operating Income Statement - Detail - EnergyNorth
Test Year With Known and Measurable Changes

Source

Line	Account	Account Number	Test Year Ended December 31, 2019	Cost of Gas & LDAC	Distribution Operating Income	RR-EN-3	Test Year At Current Rates	Labor	RR-EN-3
						Known and Measurable Adjustments			Labor Pro Forma
1	OPERATION AND MAINTENANCE EXPENSES								
2	O&M - Gas Production								
3	Operation Supervision and Engineering	710	\$ 976,663	\$ -	\$ 976,663	\$ 13,426	\$ 990,089	\$ 944,645	\$ 958,071
4	Liquefied Petroleum Gas Expenses	717	-	-	-	-	-	-	-
5	Liquefied Petroleum Gas	728	-	-	-	-	-	-	-
6	Gas Mixing Expense	733	185,703	-	185,703	(121,666)	64,037	185,703	188,343
7	Miscellaneous Production Expenses	735	514,254	-	514,254	(44,534)	469,719	-	-
8	Maintenance of Production Equipment	742	119,531	-	119,531	-	119,531	-	-
9	Natural Gas City Gate Purchases	804	1,458,035	(1,458,035)	-	-	-	-	-
10	Other Gas Purchases	805	67,686,807	(67,686,807)	-	-	-	-	-
11	Gas Withdrawn from Storage	808	1,214,522	(1,214,522)	-	-	-	-	-
12	Operation Labor and Expenses	841	-	-	-	-	-	-	-
13	Other Expenses	846	(1,967,471)	1,993,587	26,116	4	26,120	263	267
14	<i>Total O&M - Gas Production</i>		\$ 70,188,045	\$ (68,365,777)	\$ 1,822,267	\$ (152,771)	\$ 1,669,496	\$ 1,130,611	\$ 1,146,680
15									
16	O&M - Distribution Expenses								
17	Measuring and Regulating Station Expenses (Transmission)	857	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	Maintenance of Mains (Transmission)	863	-	-	-	-	-	-	-
19	Operation Supervision and Engineering	870	536,299	-	536,299	4,219	540,518	331,359	336,069
20	Distribution Load Dispatching	871	575,530	-	575,530	8,173	583,704	575,068	583,241
21	Mains Services Expenses	874	5,633,309	-	5,633,309	48,327	5,681,636	3,497,946	3,547,661
22	Measuring and Regulating Station Expenses - General	875	-	-	-	-	-	-	-
23	Measuring and Regulating Station Expenses - Industrial	876	-	-	-	-	-	-	-
24	Meter and House Regulator Expenses	878	1,118,308	-	1,118,308	14,767	1,133,075	1,038,978	1,053,744
25	Customer Installations Expenses	879	629,292	-	629,292	8,858	638,150	623,226	632,084
26	Other Expenses	880	1,717,919	-	1,717,919	12,280	1,730,199	864,000	876,280
27	Rents	881	10,618	-	10,618	-	10,618	-	-
28	Maintenance Supervision and Engineering	885	-	-	-	-	-	-	-
29	Maintenance of Structures and Improvements	886	147,555	-	147,555	1,706	149,261	120,051	121,758
30	Maintenance of Mains	887	2,660,338	-	2,660,338	11,591	2,671,929	815,525	827,116
31	Maintenance of Measuring and Regulating Station Expenses	889	-	-	-	-	-	-	-
32	Maintenance of Services	892	462,357	-	462,357	2,929	465,285	206,069	208,998
33	Maintenance of Meters and House Regulators	893	351,020	-	351,020	3,746	354,765	263,554	267,300
34	Maintenance of Other Equipment	894	345,205	-	345,205	1,379	346,584	97,049	98,428
35	<i>Total O&M - Distribution</i>		\$ 14,187,750	\$ -	\$ 14,187,750	\$ 117,974	\$ 14,305,724	\$ 8,432,825	\$ 8,552,678
36	<i>Total O&M - Gas Production and Distribution</i>		\$ 84,375,795	\$ (68,365,777)	\$ 16,010,018	\$ (34,797)	\$ 15,975,221	\$ 9,563,437	\$ 9,699,359
37									
38	Customer Accounts Expenses								
39	Supervision	901	\$ 243,201	\$ -	\$ 243,201	\$ 3,457	\$ 246,658	\$ 243,201	\$ 246,658
40	Meter Reading Expenses	902	323,371	-	323,371	4,231	327,602	297,723	301,954
41	Customer Records and Collection Expenses	903	2,734,690	-	2,734,690	22,421	2,757,111	1,577,532	1,599,953
42	Uncollectible Accounts	904 0	1,680,770	-	1,680,770	-	1,680,770	-	-
43	Bad Debt Expense - Commodity	904 1	(983,441)	983,441	-	-	-	-	-
44	Miscellaneous Customer Accounts Expenses	905	13,047	-	13,047	-	13,047	-	-
45	<i>Total Customer Accounting</i>		\$ 4,011,638	\$ 983,441	\$ 4,995,080	\$ 30,109	\$ 5,025,189	\$ 2,118,456	\$ 2,148,565
46									
47	Customer Service and Informational & Sales Expenses								
48	Cust Assistance	908	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
49	Informational and Instructional Advertising Expenses	909	95,856	-	95,856	(14,122)	81,733	21,409	21,713
50	Cust Service Misc	910	15,180	-	15,180	-	15,180	-	-
51	Sales & Advertising	912	449,660	-	449,660	5,946	455,606	418,379	424,325
52	Advertising Expenses	913	26,484	-	26,484	(26,484)	0	-	-
53	Miscellaneous Sales Expenses	916	76,299	-	76,299	1,084	77,383	76,299	77,383
54	<i>Total Customer Service and Informational & Sales Expenses</i>		\$ 663,477	\$ -	\$ 663,477	\$ (33,575)	\$ 629,902	\$ 516,086	\$ 523,421
55	<i>Total Customer Accounts, Customer Service and Informational</i>		\$ 4,675,116	\$ 983,441	\$ 5,658,557	\$ (3,466)	\$ 5,655,091	\$ 2,634,542	\$ 2,671,986
56									
57	Administrative and General Expenses								
58	A&G Salaries	920 0	\$ 2,690,132	\$ -	\$ 2,690,132	\$ 34,648	\$ 2,724,780	\$ 2,437,821	\$ 2,472,469
59	A&G Salaries - LU Head Office	920 1	3,128,482	-	3,128,482	-	3,128,482	Allocated costs	-
60	Office Supplies and Expenses	921	2,214,501	-	2,214,501	(16,202)	2,198,299	-	-
61	Administrative Expenses Transferred	922 0	(13,438,703)	-	(13,438,703)	233,952	(13,204,750)	Allocated costs	-
62	LU Labor Allocations Capitalized	922 1	(2,935,673)	-	(2,935,673)	-	(2,935,673)	-	-
63	Outside Services Employed	923 0	1,038,455	-	1,038,455	(84,318)	954,137	-	-
64	Allocated LU Head Office	923 1	6,179,915	-	6,179,915	-	6,179,915	-	-
65	Property Insurance	924	51,523	-	51,523	-	51,523	-	-
66	Injuries and Damages	925	814,179	-	814,179	-	814,179	-	-
67	Employee Pensions and Benefits	926	7,987,623	-	7,987,623	(732,228)	7,255,395	-	-
68	Regulatory Commission Expenses	928	813,919	-	813,919	(36,883)	777,036	-	-
69	Miscellaneous General Expenses	930	1,146	-	1,146	-	1,146	-	-
70	Rents	931	173,951	-	173,951	(42,637)	131,314	-	-
71	Maintenance of General Plant	932	-	-	-	-	-	-	-
72	<i>Total Administrative & General</i>		\$ 8,719,450	\$ -	\$ 8,719,450	\$ (643,667)	\$ 8,075,783	\$ 2,437,821	\$ 2,472,469
73	Total Operation and Maintenance Expenses		\$ 97,770,361	\$ (67,382,336)	\$ 30,388,025	\$ (681,930)	\$ 29,706,094	\$ 14,635,799	\$ 14,843,813
74									

Liberty Utilities (EnergyNorth)
Operating Income Statement - Detail - EnergyNorth
Test Year With Known and Measurable Changes

Source

RR-EN-3

RR-EN-3

Line	Account	Account Number	Test Year Ended December 31, 2019	Cost of Gas & LDAC	Distribution Operating Income	Known and Measurable Adjustments	Test Year At Current Rates	Labor	Labor Pro Forma
75	DEPRECIATION AND AMORTIZATION EXPENSE								
76	Depreciation Expense	403	\$ 18,173,439	\$ -	\$ 18,173,439	\$ 1,836,152	\$ 20,009,591		
77	Amortization - Intangibles	405	3,435,643	-	3,435,643	(128,313)	3,307,330		
78	Regulatory Debits - Amortization of Regulatory Assets	407 3	705,261	-	705,261	186,853	892,115		
79	Regulatory Credits - Amortization of Regulatory Liabilities	407 4	3,025,052	(3,025,052)	-	(1,308,511)	(1,308,511)		
80	Total Depreciation and Amortization Expense		\$ 25,339,396	\$ (3,025,052)	\$ 22,314,344	\$ 586,182	\$ 22,900,526		
81									
82	TAXES OTHER THAN INCOME TAXES								
83	Taxes other than Income Taxes - Payroll Taxes	408	\$ 1,625,755	\$ -	\$ 1,625,755	\$ 372,220	\$ 1,997,975		
84	Taxes other than Income Taxes - Property Taxes	408	12,404,863	-	12,404,863	(209,402)	12,195,461		
85	Total Taxes other than Income Taxes		\$ 14,030,617	\$ -	\$ 14,030,617	\$ 162,818	\$ 14,193,436		
86									
87	FEDERAL / STATE INCOME TAXES								
88	Income Tax Expense	409-410	\$ 3,709,928	\$ -	\$ 3,709,928	\$ 1,820,876	\$ 5,530,804		
89	Subtotal - Income Tax		\$ 3,709,928	\$ -	\$ 3,709,928	\$ 1,820,876	\$ 5,530,804		
90									
91									
92									
93	TOTAL EXPENSES		\$ 140,850,302	\$ (70,407,388)	\$ 70,442,914	\$ 1,887,946	\$ 72,330,860	\$ 14,635,799	\$ 14,843,813
94									
95	REVENUES								
96	Operating Revenue		\$ 157,984,809	\$ (72,649,313)	\$ 85,335,497	\$ 1,348,864	\$ 86,684,361		
97	Decoupling		4,965,231	-	4,965,231	-	4,965,231		
98	COG Revenue (credit to Account 846)			1,993,587	1,993,587	-	1,993,587		
99	Other Revenue		1,207,376	-	1,207,376	-	1,207,376		
100	Total Revenue		\$ 164,157,416	\$ (70,655,726)	\$ 93,501,690	\$ 1,348,864	\$ 94,850,554		
101									
102	UTILITY NET INCOME		\$ 23,307,114	\$ (248,338)	\$ 23,058,776	\$ (539,082)	\$ 22,519,695		
103									
104	TOTAL RATE BASE	RR-EN-5	\$ 346,131,311		\$ 346,131,311		\$ 346,131,311		
105									
106	Income Tax Rate		13 73%		13 86%		19 72%		
107									
108	Rate of Return		6 73%		6 66%		6 51%		

Liberty Utilities (EnergyNorth)
Summary of Adjustments
Test Year Ended December 31, 2019

Adjustment 1 Adjustment 2 Adjustment 3 Adjustment 4 Adjustment 5 Adjustment 6 Adjustment 7 Adjustment 8 Adjustment 9 Adjustment 10

539,082 (1,348,864) 208,014 372,220 (498,276) 1,836,152 (1,249,970) (168,070) 1,473,766 347,110 (433,001)

Line	Account	Account Number	Total	Revenue Adjustments	Salary and Wage Expense	Payroll Tax Expense	Pension and Benefits Expense	Depreciation Expense	Amortization Expense	Property Tax	Income Tax Expense - Historical Test Year	Income Tax Expense - Pro Forma Test Year at Current Rates	Other Adjustments	Historical Test Year Labor Expense	% Total Labor
1	OPERATION AND MAINTENANCE EXPENSES														
2	O&M - Gas Production														
3	Operation Supervision and Engineering	710	\$ 13,426		\$ 13,426									\$ 944,645	6.45%
4	Liquefied Petroleum Gas Expenses	717	-		-									-	0.00%
5	Liquefied Petroleum Gas	728	-		-									-	0.00%
6	Gas Mixing Expense	733	(121,666)		2,639								(124,306)	185,703	1.27%
7	Miscellaneous Production Expenses	735	(44,534)		-								(44,534)	-	0.00%
8	Maintenance of Production Equipment	742	-		-									-	0.00%
9	Natural Gas City Gate Purchases	804	-		-									-	0.00%
10	Other Gas Purchases	805	-		-									-	0.00%
11	Gas Withdrawn from Storage	808	-		-									-	0.00%
12	Operation Labor and Expenses	841	-		-									-	0.00%
13	Other Expenses	846	4		4									263	0.00%
14	<i>Total O&M - Gas Production</i>		<i>\$ (152,771)</i>	<i>\$ -</i>	<i>\$ 16,069</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ (168,840)</i>	<i>\$ 1,130,611</i>	<i>7.72%</i>
15															
16	O&M - Distribution Expenses														
17	Measuring and Regulating Station Expenses (Transmission)	857	\$ -		\$ -									\$ -	0.00%
18	Maintenance of Mains (Transmission)	863	-		-									-	0.00%
19	Operation Supervision and Engineering (Transmission)	870	4,219		4,710								(491)	331,359	2.26%
20	Distribution Load Dispatching	871	8,173		8,173									575,068	3.93%
21	Mains Services Expenses	874	48,527		49,715								(1,388)	3,497,946	23.90%
22	Measuring and Regulating Station Expenses - General	875	-		-									-	0.00%
23	Measuring and Regulating Station Expenses - Industrial	876	-		-									-	0.00%
24	Meter and House Regulator Expenses	878	14,767		14,767									1,038,978	7.10%
25	Customer Installations Expenses	879	8,858		8,858									623,226	4.26%
26	Other Expenses	880	12,280		12,280									864,000	5.90%
27	Rents	881	-		-									-	0.00%
28	Maintenance Supervision and Engineering	885	-		-									-	0.00%
29	Maintenance of Structures and Improvements	886	1,706		1,706									120,051	0.82%
30	Maintenance of Mains	887	11,591		11,591									815,525	5.57%
31	Maintenance of Measuring and Regulating Station Expense	889	-		-									-	0.00%
32	Maintenance of Services	892	2,929		2,929									206,069	1.41%
33	Maintenance of Meters and House Regulators	893	3,746		3,746									263,554	1.80%
34	Maintenance of Other Equipment	894	1,379		1,379									97,049	0.66%
35	<i>Total O&M - Distribution</i>		<i>117,974</i>	<i>-</i>	<i>119,853</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>(1,879)</i>	<i>8,432,825</i>	<i>57.62%</i>
36	<i>Total O&M - Gas Production and Distribution</i>		<i>\$ (34,797)</i>	<i>\$ -</i>	<i>\$ 135,922</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ (170,719)</i>	<i>\$ 9,563,437</i>	<i>65.34%</i>
37															
38	Customer Accounts Expenses														
39	Supervision	901	\$ 3,457		\$ 3,457									\$ 243,201	1.66%
40	Meter Reading Expenses	902	4,231		4,231									297,723	2.03%
41	Customer Records and Collection Expenses	903	22,421		22,421									1,577,532	10.78%
42	Uncollectible Accounts	904.0	-		-									-	0.00%
43	Bad Debt Expense - Commodity	904.1	-		-									-	0.00%
44	Miscellaneous Customer Accounts Expenses	905	-		-									-	0.00%
45	<i>Total Customer Accounting</i>		<i>\$ 30,109</i>	<i>\$ -</i>	<i>\$ 30,109</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ 2,118,456</i>	<i>14.47%</i>
46															
47	Customer Service and Informational & Sales Expenses														
48	Cust Assistance	908	\$ -		\$ -									\$ -	0.00%
49	Informational and Instructional Advertising Expenses	909	(14,122)		304								\$ (14,426)	21,409	0.15%
50	Cust Service Misc	910	-		-									-	0.00%
51	Sales & Advertising	912	5,946		5,946									418,379	2.86%
52	Advertising Expenses	913	(26,484)		-								\$ (26,484.00)	-	0.00%
53	Miscellaneous Sales Expenses	916	1,084		1,084									76,299	0.52%
54	<i>Total Customer Service and Informational & Sales Expenses</i>		<i>(33,575)</i>	<i>-</i>	<i>7,335</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>(40,910)</i>	<i>516,086</i>	<i>3.53%</i>
55	<i>Total Customer Accounts Customer Service and Informational</i>		<i>\$ (3,466)</i>	<i>\$ -</i>	<i>\$ 37,444</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ (40,910)</i>	<i>\$ 2,634,542</i>	<i>18.00%</i>
56															
57	Administrative and General Expenses														
58	A&G Salaries	920.0	\$ 34,648		\$ 34,648									\$ 2,437,821	16.66%
59	A&G Salaries - LU Head Office	920.1	-		-									Allocated costs	0.00%
60	Office Supplies and Expenses	921.0	(16,202)		-								(16,202)	-	0.00%
61	Administrative Expenses Transferred	922.0	233,952		-		233,952							Allocated costs	0.00%
62	LU Labor Allocations Capitalized	922.1	-		-									Allocated costs	0.00%
63	Outside Services Employed	923.0	(84,318)		-								(84,318)	-	0.00%
64	Allocated LU Head Office	923.1	-		-									-	0.00%
65	Property Insurance	924	-		-									-	0.00%
66	Injuries and Damages	925	-		-									-	0.00%
67	Employee Pensions and Benefits	926	(732,228)		-		(732,228)							-	0.00%
68	Regulatory Commission Expenses	928	(36,883)		-								(36,883)	-	0.00%
69	Miscellaneous General Expenses	930	-		-									-	0.00%
70	Rents	931	(42,637)		-								(42,637)	-	0.00%
71	Maintenance of General Plant	932	-		-									-	0.00%
72	<i>Total Administrative & General</i>		<i>(643,667)</i>	<i>-</i>	<i>34,648</i>	<i>-</i>	<i>(498,276)</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>(180,040)</i>	<i>2,437,821</i>	<i>16.66%</i>
73	Total Operation and Maintenance Expenses		\$ (681,930)	\$ -	\$ 208,014	\$ -	\$ (498,276)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (391,669)	\$ 14,635,799	100.00%

Liberty Utilities (EnergyNorth)
Summary of Adjustments
Test Year Ended December 31, 2019

Adjustment 1 Adjustment 2 Adjustment 3 Adjustment 4 Adjustment 5 Adjustment 6 Adjustment 7 Adjustment 8 Adjustment 9 Adjustment 10

539,082 (1,348,864) 208,014 372,220 (498,276) 1,836,152 (1,249,970) (168,070) 1,473,766 347,110 (433,001)

Line	Account	Account Number	Total	Revenue Adjustments	Salary and Wage Expense	Payroll Tax Expense	Pension and Benefits Expense	Depreciation Expense	Amortization Expense	Property Tax	Income Tax Expense - Historical Test Year	Income Tax Expense - Pro Forma Test Year at Current Rates	Other Adjustments	Historical Test Year Labor Expense	% Total Labor
74															
75	DEPRECIATION AND AMORTIZATION EXPENSE														
76	Depreciation Expense	403.0	\$ 1,836,152					\$ 1,836,152							
77	Amortization - Intangibles	405.0	(128,313)						(128,313)						
78	Regulatory Debits	407.3	186,853						186,853						
79	Regulatory Credits - Amortization of Regulatory Assets	407.4	(1,308,511)						(1,308,511)						
80	Total Depreciation and Amortization Expense		\$ 586,182	\$ -	\$ -	\$ -	\$ -	\$ 1,836,152	\$ (1,249,970)	\$ -	\$ -	\$ -	\$ -	\$ -	
81															
82	TAXES OTHER THAN INCOME TAXES														
83	Taxes other than Income Taxes - Payroll Taxes	408	\$ 372,220			\$ 372,220									
84	Taxes other than Income Taxes - Property Taxes	408	(209,402)							(168,070)			(41,332)		
85	Total Taxes other than Income Taxes		\$ 162,818	\$ -	\$ -	\$ 372,220	\$ -	\$ -	\$ -	\$ (168,070)	\$ -	\$ -	\$ (41,332)		
86															
87	FEDERAL / STATE INCOME TAXES														
88	Income Tax Expense		\$ 1,820,876	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,473,766	\$ 347,110	\$ -		
89															
90															
91															
92	TOTAL EXPENSES		\$ 1,887,946	\$ -	\$ 208,014	\$ 372,220	\$ (498,276)	\$ 1,836,152	\$ (1,249,970)	\$ (168,070)	\$ 1,473,766	\$ 347,110	\$ (433,001)		
93															
94	REVENUES														
95	Operating Revenue		\$ 1,348,864	\$ 1,348,864											
96	Other Revenue		\$ -	\$ -											
97	Total Revenue		\$ 1,348,864	\$ 1,348,864	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
98															
99	UTILITY NET INCOME		\$ (539,082)	\$ 1,348,864	\$ (208,014)	\$ (372,220)	\$ 498,276	\$ (1,836,152)	\$ 1,249,970	\$ 168,070	\$ (1,473,766)	\$ (347,110)	\$ 433,001		

Liberty Utilities (EnergyNorth)
Adjustments to Test Year
Adjustment 1
Revenue Adjustments

Line	Description	Current Amounts (12/31/2019 Test Year)	Source/Notes
1	Operating Revenue	\$ 85,335,497	Trial Balance
2			
3	<u>Adjustments to Operating Revenue</u>		
4			
5	CNG Station Revenue Requirement Adjustment	\$ (11,187)	Staff Request TS 3-6
6	Low Income Adjustment	(64,825)	
7	Granite Ridge Special Contract	(776,312)	
8	iNATGAS Special Contract	(24,630)	
9	Allowed Base Revenue Adjustment to Test Year	(831,044)	
10	Customer Count Adjustment	734,227	Required by Commission Order No 26,122
11	Pelham Risk Sharing Adjustment	61,871	Mullen Testimony
12	One-time correcting entry - ROR on Concord Steam Adjustment	(45,747)	DBS/KAS-1
13	One-time correcting entry - True-up on LRAM Adjustment	81,406	DBS/KAS-1
14	CIBS Revenue Adjustment	1,612,633	Required by Commission in Docket DG 20-049
15	End of Year Rate Adjustment	612,472	Input (Table 1 of DeCoursey Testimony)
16	Pro Forma Operating Revenue	\$ 86,684,361	
17			
18	Total Adjustment to Operating Revenues	\$ 1,348,864	

Liberty Utilities (EnergyNorth)
Adjustments to Test Year
Adjustment 2
Salary and Wage Expense

Line	Department	Total
1	Test Year LU NH Labor Charged to EnergyNorth	\$ 14,635,799
2	Less: vacancy adjustment	211,691
3	Net Test Year Labor Charged to EnergyNorth	\$ 14,424,108
4	2019 Salary & Wage Increase Annualization- O&M	2.47%
5	2019 Payroll Increase Annualization (not in test year, effective March 2019)	58,781
6	2019 LU NH Labor Charged to EnergyNorth Annualized	14,482,889
7		
8	2020 Salary & Wage Increase - O&M	357,727
9	Adjustment for pro rated increase (effective March 2020)	(59,621)
10	2020 Payroll Increase - O&M	\$ 298,106
11		
12	Test year LU Regional Allocated Labor (not included in test year labor)	\$ 3,128,482
13	2019 Salary & Wage Increase LU Regional	2.47%
14	2019 Salary & Wage Increase Annualization (not in test year)	12,565
15	2019 Salary & Wages Annualized	\$ 3,141,047
16		
17	2020 Salary & Wage Increase - O&M	77,584
18	Adjustment for pro rated increase (effective March 2020)	(12,931)
19	2020 Payroll Increase - O&M	\$ 64,653
20		
21	Pro Forma LU NH Labor for 2020 Payroll Increase	17,986,695
22	Less: 2019 Ratification Bonus	18,000
23	Plus: 5 year amortization of 2019 Ratification Bonus	3,600
24	Net Pro Forma LU NH Labor for 2020 Payroll Increase	17,972,295
25		
26	Test Year Labor Charged to EnergyNorth	17,764,281
27		
28	Increase Due to Known and Measurable - Payroll	\$ 208,014

Liberty Utilities (EnergyNorth)
Adjustments to Test Year
Adjustment 3
Payroll Tax Expense

Line	Particulars	Reference	Expense (\$)
1	Unadjusted Test Year Labor Expense	<i>RR-EN-2-1</i>	\$ 14,635,799
2	Unadjusted Test Year Payroll Tax Expense	<i>RR-EN-2-1</i>	1,625,755
3	Payroll Tax Rate (%)		11.11%
4			
5	Adjusted Test Year Labor Expense		\$ 17,986,695
6	Payroll Tax Rate (%)		11.11%
7	Adjusted Payroll Tax Expense		1,997,975
8	Increase Due to Known and Measurable Payroll Tax Expense		\$ 372,220

Liberty Utilities (EnergyNorth)
Adjustments to Test Year
Adjustment 4
Pension and Benefits Expense

Line	Particulars	Source	Amount
1	Test Year ended 12/31/2019 Benefits Expense	RR-3-04WP	\$ 4,623,151
2	Adjustment to Benefits Expense		\$ 11,974
3			
4	Historical Test Year Pension & OPEB Expense	RR-3-04WP	\$ 3,300,364
5	Adjustment to Pension & OPEB Expense	RR-3-04WP	\$ (680,094)
6			
7	Historical Test Year Other Employee Benefits Expense	RR-3-04WP	\$ 64,108
8	Adjustment to Other Employee Benefits Expense		\$ (64,108)
9			
10			
11	Adjustment - Including Capitalized Portion of Pensions and OPEBs - To Account 926		\$ (732,228)
12			
13	Total	Ln 5	(680,094)
14	Capitalization Rate		34.40%
15			
16	Adjustment - Capitalized Portion - To Account 922		\$ 233,952
17			
18			
19	Adjustment to Rate Year Expense		\$ (498,276)
20			
21			

Liberty Utilities (Energy/North)
Adjustments to Test Year
Adjustment 5
Depreciation Expense

Line	Account	Account Number	Depreciation Rates	Plant in Service					Pro Forma Depreciation Expense	Accumulated Reserve			
				Balance 1/1/2019	Additions	Account 106	Balance 12/31/2019	Decoupling IT over \$50k		Accumulated Reserve as of 12/31/2019	Decoupling IT over \$50k	Accounts 1084 and 2420 by FERC Account	Adjusted Accumulated Reserve
1	Franchises and Consents	302	0.00%	250,950	-	-	250,950	-	250,950	-	-	-	-
2	Capital Software	303.0	16.13%	16,411,722	989,181	-	-	-	-	-	-	-	-
3	Capital Software - 3 Years	303.1	33.33%	-	-	9,806	909,178	185,436	723,742	241,247	526,686	41,208	485,478
4	Capital Software - 5 Years	303.2	20.00%	-	-	141,332	13,103,294	-	13,103,294	2,620,659	10,753,219	-	10,753,219
5	Capital Software - 10 Years	303.4	10.00%	-	-	34,862	3,232,162	-	3,232,162	323,216	2,322,064	-	2,322,064
6	Subtotal - INTANGIBLE PLANT			\$ 16,662,672	\$ 989,181	\$ 186,000	\$ 17,495,584	\$ 185,436	\$ 17,310,148	\$ 3,185,122	\$ 13,601,969	\$ 41,208	\$ 13,560,761
7													
8	Land & Land Rights	304		\$ 97,504	\$ -	\$ -	\$ 97,504	\$ -	\$ 97,504	\$ -	\$ -	\$ -	\$ -
9	Structures and Improvements	305	2.86%	815,122	37,045	-	852,167	-	852,167	24,372	280,124	-	280,124
10	Liquefied Petroleum Gas Equipment	311	2.86%	-	-	-	-	-	-	-	(35,647)	-	(35,647)
11	Gas Mixing Equipment	319	5.00%	336,984	31,360	-	368,345	-	368,345	18,417	241,392	-	241,392
12	Other Equipment - LNG	320.0	2.86%	294,148	21,422	-	315,570	-	315,570	9,025	(57,148)	-	(57,148)
13	Other Equipment	320.1	2.86%	3,478,111	0	-	3,478,111	-	3,478,111	99,474	1,389,131	-	1,389,131
13	Purification Equipment	361	2.86%	96,980	-	-	96,980	-	96,980	2,774	17,233	-	17,233
15	Other Equipment	363	2.86%	7,646	-	-	7,646	-	7,646	219	2,044	-	2,044
16	Subtotal - PRODUCTION PLANT			\$ 5 126 494	\$ 89 827	\$ -	\$ 5 216 322	\$ -	\$ 5 216 322	\$ 154 281	\$ 1 837 129	\$ -	\$ 1 837 129
17													
18	Land & Land Rights	364.1	0.00%	\$ 57,315	\$ -	\$ -	\$ 57,315	\$ -	\$ 57,315	-	-	-	-
19	Structures and Improvements	364.2	2.86%	609,078	-	-	609,078	-	609,078	17,420	460,293	-	460,293
20	Other Equipment	364.8	5.26%	3 929 432	(33 412)	-	3 896 019	-	3 896 019	204 931	2 400 155	-	2 400 155
21	Subtotal LNG Terminating and Processing			\$ 4,595,825	\$ (33,412)	\$ -	\$ 4,562,412	\$ -	\$ 4,562,412	\$ 222,350	\$ 2,860,448	\$ -	\$ 2,860,448
22													
23	Land & Land Rights	365	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	Structures and Improvements	366.2	2.86%	-	-	-	-	-	-	-	(34,860)	-	(34,860)
25	Structures and Improv-Other	366.3	2.86%	-	-	-	-	-	-	-	(48,434)	-	(48,434)
26	Mains	367	1.92%	11,722,426	(11,827)	29,863	11,740,462	-	11,740,462	225,417	404,274	-	404,274
27	Measuring and Regulating Station Equipment	369	2.86%	115,257	22,924	-	138,182	-	138,182	3,952	(18,159)	-	(18,159)
28	Land & Land Rights	374	0.00%	357,903	-	-	357,903	-	357,903	-	-	-	-
29	Structures and Improvements	375	2.86%	99,272	1,590,024	-	1,689,296	-	1,689,296	48,314	213,309	-	213,309
30	T&D Mains - STL-PLST-CI-Mixed	376.0	1.92%	257,097,448	29,961,341	25,023,889	312,082,678	-	312,082,678	5,991,987	72,204,757	-	69,404,820
31	T&D Mains - OTH	376.1	1.92%	288	-	-	288	-	288	6	11	-	277
32	T&D Mains - PLST	376.2	1.92%	2,783,066	305,297	1,444,003	4,532,366	-	4,532,366	87,021	988,333	-	950,008
33	T&D Mains - CI	376.3	1.92%	6,137	-	-	6,137	-	6,137	118	6,137	-	5,899
34	T&D Mains - Valve > 4"	376.4	1.92%	7,061	-	-	7,061	-	7,061	136	984	-	946
35	Dist-Compressor station equipment	377	1.92%	-	2,246,186	-	2,246,186	-	2,246,186	43,127	192,723	-	192,723
36	Measuring and Regulating Station Equipment - General	378	2.86%	6,490,028	943,675	1,587	7,435,290	-	7,435,290	212,649	4,358,391	-	4,358,391
37	Dist-Measuring and regulating station equipment-Ci	379	2.86%	1,883,503	3,411,244	-	5,294,746	-	5,294,746	151,430	1,321,095	-	1,321,095
38	T&D Gas Services - STL	380.0	3.55%	159,518,056	10,726,295	6,311,903	176,556,254	-	176,556,254	6,267,747	86,081,825	-	85,209,235
39	T&D Gas Services - OTH	380.1	3.55%	893,282	124,699	371,956	1,389,937	-	1,389,937	49,343	151,982	-	151,982
40	T&G Gas Services - PLST	380.2	3.55%	757,753	153,465	66,375	977,594	-	977,594	34,705	250,267	-	250,267
41	Meters	381.0	3.13%	13,446,533	(201,985)	1,550,680	14,795,228	-	14,795,228	463,091	4,544,359	919	4,543,440
42	Meters - Instrument	381.1	3.13%	276,522	-	-	276,522	-	276,522	8,655	113,499	-	113,499
43	Meters - ERTS	381.2	6.67%	6,073,154	(27,801)	-	6,045,353	-	6,045,353	403,225	2,744,146	-	2,744,146
44	Meter Installations	382	3.13%	18,597,177	-	7,464,547	26,061,724	-	26,061,724	815,732	4,122,684	-	4,122,684
45	Indust meas and reg station equip	385	2.86%	-	53,375	-	53,375	-	53,375	1,527	5,332	1,229	4,103
46	Other Equipment	387	5.26%	1 714 172	24 435	939 163	2 677 770	-	2 677 770	140 851	1 078 797	-	1 078 797
47	Subtotal - DISTRIBUTION PLANT			\$ 481,839,040	\$ 49,321,346	\$ 43,203,966	\$ 574,364,353	\$ -	\$ 574,364,353	\$ 14,949,031	\$ 178,681,730	\$ -	\$ 174,968,441

Liberty Utilities (Energy/North)
Adjustments to Test Year
Adjustment 5
Depreciation Expense

Line	Account	Account Number	Depreciation Rates	Plant in Service					Pro Forma Depreciation Expense	Accumulated Reserve			
				Balance 1/1/2019	Additions	Account 106	Balance 12/31/2019	Decoupling IT over \$50k		Accumulated Reserve as of 12/31/2019	Decoupling IT over \$50k	Accounts 1084 and 2420 by FERC Account	Adjusted Accumulated Reserve
48													
49	Land & Land Rights	389	0.00%	\$ 174,525	\$ (53,036)	\$ -	\$ 121,489	\$ -	\$ 121,489	\$ -	\$ -	\$ -	\$ -
50	Structures and Improvements	390.0	2.86%	18,958,404	2,605,825	1,068,183	22,632,412	-	22,632,412	647,287	5,559,722	26,833	5,532,889
51	Structures and Improvements - Boiler	390.1	2.86%	20,705	-	-	20,705	-	20,705	592	21,812	-	21,812
52	Structures and Improvements	390.2	2.86%	-	-	-	-	-	-	-	5,360	-	5,360
53	Office Furniture and Equipment	391.0	5.28%	357,246	176,299	102,823	636,368	-	636,368	33,600	119,886	-	119,886
54	Office Furniture and Equipment - Computers	391.1	10.00%	846,215	-	20,888	867,103	-	867,103	86,710	(403,214)	-	(403,214)
55	Office Furniture and Equipment - Laptop Computers	391.2	20.00%	834,476	44,256	20,888	899,621	-	899,621	179,924	440,849	-	440,849
56	Transportation Equipment - Auto	392.0	20.00%	5,380,959	1,102,627	1,230,529	7,714,115	-	7,714,115	1,542,823	3,451,477	-	3,451,477
57	Transportation Equipment - Truck	392.1	20.00%	170,840	(20,060)	-	150,780	-	150,780	30,156	150,780	-	150,780
58	Transportation Equipment - Van	392.2	20.00%	13,613	128,607	-	142,220	-	142,220	28,444	13,613	-	13,613
59	Transportation Equipment - Van	392.3	20.00%	-	-	-	-	-	-	-	34,070	-	34,070
60	Stores Equipment	393	3.33%	99,421	-	38,722	138,142	-	138,142	4,600	35,198	-	35,198
61	Tools, Shop, and Garage Equipment	394.0	5.26%	1,041,043	2,099,550	198,864	3,339,457	-	3,339,457	175,655	787,804	-	787,804
62	Tools, Shop, and Garage Equipment - CNG Station	394.1	5.26%	-	-	-	-	-	-	-	(33,749)	-	(33,749)
63	Power Operated Equipment <=12,000 lbs	396.0	20.00%	454,189	214,302	532,868	1,201,359	-	1,201,359	240,272	177,393	-	177,393
64	Power Operated Equipment >=12,000 lbs	396.1	20.00%	177,393	-	-	177,393	-	177,393	35,479	461,164	-	461,164
65	Power Operated Equipment <=12,000 lbs	396.2	20.00%	-	-	-	-	-	-	-	44,952	-	44,952
66	Communications Equipment	397	10.00%	507,407	165,492	219,503	892,402	-	892,402	89,240	433,204	-	433,204
67	Miscellaneous Equipment	398	6.67%	485,924	-	317,050	802,973	-	802,973	53,558	251,165	-	251,165
68	Subtotal - GENERAL PLANT			\$ 29,522,360	\$ 6,463,862	\$ 3,750,318	\$ 39,736,540	\$ -	\$ 39,736,540	\$ 3,148,341	\$ 11,551,486	\$ 26,833	\$ 11,524,653
69													
70	TOTAL			\$ 537,746,391	\$ 56,830,804	\$ 47,140,284	\$ 641,375,210	\$ 185,436	\$ 641,189,774	\$ 21,659,125	\$ 208,532,762	\$ 41,208	\$ 204,751,433
71													
72	OPI-LAND RETAINED	121					13,665		Non-Rate Base				
73	OPI-STRUCTURES-RETAINED	121.1					133,284		Non-Rate Base	133,284			Not In Rate Base
74	PLANT HELD FOR FUTURE USE	105					852,305		Non-Rate Base				
75													
76	GRAND TOTAL			\$ 537,746,391	\$ 56,830,804	\$ 47,140,284	\$ 642,374,464	\$ 185,436	\$ 641,189,774	\$ 21,659,125	\$ 208,666,046	\$ 41,208	\$ 204,751,433
77													
78	Less Amortization expense included above						To RR-EN-3-6		\$ (3,185,122)				
79	Depreciation Expense, as Calculated								\$ 18,474,003				
80	Depreciation Reserve Imbalance								\$ 9,213,530				
81	Amortization Period								6				
82	Depreciation Reserve Imbalance Adjustment Amortization (Account 403)								\$ 1,535,588				
83	Pro Forma Depreciation Expense								\$ 20,009,591				
84	Test Year Actual Depreciation Expense								\$ 18,173,439				
85	Adjustment to Depreciation Expense								\$ 1,836,152				

Liberty Utilities (EnergyNorth)
Adjustments to Test Year
Adjustment 6
Amortization Expense

Line	Description	Reference	Amortization Expense
1	Adjustment 1: Account 1929-4073 - Amortization of Costs to Achieve		
2			
3	Amount in Historical Test Year	RR-EN-2-1	\$ 705,261
4	Remove Cost to Achieve		(195,850)
5	New Costs to Achieve		48,197
6	Proposed Cost to Achieve		3
7	Add New Cost to Achieve Amortization		16,066
8	Remove Test Year Amortization for Concord Steam		(500,658)
9	Add New Concord Steam Amortization		518,100
10	Adjustment		<u>\$ (162,343)</u>
11			
12	Adjustment 2: NHDAS Special Contract Amortization		
13	Total NHDAS Special Contract Amount		\$ 1,047,589
14	Proposed Amortization Period (Years)		3
15	Adjustment		<u>\$ 349,196</u>
16			
17	Adjustment to Test Year Account 407.3		<u>\$ 186,853</u>
18			
19	Adjustment 3: Amortization of Excess Accumulated Deferred Income Taxes (EADIT)		
20	Total EADIT (inclusive of gross-up)		\$ (37,855,214)
21	Protected EADIT		\$ (33,434,927)
22	Weighted Average Remaining Life (years)		28 93
23	Protected EADIT Amortization		<u>\$ (1,155,718)</u>
24			
25	Unprotected EADIT (inclusive of gross-up)		\$ (4,420,287)
26	Unprotected EADIT Amortization Period (years)		28 93
27	Unprotected EADIT Amortization		<u>\$ (152,792)</u>
28			
29	Adjustment to Test Year Account 407.4		<u>\$ (1,308,511)</u>
30			
31	Adjustment 4: Account 8640-4050 - Amortization of Intangibles		
32	Annual Amortization Expense, as Calculated	RR-EN-3-5	\$ 3,185,122
33	Deprecation Reserve Imbalance (Account 405)		\$ 733,248
34	Amortization Period		6
35	Depreciation Reserve Impalance Amortization		<u>\$ 122,208</u>
36	Pro Forma Annual Amortization Expense		3,307,330
37	Historical Test Year Expense	RR-EN-2-1	<u>3,435,643</u>
38	Adjustment		<u>\$ (128,313)</u>
39			
40	Adjustment to Test Year Account 405.0		<u>\$ (128,313)</u>
41			
42	Total Adjustment		<u>\$ (1,249,970)</u>

Liberty Utilities (EnergyNorth)
Adjustments to Test Year
Adjustment 7
Property Tax

Line	Municipality	Parcel	Tax Year 2019		
			Installment #1	Installment #2	Total Due
1	Allenstown	0400-001	\$ 30,526	\$ 32,637	\$ 63,163
2	Amherst	002-033-008	48,942	47,884	96,826
3	Amherst	002-033-007	4,171	4,081	8,252
4	Auburn	000001/000001/000UTL	604	743	1,347
5	Bedford	1-1-A	45,894	59,286	105,180
6	Belmont	999-000-000-001	21,788	20,272	42,060
7	Berlin	000404-000051.0000L1	10,810	11,418	22,228
8	Boscawen	000099-000002-000000	10,906	12,263	23,169
9	Bow	0-9-99	71,941	78,266	150,207
10	Canterbury	000000-000002-000000	3,726	2,682	6,408
11	Derry	35-102	37,832	57,824	95,656
12	Franklin	000-001-00	44,651	47,057	91,709
13	Gilford	210-002.000	53	70	123
14	Gilford	210-003.000	49	67	116
15	Gilford	210-004.000	47	65	112
16	Gilford	210-005.000	49	67	116
17	Gilford	200-003.000	3,336	3,954	7,290
18	Goffstown	99-4-2	29,805	48,006	77,811
19	Goffstown	99-4-1	2,780	(478)	2,302
20	Hollis	056-027-001	2,647	2,614	5,261
21	Hooksett	0GAS-0001	148,146	139,528	287,674
22	Hooksett	0036-0041-0001	3,009	2,834	5,843
23	Hudson	100-006-000	191,528	179,829	371,357
24	Hudson	167-030-000	788	807	1,594
25	Hudson	167-029-000	752	770	1,522
26	Laconia	425/44/83/1	119,581	134,274	253,855
27	Litchfield	000UTL-000UTL-000001	10,892	11,171	22,063
28	Londonderry	81-7-0	221,407	232,117	453,524
29	Londonderry	81-14-0	19,889	19,464	39,353
30	Loudon	000070-000004-000000	112,584	121,342	233,926
31	Manchester	0999A-0075	992,725	1,031,464	2,024,189
32	Manchester	0752-0001	22,843	24,254	47,097
33	Manchester	0508-0002A	72	76	148
34	Manchester	0394-0004	310	329	639
35	Manchester	0471-0008	529	562	1,091
36	Merrimack	006D-3-000000-000000	180,814	180,650	361,464
37	Milford	036-183-000-000	884	690	1,575
38	Milford	055-007-000-000	56,819	63,292	120,111
39	Nashua	0039-00026	2,676	2,681	5,357
40	Nashua	0038-00063	88	93	181
41	Nashua	0038-00020	139	146	285
42	Nashua	0041-00011	1,122,729	1,037,077	2,159,806
43	Nashua	0000PC-00005	50,409	22,535	72,944
44	Northfield	000999-000001-000001	33,990	35,226	69,216
45	Pembroke	999-11	67,304	51,160	118,464
46	Sanborton	00.003.000.000	1,156	1,969	3,125
47	Tilton	000R23-000013-000000	110,104	108,282	218,386
48	Tilton	000R23-000014-000000	13,102	11,615	24,717

Liberty Utilities (EnergyNorth)
Adjustments to Test Year
Adjustment 7
Property Tax

Line	Municipality	Parcel	Tax Year 2019		
			Installment #1	Installment #2	Total Due
49	Concord	109/1/2	\$ 8,484	\$ 8,275	\$ 16,759
50	Concord	109/1/2	8,484	8,275	16,759
51	Concord	109/1/3	601	586	1,188
52	Concord	109/1/3	601	586	1,188
53	Concord	109/1/4	6,954	6,783	13,737
54	Concord	109/1/4	6,954	6,783	13,737
55	Concord	109/2/1	338	330	668
56	Concord	109/2/1	338	330	668
57	Concord	109/2/3	619	604	1,223
58	Concord	109/2/3	619	604	1,223
59	Concord	109/2/4	978	954	1,932
60	Concord	109/2/4	978	954	1,932
61	Concord	NO00/1/13	1,326	1,293	2,619
62	Concord	NO00/1/13	1,326	1,293	2,619
63	Concord	P000/1/6	228	236	464
64	Concord	P000/1/6	228	236	464
65	Concord	P000/1/3	30,567	37,111	67,678
66	Concord	P000/1/3	30,567	37,111	67,678
67	Concord	NO00/1/2	319,552	370,457	690,009
68	Concord	NO00/1/2	319,552	370,457	690,009
69	Concord	202Z/21	276	269	545
70	Concord	202Z/21	276	269	545
71	Concord	26/1/6	1,912	1,865	3,777
72	Concord	26/1/6	1,912	1,865	3,777
73	Concord	494Z/3	315	307	621
74	Concord	494Z/3	315	307	621
75	Concord	109/2/4/A	6	6	12
76	Concord	109/2/4/A	6	6	12
77	State of NH	TRUE UP		230,708	230,708
78	State of NH	NH DRA 1-2	605,067	605,067	1,210,134
79	State of NH	NH DRA 3-4	605,067	605,067	1,210,134
80	Keene	583038000001000	45,598	43,361	88,959
81	Keene	1160390000000000	8,012	8,264	16,276
82	R&M REALTY	5820140000000000	5,249	5,385	10,633
83	Keene Propane	047020020000	21,051	20,281	41,332
84	State of NH	NH DRA 1-2	3,858	3,858	7,716
85	State of NH	NH DRA 3-4	3,858	3,858	7,716
86	Total		\$ 5,897,896	\$ 6,227,020	\$ 12,124,916
87	Pro Forma Property Tax		\$ 12,454,039		
88	Less Amount for Non-Utility Property (adjustment to Pro Forma)		3,514		
89	Less NH True-up Double Count (adjustment to Pro Forma)		230,708		
90	Property Tax expense, Test Year		12,404,863		
91	Less Education Tax Removal (adjustment to book)		16,976		
92	Increase (Decrease) in Property tax expense		\$ (168,070)		

Liberty Utilities (EnergyNorth)
Adjustments to Test Year
Adjustment 8
Income Tax Expense - Historical Test Year

Line	Description	Reference	Amount
1	Test Year Actual to Statutory Rates		
2			
3	Normalized Revenue	RR-EN-2, line 6	\$ 93,501,690
4	Normalized Expenses, Excluding Income Tax	RR-EN-2, lines 9-15	66,732,986
5	Income (Loss) Before Taxes		\$ 26,768,704
6			
7	Rate Base	RR-1	\$ 346,131,311
8	Debt Portion	RR-4	49.85%
9	Debt Component		172,546,459
10	Debt Cost	RR-4	4.420%
11	Synchronized Interest Expense		7,626,553
12	Pre-Tax Income		\$ 19,142,151
13			
14	Combined Income Tax Rate	Line 20	27.08%
15	Income Tax Expense (Credit) at Statutory Rates		\$ 5,183,694
16	Income Tax Expense (Credit) Recorded		3,709,928
17	Adjustment to Normalize Historical Test Year		\$ 1,473,766
18			
19	Federal Statutory Rate		21.00%
20	New Hampshire Business Tax Rate		7.70%
21	Combined Income Tax Rate		27.08%
22			
23	This adjustment normalizes income tax expense in the Test Year before adjustments to reflect statutory rates.		

Liberty Utilities (EnergyNorth)
Adjustments to Test Year
Adjustment 9
Income Tax Expense - Pro Forma Test Year at Current Rates

Line	Description	Reference	Adjustment Amount	Items with Tax Effects
1	Adjustments to increase (decrease) taxable income:			() = Lower income
2	Revenue Adjustments	RR-EN-3-1	\$ 1,348,864	\$ 1,348,864
3	Salary and Wage Expense	RR-EN-3-2	(208,014)	(208,014)
4	Payroll Tax Expense	RR-EN-3-3	(372,220)	(372,220)
5	Pension and Benefits Expense	RR-EN-3-4	498,276	498,276
6	Depreciation Expense	RR-EN-3-5	(1,836,152)	(1,836,152)
7	Amortization Expense	RR-EN-3-6	1,249,970	1,249,970
8	Property Tax	RR-EN-3-7	168,070	168,070
9	Income Tax Expense - Historical Test Year	RR-EN-3-8	(1,473,766)	
10	Income Tax Expense - Pro Forma Test Year at Current Rates	RR-EN-3-9	(347,110)	
11	Other Adjustments	RR-EN-3-10	433,001	433,001
12			<u>\$ (539,082)</u>	<u>\$ 1,281,795</u>
13	Tax Rate			27.08%
14	Adjustment to Test Year at Current Rates			\$ 347,110
15				
16	This adjustment reflects income tax expense related to the Company's adjustments, computed at statutory rates.			

Liberty Utilities (EnergyNorth)
Adjustments to Test Year
Adjustment 10
Other Adjustments

Line	Description	Account	Amount
1	Adjustment for PUC Annual Assessment		
2	Liberty Utilities (ENNG) - Gas	\$	579,781
3	Liberty Utilities (ENNG) - IESR		149,295
4			
5	Liberty Utilities (ENNG) - GPSP	\$	39,717
6	Liberty Utilities (ENNG) - PIESR		7,805
7	Regulatory Expenses- Test Year		(813,481)
8			
9			
10	Total PUC Annual Assessment Adjustment	Account 928	\$ (36,883)
11			
12	Adjustment for Concord Rental Expense Credit		
13	Test Year Concord Training Center Lease Credit	\$	(267,014)
14	Going forward Concord Training Center Lease Credit		(309,651)
15			
16			
17	Total Concord Rental Expense Credit Adjustment	Account 931	\$ (42,637)
18			
19	Adjustment to Remove Keene Production Costs		
20	Keene Production Cost	Account 733	\$ (118,993)
21		Account 733	\$ (5,313)
22		Account 735	\$ (41,034)
23		Account 921	\$ (10,202)
24		Account 408	(41,332)
25			
26	Total Keene Production Cost Adjustment		\$ (216,874)
27			
28	Adjustment to Exclude GSE Related Costs		
29	GSE September Lease Payment	Account 874	\$ (888)
30	Electric Manuals	Account 870	(491)
31			
32	Total GSE Related Cost Adjustment		\$ (1,379)
33			
34	Adjustment to Remove NHPUC Penalty Expenses		
35	Penalty Expenses	Account 735	\$ (3,500)
36		Account 874	(500)
37		Account 921.4	(3,000)
38		Account 923	(78,000)
39			
40	Total Adjustment to Remove NHPUC Penalty Expenses		\$ (85,000)
41			
42	Adjustment to Remove Lobbying Expense		
43	American Gas Association	\$	(2,955)
44	New England Council		(45)
45			
46	Total Adjustment to Remove Lobbying Expense	Account 921	\$ (3,000)
47			
48	Adjustment to Outside Services		
49	CBIZ Cottonwood 2018 Removal	\$	(21,025)
50	CBIZ Cottonwood 2019 Addition		26,833
51	K&Y Removal		(4,830)
52	KPMG Removal		(7,296)
53			
54	Total Outside Services Adjustment	Account 923	\$ (6,318)
55			
56	Adjustment to Remove Non-Recoverable Advertising Expenses		
57	Comcast Advertising	Account 909	\$ (14,084)
58	Newsletter	Account 909	\$ (342)
59	Advertising Expenses	Account 913	\$ (26,484)
60			
61	Total Adjustment for Non-Recoverable Advertising Expenses		\$ (40,910)

Liberty Utilities (EnergyNorth)
Weighted Average Cost of Capital
Test Year Ended December 31, 2019

Line	Description	Capital Structure	Cost of Capital	Weighted Cost of Capital	Tax Rate	Pre-Tax
1	Common Stock	50.15%	10.51%	5.27%	27.08%	7.23%
2	Long-Term Debt	49.85%	4.420%	2.20%		2.20%
3	Total	100.00%		7.47%		9.43%

Liberty Utilities (EnergyNorth)
Rate Base - EnergyNorth
Balances at December 31, 2019

Line	Description	Reference	Rate Base
1	Utility Plant (Balance at 12/31/2019)	RR-EN-3-5	\$ 641,189,774
2	Depreciation Allowance (Balance at 12/31/2019)	RR-EN-3-5	(204,751,433)
3	Net Utility Plant		<u>\$ 436,438,341</u>
4			
5	Materials and Supplies (Average of 5 Quarterly Balances)	RR-EN-5-1	\$ 5,936,060
6	Customer Deposits (Average of 5 Quarterly Balances)	RR-EN-5-1	(3,019,271)
7			
8	Cash Working Capital	RR-EN-5-2	\$ 3,239,217
9			
10	Deferred Tax Liability, Net (Balance at 12/31/2019)	RR-EN-5-WP1	\$ (58,607,821)
11			
12	Excess Accumulated Deferred Income Taxes	RR-EN-5-WP1	\$ (37,855,214)
13			
14	Rate Base		<u>\$ 346,131,311</u>

Liberty Utilities (EnergyNorth)
Rate Base Quarterly Balances - EnergyNorth
Test Year Ended December 31, 2019

Line	Description	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2019 Q4	5 Quarter Average
1							
2	Materials and Supplies	\$ 5,281,934	\$ 5,460,957	\$ 6,220,835	6,712,826	6,003,746	\$ 5,936,060
3							
4							
5	Customer Deposits	\$(2,989,774)	\$(2,978,394)	\$(3,062,985)	(3,000,070)	(3,065,133)	\$(3,019,271)

Liberty Utilities (EnergyNorth)
Cash Working Capital - EnergyNorth
Test Year Ended December 31, 2019

Line	Description	Reference	Test Year Pro Forma
1	O&M Expenses		
2	Distribution, before Adjustments	RR-EN-2-1	\$ 70,442,914
3	Less: Depreciation and Amortization	RR-EN-2-1	(22,314,344)
4	Less: Deferred Income Taxes	RR-EN-2-1-WP	(3,483,997)
5	Known and Measurable Adjustments (excluding depreciation and amortization)	RR-EN-2-1	1,301,764
6			<u>\$ 45,946,337</u>
7			
8	Cash Working Capital Required - Days	25.72	<u>7.05%</u>
9			
10	Cash Working Capital Required		<u><u>\$ 3,239,217</u></u>

**LIBERTY UTILITIES (ENERGYNORTH NATURAL
GAS) CORP. D/B/A LIBERTY
DISTRIBUTION SERVICE RATE CASE**

DOCKET NO. DG 20-105

Staff's Responses to Liberty Utilities' First Set of Data Requests

Date Request Received: March 25, 2021
Data Request No.: LU 1-1

Date of Response: April 8, 2021
Witness: Donna H. Mullinax

Request:

Reference the Direct Testimony of Donna H. Mullinax at Bates 000013, lines 4 – 13, regarding Staff's adjustment to material and supplies ("M&S"). Please confirm that Witness Mullinax reviewed Energy North's M&S quarterly balances for 2020. If so, please explain why the quarterly balances for 2020 were not addressed.

Response:

The Company used a five-quarter average (M&S balances for December 2018, March 2019, June 2019, September 2019, and December 2019) to calculate the \$5.94 million proposed to be included in rate base. On November 11, 2020, the Company's response to Staff 2-5 provided the monthly M&S balances for the test year and each of the three preceding calendar years. Staff's analysis of this information found significant increases in the M&S balances since the last base rate case. The 2018 balance increased by \$4.9 million, 35.8% over 2017. The 2019 balance increased by \$6.0 million, 25.3% over 2019.

In Staff TS 3-14, Staff asked the Company whether the "Company expects the reason(s) for the increase to continue such that the M&S balance in 2019 is expected during the rate effective period." The Company responded, "No. Pipeline replacement is leveling off and the Company expects to see some improvement in materials planning as a result of move towards an integrated system under SAP." The Company's response was provided on February 24, 2021, and did not state when the pipeline replacement was leveling off or when the Company *expects* to see "some improvement in materials planning as a result of move towards an integrated system under SAP." The response implied a future event (after February 2021). Thus, Staff disregarded the 2020 balances and did not review them.

Since the Company is anticipating the leveling off of pipeline replacement and improvements in material planning process, the amount included within the Company's requested M&S balance should be adjusted to be reflective of the M&S balance expected during the rate-effective period. Staff used the provided historical amounts to normalize the M&S balance.

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

DG 20-105
Distribution Service Rate Case

Staff Technical Session Data Requests - Set 3

Date Request Received: 2/8/21
Request No. Staff TS 3-14

Date of Response: 2/24/21
Respondent: David Simek
Kenneth Sosnick

REQUEST:

M&S. Reference Staff 2-5. The response provided the monthly balances for M&S items for the test year and each of the three preceding years. Staff's analysis shows the average total balances (for EnergyNorth and Keene) are as follows:

- 2016 – \$3.3 million
 - 2017 – \$3.6 million (7.8% increase over 2016)
 - 2018 – \$4.9 million (35.8% increase over 2017)
 - 2019 – \$6.0 million (25.2% increase over 2018)
- a. Please explain the significant increase from 2017 to 2018.
 - b. Please explain the significant increase from 2018 to 2019.
 - c. Does the Company expect the reason(s) for the increase to continue such that the M&S balance in 2019 is expected during the rate effective period?

RESPONSE:

- a. During 2017, the Company was informed that one of the suppliers of regulators was moving to Mexico. The Company made additional purchases in order to avoid any potential delays in the delivery of meter sets and assemblies arising from the supplier's move. The Company also increased its inventories to accommodate for the expected increase in main replacement associated with the CIBS program.
- b. During 2019, the Company added an additional contractor to provide sufficient resources to meet the increased pipeline replacement. To meet that requirement, the Company purchased additional materials to support the new contractor.
- c. No. Pipeline replacement is leveling off and the Company expects to see some improvements in materials planning as a result of move towards an integrated system under SAP.

**LIBERTY UTILITIES (ENERGYNORTH NATURAL
GAS) CORP. D/B/A LIBERTY
DISTRIBUTION SERVICE RATE CASE**

DOCKET NO. DG 20-105

Staff's Responses to Liberty Utilities' First Set of Data Requests

Date Request Received: March 25, 2021
Data Request No.: LU 1-2

Date of Response: April 8, 2021
Witness: Donna H. Mullinax

Request:

Reference the Direct Testimony of Witness Mullinax, at Bates 000013 through 000014.

- a. Please explain the use of year-end M&S balances for a rate base recommendation rather than using a five-quarter average or 13-month average approach. Please explain whether Witness Mullinax typically use year-end balances for M&S when making revenue requirement recommendations.
- b. Given the typical construction season in EnergyNorth's service territory due to seasonal climate and ground conditions, please explain whether Staff would expect the M&S balance to be higher or lower at the end of December than compared to the balances required during the construction season.

Response:

- a. The Company used a five-quarter average (M&S balances for December 2018, March 2019, June 2019, September 2019, and December 2019) to calculate the \$5.94 million proposed to be included in rate base. Staff's analysis found significant increases in the M&S balances since the last base rate case. The 2018 balance increased by \$4.9 million, 35.8% over 2017. The 2019 balance increased by \$6.0 million, 25.3% over 2019.

In Staff TS 3-14, Staff asked the Company whether the "Company expects the reason(s) for the increase to continue such that the M&S balance in 2019 is expected during the rate effective period." The Company responded, "No. Pipeline replacement is leveling off and the Company *expects* to see some improvement in materials planning as a result of move towards an integrated system under SAP."

Based upon the Company's response, Staff determined that the Company's proposed five-quarter average M&S balance of \$5.94 million would not be reflective of the M&S balance expected during the rate-effective period and that an adjustment was appropriate.

In selecting the basis for an adjustment, Staff considered several approaches in determining the M&S balance to be included in rate base. The 2020 M&S balances were disregarded. The Company's response to Staff TS 3-14 (provided on February 24, 2021) stated that pipeline replacement is leveling off and that additional improvements were *expected*, and thus Staff assumed them to have not been realized yet. Staff considered using (1) the average of three-year end balances (December 2017, December 2018, and

December 2019); (2) the average of three 13-month averages; and (3) a 36-month average. The results of that analysis are shown below.

Method	Amount	Difference from Company Proposed Balance
5-Quarter Average Used by Company	\$ 5,936,060	
Average of 3 Year End Balances Recommended by Staff	\$ 5,086,828	\$ (849,231)
3 - 13 Month Averages	\$ 4,851,297	\$ (1,084,762)
36 Month Average	\$ 4,908,650	\$ (1,027,410)

Staff selected the average of three-year end balances to develop a proxy for the M&S balance during the rate effective period. Use of the other methods would have resulted in a larger adjustment.

- b. Assuming good inventory control practices, Staff would expect M&S balances to be higher during the construction season.

Regulatory Assets on Decmeber 31, 2017

	Energy North	NH Gas Co	
ASSETS			
Reg_assets_non_cur Regulatory assets - non-current	77,557,708	692,196	78,249,904
Reg_assets_environmental Environmental costs	48,163,464	-	
10_1920_1863 KS R/A-Environmental-Materials	27,075,097	-	27,075,097
10_1920_1864 KS R/A-Environmental-Purch Gas	20,964,352	-	20,964,352
10_1930_1824 Environmental Response Fund	124,016	-	124,016
Reg_assets_pension Pension and post employment benefits	21,625,753	-	
10_1930_1826 Reg asset pension/OPEB tracker	21,625,753	-	21,625,753
Reg_assets_rate_case Rate case costs	2,499,338	-	
10_1930_1745 Rate Case Recovery	486,876	-	486,876
10_1930_1823 Deferred Rate Case	2,012,462	-	2,012,462
Reg_assets_taxes Taxes	1,157,159	-	
10_1929_1863 Regulatory Assets - FAS 109	425,019	-	425,019
10_1930_2830 Accum Def Inc Taxes-Other Reg Asset	732,140	-	732,140
Reg_assets_other Other regulatory assets	4,111,994	692,196	
10_1920_1860 Misc Deferred Debits	3,444,180	692,196	4,136,376
10_1930_1828 NEG & KeySpan CTA	667,813	-	667,813

**FUNCTIONAL COST STUDY
SUMMARY OF RESULTS**

Docket No. DG 20-105
Attachment DBS/KAS-4-Rebuttal
Page 1 of 17

Line

No.	Description	System Total	Delivery Costs	Direct Gas Costs	LPG & LNG	Misc	Production Costs
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
Rate Base							
1	Plant in Service	\$ 641,189,774	\$ 631,599,724	\$ -	\$ 9,590,051	\$ -	\$ 9,590,051
2	Accumulated Reserve	(204,751,433)	(200,951,293)	-	(3,800,140)	-	(3,800,140)
3	Other Rate Base Items	(90,307,030)	(89,340,674)	-	(987,780)	21,425	(966,355)
4	Total Rate Base	\$ 346,131,311	\$ 341,307,756	\$ -	\$ 4,802,130	\$ 21,425	\$ 4,823,555
Revenues at Current Rates							
5	Sales Revenue	\$ 93,643,178	\$ 91,649,591	\$ -	\$ 1,980,418	\$ 13,170	\$ 1,993,587
6	Miscellaneous Revenues	1,207,376	1,206,507	-	800	69	869
7	Total Revenues	\$ 94,850,554	\$ 92,856,098	\$ -	\$ 1,981,218	\$ 13,238	\$ 1,994,456
Expenses at Current Rates							
8	Operations & Maintenance Expenses	\$ 29,706,094	\$ 27,196,266	\$ -	\$ 2,225,393	\$ 284,435	\$ 2,509,828
9	Depreciation Expense	22,900,526	22,208,248	-	661,449	30,828	692,277
10	Taxes Other Than Income Taxes	14,193,436	13,841,955	-	351,481	-	351,481
	Interest on Customer Deposits	-	-	-	-	-	-
11	Total Expenses - Current	\$ 66,800,055	\$ 63,246,469	\$ -	\$ 3,238,323	\$ 315,264	\$ 3,553,587
12	Total Income Taxes	\$ 5,530,804	\$ 5,981,798	\$ -	\$ (369,077)	\$ (81,916)	\$ (450,993)
13	Current Operating Income	\$ 22,519,695	\$ 23,627,832	\$ -	\$ (888,028)	\$ (220,109)	\$ (1,108,137)
14	Return at Current Rates	6.51%	6.92%	0.00%	-18.49%	-1027.35%	-22.97%
15	Index Rate of Return	1.00	1.06	-	(2.84)	(157.91)	(3.53)
Revenue Requirement at Equal Rates of Return							
16	Required Return	7.47%	7.47%	7.47%	7.47%	7.47%	7.47%
17	Required Operating Income	\$ 25,856,009	\$ 25,495,689	\$ -	\$ 358,719	\$ 1,600	\$ 360,320
18	Operating Income (Deficiency)/Surplus	\$ (3,336,314)	\$ (1,867,858)	\$ -	\$ (1,246,747)	\$ (221,709)	\$ (1,468,456)
Expenses at Required Return							
19	Operations & Maintenance Expenses	\$ 29,706,094	\$ 27,196,266	\$ -	\$ 2,225,393	\$ 284,435	\$ 2,509,828
20	Depreciation Expense	22,900,526	22,208,248	-	661,449	30,828	692,277
21	Taxes Other than Income	14,193,436	13,841,955	-	351,481	-	351,481
22	Interest on Customer Deposits	-	-	-	-	-	-
23	Total Expenses Required	\$ 66,800,055	\$ 63,246,469	\$ -	\$ 3,238,323	\$ 315,264	\$ 3,553,587
24	Income Taxes	\$ 6,769,798	\$ 6,675,456	\$ -	\$ 93,922	\$ 419	\$ 94,341
25	Total Revenue Requirement at Equal Return	\$ 99,425,862	\$ 95,417,615	\$ -	\$ 3,690,964	\$ 317,283	\$ 4,008,247
26	Revenue (Deficiency)/Surplus	\$ (4,575,308)	\$ (2,561,517)	\$ -	\$ (1,709,747)	\$ (304,045)	\$ (2,013,791)

**Functional Cost Study
Account Detail**

Docket No. DG 20-105
Attachment DBS/KAS-4-Rebuttal
Page 2 of 17

Line No.	Description (A)	LPG & LNG Costs (B)	Misc. Production Costs (C)	Bad Debts Excl. LPG & LNG (D)	Gas Cost Working Capital (E)	Total Indirect Costs (F)
Summary of Results at Present Rates						
Rate Base						
1	Gas Plant in Service	\$ 9,590,051	\$ -	\$ -	\$ -	\$ 9,590,051
2	Accumulated Reserve	(3,800,140)	-	-	-	(3,800,140)
3	Net Utility Plant in Service	\$ 5,789,911	\$ -	\$ -	\$ -	\$ 5,789,911
Other Rate Base Items:						
4	Fuel Stock	\$ -	\$ -	\$ -	\$ -	\$ -
5	Materials and Supplies	77,309.14	\$ -	\$ -	\$ -	77,309.14
6	Gas Stored Underground	-	-	-	-	-
7	LNG Inventory	-	-	-	-	-
8	Cash Working Capital	191,211	21,425	-	-	212,636
9	Accumulated Deferred Income Taxes	(763,288)	-	-	-	(763,288)
10	Excess Accum. Deferred Income Taxes	(493,013)	-	-	-	(493,013)
11	Total Rate Base	\$ 4,802,130	\$ 21,425	\$ -	\$ -	\$ 4,823,555
Revenues						
12	Total Sales Revenue	\$ 1,980,418	\$ 13,170	\$ -	\$ -	\$ 1,993,587
13	Other Operating Revenues	800	69	-	-	869
14	Total Operating Revenues	\$ 1,981,218	\$ 13,238	\$ -	\$ -	\$ 1,994,456
Expenses						
15	Purchased Gas Costs	\$ -	\$ -	\$ -	\$ -	\$ -
16	Other O&M excl. Uncollectible	2,162,998	279,072	-	-	2,442,070
17	Uncollectible Expense	62,395	-	5,364	-	67,758
18	Depreciation Expense	661,449	30,828	-	-	692,277
19	Other Taxes	351,481	-	-	-	351,481
20	Income Taxes	(369,077)	(80,464)	(1,453)	-	(450,993)
21	Total Operating Expenses	\$ 2,869,246	\$ 229,436	\$ 3,911	\$ -	\$ 3,102,593
22	Operating Income	\$ (888,028)	\$ (216,198)	\$ (3,911)	\$ -	\$ (1,108,137)
23	Rate of Return	-18.49%	-1009.10%	0.00%	0.00%	-22.97%
24	Index Rate of Return	1.00	54.57	-	-	1.24
25	Net Revenues	\$ 1,980,418	\$ 13,170	\$ -	\$ -	\$ 1,993,587

**Functional Cost Study
Account Detail**

Docket No. DG 20-105
Attachment DBS/KAS-4-Rebuttal
Page 3 of 17

Line No.	Description	LPG & LNG Costs	Misc. Production Costs	Bad Debts Excl. LPG & LNG	Gas Cost Working Capital	Total Indirect Costs
	(A)	(B)	(C)	(D)	(E)	(F)
Summary of Results at Claimed Rates						
Rate Base						
26	Gas Plant in Service	\$ 9,590,051	\$ -	\$ -	\$ -	\$ 9,590,051
27	Accumulated Reserve	(3,800,140)	-	-	-	(3,800,140)
28	Net Utility Plant in Service	\$ 5,789,911	\$ -	\$ -	\$ -	\$ 5,789,911
Other Rate Base Items:						
29	Fuel Stock	\$ -	\$ -	\$ -	\$ -	\$ -
30	Materials and Supplies	77,309				77,309
31	Gas Stored Underground	-				-
32	LNG Inventory	-				-
33	Cash Working Capital	191,211	21,425	-	-	212,636
34	Accumulated Deferred Income Taxes	(763,288)	-	-	-	(763,288)
35	Excess Accum. Deferred Income Taxes	(493,013)				(493,013)
36	Total Rate Base	\$ 4,802,130	\$ 21,425	\$ -	\$ -	\$ 4,823,555
37	Required Rate of Return	7.47%	7.47%	7.47%	7.47%	7.47%
38	Required Operating Income	\$ 358,719	\$ 1,600	\$ -	\$ -	\$ 360,320
Expenses						
39	Purchased Gas Costs	\$ -	\$ -	\$ -	\$ -	\$ -
40	Other O&M excl. Uncollectible	2,162,998	279,072	-	-	2,442,070
41	Uncollectible Expense	62,395	-	5,364	-	67,758
42	Depreciation Expense	661,449	30,828	-	-	692,277
43	Other Taxes	351,481	-	-	-	351,481
44	Total Expenses Required	\$ 3,238,323	\$ 309,900	\$ 5,364	\$ -	\$ 3,553,587
45	Income Taxes	93,922	419	(0)	-	94,341
46	Total Rev. Req. at Required Return	\$ 3,690,964	\$ 311,920	\$ 5,363	\$ -	\$ 4,008,247
Revenues						
47	Total Sales Revenue	\$ 3,690,164	\$ 311,851	\$ 5,363	\$ -	\$ 4,007,379
48	Other Operating Revenues	800	69	-	-	869
49	Total Operating Revenues	\$ 3,690,964	\$ 311,920	\$ 5,363	\$ -	\$ 4,008,247

**Functional Cost Study
Account Detail**

Docket No.DG20-105
Attachment DBS/KAS-4-Rebuttal
Page 4 of 17

Account Description	Amount	Alloc. Factor	Delivery Costs				Direct Gas Costs			
			DEM	CUS	COM	TOTAL	DEM	CUS	COM	TOTAL
RATE BASE										
Plant in Service										
Intangible Plant										
Misc. Intangible Plant	17,059,198	LABOR	8,865,727	6,749,844	-	15,615,571	-	-	-	-
Sub-total	17,310,148		8,996,147	6,849,138	-	15,845,285	-	-	-	-
Production Plant										
Production Plant EN	5,216,322	DPROD	453,820	-	-	453,820	-	-	-	-
Production Plant Keene	-	DPROD_K	-	-	-	-	-	-	-	-
Sub-total	5,216,322		453,820	-	-	453,820	-	-	-	-
Distribution Plant										
Land & Land Rights	-	DIST	-	-	-	-	-	-	-	-
M&R Stations	-	DIST	-	-	-	-	-	-	-	-
Mains	11,740,462	DIST	11,740,462	-	-	11,740,462	-	-	-	-
Compressor Station Equipment	2,246,186	DIST	2,246,186	-	-	2,246,186	-	-	-	-
M&R Stations	7,435,290	DIST	7,435,290	-	-	7,435,290	-	-	-	-
Services	178,923,785	CUST	-	178,923,785	-	178,923,785	-	-	-	-
Meters & Meter Installations	21,117,103	CUST	-	21,117,103	-	21,117,103	-	-	-	-
Other Equipment	2,677,770	DIST	2,677,770	-	-	2,677,770	-	-	-	-
Sub-total	578,926,765		352,824,153	226,102,612	-	578,926,765	-	-	-	-
General Plant										
Land & Land Rights	121,489	LABOR	63,138	48,070	-	111,208	-	-	-	-
Structures & Improvements	22,653,117	LABOR	11,772,907	8,963,200	-	20,736,107	-	-	-	-
Office Furniture & Equipment	2,403,092	LABOR	1,248,896	950,836	-	2,199,732	-	-	-	-
Transportation Equipment	8,007,116	LABOR	4,161,327	3,168,190	-	7,329,517	-	-	-	-
Stores Equipment	138,142	LABOR	71,793	54,659	-	126,452	-	-	-	-
Tools, Shop & Garage Equip.	3,339,457	LABOR	1,735,528	1,321,329	-	3,056,857	-	-	-	-
Laboratory Equip.	-	LABOR	-	-	-	-	-	-	-	-
Power Operated Equip.	1,378,752	LABOR	716,542	545,533	-	1,262,075	-	-	-	-
Communication Equip.	892,402	LABOR	463,785	353,098	-	816,883	-	-	-	-
Miscellaneous Equip.	802,973	LABOR	417,308	317,714	-	735,022	-	-	-	-
Sub-total	39,736,540		20,651,224	15,722,630	-	36,373,854	-	-	-	-
TOTAL PLANT-IN-SERVICE	641,189,774		382,925,343	248,674,380	-	631,599,724	-	-	-	-
Accumulated Reserve for Depreciation										
Intangible Plant										
Misc. Intangible Plant	(13,560,761)	LABOR	(7,047,577)	(5,365,611)	-	(12,413,188)	-	-	-	-
Sub-total	(13,560,761)		(7,047,577)	(5,365,611)	-	(12,413,188)	-	-	-	-
Production Plant										
Production Plant	(1,837,129)	DPROD	(159,830)	-	-	(159,830)	-	-	-	-
Production Plant Keene	-	DPROD_K	-	-	-	-	-	-	-	-
Sub-total	(1,837,129)		(159,830)	-	-	(159,830)	-	-	-	-
Distribution Plant										
Land & Land Rights	-	DIST	-	-	-	-	-	-	-	-
M&R Stations	83,294	DIST	83,294	-	-	83,294	-	-	-	-
Mains	(404,274)	DIST	(404,274)	-	-	(404,274)	-	-	-	-
Compressor Station Equipment	(192,723)	DIST	(192,723)	-	-	(192,723)	-	-	-	-
M&R Stations	(4,358,391)	DIST	(4,358,391)	-	-	(4,358,391)	-	-	-	-
Services	(85,611,484)	DIST	(85,611,484)	-	-	(85,611,484)	-	-	-	-
Meters & Meter Installations	(7,401,085)	DIST	(7,401,085)	-	-	(7,401,085)	-	-	-	-
Meters Installations	(4,122,684)	CUST	-	(4,122,684)	-	(4,122,684)	-	-	-	-
Land & Land Rights	-	CUST	-	-	-	-	-	-	-	-
Structures and Improvements	(460,293)	CUST	-	(460,293)	-	(460,293)	-	-	-	-
Other Equipment	(2,400,155)	DIST	(2,400,155)	-	-	(2,400,155)	-	-	-	-
Other Equipment	(1,078,797)	DIST	(1,078,797)	-	-	(1,078,797)	-	-	-	-
Measuring and Regulating Station Equipment	18,159	DIST	18,159	-	-	18,159	-	-	-	-
Dist-Measuring and regulating station equipment-CI	(1,321,095)	DIST	(1,321,095)	-	-	(1,321,095)	-	-	-	-
Indust meas and reg station equip	(4,103)	DIST	(4,103)	-	-	(4,103)	-	-	-	-
Structures and Improvements	(213,309)	DIST	(213,309)	-	-	(213,309)	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
Sub-total	(177,828,890)		(173,245,912)	(4,582,977)	-	(177,828,890)	-	-	-	-

**Functional Cost Study
Account Detail**

Docket No.DG20-105
Attachment DBS/KAS-4-Rebuttal
Page 5 of 17

Account Description	Amount	Alloc. Factor	LPG & LNG				Misc			
			DEM	CUS	COM	TOTAL	DEM	CUS	COM	TOTAL
RATE BASE										
Plant in Service										
Intangible Plant										
Misc. Intangible Plant	17,059,198	LABOR	1,443,627	-	-	1,443,627	-	-	-	-
Sub-total	17,310,148		1,464,863	-	-	1,464,863	-	-	-	-
Production Plant										
Production Plant EN	5,216,322	DPROD	4,762,502	-	-	4,762,502	-	-	-	-
Production Plant Keene	-	DPROD_K	-	-	-	-	-	-	-	-
Sub-total	5,216,322		4,762,502	-	-	4,762,502	-	-	-	-
Distribution Plant										
Land & Land Rights	-	DIST	-	-	-	-	-	-	-	-
M&R Stations	-	DIST	-	-	-	-	-	-	-	-
Mains	11,740,462	DIST	-	-	-	-	-	-	-	-
Compressor Station Equipment	2,246,186	DIST	-	-	-	-	-	-	-	-
M&R Stations	7,435,290	DIST	-	-	-	-	-	-	-	-
Services	178,923,785	CUST	-	-	-	-	-	-	-	-
Meters & Meter Installations	21,117,103	CUST	-	-	-	-	-	-	-	-
Other Equipment	2,677,770	DIST	-	-	-	-	-	-	-	-
Sub-total	578,926,765		-	-	-	-	-	-	-	-
General Plant										
Land & Land Rights	121,489	LABOR	10,281	-	-	10,281	-	-	-	-
Structures & Improvements	22,653,117	LABOR	1,917,009	-	-	1,917,009	-	-	-	-
Office Furniture & Equipment	2,403,092	LABOR	203,361	-	-	203,361	-	-	-	-
Transportation Equipment	8,007,116	LABOR	677,598	-	-	677,598	-	-	-	-
Stores Equipment	138,142	LABOR	11,690	-	-	11,690	-	-	-	-
Tools, Shop & Garage Equip.	3,339,457	LABOR	282,600	-	-	282,600	-	-	-	-
Laboratory Equip.	-	LABOR	-	-	-	-	-	-	-	-
Power Operated Equip.	1,378,752	LABOR	116,676	-	-	116,676	-	-	-	-
Communication Equip.	892,402	LABOR	75,519	-	-	75,519	-	-	-	-
Miscellaneous Equip.	802,973	LABOR	67,951	-	-	67,951	-	-	-	-
Sub-total	39,736,540		3,362,686	-	-	3,362,686	-	-	-	-
TOTAL PLANT-IN-SERVICE	641,189,774		9,590,051	-	-	9,590,051	-	-	-	-
Accumulated Reserve for Depreciation										
Intangible Plant										
Misc. Intangible Plant	(13,560,761)	LABOR	(1,147,573)	-	-	(1,147,573)	-	-	-	-
Sub-total	(13,560,761)		(1,147,573)	-	-	(1,147,573)	-	-	-	-
Production Plant										
Production Plant	(1,837,129)	DPROD	(1,677,299)	-	-	(1,677,299)	-	-	-	-
Production Plant Keene	-	DPROD_K	-	-	-	-	-	-	-	-
Sub-total	(1,837,129)		(1,677,299)	-	-	(1,677,299)	-	-	-	-
Distribution Plant										
Land & Land Rights	-	DIST	-	-	-	-	-	-	-	-
M&R Stations	83,294	DIST	-	-	-	-	-	-	-	-
Mains	(404,274)	DIST	-	-	-	-	-	-	-	-
Compressor Station Equipment	(192,723)	DIST	-	-	-	-	-	-	-	-
M&R Stations	(4,358,391)	DIST	-	-	-	-	-	-	-	-
Services	(85,611,484)	DIST	-	-	-	-	-	-	-	-
Meters & Meter Installations	(7,401,085)	DIST	-	-	-	-	-	-	-	-
Meters Installations	(4,122,684)	CUST	-	-	-	-	-	-	-	-
Land & Land Rights	-	CUST	-	-	-	-	-	-	-	-
Structures and Improvements	(460,293)	CUST	-	-	-	-	-	-	-	-
Other Equipment	(2,400,155)	DIST	-	-	-	-	-	-	-	-
Other Equipment	(1,078,797)	DIST	-	-	-	-	-	-	-	-
Measuring and Regulating Station Equipment	18,159	DIST	-	-	-	-	-	-	-	-
Dist-Measuring and regulating station equipment-Ci	(1,321,095)	DIST	-	-	-	-	-	-	-	-
Indust meas and reg station equip	(4,103)	DIST	-	-	-	-	-	-	-	-
Structures and Improvements	(213,309)	DIST	-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
Sub-total	(177,828,890)		-	-	-	-	-	-	-	-

**Functional Cost Study
Account Detail**

Docket No.DG20-105
Attachment DBS/KAS-4-Rebuttal
Page 6 of 17

Account Description	Amount	Alloc. Factor	Delivery Costs				Direct Gas Costs			
			DEM	CUS	COM	TOTAL	DEM	CUS	COM	TOTAL
General Plant										
Land & Land Rights	-	0	-	-	-	-	-	-	-	-
Structures & Improvements	(5,560,061)	LABOR	(2,889,584)	(2,199,960)	-	(5,089,543)	-	-	-	-
Office Furniture & Equipment	(157,522)	LABOR	(81,865)	(62,327)	-	(144,192)	-	-	-	-
Transportation Equipment	(3,649,940)	LABOR	(1,896,887)	(1,444,178)	-	(3,341,065)	-	-	-	-
Stores Equipment	(35,198)	LABOR	(18,293)	(13,927)	-	(32,219)	-	-	-	-
Tools, Shop & Garage Equip.	(754,055)	LABOR	(391,885)	(298,358)	-	(690,244)	-	-	-	-
Laboratory Equip.	-	LABOR	-	-	-	-	-	-	-	-
Power Operated Equip.	(683,509)	LABOR	(355,222)	(270,445)	-	(625,667)	-	-	-	-
Communication Equip.	(433,204)	LABOR	(225,138)	(171,407)	-	(396,544)	-	-	-	-
Miscellaneous Equip.	(251,165)	LABOR	(130,531)	(99,379)	-	(229,910)	-	-	-	-
Other	-	PLANT	-	-	-	-	-	-	-	-
Sub-total	(11,524,653)		(5,989,404)	(4,559,981)	-	(10,549,385)	-	-	-	-
TOTAL DEPRECIATION ACCRUAL	(204,751,433)		(186,442,724)	(14,508,570)	-	(200,951,293)	-	-	-	-
NET PLANT	436,438,341		196,482,620	234,165,811	-	430,648,430	-	-	-	-
Rate Base Adjustments										
Additions										
Fuel Stock	-	PDGPLT	-	-	-	-	-	-	-	-
Gas Materials and Supplies	5,936,060	PDGPLT	3,557,843	2,300,907	-	5,858,751	-	-	-	-
Gas Stored Underground - Current A/C 164	-	PDGPLT	-	-	-	-	-	-	-	-
LNG Inventory - Current A/C 164	-	PDGPLT	-	-	-	-	-	-	-	-
Gas Stored Underground - Non-Current A/C 117	-	PDGPLT	-	-	-	-	-	-	-	-
Cash Working Capital (Other)	3,239,217	OMEXPX	1,842,826	1,164,663	19,092	3,026,581	-	-	-	-
Prepayments	-	PDGPLT	-	-	-	-	-	-	-	-
Sub-total	9,175,276		5,400,669	3,465,570	19,092	8,885,331	-	-	-	-
Deductions										
Customer Deposits	(3,019,271)	CUST	-	(3,019,271)	-	(3,019,271)	-	-	-	-
Excess Accum. Deferred Income Taxes	(37,855,214)	PDGPLT	(22,688,944)	(14,673,257)	-	(37,362,201)	-	-	-	-
Accum. Deferred Income Taxes	(58,607,821)	PDGPLT	(35,127,250)	(22,717,284)	-	(57,844,533)	-	-	-	-
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
~	~	~	~	~	~	~	~	~	~	~
Sub-total	(99,482,306)		(57,816,193)	(40,409,812)	-	(98,226,006)	-	-	-	-
TOTAL RATE BASE ADJ.	(90,307,030)		(52,415,524)	(36,944,242)	19,092	(89,340,674)	-	-	-	-
TOTAL RATE BASE	346,131,311		144,067,096	197,221,569	19,092	341,307,756	-	-	-	-

**Functional Cost Study
Account Detail**

Docket No.DG20-105
Attachment DBS/KAS-4-Rebuttal
Page 7 of 17

Account Description	Amount	Alloc. Factor	LPG & LNG				Misc			
			DEM	CUS	COM	TOTAL	DEM	CUS	COM	TOTAL
General Plant										
Land & Land Rights	-	0	-	-	-	-	-	-	-	-
Structures & Improvements	(5,560,061)	LABOR	(470,518)	-	-	(470,518)	-	-	-	-
Office Furniture & Equipment	(157,522)	LABOR	(13,330)	-	-	(13,330)	-	-	-	-
Transportation Equipment	(3,649,940)	LABOR	(308,874)	-	-	(308,874)	-	-	-	-
Stores Equipment	(35,198)	LABOR	(2,979)	-	-	(2,979)	-	-	-	-
Tools, Shop & Garage Equip.	(754,055)	LABOR	(63,812)	-	-	(63,812)	-	-	-	-
Laboratory Equip.	-	LABOR	-	-	-	-	-	-	-	-
Power Operated Equip.	(683,509)	LABOR	(57,842)	-	-	(57,842)	-	-	-	-
Communication Equip.	(433,204)	LABOR	(36,660)	-	-	(36,660)	-	-	-	-
Miscellaneous Equip.	(251,165)	LABOR	(21,255)	-	-	(21,255)	-	-	-	-
Other	-	PLANT	-	-	-	-	-	-	-	-
Sub-total	(11,524,653)		(975,268)	-	-	(975,268)	-	-	-	-
TOTAL DEPRECIATION ACCRUAL	(204,751,433)		(3,800,140)	-	-	(3,800,140)	-	-	-	-
NET PLANT	436,438,341		5,789,911	-	-	5,789,911	-	-	-	-
Rate Base Adjustments										
Additions										
Fuel Stock	-	PDGPLT	-	-	-	-	-	-	-	-
Gas Materials and Supplies	5,936,060	PDGPLT	77,309	-	-	77,309	-	-	-	-
Gas Stored Underground - Current A/C 164	-	PDGPLT	-	-	-	-	-	-	-	-
LNG Inventory - Current A/C 164	-	PDGPLT	-	-	-	-	-	-	-	-
Gas Stored Underground - Non-Current A/C 117	-	PDGPLT	-	-	-	-	-	-	-	-
Cash Working Capital (Other)	3,239,217	OMEXPX	191,211	-	-	191,211	-	-	21,425	21,425
Prepayments	-	PDGPLT	-	-	-	-	-	-	-	-
Sub-total	9,175,276		268,520	-	-	268,520	-	-	21,425	21,425
Deductions										
Customer Deposits	(3,019,271)	CUST	-	-	-	-	-	-	-	-
Excess Accum. Deferred Income Taxes	(37,855,214)	PDGPLT	(493,013)	-	-	(493,013)	-	-	-	-
Accum. Deferred Income Taxes	(58,607,821)	PDGPLT	(763,288)	-	-	(763,288)	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
~	~		-	-	-	-	-	-	-	-
Sub-total	(99,482,306)		(1,256,300)	-	-	(1,256,300)	-	-	-	-
TOTAL RATE BASE ADJ.	(90,307,030)		(987,780)	-	-	(987,780)	-	-	21,425	21,425
TOTAL RATE BASE	346,131,311		4,802,130	-	-	4,802,130	-	-	21,425	21,425

**Functional Cost Study
Account Detail**

Docket No.DG20-105
Attachment DBS/KAS-4-Rebuttal
Page 8 of 17

Account Description	Amount	Alloc. Factor	Delivery Costs				Direct Gas Costs			
			DEM	CUS	COM	TOTAL	DEM	CUS	COM	TOTAL
EXPENSES										
O & M Expenses										
Production (LPG LNG) - Operation										
Supervision	990,089	DPROD	86,138	-	-	86,138	-	-	-	-
LPG - Production	-	DPROD	-	-	-	-	-	-	-	-
LPG - Materials	-	DPROD	-	-	-	-	-	-	-	-
Gas Mixing & Misc Exp - Keene	64,037	DPROD	5,571	-	-	5,571	-	-	-	-
Misc. Prod. Exp.	469,719	DPROD	40,866	-	-	40,866	-	-	-	-
Operation Labor & Expenses	-	DPROD	-	-	-	-	-	-	-	-
Other	26,120	DPROD	2,272	-	-	2,272	-	-	-	-
Indirect Expenses	-	INDIRECT	-	-	-	-	-	-	-	-
Sub-total	1,549,966		134,847	-	-	134,847	-	-	-	-
Production (LPG LNG) - Maintenance										
Maint. of Prod. Equip	119,531	DPROD	10,399	-	-	10,399	-	-	-	-
Sub-total	119,531		10,399	-	-	10,399	-	-	-	-
Total Production	1,669,496		145,246	-	-	145,246	-	-	-	-
Purchased Gas Expenses										
Gas Supply	-	GASCOST	-	-	-	-	-	-	-	-
Storage Gas	-	GASCOST	-	-	-	-	-	-	-	-
Other Gas Supply	-	GASSPLY	-	-	-	-	-	-	-	-
Sub-total	-		-	-	-	-	-	-	-	-
Distribution Operation Expenses										
Operation Supervision & Engineering	540,518	DISTOPX	442,600	97,918	-	540,518	-	-	-	-
Distribution Load Dispatch	583,704	DIST	583,704	-	-	583,704	-	-	-	-
Mains & Services Expenses	5,681,636	DIST	5,681,636	-	-	5,681,636	-	-	-	-
M&R Station Expenses - General	-	DIST	-	-	-	-	-	-	-	-
M&R Station Expenses - Industrial	-	DIST	-	-	-	-	-	-	-	-
Meter & House Regulator Expenses	1,133,075	CUST	-	1,133,075	-	1,133,075	-	-	-	-
Customer Installation Expenses	638,150	CUST	-	638,150	-	638,150	-	-	-	-
Other Expenses	1,730,199	DIST	1,730,199	-	-	1,730,199	-	-	-	-
Rents	10,618	DIST	10,618	-	-	10,618	-	-	-	-
Sub-total	10,317,899		8,448,756	1,869,143	-	10,317,899	-	-	-	-
Distribution Maintenance Expenses										
Maint. Supervision & Engineering	-	DISTMNX	-	-	-	-	-	-	-	-
Maint. of Structures & Improv.	149,261	DIST	149,261	-	-	149,261	-	-	-	-
Maint. of Mains	2,671,929	DIST	2,671,929	-	-	2,671,929	-	-	-	-
Maint. of M&R Station Equip. - General	-	DIST	-	-	-	-	-	-	-	-
Maint. of Services	465,285	CUST	-	465,285	-	465,285	-	-	-	-
Maint. of Meters & House Regulators	354,765	CUST	-	354,765	-	354,765	-	-	-	-
Maint. of Other Equip.	346,584	DIST	346,584	-	-	346,584	-	-	-	-
Sub-total	3,987,825		3,167,775	820,051	-	3,987,825	-	-	-	-
Total Distribution	14,305,724		11,616,531	2,689,194	-	14,305,724	-	-	-	-

**Functional Cost Study
Account Detail**

Docket No.DG20-105
Attachment DBS/KAS-4-Rebuttal
Page 9 of 17

Account Description	Amount	Alloc. Factor	LPG & LNG				Misc			
			DEM	CUS	COM	TOTAL	DEM	CUS	COM	TOTAL
EXPENSES										
O & M Expenses										
Production (LPG LNG) - Operation										
Supervision	990,089	DPROD	903,952	-	-	903,952	-	-	-	-
LPG - Production	-	DPROD	-	-	-	-	-	-	-	-
LPG - Materials	-	DPROD	-	-	-	-	-	-	-	-
Gas Mixing & Misc Exp - Keene	64,037	DPROD	58,466	-	-	58,466	-	-	-	-
Misc. Prod. Exp.	469,719	DPROD	428,854	-	-	428,854	-	-	-	-
Operation Labor & Expenses	-	DPROD	-	-	-	-	-	-	-	-
Other	26,120	DPROD	23,847	-	-	23,847	-	-	-	-
Indirect Expenses	-	INDIRECT	-	-	-	-	-	-	-	-
Sub-total	1,549,966		1,415,119	-	-	1,415,119	-	-	-	-
Production (LPG LNG) - Maintenance										
Maint. of Prod. Equip	119,531	DPROD	109,132	-	-	109,132	-	-	-	-
Sub-total	119,531		109,132	-	-	109,132	-	-	-	-
Total Production	1,669,496		1,524,250	-	-	1,524,250	-	-	-	-
Purchased Gas Expenses										
Gas Supply	-	GASCOST	-	-	-	-	-	-	-	-
Storage Gas	-	GASCOST	-	-	-	-	-	-	-	-
Other Gas Supply	-	GASSPLY	-	-	-	-	-	-	-	-
Sub-total	-		-	-	-	-	-	-	-	-
Distribution Operation Expenses										
Operation Supervision & Engineering	540,518	DISTOPX	-	-	-	-	-	-	-	-
Distribution Load Dispatch	583,704	DIST	-	-	-	-	-	-	-	-
Mains & Services Expenses	5,681,636	DIST	-	-	-	-	-	-	-	-
M&R Station Expenses - General	-	DIST	-	-	-	-	-	-	-	-
M&R Station Expenses - Industrial	-	DIST	-	-	-	-	-	-	-	-
Meter & House Regulator Expenses	1,133,075	CUST	-	-	-	-	-	-	-	-
Customer Installation Expenses	638,150	CUST	-	-	-	-	-	-	-	-
Other Expenses	1,730,199	DIST	-	-	-	-	-	-	-	-
Rents	10,618	DIST	-	-	-	-	-	-	-	-
Sub-total	10,317,899		-	-	-	-	-	-	-	-
Distribution Maintenance Expenses										
Maint. Supervision & Engineering	-	DISTMNX	-	-	-	-	-	-	-	-
Maint. of Structures & Improv.	149,261	DIST	-	-	-	-	-	-	-	-
Maint. of Mains	2,671,929	DIST	-	-	-	-	-	-	-	-
Maint. of M&R Station Equip. - General	-	DIST	-	-	-	-	-	-	-	-
Maint. of Services	465,285	CUST	-	-	-	-	-	-	-	-
Maint. of Meters & House Regulators	354,765	CUST	-	-	-	-	-	-	-	-
Maint. of Other Equip.	346,584	DIST	-	-	-	-	-	-	-	-
Sub-total	3,987,825		-	-	-	-	-	-	-	-
Total Distribution	14,305,724		-	-	-	-	-	-	-	-

**Functional Cost Study
Account Detail**

Docket No.DG20-105
Attachment DBS/KAS-4-Rebuttal
Page 10 of 17

Account Description	Amount	Alloc. Factor	Delivery Costs				Direct Gas Costs			
			DEM	CUS	COM	TOTAL	DEM	CUS	COM	TOTAL
Customer Account										
Supervision	246,658	CACCTX	-	246,658	-	246,658	-	-	-	-
Meter Reading	327,602	CUST	-	327,602	-	327,602	-	-	-	-
Customer Records & Collection	2,757,111	CUST	-	2,757,111	-	2,757,111	-	-	-	-
Uncollectable Accounts - Delivery	1,613,012	PREV_DEL	-	-	1,613,012	1,613,012	-	-	-	-
Uncollectable Accounts - Production	67,758	PREV_PROD	-	-	-	-	-	-	-	-
Misc. Customer Accounts	13,047	CUST	-	13,047	-	13,047	-	-	-	-
Sub-total	5,025,189		-	3,344,419	1,613,012	4,957,430	-	-	-	-
Customer Service & Information Expenses										
Informational and Instructional Advertisign Expenses	81,733	CUST	-	81,733	-	81,733	-	-	-	-
Misc Customer Assistance Expense	15,180	CUST	-	15,180	-	15,180	-	-	-	-
Sub-total	96,913		-	96,913	-	96,913	-	-	-	-
Sales Expenses										
Demonstrating & Selling Expenses	455,606	CUST	-	455,606	-	455,606	-	-	-	-
Advertising Expenses	0	CUST	-	0	-	0	-	-	-	-
Misc. Sales Expenses	77,383	CUST	-	77,383	-	77,383	-	-	-	-
Sub-total	532,989		-	532,989	-	532,989	-	-	-	-
Administrative and General Expenses										
Administrative & General Salaries	5,432,241	LABOR	2,823,156	2,149,385	-	4,972,541	-	-	-	-
A&G Salaries - Energy Procurement	421,021	GASSPLY	-	-	-	-	-	-	-	-
Office Supplies	2,029,906	LABOR	1,054,949	803,177	-	1,858,126	-	-	-	-
Office Supplies - Energy Procurement	168,393	GASSPLY	-	-	-	-	-	-	-	-
A&G Transferred	(16,140,423)	AG+TRANSFER	(7,840,061)	(5,968,963)	(497,026)	(14,306,050)	-	-	-	-
A&G Transferred - Energy Procurement	-	GASSPLY	-	-	-	-	-	-	-	-
Outside Services	6,917,962	LABOR	3,595,290	2,737,243	-	6,332,533	-	-	-	-
Outside Serv. - Gas Acquisition	216,091	GASSPLY	-	-	-	-	-	-	-	-
Property Insurance	51,523	LABOR	26,777	20,386	-	47,163	-	-	-	-
Injuries & Damages	814,179	LABOR	423,132	322,148	-	745,280	-	-	-	-
Employee Pension & Benefits	7,255,395	LABOR	3,770,655	2,870,756	-	6,641,411	-	-	-	-
Regulatory Commission - Delivery	745,711	PREV_DEL	-	-	745,711	745,711	-	-	-	-
Regulatory Commission - Production	31,325	REG_COMM	-	-	-	-	-	-	-	-
Misc. General Expenses	1,146	LABOR	595	453	-	1,049	-	-	-	-
Office Rent	131,314	LABOR	68,244	51,957	-	120,202	-	-	-	-
Maintenance of General Plant	-	LABOR	-	-	-	-	-	-	-	-
Sub-total	8,075,783		3,922,737	2,986,542	248,685	7,157,963	-	-	-	-
TOTAL O & M EXPENSES	29,706,094		15,684,514	9,650,056	1,861,696	27,196,266	-	-	-	-
Labor Expense										
Production - Operation										
Supervision	958,071	DPROD	83,352	-	-	83,352	-	-	-	-
LPG - Production	-	DPROD	-	-	-	-	-	-	-	-
LPG - Materials	-	DPROD	-	-	-	-	-	-	-	-
Gas Mixing & Misc Exp - Keene	188,343	DPROD	16,386	-	-	16,386	-	-	-	-
Misc. Prod. Exp.	-	DPROD	-	-	-	-	-	-	-	-
Operation Labor & Expenses	-	DPROD	-	-	-	-	-	-	-	-
Sub-total	1,146,680		99,761	-	-	99,761	-	-	-	-
Production - Maintenance										
Maint. of Prod. Equip	-	DPROD	-	-	-	-	-	-	-	-
Sub-total	-		-	-	-	-	-	-	-	-
Total Production	1,146,680		99,761	-	-	99,761	-	-	-	-

**Functional Cost Study
Account Detail**

Docket No.DG20-105
Attachment DBS/KAS-4-Rebuttal
Page 11 of 17

Account Description	Amount	Alloc. Factor	LPG & LNG				Misc			
			DEM	CUS	COM	TOTAL	DEM	CUS	COM	TOTAL
Customer Account										
Supervision	246,658	CACCTX	-	-	-	-	-	-	-	-
Meter Reading	327,602	CUST	-	-	-	-	-	-	-	-
Customer Records & Collection	2,757,111	CUST	-	-	-	-	-	-	-	-
Uncollectable Accounts - Delivery	1,613,012	PREV_DEL	-	-	-	-	-	-	-	-
Uncollectable Accounts - Production	67,758	PREV_PROD	-	-	62,395	62,395	-	-	5,364	5,364
Misc. Customer Accounts	13,047	CUST	-	-	-	-	-	-	-	-
Sub-total	5,025,189		-	-	62,395	62,395	-	-	5,364	5,364
Customer Service & Information Expenses										
Informational and Instructional Advertisign Expenses	81,733	CUST	-	-	-	-	-	-	-	-
Misc Customer Assistance Expense	15,180	CUST	-	-	-	-	-	-	-	-
Sub-total	96,913		-	-	-	-	-	-	-	-
Sales Expenses										
Demonstrating & Selling Expenses	455,606	CUST	-	-	-	-	-	-	-	-
Advertising Expenses	0	CUST	-	-	-	-	-	-	-	-
Misc. Sales Expenses	77,383	CUST	-	-	-	-	-	-	-	-
Sub-total	532,989		-	-	-	-	-	-	-	-
Administrative and General Expenses										
Administrative & General Salaries	5,432,241	LABOR	459,701	-	-	459,701	-	-	-	-
A&G Salaries - Energy Procurement	421,021	GASSPLY	-	-	-	-	-	-	421,021	421,021
Office Supplies	2,029,906	LABOR	171,780	-	-	171,780	-	-	-	-
Office Supplies - Energy Procurement	168,393	GASSPLY	-	-	-	-	-	-	168,393	168,393
A&G Transferred	(16,140,423)	AGVTRANSFER	(1,276,615)	-	-	(1,276,615)	-	-	(557,758)	(557,758)
A&G Transferred - Energy Procurement	-	GASSPLY	-	-	-	-	-	-	-	-
Outside Services	6,917,962	LABOR	585,429	-	-	585,429	-	-	-	-
Outside Serv. - Gas Acquisition	216,091	GASSPLY	-	-	-	-	-	-	216,091	216,091
Property Insurance	51,523	LABOR	4,360	-	-	4,360	-	-	-	-
Injuries & Damages	814,179	LABOR	68,900	-	-	68,900	-	-	-	-
Employee Pension & Benefits	7,255,395	LABOR	613,984	-	-	613,984	-	-	-	-
Regulatory Commission - Delivery	745,711	PREV_DEL	-	-	-	-	-	-	-	-
Regulatory Commission - Production	31,325	REG_COMM	-	-	-	-	-	-	31,325	31,325
Misc. General Expenses	1,146	LABOR	97	-	-	97	-	-	-	-
Office Rent	131,314	LABOR	11,112	-	-	11,112	-	-	-	-
Maintenance of General Plant	-	LABOR	-	-	-	-	-	-	-	-
Sub-total	8,075,783		638,748	-	-	638,748	-	-	279,072	279,072
TOTAL O & M EXPENSES	29,706,094		2,162,998	-	62,395	2,225,393	-	-	284,435	284,435
Labor Expense										
Production - Operation										
Supervision	958,071	DPROD	874,719	-	-	874,719	-	-	-	-
LPG - Production	-	DPROD	-	-	-	-	-	-	-	-
LPG - Materials	-	DPROD	-	-	-	-	-	-	-	-
Gas Mixing & Misc Exp - Keene	188,343	DPROD	171,957	-	-	171,957	-	-	-	-
Misc. Prod. Exp.	-	DPROD	-	-	-	-	-	-	-	-
Operation Labor & Expenses	-	DPROD	-	-	-	-	-	-	-	-
Sub-total	1,146,680		1,046,919	-	-	1,046,919	-	-	-	-
Production - Maintenance										
Maint. of Prod. Equip	-	DPROD	-	-	-	-	-	-	-	-
Sub-total	-		-	-	-	-	-	-	-	-
Total Production	1,146,680		1,046,919	-	-	1,046,919	-	-	-	-

**Functional Cost Study
Account Detail**

Docket No.DG20-105
Attachment DBS/KAS-4-Rebuttal
Page 12 of 17

Account Description	Amount	Alloc. Factor	Delivery Costs				Direct Gas Costs			
			DEM	CUS	COM	TOTAL	DEM	CUS	COM	TOTAL
Distribution Operation Expenses										
Operation Supervision & Engineering	336,069	DISTOPX	275,188	60,881	-	336,069	-	-	-	-
Distribution Load Dispatch	583,241	DIST	583,241	-	-	583,241	-	-	-	-
Mains & Services Expenses	3,547,661	DIST	3,547,661	-	-	3,547,661	-	-	-	-
M&R Station Expenses - General	-	DIST	-	-	-	-	-	-	-	-
M&R Station Expenses - Industrial	-	DIST	-	-	-	-	-	-	-	-
Meter & House Regulator Expenses	1,053,744	CUST	-	1,053,744	-	1,053,744	-	-	-	-
Customer Installation Expenses	632,084	CUST	-	632,084	-	632,084	-	-	-	-
Other Expenses	876,280	DIST	876,280	-	-	876,280	-	-	-	-
Rents	-	DIST	-	-	-	-	-	-	-	-
Sub-total	7,029,078		5,282,370	1,746,709	-	7,029,078	-	-	-	-
Distribution Maintenance Expenses										
Maint. Supervision & Engineering	-	DISTMNX	-	-	-	-	-	-	-	-
Maint. of Structures & Improv.	121,758	DIST	121,758	-	-	121,758	-	-	-	-
Maint. of Mains	827,116	DIST	827,116	-	-	827,116	-	-	-	-
Maint. of M&R Station Equip. - General	-	DIST	-	-	-	-	-	-	-	-
Maint. of Services	208,998	CUST	-	208,998	-	208,998	-	-	-	-
Maint. of Meters & House Regulators	267,300	CUST	-	267,300	-	267,300	-	-	-	-
Maint. of Other Equip.	98,428	DIST	98,428	-	-	98,428	-	-	-	-
Sub-total	1,523,600		1,047,302	476,298	-	1,523,600	-	-	-	-
Total Distribution	8,552,678		6,329,672	2,223,007	-	8,552,678	-	-	-	-
Customer Account										
Supervision	246,658	CACCTX	-	246,658	-	246,658	-	-	-	-
Meter Reading	301,954	CUST	-	301,954	-	301,954	-	-	-	-
Customer Records & Collection	1,599,953	CUST	-	1,599,953	-	1,599,953	-	-	-	-
Uncollectable Accounts	-		-	-	-	-	-	-	-	-
Misc. Customer Accounts	-	CUST	-	-	-	-	-	-	-	-
Sub-total	2,148,565		-	2,148,565	-	2,148,565	-	-	-	-
Customer Service & Information Expenses										
Informational and Instructional Advertising Expenses	21,713	CUST	-	21,713	-	21,713	-	-	-	-
Misc Customer Assistance Expense	-	CUST	-	-	-	-	-	-	-	-
Sub-total	21,713		-	21,713	-	21,713	-	-	-	-
Sales Expenses										
Demonstrating & Selling Expenses	424,325	CUST	-	424,325	-	424,325	-	-	-	-
Advertising Expenses	-	CUST	-	-	-	-	-	-	-	-
Misc. Sales Expenses	77,383	CUST	-	77,383	-	77,383	-	-	-	-
Sub-total	501,708		-	501,708	-	501,708	-	-	-	-
TOTAL O & M LABOR EXP.	12,371,345		6,429,433	4,894,993	-	11,324,425	-	-	-	-

**Functional Cost Study
Account Detail**

Docket No.DG20-105
Attachment DBS/KAS-4-Rebuttal
Page 13 of 17

Account Description	Amount	Alloc. Factor	LPG & LNG				Misc			
			DEM	CUS	COM	TOTAL	DEM	CUS	COM	TOTAL
Distribution Operation Expenses										
Operation Supervision & Engineering	336,069	DISTOPX	-	-	-	-	-	-	-	-
Distribution Load Dispatch	583,241	DIST	-	-	-	-	-	-	-	-
Mains & Services Expenses	3,547,661	DIST	-	-	-	-	-	-	-	-
M&R Station Expenses - General	-	DIST	-	-	-	-	-	-	-	-
M&R Station Expenses - Industrial	-	DIST	-	-	-	-	-	-	-	-
Meter & House Regulator Expenses	1,053,744	CUST	-	-	-	-	-	-	-	-
Customer Installation Expenses	632,084	CUST	-	-	-	-	-	-	-	-
Other Expenses	876,280	DIST	-	-	-	-	-	-	-	-
Rents	-	DIST	-	-	-	-	-	-	-	-
Sub-total	7,029,078		-	-	-	-	-	-	-	-
Distribution Maintenance Expenses										
Maint. Supervision & Engineering	-	DISTMNX	-	-	-	-	-	-	-	-
Maint. of Structures & Improv.	121,758	DIST	-	-	-	-	-	-	-	-
Maint. of Mains	827,116	DIST	-	-	-	-	-	-	-	-
Maint. of M&R Station Equip. - General	-	DIST	-	-	-	-	-	-	-	-
Maint. of Services	208,998	CUST	-	-	-	-	-	-	-	-
Maint. of Meters & House Regulators	267,300	CUST	-	-	-	-	-	-	-	-
Maint. of Other Equip.	98,428	DIST	-	-	-	-	-	-	-	-
Sub-total	1,523,600		-	-	-	-	-	-	-	-
Total Distribution	8,552,678		-	-	-	-	-	-	-	-
Customer Account										
Supervision	246,658	CACCTX	-	-	-	-	-	-	-	-
Meter Reading	301,954	CUST	-	-	-	-	-	-	-	-
Customer Records & Collection	1,599,953	CUST	-	-	-	-	-	-	-	-
Uncollectable Accounts	-		-	-	-	-	-	-	-	-
Misc. Customer Accounts	-	CUST	-	-	-	-	-	-	-	-
Sub-total	2,148,565		-	-	-	-	-	-	-	-
Customer Service & Information Expenses										
Informational and Instructional Advertising Expenses	21,713	CUST	-	-	-	-	-	-	-	-
Misc Customer Assistance Expense	-	CUST	-	-	-	-	-	-	-	-
Sub-total	21,713		-	-	-	-	-	-	-	-
Sales Expenses										
Demonstrating & Selling Expenses	424,325	CUST	-	-	-	-	-	-	-	-
Advertising Expenses	-	CUST	-	-	-	-	-	-	-	-
Misc. Sales Expenses	77,383	CUST	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-
Sub-total	501,708		-	-	-	-	-	-	-	-
TOTAL O & M LABOR EXP.	12,371,345		1,046,919	-	-	1,046,919	-	-	-	-

**Functional Cost Study
Account Detail**

Docket No.DG20-105
Attachment DBS/KAS-4-Rebuttal
Page 14 of 17

Account Description	Amount	Alloc. Factor	Delivery Costs				Direct Gas Costs			
			DEM	CUS	COM	TOTAL	DEM	CUS	COM	TOTAL
Depreciation Expense										
Intangible Plant										
Misc. Intangible Plant	3,185,122	LABOR	1,655,320	1,260,263	-	2,915,583	-	-	-	-
Sub-total	3,185,122		1,655,320	1,260,263	-	2,915,583	-	-	-	-
Production Plant										
Production Plant EN	154,281	DPROD	13,422	-	-	13,422	-	-	-	-
Production Plant Keene	-	DPROD	-	-	-	-	-	-	-	-
Sub-total	154,281		13,422	-	-	13,422	-	-	-	-
Other										
Depr Amort of Reserve Surplus	1,657,796	PLANT	990,054	642,948	-	1,633,001	-	-	-	-
Regulatory Debits	892,115	AGEXP	433,336	329,917	27,472	790,725	-	-	-	-
Amort. Of Regulatory Asset	(1,308,511)	LABOR	(680,038)	(517,741)	-	(1,197,779)	-	-	-	-
Ratemaking Adjustment	-	PDGPLT	-	-	-	-	-	-	-	-
Sub-total	1,241,400		743,352	455,124	27,472	1,225,948	-	-	-	-
Distribution Plant										
Land & Land Rights	-	0	-	-	-	-	-	-	-	-
M&R Stations	-	0	-	-	-	-	-	-	-	-
Mains	225,417	DIST	225,417	-	-	225,417	-	-	-	-
Compressor Station Equipment	43,127	DIST	43,127	-	-	43,127	-	-	-	-
M&R Stations	212,649	CUST	-	212,649	-	212,649	-	-	-	-
Services	6,351,794	CUST	-	6,351,794	-	6,351,794	-	-	-	-
Meters & Meter Installations	874,971	CUST	-	874,971	-	874,971	-	-	-	-
Other Equipment	140,851	DIST	140,851	-	-	140,851	-	-	-	-
Sub-total	15,171,381		7,731,966	7,439,414	-	15,171,381	-	-	-	-
General Plant Plant										
Land & Land Rights	-	0	-	-	-	-	-	-	-	-
Structures & Improvements	647,879	LABOR	336,705	256,348	-	593,053	-	-	-	-
Office Furniture & Equipment	300,235	LABOR	156,033	118,794	-	274,827	-	-	-	-
Transportation Equipment	1,601,423	LABOR	832,265	633,638	-	1,465,903	-	-	-	-
Stores Equipment	4,600	LABOR	2,391	1,820	-	4,211	-	-	-	-
Tools, Shop & Garage Equip.	175,655	LABOR	91,289	69,502	-	160,791	-	-	-	-
Laboratory Equip.	-	0	-	-	-	-	-	-	-	-
Power Operated Equip.	275,750	LABOR	143,308	109,107	-	252,415	-	-	-	-
Communication Equip.	89,240	LABOR	46,378	35,310	-	81,688	-	-	-	-
Miscellaneous Equip.	53,558	LABOR	27,834	21,192	-	49,026	-	-	-	-
Sub-total	3,148,341		1,636,204	1,245,710	-	2,881,915	-	-	-	-
TOTAL DEPRECIATION EXPENSES	22,900,526		11,780,265	10,400,511	27,472	22,208,248	-	-	-	-
Taxes Other Than Income Taxes										
Payroll	1,997,975	LABOR	1,038,355	790,542	-	1,828,897	-	-	-	-
Property	12,195,461	PLANT	7,283,259	4,729,799	-	12,013,058	-	-	-	-
Sub-total	14,193,436		8,321,613	5,520,341	-	13,841,955	-	-	-	-
TOTAL TAXES OTHER THAN INCOME TAX	14,193,436		8,321,613	5,520,341	-	13,841,955	-	-	-	-
Operating Revenues										
Distribution Rate Revenue	93,643,178	CUR_REV	-	-	91,649,591	91,649,591	-	-	-	-
Late Payment Charges - Delivery	20,686	PREV_DEL	-	-	20,686	20,686	-	-	-	-
Late Payment Charges - Production	869	PREV_PROD	-	-	-	-	-	-	-	-
Connect/Reconnect Fees	386,715	CUST	-	386,715	-	386,715	-	-	-	-
Other Revenues	799,106	OTH_REV	-	-	799,106	799,106	-	-	-	-
Sub-total	94,850,554		-	386,715	92,469,383	92,856,098	-	-	-	-
TOTAL	94,850,554		-	386,715	92,469,383	92,856,098	-	-	-	-

**Functional Cost Study
Account Detail**

Docket No.DG20-105
Attachment DBS/KAS-4-Rebuttal
Page 15 of 17

Account Description	Amount	Alloc. Factor	LPG & LNG				Misc			
			DEM	CUS	COM	TOTAL	DEM	CUS	COM	TOTAL
Depreciation Expense										
Intangible Plant										
Misc. Intangible Plant	3,185,122	LABOR	269,539	-	-	269,539	-	-	-	-
Sub-total	3,185,122		269,539	-	-	269,539	-	-	-	-
Production Plant										
Production Plant EN	154,281	DPROD	140,858	-	-	140,858	-	-	-	-
Production Plant Keene	-	DPROD	-	-	-	-	-	-	-	-
Sub-total	154,281		140,858	-	-	140,858	-	-	-	-
Other										
Depr Amort of Reserve Surplus	1,657,796	PLANT	24,795	-	-	24,795	-	-	-	-
Regulatory Debits	892,115	AGEXP	70,561	-	-	70,561	-	-	30,828	30,828
Amort. Of Regulatory Asset	(1,308,511)	LABOR	(110,732)	-	-	(110,732)	-	-	-	-
Ratemaking Adjustment	-	PDGPLT	-	-	-	-	-	-	-	-
Sub-total	1,241,400		(15,376)	-	-	(15,376)	-	-	30,828	30,828
Distribution Plant										
Land & Land Rights	-	0	-	-	-	-	-	-	-	-
M&R Stations	-	0	-	-	-	-	-	-	-	-
Mains	225,417	DIST	-	-	-	-	-	-	-	-
Compressor Station Equipment	43,127	DIST	-	-	-	-	-	-	-	-
M&R Stations	212,649	CUST	-	-	-	-	-	-	-	-
Services	6,351,794	CUST	-	-	-	-	-	-	-	-
Meters & Meter Installations	874,971	CUST	-	-	-	-	-	-	-	-
Other Equipment	140,851	DIST	-	-	-	-	-	-	-	-
Sub-total	15,171,381		-	-	-	-	-	-	-	-
General Plant Plant										
Land & Land Rights	-	0	-	-	-	-	-	-	-	-
Structures & Improvements	647,879	LABOR	54,826	-	-	54,826	-	-	-	-
Office Furniture & Equipment	300,235	LABOR	25,407	-	-	25,407	-	-	-	-
Transportation Equipment	1,601,423	LABOR	135,520	-	-	135,520	-	-	-	-
Stores Equipment	4,600	LABOR	389	-	-	389	-	-	-	-
Tools, Shop & Garage Equip.	175,655	LABOR	14,865	-	-	14,865	-	-	-	-
Laboratory Equip.	-	0	-	-	-	-	-	-	-	-
Power Operated Equip.	275,750	LABOR	23,335	-	-	23,335	-	-	-	-
Communication Equip.	89,240	LABOR	7,552	-	-	7,552	-	-	-	-
Miscellaneous Equip.	53,558	LABOR	4,532	-	-	4,532	-	-	-	-
Sub-total	3,148,341		266,427	-	-	266,427	-	-	-	-
TOTAL DEPRECIATION EXPENSES	22,900,526		661,449	-	-	661,449	-	-	30,828	30,828
Taxes Other Than Income Taxes										
Payroll	1,997,975	LABOR	169,078	-	-	169,078	-	-	-	-
Property	12,195,461	PLANT	182,403	-	-	182,403	-	-	-	-
Sub-total	14,193,436		351,481	-	-	351,481	-	-	-	-
TOTAL TAXES OTHER THAN INCOME TAX	14,193,436		351,481	-	-	351,481	-	-	-	-
Operating Revenues										
Distribution Rate Revenue	93,643,178	CUR_REV	-	-	1,980,418	1,980,418	-	-	13,170	13,170
Late Payment Charges - Delivery	20,686	PREV_DEL	-	-	-	-	-	-	-	-
Late Payment Charges - Production	869	PREV_PROD	-	-	800	800	-	-	69	69
Connect/Reconnect Fees	386,715	CUST	-	-	-	-	-	-	-	-
Other Revenues	799,106	OTH_REV	-	-	-	-	-	-	-	-
Sub-total	94,850,554		-	-	1,981,218	1,981,218	-	-	13,238	13,238
TOTAL	94,850,554		-	-	1,981,218	1,981,218	-	-	13,238	13,238

**Functional Cost Study
External Allocation Factors**

Docket No. DG 20-105
Attachment DBS/KAS-4-Rebuttal
Page 16 of 17

Name	Description		Total	Delivery Costs	Direct Gas Costs	Production Costs	Misc. Costs
DEMAND ALLOCATORS							
LPG_LNG	Production	DEM					
	Test Yr - Energy North		1	0.00%	0.00%	100.00%	0.00%
						1	
DIST	Distribution	DEM					
	Test Yr - Energy North		1	100.00%	0.00%	0.00%	0.00%
				1			
DPROD	Delivery & Production	DEM					
	Test Yr - Energy North		1	8.70%	0.00%	91.30%	0.00%
				0.087		0.913	
DPROD_K	Keene Production	DEM					
	Test Yr - Energy North		1	100.00%	0.00%	0.00%	0.00%
				1			
CUSTOMER ALLOCATORS							
CUST	Distribution Customer	CUS					
	Test Yr - Energy North		1	100.00%	0.00%	0.00%	0.00%
				1			
COMMODITY ALLOCATORS							
PROPANE	Propane Commodity	COM					
	Test Yr - Energy North		1	0.00%	0.00%	100.00%	0.00%
						1	
LNG	LNG Commodity	COM					
	Test Yr - Energy North		1	0.00%	0.00%	100.00%	0.00%
						1	
GASCOST	Allocated Gas Costs	COM					
	Test Yr - Energy North		1	0.00%	100.00%	0.00%	0.00%
					1		
GASSPLY	Gas Supply	COM					
	Test Yr - Energy North		1	0.00%	0.00%	0.00%	100.00%
							1
CUR_REV	Revenues at Current Rates	COM					
	Test Yr - Energy North		93,645,932	97.87%	0.00%	2.11%	0.01%
				91,652,286	-	1,980,476	13,170
PROP_REV	Proposed Revenues	COM					
	Test Yr - Energy North		99,425,862	95.97%	0.00%	3.71%	0.32%
				95,417,615		3,690,964	317,283
PREV_DEL	Proposed Revenues Delivery	COM					
	Test Yr - Energy North		1	100.00%	0.00%	0.00%	0.00%
				1			
PREV_PROD	Proposed Production Revenue	COM					
	Test Yr - Energy North		4,008,247	0.00%	0.00%	92.08%	7.92%
						3,690,964	317,283
INDIRECT	Settlement Indirect Expenses	COM					
	Test Yr - Energy North		(1,993,598)	0.00%	0.00%	99.34%	0.66%
						(1,980,428)	(13,170)
REG_COMM	Production Regulatory Comm. Exp	COM					
	Test Yr - Energy North		1	0.00%	0.00%	0.00%	100.00%
							1
OTH_REV	Other Revenue	COM					
	Test Yr - Energy North		1	100.00%	0.00%	0.00%	0.00%
				1			

**Functional Cost Study
Internal Allocators**

Docket No. DG 20-105
Attachment DBS/KAS-4-Rebuttal
Page 17 of 17

Allocator		Description	Total	Delivery Costs	Direct Gas		
Name					Costs	Production Costs	Misc. Costs
PLANT	Total Plant in Service		641,189,774	631,599,724	-	9,590,051	-
	Percent		100.00%	98.50%	0.00%	1.50%	0.00%
OMEXPX	TOI and O&M Exp. excl. gas costs & uncollectible		42,192,640	39,422,936	-	2,490,632	279,072
	Percent		100.00%	93.44%	0.00%	5.90%	0.66%
PRODOEXP	Production Operations Expenses		559,876	48,709	-	511,167	-
	Percent		100.00%	8.70%	0.00%	91.30%	0.00%
PRODMNTX	Production Maintenance Expenses		119,531	10,399	-	109,132	-
	Percent		100.00%	8.70%	0.00%	91.30%	0.00%
DISTOPX	Distribution Operations Expense		9,777,381	9,777,381	-	-	-
	Percent		100.00%	100.00%	0.00%	0.00%	0.00%
DISTMNX	Distribution Maintenance Expense		3,987,825	3,987,825	-	-	-
	Percent		100.00%	100.00%	0.00%	0.00%	0.00%
CACCTX	Customer Accounting Expenses		3,097,761	3,097,761	-	-	-
	Percent		100.00%	100.00%	0.00%	0.00%	0.00%
LABOR	Labor expense excluding A&G		12,371,345	11,324,425	-	1,046,919	-
	Percent		100.00%	91.54%	0.00%	8.46%	0.00%
GENPLT	General Plant		39,736,540	36,373,854	-	3,362,686	-
	Percent		100.00%	91.54%	0.00%	8.46%	0.00%
AGxTRANSFER	A&G Expenses excluding transfer		24,216,206	21,464,013	-	1,915,363	836,830
	Percent		100.00%	88.63%	0.00%	7.91%	3.46%
AGEXP	Total A&G Expense		8,075,783	7,157,963	-	638,748	279,072
	Percent		100.00%	88.63%	0.00%	7.91%	3.46%
DISTRPLT	Distribution Plant		578,926,765	578,926,765	-	-	-
	Percent		100.00%	100.00%	0.00%	0.00%	0.00%
RTBASE	Rate Base		346,131,311	341,307,756	-	4,802,130	21,425
	Percent		100.00%	98.61%	0.00%	1.39%	0.01%
PDGPLT	Production, Distribution & General Plant		623,879,626	615,754,439	-	8,125,188	-
	Percent		100.00%	98.70%	0.00%	1.30%	0.00%