



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

DG 17-048
Distribution Service Rate Case

Staff Data Requests – Technical Session Set 3

Date Request Received: 11/3/17
Request No. Staff Tech 3-12

Date of Response: 11/15/17
Respondent: William Clark

REQUEST:

Reference Staff DR 5-4:

- a) Please provide a REVISED Attachment to Staff 1-1.e in DG 14-091 (Hall Testimony, Attachment SRH-1) that includes projected AFUDC based on the cost estimates, anticipated construction schedule and Concord property tax rate at that time. Provide supporting work papers in both hard copy and electronic (Microsoft Excel) formats, with all data and formulas intact.
- b) Please provide an updated REVISED Attachment to Staff 1-1.e in DG 14-091 (Hall Testimony, Attachment SRH-1) using the actual investment amounts (including AFUDC), calendar years corresponding to the in-service date and current Concord property tax rate. Provide supporting work papers in both hard copy and electronic (Microsoft Excel) formats, with all data and formulas intact.
- c) Please update Attachment 5-4.3 to include actual monthly consumption and gross margin since May 2017.

RESPONSE:

- a) Please see Attachment Staff Tech 3-12.a.xlsx for revised Attachment Staff 1-1.e in DG 14-091, which includes projected AFUDC based on original project cost and timeline. Including AFUDC in these calculations is atypical.
- b) Please see Attachment Staff Tech 3-12.b.xlsx with revised investment amounts based on actual costs and actual AFUDC.
- c) Please see Confidential Attachment Staff Tech 3-12.c.

The redacted or highlighted portions of Confidential Attachment Staff Tech 3-12.c contain particular usage of a customer usage, which is rendered confidential by RSA 363:38 and other authority, and the rent paid by that customer, which was rendered confidential by order in Docket No. DG 14-091. Therefore, pursuant to RSA 91-A:5, IV and Puc 203.08(d), the Company has a good faith basis to seek confidential treatment of this information and will submit a motion seeking confidential treatment prior to the final hearing in this docket.

Liberty Utilities (Energy/North Natural Gas) Corp.
Request for Approval of Special Contract and Lease Agreement with Innovative Natural Gas, LLC d/b/a INATGAS
Computation of Revenue Requirement

	(a) 1	(b) 2	(c) 3	(d) 4	(e) 5	(f) 6	(g) 7	(h) 8	(i) 9	(j) 10	(k) 11	(l) 12	(m) 13	(n) 14	(o) 15
	Year 1 Year 1 began on 12/1/2016	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Investment															
Compressors	1,100,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Piping, meter set, survey, etc	3,080,084	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land (pro-rated)	200,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AFUDC - Actual	435,510	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Amount	4,815,594	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cumulative Program Spend	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594
Does not include Burdens															
Deferred Tax Calculation															
Annual Tax Depreciation (bonus in 2016)	MACRS 15 year	2,194,544	198,554	178,699	160,933	144,840	130,210	123,312	123,312	123,521	123,312	123,312	123,521	123,312	123,521
Cumulative Tax Depreciation		2,194,544	2,393,098	2,571,797	2,732,730	2,877,570	3,007,779	3,131,092	3,254,404	3,377,926	3,501,238	3,624,551	3,748,072	3,871,385	3,994,697
Annual Book Depreciation (30-yr prop)	3.33%	139,336	139,336	139,336	139,336	139,336	139,336	139,336	139,336	139,336	139,336	139,336	139,336	139,336	139,336
Cumulative Book Depreciation		139,336	278,672	418,008	557,345	696,681	836,017	975,353	1,114,689	1,254,025	1,393,361	1,532,697	1,672,034	1,811,370	1,950,706
Annual Book/Tax Timer		2,055,208	59,218	39,362	21,597	5,504	(9,127)	(16,024)	(16,024)	(15,815)	(16,024)	(16,024)	(15,815)	(16,024)	(15,815)
Cumulative Book/Tax Timer		2,055,208	2,114,426	2,153,788	2,175,385	2,180,889	2,171,763	2,155,739	2,139,715	2,123,901	2,107,877	2,091,853	2,076,039	2,060,015	2,043,991
Effective Tax Rate		39.61%	39.41%	39.21%	39.21%	39.21%	39.21%	39.21%	39.21%	39.21%	39.21%	39.21%	39.21%	39.21%	39.21%
Deferred Tax Reserve		814,019	833,295	844,500	852,969	855,127	851,548	845,265	838,982	832,781	826,499	820,216	814,015	807,732	801,449
Rate Base Calculation															
Plant In Service		4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594	4,815,594
Accumulated Depreciation		(139,336)	(278,672)	(418,008)	(557,345)	(696,681)	(836,017)	(975,353)	(1,114,689)	(1,254,025)	(1,393,361)	(1,532,697)	(1,672,034)	(1,811,370)	(1,950,706)
Net Plant in Service		4,676,258	4,536,922	4,397,586	4,258,249	4,118,913	3,979,577	3,840,241	3,700,905	3,561,569	3,422,233	3,282,897	3,143,560	3,004,224	2,864,888
Deferred Tax Reserve		(814,019)	(833,295)	(844,500)	(852,969)	(855,127)	(851,548)	(845,265)	(838,982)	(832,781)	(826,499)	(820,216)	(814,015)	(807,732)	(801,449)
Year End Rate Base		3,862,239	3,703,627	3,553,085	3,405,281	3,263,787	3,128,029	2,994,976	2,861,923	2,728,787	2,595,734	2,462,681	2,329,546	2,196,492	2,063,439
Revenue Requirement Calculation															
Year End Rate Base		3,862,239	3,703,627	3,553,085	3,405,281	3,263,787	3,128,029	2,994,976	2,861,923	2,728,787	2,595,734	2,462,681	2,329,546	2,196,492	2,063,439
Pre-Tax ROR		10.71%	10.71%	10.71%	10.71%	10.71%	10.71%	10.71%	10.71%	10.71%	10.71%	10.71%	10.71%	10.71%	10.71%
Return and Income Taxes		413,646	396,658	380,535	364,706	349,552	335,012	320,762	306,512	292,253	278,003	263,753	249,494	235,244	220,994
Book Depreciation - annual		139,336	139,336	139,336	139,336	139,336	139,336	139,336	139,336	139,336	139,336	139,336	139,336	139,336	139,336
Property Taxes - annual (2.7% inflation adj)		128,512	128,036	127,437	126,707	125,861	124,852	123,713	122,417	120,975	119,341	117,546	115,562	113,399	111,010
Annual Revenue Requirement		681,494	664,030	647,308	630,749	614,749	599,200	583,811	568,265	552,564	536,680	520,635	504,392	487,980	471,340
Prior Year Cumulative Revenue Requirement		-	681,494	1,345,525	1,992,833	2,623,582	3,238,331	3,837,531	4,421,343	4,989,607	5,542,172	6,078,852	6,599,487	7,103,879	7,591,859
Cumulative Revenue Requirement		681,494	1,345,525	1,992,833	2,623,582	3,238,331	3,837,531	4,421,343	4,989,607	5,542,172	6,078,852	6,599,487	7,103,879	7,591,859	8,063,199
Minimum Take-or-Pay Assumption Level															
Cumulative estimated revenue at minimum take-or-pay level		192,600	385,200	699,800	1,014,400	1,817,000	2,619,600	3,422,200	4,224,800	5,027,400	5,830,000	6,632,600	7,435,200	8,237,800	9,040,400
Cumulative revenue requirement (line 39)		681,494	1,345,525	1,992,833	2,623,582	3,238,331	3,837,531	4,421,343	4,989,607	5,542,172	6,078,852	6,599,487	7,103,879	7,591,859	8,063,199
Excess revenue (deficiency)		(488,894)	(960,325)	(1,293,033)	(1,609,182)	(1,421,331)	(1,217,931)	(999,143)	(764,807)	(514,772)	(248,852)	33,113	331,321	645,941	977,201
NPV	(\$228,535)														1,340,515
Baseline Assumption Level															
Cumulative estimated revenue at baseline level		314,600	781,700	1,401,300	2,325,900	3,403,000	4,632,600	5,862,200	7,274,800	8,687,400	10,100,000	11,512,600	12,925,200	14,337,800	15,750,400
Cumulative revenue requirement (line 39)		681,494	1,345,525	1,992,833	2,623,582	3,238,331	3,837,531	4,421,343	4,989,607	5,542,172	6,078,852	6,599,487	7,103,879	7,591,859	8,063,199
Excess revenue (deficiency)		(366,894)	(563,825)	(591,533)	(297,682)	164,669	795,069	1,440,857	2,285,193	3,145,228	4,021,148	4,913,113	5,821,321	6,745,941	7,687,201
NPV	\$2,898,855														8,660,515
Accelerated Sales Assumption Level															
Cumulative estimated revenue at accelerated sales level		467,100	1,025,700	1,828,300	3,057,900	4,287,500	5,700,100	7,112,700	8,525,300	9,937,900	11,350,500	12,763,100	14,175,700	15,588,300	17,000,900
Cumulative revenue requirement (line 39)		681,494	1,345,525	1,992,833	2,623,582	3,238,331	3,837,531	4,421,343	4,989,607	5,542,172	6,078,852	6,599,487	7,103,879	7,591,859	8,063,199
Excess revenue (deficiency)		(214,394)	(319,825)	(164,533)	434,318	1,049,169	1,862,569	2,691,357	3,535,693	4,395,728	5,271,648	6,163,613	7,071,821	7,996,441	8,937,701
NPV	\$3,729,996														9,911,015

Imputed Capital Structure/ROR

[illegible]

W

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Annual revenue requirement	681,494	664,030	647,308	630,749	614,749	599,200	583,811	568,265	552,564	536,680	520,635	504,392	487,980	471,340	439,286
Minimum Take-or-Pay Assumption Level															
Annual estimated revenue at minimum take-or-pay level	192,600	192,600	314,600	314,600	802,600	802,600	802,600	802,600	802,600	802,600	802,600	802,600	802,600	802,600	802,600
Annual revenue requirement (line 6)	681,494	664,030	647,308	630,749	614,749	599,200	583,811	568,265	552,564	536,680	520,635	504,392	487,980	471,340	439,286
Excess revenue (deficiency)	(488,894)	(471,430)	(332,708)	(316,149)	187,851	203,400	218,789	234,335	250,036	265,920	281,965	298,208	314,620	331,260	363,314
NPV	(\$228,535)														
Baseline Assumption Level															
Annual estimated revenue at baseline level	314,600	467,100	619,600	924,600	1,077,100	1,229,600	1,229,600	1,412,600	1,412,600	1,412,600	1,412,600	1,412,600	1,412,600	1,412,600	1,412,600
Annual revenue requirement (line 6)	681,494	664,030	647,308	630,749	614,749	599,200	583,811	568,265	552,564	536,680	520,635	504,392	487,980	471,340	439,286
Excess revenue (deficiency)	(366,894)	(196,930)	(27,708)	293,851	462,351	630,400	645,789	844,335	860,036	875,920	891,965	908,208	924,620	941,260	973,314
NPV	\$2,898,855														
Accelerated Sales Assumption Level															
Annual estimated revenue at accelerated level	467,100	558,600	802,600	1,229,600	1,229,600	1,412,600	1,412,600	1,412,600	1,412,600	1,412,600	1,412,600	1,412,600	1,412,600	1,412,600	1,412,600
Annual revenue requirement (line 6)	681,494	664,030	647,308	630,749	614,749	599,200	583,811	568,265	552,564	536,680	520,635	504,392	487,980	471,340	439,286
Excess revenue (deficiency)	(214,394)	(105,430)	155,292	598,851	614,851	813,400	828,789	844,335	860,036	875,920	891,965	908,208	924,620	941,260	973,314
NPV	\$3,729,996														