



**Liberty Utilities™**

**EXHIBIT**  
# 45  
DG 17-048

<b>ORIGINAL</b>
N.H.P.U.C. Case No. <u>DG 14-091</u>
Exhibit No. <u>#3</u>
Witness <u>Panal #1</u>
<b>DO NOT REMOVE FROM FILE</b>

**STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION**

Docket No. DG 14-\_\_\_

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

Request for Approval of Special Contract and Lease Agreement with Innovative Natural Gas,  
LLC d/b/a iNATGAS

**PREFILED TESTIMONY**

**OF**

**STEPHEN R. HALL**

April 4, 2014

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1 **I. INTRODUCTION**

2 **Q. Please state your name, occupation and business address.**

3 A. My name is Stephen R. Hall and I am employed by Liberty Energy Utilities (New  
4 Hampshire) Corp. as Director, Regulatory and Government. My business address is 11  
5 Northeastern Blvd., Salem, NH 03079. I am responsible for rates and regulatory affairs  
6 for Liberty Utilities (EnergyNorth Natural Gas) Corp. ("EnergyNorth") and Liberty  
7 Utilities (Granite State Electric) Corp. and I have supervisory responsibility for  
8 government affairs at the companies.

9

10 **Q. Have you previously testified before the Commission?**

11 A. Yes, I have testified extensively before the Commission during my 34-year career at  
12 Public Service of New Hampshire and more recently on behalf of Liberty Utilities  
13 ("Liberty"). My testimony has covered a wide range of regulatory, ratemaking and  
14 pricing issues, including testimony in support of many special contracts.

15

16 **Q. What is the purpose of your testimony?**

17 A. The purpose of my testimony is to describe the ratemaking that will apply to Liberty's  
18 investment and associated revenue from the proposed contract with Innovative Natural  
19 Gas, LLC (iNATGAS) that is described in the direct testimony of William J. Clark.

20

21 **Q. What are you proposing for ratemaking treatment for the investment and revenue  
22 that will result from the contract?**

23 A. Liberty is proposing that the investment be included in EnergyNorth's rate base, just as

1 any other investment in infrastructure is treated. As a result, EnergyNorth's distribution  
2 rates will include the revenue requirement associated with the investment following the  
3 next distribution rate case. Liberty is also proposing that the revenue realized under the  
4 contract be treated in the same fashion as any distribution revenue is treated. In this way,  
5 customers will pay for the cost of the investment and will also receive the value of the  
6 revenue under the contract, since that revenue will decrease EnergyNorth's distribution  
7 revenue requirement.

8  
9 **Q. Have you performed an analysis of the annual revenue requirement and the revenue**  
10 **to be realized under the contract?**

11 A. Yes, we have. Attachment SRH-1 contains that analysis.

12  
13 **Q. Please describe Attachment SRH-1.**

14 A. Attachment SRH-1 shows a calculation of the cumulative annual revenue requirement for  
15 the project for each year of the 15-year term of the contract. It also shows the anticipated  
16 cumulative annual revenue under the contract under three different scenarios. The first  
17 scenario shows cumulative revenue under the minimum take-or-pay level. The second  
18 scenario shows cumulative revenue at the base assumption level. The third scenario  
19 shows cumulative revenue at a high level (i.e., at a level in excess of the baseline  
20 assumptions).

21  
22 The revenue from each scenario is then compared to the revenue requirement calculated  
23 in the upper portion of the attachment, and the cumulative difference between the revenue

1 requirement and assumed revenue is calculated to determine the year in which the  
2 cumulative revenue exceeds the cumulative revenue requirement (i.e., a simple payback  
3 analysis).

4  
5 As shown on the attachment, even if the revenue under the contract remains at the  
6 minimum level, there will be a cumulative net benefit starting in the fifth year of the term  
7 of the contract. Under baseline assumptions, there is a cumulative net benefit in the  
8 second year of the term of the contract, and under the high revenue level assumption,  
9 there is a net benefit at the commencement of the contract.

10  
11 Based on this analysis, we have concluded that the financial risk to customers associated  
12 with the contract is low, since even at the minimum revenue level, there will be a  
13 cumulative net benefit beginning in the fifth year.

14  
15 **Q. Does this complete your testimony?**

16 **A. Yes, it does.**

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Liberty Utilities (EnergyNorth 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

Year	(a) 1 2014	(b) 2 2015	(c) 3 2016	(d) 4 2017	(e) 5 2018	
<b>Investment</b>						
Compressors	1,000,000	-	-	-	-	
Piping, meter set, survey, etc	865,000	-	-	-	-	
Land (pro-rated)	200,000	-	-	-	-	
Contingency	180,000	-	-	-	-	
Estimated annual operating costs	see real estate taxes below	-	-	-	-	
Total Amount	2,245,000	-	-	-	-	
Cumulative Program Spend	2,245,000	2,245,000	2,245,000	2,245,000	2,245,000	
<b>Deferred Tax Calculation</b>						
Annual Tax Depreciation (no bonus in 2014)	MACRS 15 year	102,250	194,275	174,848	157,465	141,719
Cumulative Tax Depreciation		102,250	296,525	471,373	628,838	770,556
Annual Book Depreciation (30-yr prop)	3.33%	68,167	68,167	68,167	68,167	68,167
Cumulative Book Depreciation		68,167	136,333	204,500	272,667	340,833
Annual Book/Tax Timer		34,083	126,108	106,681	89,298	73,552
Cumulative Book/Tax Timer		34,083	160,192	266,872	356,171	429,723
Effective Tax Rate		39.61%	39.61%	39.61%	39.61%	39.61%
Deferred Tax Reserve		13,451	63,452	105,708	141,079	170,213
<b>Rate Base Calculation</b>						
Plant In Service	2,245,000	2,245,000	2,245,000	2,245,000	2,245,000	
Accumulated Depreciation	(68,167)	(136,333)	(204,500)	(272,667)	(340,833)	
Net Plant in Service	2,176,833	2,108,667	2,040,500	1,972,333	1,904,167	
Deferred Tax Reserve	(13,451)	(63,452)	(105,708)	(141,079)	(170,213)	
Year End Rate Base	2,163,382	2,045,215	1,934,792	1,831,254	1,733,954	
<b>Revenue Requirement Calculation</b>						
Year End Rate Base	2,163,382	2,045,215	1,934,792	1,831,254	1,733,954	
Pre-Tax ROR	11.50%	11.50%	11.50%	11.50%	11.50%	
Return and Income Taxes	248,789	235,200	222,501	210,594	199,405	
Book Depreciation - annual	68,167	68,167	68,167	68,167	68,167	
Property Taxes - annual (3% inflation adj)	49,196	49,132	48,972	48,717	48,556	
Annual Revenue Requirement	366,152	352,499	339,640	327,477	316,128	
Prior Year Cumulative Revenue Requirement	-	366,152	718,651	1,058,290	1,385,768	
Cumulative Revenue Requirement	366,152	718,651	1,058,290	1,385,768	1,701,896	
<b>Minimum Take-or-Pay Assumption Level</b>						
Cumulative estimated revenue at minimum take-or-pay level	192,600	385,200	699,800	1,014,400	1,817,000	
Cumulative revenue requirement (line 39)	366,152	718,651	1,058,290	1,385,768	1,701,896	
Excess revenue (deficiency)	(173,552)	(333,451)	(358,490)	(371,368)	115,104	
<b>Baseline Assumption Level</b>						
Cumulative estimated revenue at baseline level	314,600	781,700	1,401,300	2,325,900	3,403,000	
Cumulative revenue requirement (line 39)	366,152	718,651	1,058,290	1,385,768	1,701,896	
Excess revenue (deficiency)	(51,552)	63,049	343,010	940,132	1,701,104	
<b>Accelerated Sales Assumption Level</b>						
Cumulative estimated revenue at accelerated sales level	467,100	1,025,700	1,828,300	3,057,900	4,287,500	
Cumulative revenue requirement (line 39)	366,152	718,651	1,058,290	1,385,768	1,701,896	
Excess revenue (deficiency)	100,948	307,049	770,010	1,672,132	2,585,604	

Imputed Capital Structure/ROR

	Ratio	Rate	Weighted Rate	(prior federal tax rate of 35% plus NH rate of 8.5%) Pre Tax	(current federal tax rate of 34% plus NH rate of 8.5%) Pre Tax
Long Term Debt	50.00%	6.99%	3.50%	3.50%	3.50%
Short Term Debt	0.00%	0.00%	0.00%	0.00%	0.00%
Common Equity	50.00%	9.67%	4.84%	8.13%	8.01%
	100.00%		8.33%	11.63%	11.50%

this rate is for informational purposes only

Line/ Column Notes:

39 Property tax rate reflects actual calendar year 2012 ratio of municipal tax expense to average net plant in service, with 3% inflation factor.

Year	(f) 6	(g) 7	(h) 8	(i) 9	(j) 10
	2019	2020	2021	2022	2023
<b>Investment</b>					
Compressors	-	-	-	-	-
Piping, meter set, survey, etc	-	-	-	-	-
Land (pro-rated)	-	-	-	-	-
Contingency	-	-	-	-	-
Estimated annual operating costs	-	-	-	-	-
Total Amount	-	-	-	-	-
Cumulative Program Spend	2,245,000	2,245,000	2,245,000	2,245,000	2,245,000
<b>Deferred Tax Calculation</b>					
Annual Tax Depreciation (no bonus in 2014)	127,404	120,655	120,655	120,860	120,655
Cumulative Tax Depreciation	897,960	1,018,615	1,139,270	1,260,129	1,380,784
Annual Book Depreciation (30-yr prop)	68,167	68,167	68,167	68,167	68,167
Cumulative Book Depreciation	409,000	477,167	545,333	613,500	681,667
Annual Book/Tax Timer	59,237	52,488	52,488	52,693	52,488
Cumulative Book/Tax Timer	488,959	541,448	593,936	646,629	699,117
Effective Tax Rate	39.61%	39.61%	39.61%	39.61%	39.61%
Deferred Tax Reserve	193,677	214,467	235,258	256,130	276,920
<b>Rate Base Calculation</b>					
Plant In Service	2,245,000	2,245,000	2,245,000	2,245,000	2,245,000
Accumulated Depreciation	(409,000)	(477,167)	(545,333)	(613,500)	(681,667)
Net Plant In Service	1,836,000	1,767,833	1,699,667	1,631,500	1,563,333
Deferred Tax Reserve	(193,677)	(214,467)	(235,258)	(256,130)	(276,920)
Year End Rate Base	1,642,323	1,553,366	1,464,409	1,375,370	1,286,413
<b>Revenue Requirement Calculation</b>					
Year End Rate Base	1,642,323	1,553,366	1,464,409	1,375,370	1,286,413
Pre-Tax ROR	11.50%	11.50%	11.50%	11.50%	11.50%
Return and Income Taxes	188,867	178,637	168,407	158,168	147,937
Book Depreciation - annual	68,167	68,167	68,167	68,167	68,167
Property Taxes - annual (3% inflation adj)	48,103	47,732	47,251	46,824	46,118
Annual Revenue Requirement	305,137	294,535	283,824	273,159	262,222
Prior Year Cumulative Revenue Requirement	1,701,896	2,007,032	2,301,568	2,585,392	2,858,551
Cumulative Revenue Requirement	2,007,032	2,301,568	2,585,392	2,858,551	3,120,773
<b>Minimum Take-or-Pay Assumption Level</b>					
Cumulative estimated revenue at minimum take-or-pay level	2,619,600	3,422,200	4,224,800	5,027,400	5,830,000
Cumulative revenue requirement (line 39)	2,007,032	2,301,568	2,585,392	2,858,551	3,120,773
Excess revenue (deficiency)	612,568	1,120,632	1,639,408	2,168,849	2,709,227
<b>Baseline Assumption Level</b>					
Cumulative estimated revenue at baseline level	4,632,600	5,862,200	7,274,800	8,687,400	10,100,000
Cumulative revenue requirement (line 39)	2,007,032	2,301,568	2,585,392	2,858,551	3,120,773
Excess revenue (deficiency)	2,625,568	3,560,632	4,689,408	5,828,849	6,979,227
<b>Accelerated Sales Assumption Level</b>					
Cumulative estimated revenue at accelerated sales level	5,700,100	7,112,700	8,525,300	9,937,900	11,350,500
Cumulative revenue requirement (line 39)	2,007,032	2,301,568	2,585,392	2,858,551	3,120,773
Excess revenue (deficiency)	3,693,068	4,811,132	5,939,908	7,079,349	8,229,727

Year	(k) 11 2024	(l) 12 2025	(m) 13 2026	(n) 14 2027	(o) 15 2028	
<b>Investment</b>						
Compressors	-	-	-	-	-	
Piping, meter set, survey, etc	-	-	-	-	-	
Land (pro-rated)	-	-	-	-	-	
Contingency	-	-	-	-	-	
Estimated annual operating costs	see real estate taxes below	-	-	-	-	
Total Amount	-	-	-	-	-	
Cumulative Program Spend	2,245,000	2,245,000	2,245,000	2,245,000	2,245,000	
<b>Deferred Tax Calculation</b>						
Annual Tax Depreciation (no bonus in 2014)	MACRS 15 year	120,860	120,655	120,860	120,655	120,860
Cumulative Tax Depreciation		1,501,644	1,622,299	1,743,158	1,863,813	1,984,673
Annual Book Depreciation (30-yr prop)	3.33%	68,167	68,167	68,167	68,167	68,167
Cumulative Book Depreciation		749,833	818,000	886,167	954,333	1,022,500
Annual Book/Tax Timer		52,693	52,488	52,693	52,488	52,693
Cumulative Book/Tax Timer		751,810	804,298	856,991	909,480	962,172
Effective Tax Rate		39.61%	39.61%	39.61%	39.61%	39.61%
Deferred Tax Reserve		297,792	318,583	339,454	360,245	381,117
<b>Rate Base Calculation</b>						
Plant In Service	2,245,000	2,245,000	2,245,000	2,245,000	2,245,000	
Accumulated Depreciation	(749,833)	(818,000)	(886,167)	(954,333)	(1,022,500)	
Net Plant In Service	1,495,167	1,427,000	1,358,833	1,290,667	1,222,500	
Deferred Tax Reserve	(297,792)	(318,583)	(339,454)	(360,245)	(381,117)	
Year End Rate Base	1,197,375	1,108,417	1,019,379	930,422	841,383	
<b>Revenue Requirement Calculation</b>						
Year End Rate Base	1,197,375	1,108,417	1,019,379	930,422	841,383	
Pre-Tax ROR	11.50%	11.50%	11.50%	11.50%	11.50%	
Return and Income Taxes	137,698	127,468	117,229	106,999	96,759	
Book Depreciation - annual	68,167	68,167	68,167	68,167	68,167	
Property Taxes - annual (3% inflation adj)	45,453	44,665	43,890	42,850	41,810	
Annual Revenue Requirement	251,318	240,300	229,286	218,016	206,735	
Prior Year Cumulative Revenue Requirement	3,120,773	3,372,090	3,612,390	3,841,676	4,059,692	
Cumulative Revenue Requirement	3,372,090	3,612,390	3,841,676	4,059,692	4,266,427	
<b>Minimum Take-or-Pay Assumption Level</b>						
Cumulative estimated revenue at minimum take-or-pay level	6,632,600	7,435,200	8,237,800	9,040,400	9,843,000	
Cumulative revenue requirement (line 39)	3,372,090	3,612,390	3,841,676	4,059,692	4,266,427	
Excess revenue (deficiency)	3,260,510	3,822,810	4,396,124	4,980,708	5,576,573	
<b>Baseline Assumption Level</b>						
Cumulative estimated revenue at baseline level	11,512,600	12,925,200	14,337,800	15,750,400	17,163,000	
Cumulative revenue requirement (line 39)	3,372,090	3,612,390	3,841,676	4,059,692	4,266,427	
Excess revenue (deficiency)	8,140,510	9,312,810	10,496,124	11,690,708	12,896,573	
<b>Accelerated Sales Assumption Level</b>						
Cumulative estimated revenue at accelerated sales level	12,763,100	14,175,700	15,588,300	17,000,900	18,413,500	
Cumulative revenue requirement (line 39)	3,372,090	3,612,390	3,841,676	4,059,692	4,266,427	
Excess revenue (deficiency)	9,391,010	10,563,310	11,746,624	12,941,208	14,147,073	