
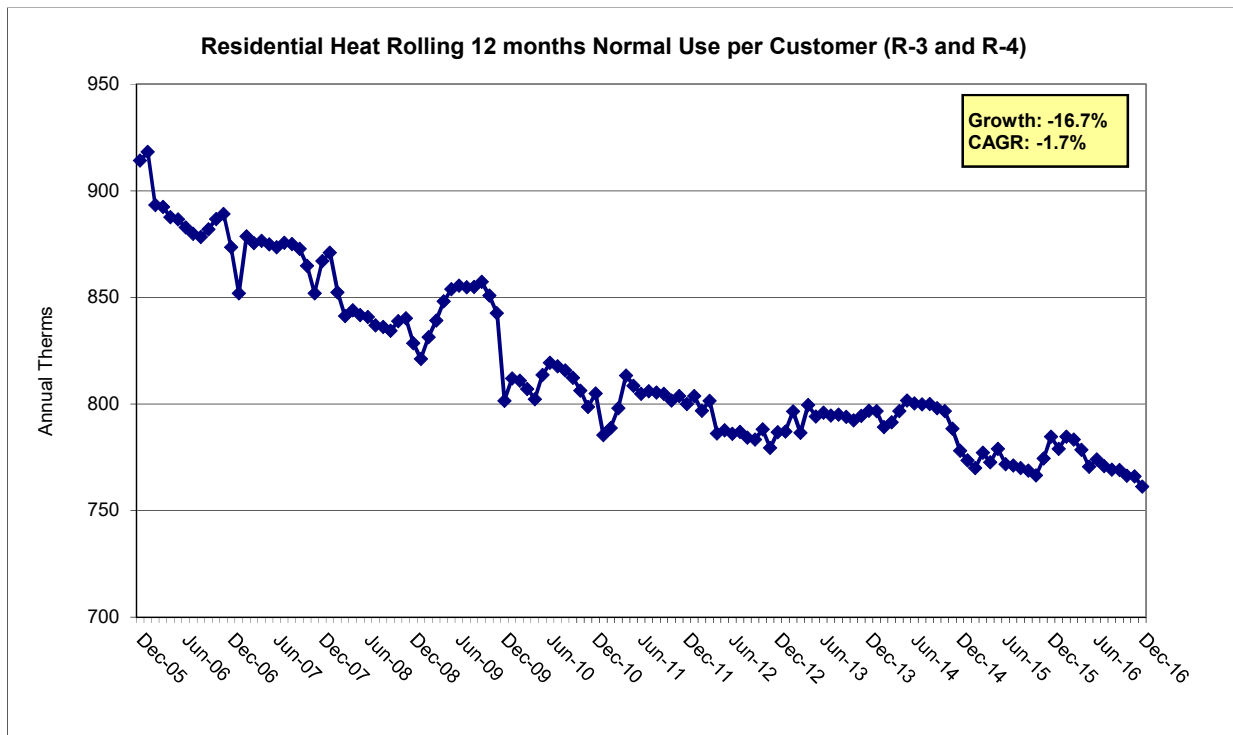
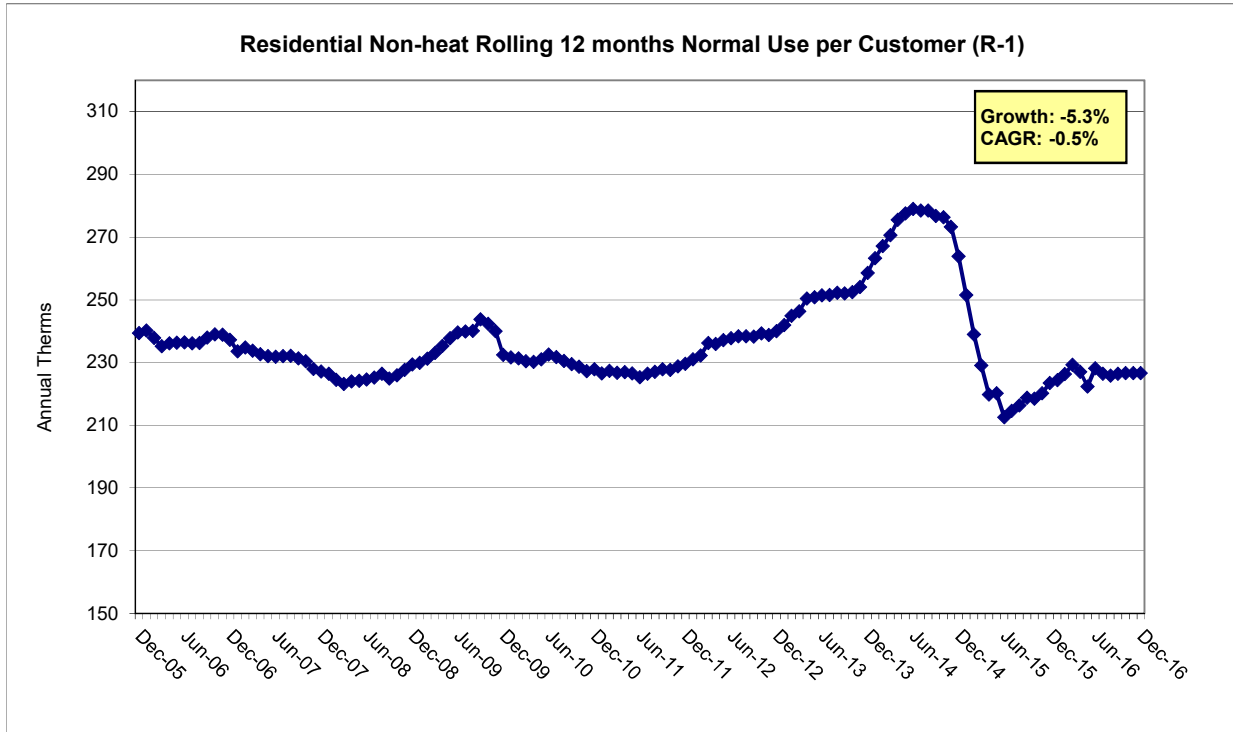


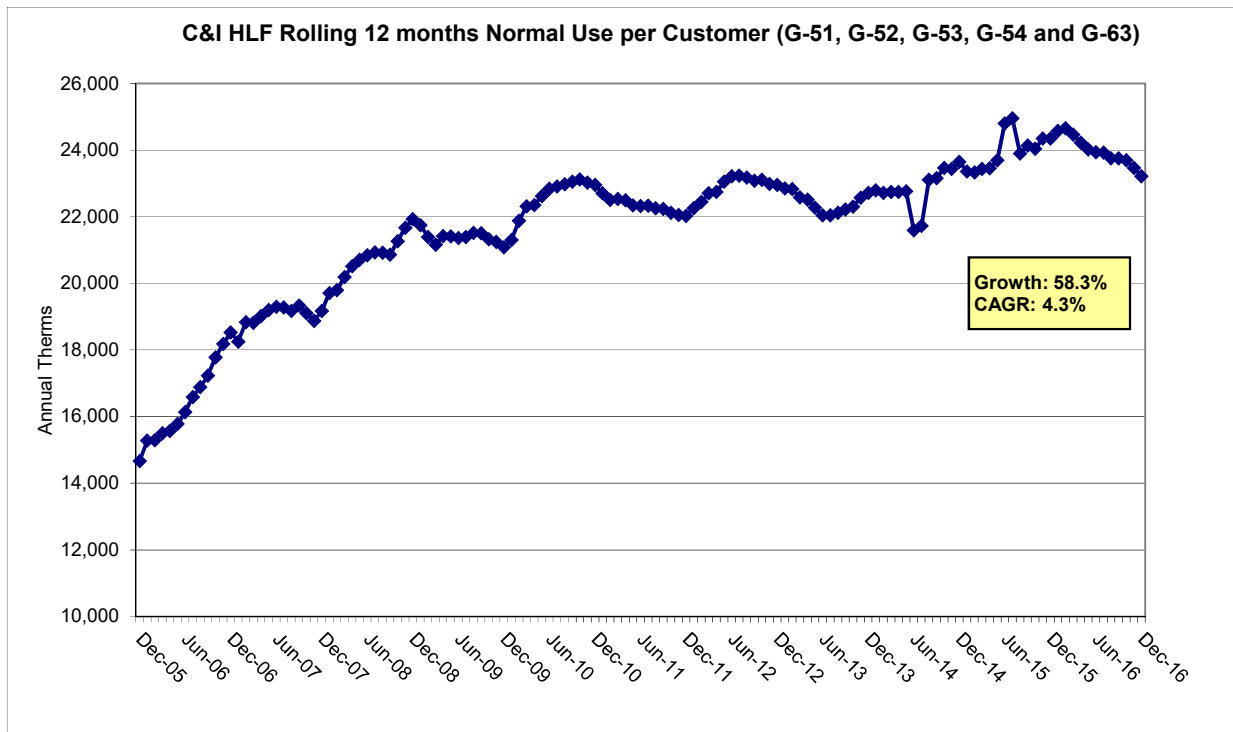
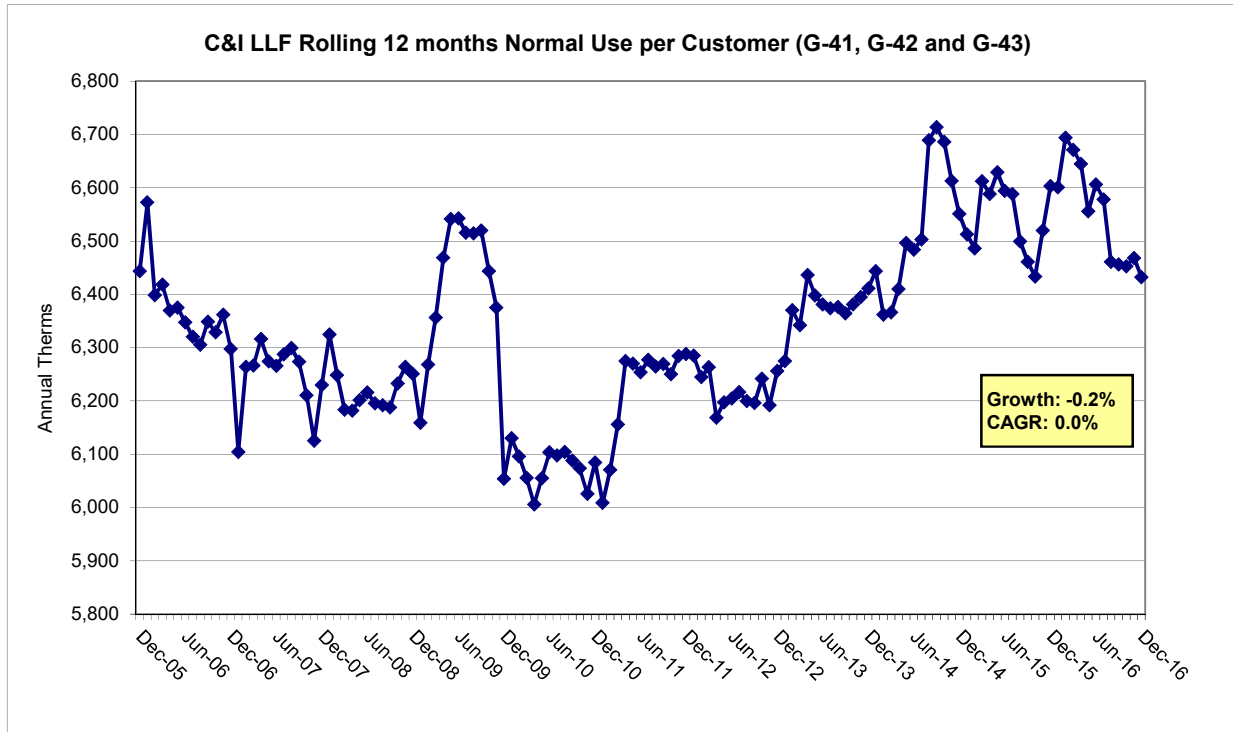
**Liberty Utilities (EnergyNorth Natural Gas) Corp.
U.S. LDCs with Decoupling Mechanisms**

Northeast	Midwest
<p>CT Connecticut Natural Gas Corporation</p> <p>MA Bay State Gas Company Boston Gas Company Colonial Gas Company Fitchburg Gas & Electric Liberty Utilities (New England Natural Gas Company) Corp. NSTAR Gas Company</p> <p>NJ New Jersey Natural Gas Company South Jersey Gas Company</p> <p>NY Brooklyn Union Gas Company Central Hudson Gas & Electric Corporation Consolidated Edison Company of New York, Inc. Corning Natural Gas Corporation KeySpan Gas East Corporation National Fuel Gas Distribution Corporation New York State Electric & Gas Corporation Niagara Mohawk Power Corporation Orange and Rockland Utilities, Inc. Rochester Gas and Electric Corporation St. Lawrence Gas Company, Inc.</p> <p>RI Rhode Island Gas & Electricity (National Grid-RI)</p> <p>VT Vermont Gas Systems, Inc.</p>	<p>IL Ameren Illinois Company North Shore Gas Company Peoples Gas Light and Coke Company</p> <p>IN Citizens Energy Group Indiana Gas Company, Inc. Southern Indiana Gas and Electric Company, Inc.</p> <p>MI Michigan Gas Utilities Corporation</p> <p>MN CenterPoint Energy - MN Minnesota Energy Resources Corporation</p> <p>WI Wisconsin Public Service Corporation</p>
	West
<p>South</p> <p>AR Arkansas Oklahoma Gas Corp. Black Hills Energy Arkansas, Inc. CenterPoint Arkansas</p> <p>GA Atlanta Gas Light Company</p> <p>LA Atmos - LA</p> <p>MD Baltimore Gas and Electric Company Chesapeake Utilities - Maryland Columbia Gas of Maryland Sandpiper Energy Washington Gas Light (WGL)</p> <p>MS Atmos - Mississippi</p> <p>NC Piedmont Natural Gas Company, Inc. Public Service Company of North Carolina, Incorporated</p> <p>SC Piedmont Natural Gas Company - SC</p> <p>TN Chattanooga Gas Company</p> <p>VA Columbia Gas of Virginia, Incorporated Virginia Natural Gas, Inc. Washington Gas Light</p>	<p>AZ Southwest Gas Corporation</p> <p>CA Pacific Gas and Electric Company San Diego Gas & Electric Co. Southern California Gas Company Southwest Gas Corporation</p> <p>CO Public Service Company of Colorado</p> <p>ID Avista Gas</p> <p>NV Southwest Gas Corporation</p> <p>OR Avista Utilities Cascade Natural Gas Corporation Northwest Natural Gas Company</p> <p>UT Questar Gas Company</p> <p>WA Avista Corporation Cascade Natural Gas Corporation Puget Sound Energy, Inc.</p> <p>WY Black Hills Northwest Wyoming Gas Utility Company, LLC Questar Gas - WY</p> 

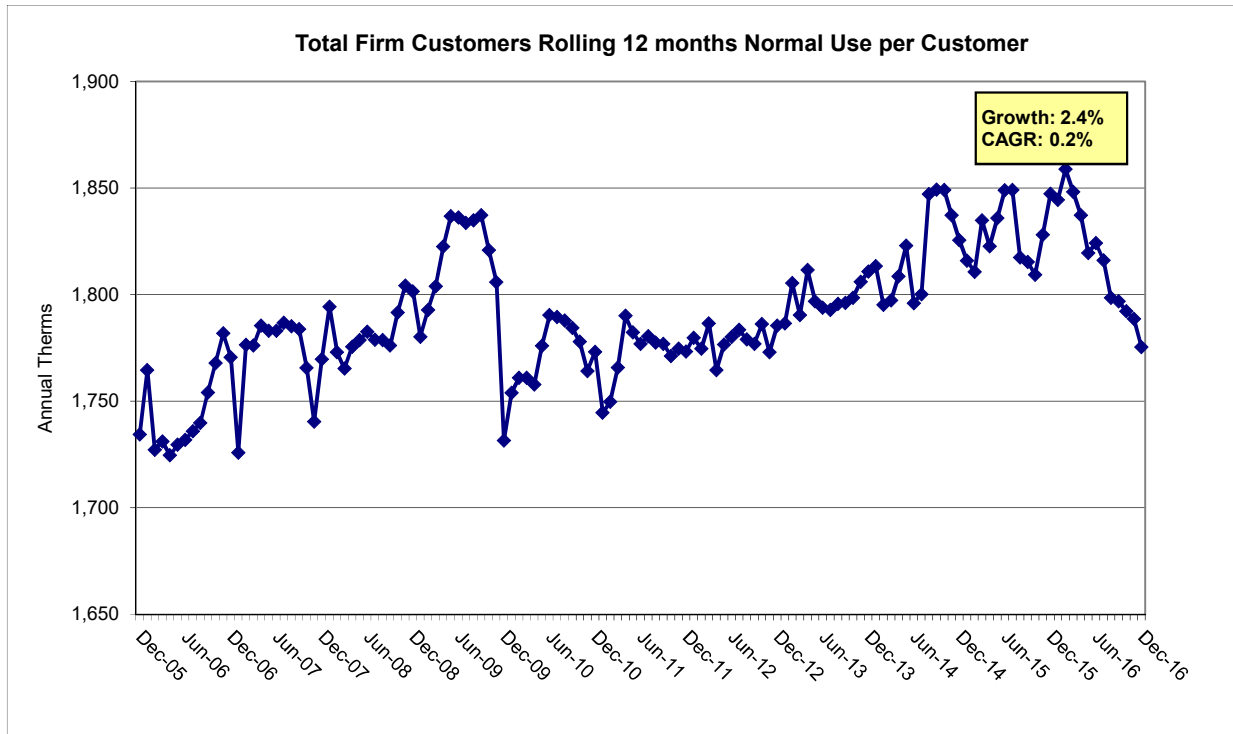
Liberty Utilities (EnergyNorth Natural Gas) Corp.
 EnergyNorth Annual Normalized Use per Customer, 2005 – 2016



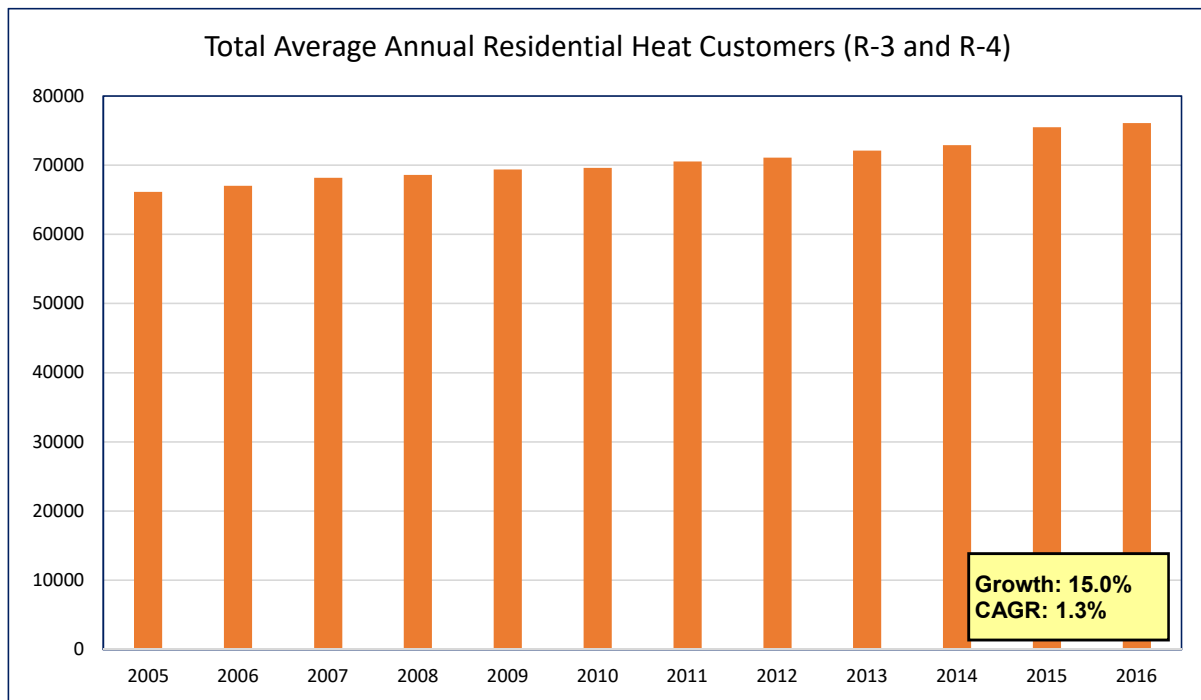
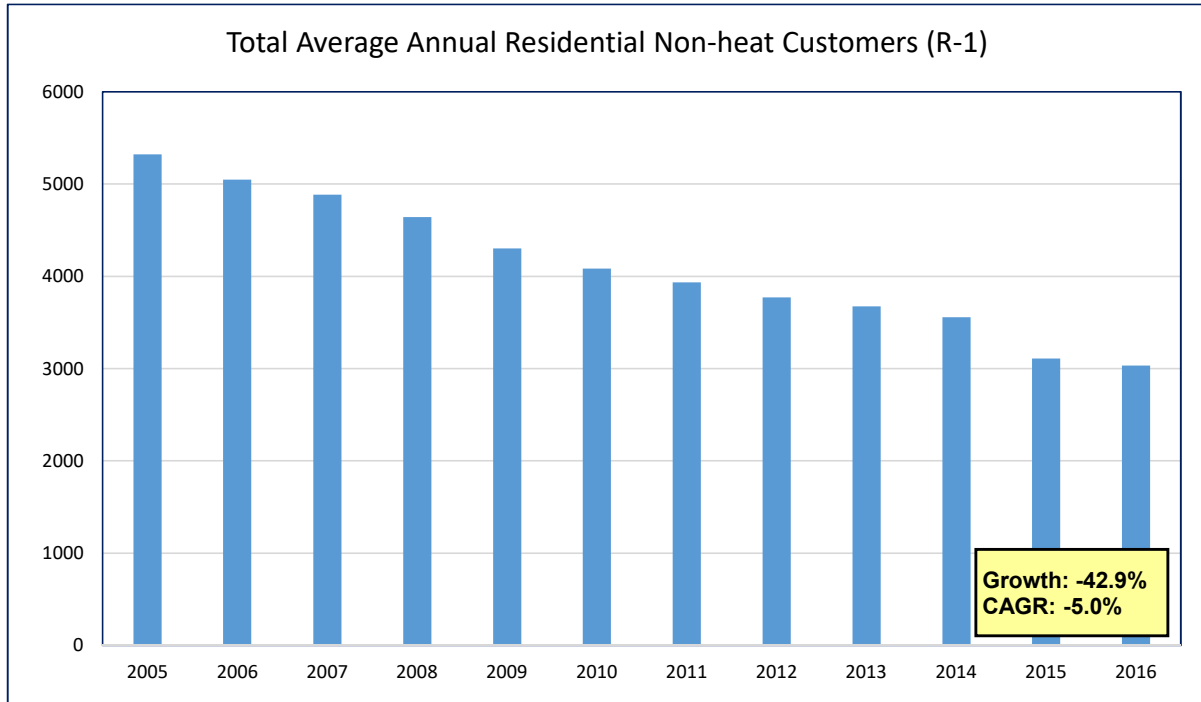
Liberty Utilities (EnergyNorth Natural Gas) Corp.
 EnergyNorth Annual Normalized Use per Customer, 2005 – 2016



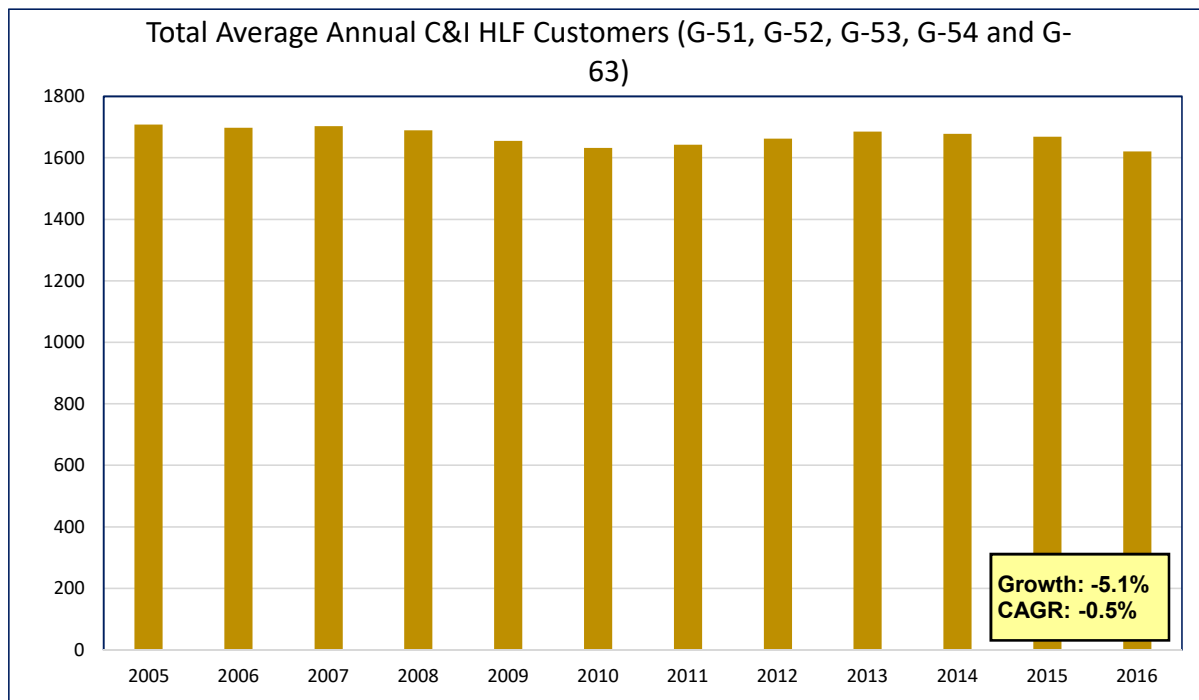
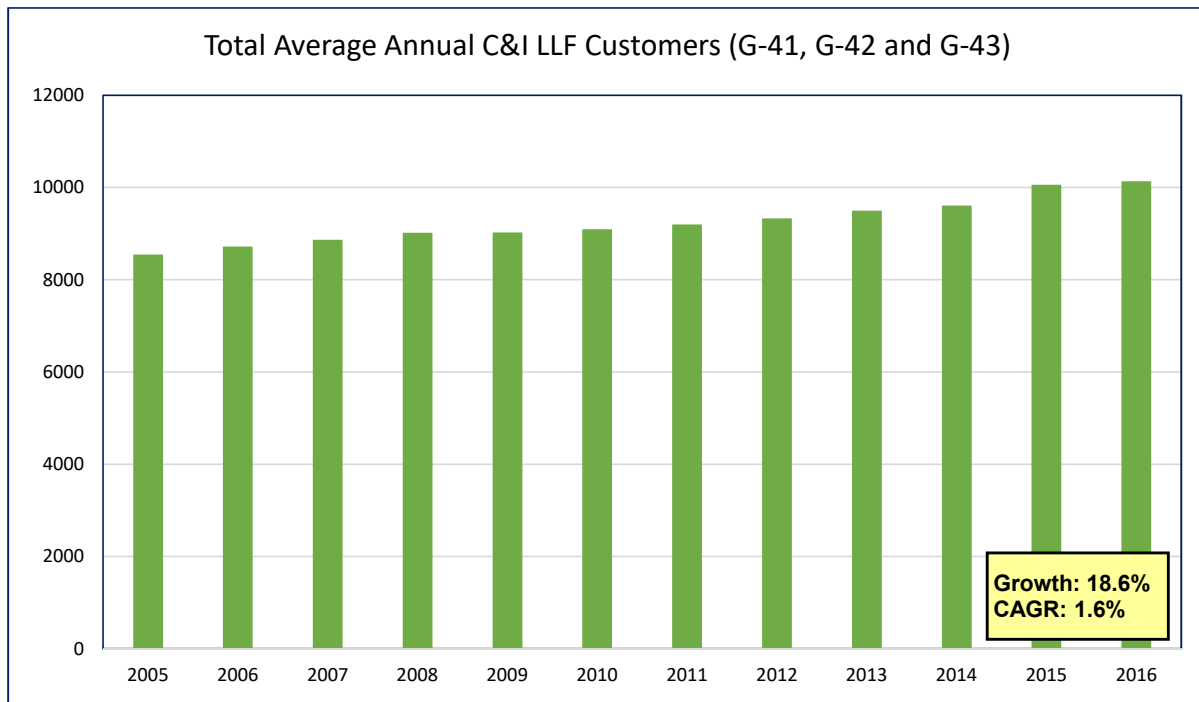
Liberty Utilities (EnergyNorth Natural Gas) Corp.
EnergyNorth Annual Normalized Use per Customer, 2005 – 2016



Liberty Utilities (EnergyNorth Natural Gas) Corp.
EnergyNorth Annual Customers, 2005 – 2016



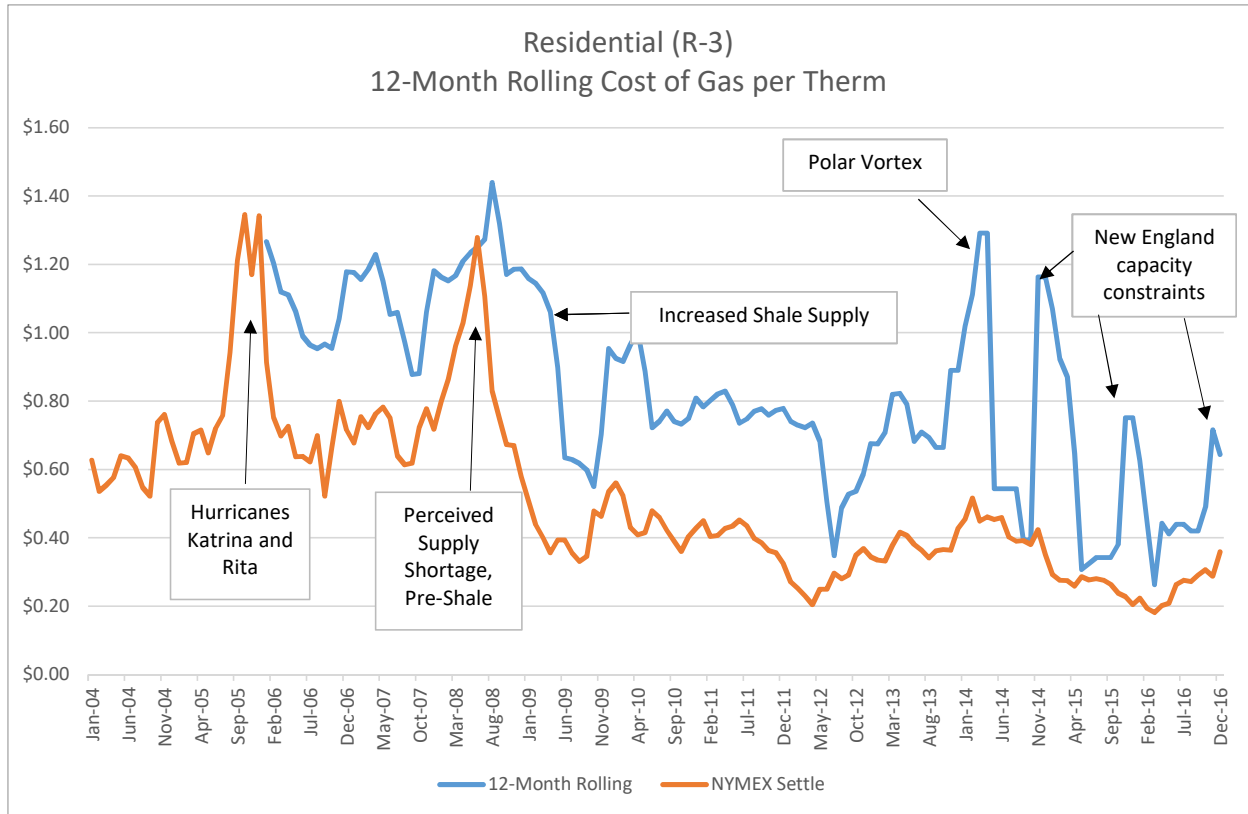
Liberty Utilities (EnergyNorth Natural Gas) Corp.
EnergyNorth Annual Customers, 2005 – 2016



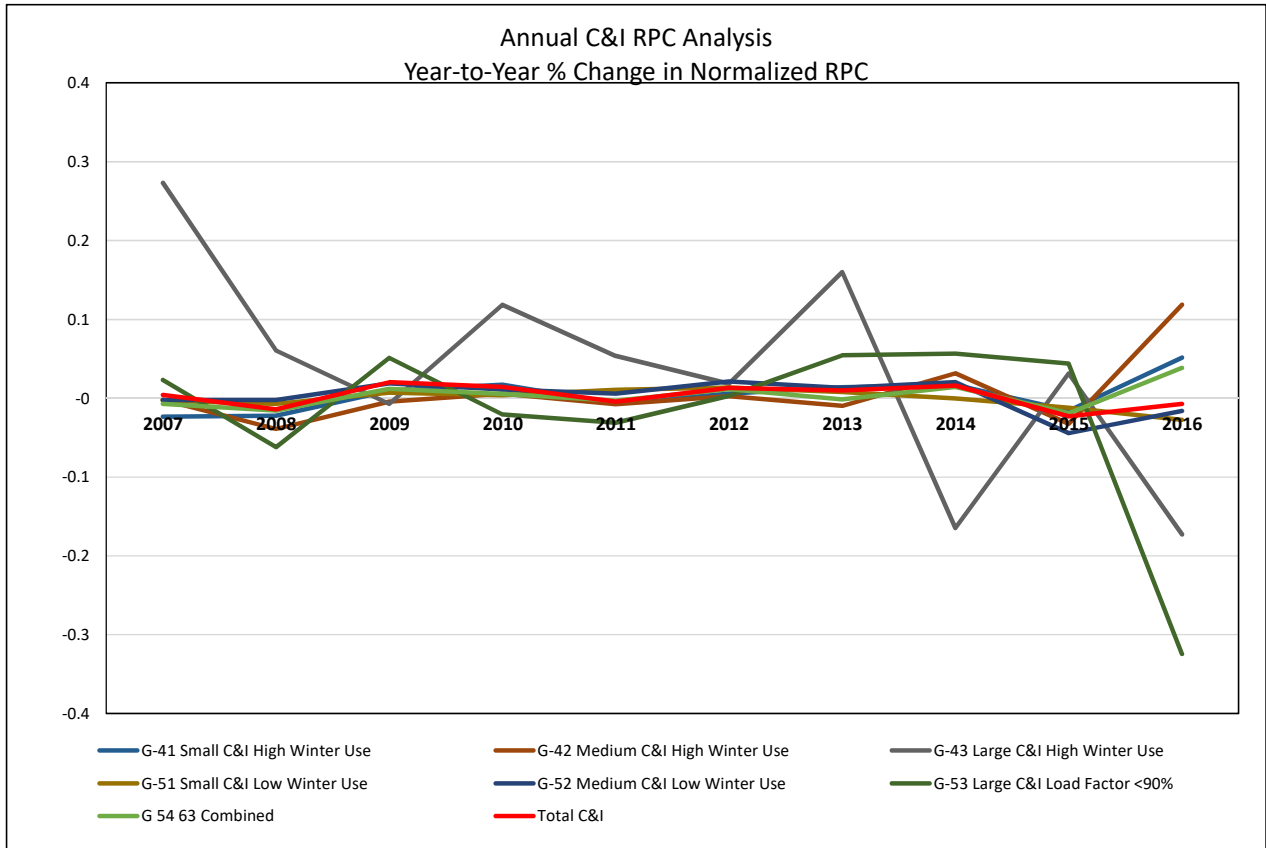
Liberty Utilities (EnergyNorth Natural Gas) Corp.
EnergyNorth Annual Customers, 2005 – 2016



Liberty Utilities (EnergyNorth Natural Gas) Corp.
EnergyNorth 12-Month Rolling R-3 Unit Cost of Gas, 2006 – 2016



Liberty Utilities (EnergyNorth Natural Gas) Corp.
 EnergyNorth Year-to-Year C Revenue Per Customer



**Liberty Utilities (EnergyNorth Natural Gas) Corp.
Hypothetical RDM Target Revenues: 2010 Billing Determinants, 2016 rates**

Line	Class	2010 Base Rate Revenues at 2016 rates		Average Customers		Target Revenue per Customer	
		Winter	Summer	Winter	Summer	Winter	Summer
		(A)	(B)	(C)	(D)	(E)	(F)
1							
2	Residential Non-heat R-1	\$499,480	\$435,831	4,103	4,060	\$121.73	\$107.34
3	Residential Heat R-3, R-4	\$24,336,541	\$12,789,369	70,111	69,146	\$347.12	\$184.96
4	Total Residential	\$24,336,541	\$12,789,369	70,111	69,146		
5	Small, High Winter Use G-41	\$6,836,739	\$2,931,513	7,697	7,382		
6	Medium, High Winter Use G-42	\$8,189,424	\$2,927,026	1,503	1,490		
7	Large High Winter Use G-43	\$1,077,990	\$419,234	42	40		
8	Total High Winter Use	\$ 16,104,153	\$ 6,277,773	9,242	8,912		
9	Small, Low Winter Use G-51	\$791,325	\$592,542	1,282	1,249		
10	Medium, Low Winter Use G-52	\$909,699	\$597,965	311	309		
11	Large Low Winter Use G-53	\$745,035	\$462,344	37	36		
12	Large Use, LF >90% G-54	\$456,463	\$361,789	21	20		
13	Total Low Winter Use	\$2,902,522	\$2,014,640	1,651	1,615		
14	Total C&I	\$19,006,674	\$8,292,413	10,893	10,527	\$1,744.83	\$787.74
15	TOTAL	\$43,343,216	\$21,081,782	81,004	79,673		

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Example RDM Calculations: Actual data

Line		Target Revenue per Customer		Summer 2011					Winter 2011 - 2012					
				Actual Summer Data			Shortfall (Surplus)		Actual Winter Data			Shortfall (Surplus)		
		Winter (A)	Summer (B)	Revenues at 2016 rates	Customers	Revenue Per Customer	Per Customer	Total	Revenues at 2016 rates	Customers	Revenue Per Customer	Per Customer	Total	
				(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	
1	Residential Non-heat	R-1	\$121.73	\$107.34	\$418,346	3,904	\$107.15	\$0.20	\$763	\$467,375	3,872	\$120.70	\$1.03	\$3,978
2	Residential Heat	R-3, R-4	\$347.12	\$184.96	\$12,793,077	70,289	\$182.01	\$2.96	\$207,719	\$22,566,735	71,446	\$315.86	\$31.26	\$2,233,390
3	Total Residential				\$12,793,077					\$22,566,735				
4														
5	Small, High Winter	G-41			\$2,959,325	7,483				\$6,350,235	7,844			
6	Medium, High Winter	G-42			\$2,954,098	1,526				\$7,430,603	1,539			
7	Large High Winter	G-43			\$438,949	41				\$1,057,130	38			
8	Small, Low Winter	G-51			\$597,278	1,265				\$782,543	1,306			
9	Medium, Low Winter	G-52			\$651,079	310				\$861,902	305			
10	Large Low Winter	G-53			\$452,023	38				\$717,814	38			
11	Large LF > 90%	G-54			\$346,494	19				\$415,959	19			
12	Total C&I		\$1,744.83	\$787.74	\$8,399,247	10,682	\$786.27	\$1.48	\$15,778	\$17,616,186	11,089	\$1,588.60	\$156.23	\$1,732,447
13	TOTAL				\$21,610,669	84,876			\$224,260	\$40,650,296	86,407			\$3,969,815
14	Seasonal RDM Adjustment								\$224,260					\$3,969,815

Notes

Lines 1, 2, 12 Columns(A), (B)	Attachment GHT/DECPL-5
Columns (C), (H)	Workpapers
Columns (D), (I)	Workpapers
Columns (E), (J)	Column (C) / Column (D); Column (H) / Column (I)
Columns (F), (K)	Column (B) - Column (E), Column (A) - Column (J)
Columns (G), (L)	Column (F) x Column (D), Column (I) x Column (K)

Actual Revenues are restated at 2016 rates

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Example RDM Calculations: Actual data

Line		Target Revenue per Customer		Summer 2012					Winter 2012 - 2013					
				Actual Summer Data			Shortfall (Surplus)		Actual Winter Data			Shortfall (Surplus)		
		Winter (A)	Summer (B)	Revenues at 2016 rates	Customers	Revenue Per Customer	Per Customer	Total	Revenues at 2016 rates	Customers	Revenue Per Customer	Per Customer	Total	
				(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	
1	Residential Non-heat	R-1	\$121.73	\$107.34	\$400,490	3,748	\$106.85	\$0.49	\$1,846	\$462,364	3,675	\$125.82	(\$4.09)	(\$15,033)
2	Residential Heat	R-3, R-4	\$347.12	\$184.96	\$12,729,928	70,842	\$179.70	\$5.27	\$373,048	\$24,512,126	71,614	\$342.28	\$4.83	\$346,231
3	Total Residential				\$12,729,928					\$24,512,126				
4														
5	Small, High Winter	G-41			\$3,004,719	7,602				\$7,165,823	7,940			
6	Medium, High Winter	G-42			\$2,947,729	1,537				\$8,320,931	1,566			
7	Large High Winter	G-43			\$457,215	40				\$1,357,501	42			
8	Small, Low Winter	G-51			\$620,045	1,295				\$836,321	1,310			
9	Medium, Low Winter	G-52			\$656,952	312				\$935,860	313			
10	Large Low Winter	G-53			\$462,561	39				\$728,336	39			
11	Large LF > 90%	G-54			\$316,383	14				\$422,583	19			
12	Total C&I		\$1,744.83	\$787.74	\$8,465,605	10,838	\$781.12	\$6.63	\$71,814	\$19,767,356	11,229	\$1,760.44	(\$15.60)	(\$175,192)
13	TOTAL				\$21,596,022	85,428			\$446,707	\$44,741,847	86,517			\$156,005
14	Seasonal RDM Adjustment								\$446,707					\$156,005

Notes

Lines 1, 2, 12 Columns(A), (B)	Attachment GHT/DECPL-5
Columns (C), (H)	Workpapers
Columns (D), (I)	Workpapers
Columns (E), (J)	Column (C) / Column (D); Column (H) / Column (I)
Columns (F), (K)	Column (B) - Column (E), Column (A) - Column (J)
Columns (G), (L)	Column (F) x Column (D), Column (I) x Column (K)

Actual Revenues are restated at 2016 rates

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Example RDM Calculations: Actual data

Line		Target Revenue per Customer		Summer 2013					Winter 2013 - 2014					
				Actual Summer Data			Shortfall (Surplus)		Actual Winter Data			Shortfall (Surplus)		
		Winter (A)	Summer (B)	Revenues at 2016 rates	Customers	Revenue Per Customer	Per Customer	Total	Revenues at 2016 rates	Customers	Revenue Per Customer	Per Customer	Total	
				(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	
1	Residential Non-heat	R-1	\$121.73	\$107.34	\$394,169	3,667	\$107.50	(\$0.16)	(\$592)	\$493,821	3,684	\$134.04	(\$12.31)	(\$45,365)
2	Residential Heat	R-3, R-4	\$347.12	\$184.96	\$12,953,149	71,591	\$180.93	\$4.03	\$288,368	\$26,877,471	73,198	\$367.19	(\$20.07)	(\$1,469,303)
3	Total Residential									\$26,877,471				
4														
5	Small, High Winter	G-41			\$3,003,894	7,699				\$7,999,789	8,037			
6	Medium, High Winter	G-42			\$3,119,974	1,575				\$9,179,266	1,581			
7	Large High Winter	G-43			\$518,306	45				\$1,473,838	45			
8	Small, Low Winter	G-51			\$623,216	1,305				\$873,602	1,302			
9	Medium, Low Winter	G-52			\$683,908	317				\$1,000,744	315			
10	Large Low Winter	G-53			\$471,235	38				\$771,519	39			
11	Large LF > 90%	G-54			\$371,274	23				\$460,166	25			
12	Total C&I		\$1,744.83	\$787.74	\$8,791,807	11,002	\$799.09	(\$11.34)	(\$124,816)	\$21,758,924	11,345	\$1,918.00	(\$173.16)	(\$1,964,463)
13	TOTAL				\$22,139,125	86,260			\$162,960	\$49,130,217	88,227			-\$3,479,131
14	Seasonal RDM Adjustment								\$162,960					(\$3,479,131)

Notes

Lines 1, 2, 12 Columns(A), (B)	Attachment GHT/DECPL-5
Columns (M), (R)	Workpapers
Columns (N), (S)	Workpapers
Columns (O), (T)	Column (M) / Column (N); Column (R) / Column (S)
Columns (P), (U)	Column (B) - Column (O), Column (A) - Column (T)
Columns (Q), (V)	Column (P) x Column (N), Column (S) x Column (U)

Actual Revenues are restated at 2016 rates

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Example RDM Calculations: Actual data

Line		Target Revenue per Customer		Summer 2014					Winter 2014 - 2015					
				Actual Summer Data			Shortfall (Surplus)		Actual Winter Data			Shortfall (Surplus)		
		Winter (A)	Summer (B)	Revenues at 2016 rates	Customers	Revenue Per Customer	Per Customer	Total	Revenues at 2016 rates	Customers	Revenue Per Customer	Per Customer	Total	
				(W)	(X)	(Y)	(Z)	(AA)	(AB)	(AC)	(AD)	(AE)	(AF)	
1	Residential Non-heat	R-1	\$121.73	\$107.34	\$388,594	3,614	\$107.53	(\$0.19)	(\$687)	\$388,238	3,159	\$122.90	(\$1.17)	(\$3,697)
2	Residential Heat	R-3, R-4	\$347.12	\$184.96	\$13,245,331	72,562	\$182.54	\$2.42	\$175,820	\$27,385,331	76,270	\$359.06	(\$11.94)	(\$910,895)
3	Total Residential				\$13,245,331					\$27,385,331				
4														
5	Small, High Winter	G-41			\$3,192,573	7,800				\$8,311,916	8,486			
6	Medium, High Winter	G-42			\$3,234,255	1,590				\$9,498,893	1,679			
7	Large High Winter	G-43			\$643,606	40				\$1,598,755	50			
8	Small, Low Winter	G-51			\$627,080	1,302				\$896,110	1,337			
9	Medium, Low Winter	G-52			\$691,224	317				\$1,040,248	321			
10	Large Low Winter	G-53			\$463,789	35				\$884,813	41			
11	Large LF > 90%	G-54			\$394,871	20				\$450,250	27			
12	Total C&I		\$1,744.83	\$787.74	\$9,247,399	11,103	\$832.84	(\$45.10)	(\$500,720)	\$22,680,984	11,940	\$1,899.54	(\$154.71)	(\$1,847,245)
13	TOTAL				\$22,881,325	87,279			-\$325,587	\$50,454,553	91,369			-\$2,761,837
14	Seasonal RDM Adjustment								(\$325,587)					(\$2,761,837)

Notes

Lines 1, 2, 12 Columns(K), (L)	Attachment GHT/DECPL-5
Columns (W), (AB)	Workpapers
Columns (X), (AC)	Workpapers
Columns (Y), (AD)	Column (W) / Column (X); Column (AB) / Column (AC)
Columns (Z), (AE)	Column (B) - Column (Y), Column (A) - Column (AD)
Columns (AA), (AF)	Column (Z) x Column (X), Column (AC) x Column (AE)

Actual Revenues are restated at 2016 rates

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Example RDM Calculations: Actual data

Line		Target Revenue per Customer		Summer 2015					Winter 2015 - 2016					
				Actual Summer Data			Shortfall (Surplus)		Actual Winter Data			Shortfall (Surplus)		
		Winter (A)	Summer (B)	Revenues at 2016 rates	Customers	Revenue Per Customer	Per Customer	Total	Revenues at 2016 rates	Customers	Revenue Per Customer	Per Customer	Total	
				(AG)	(AH)	(AI)	(AJ)	(AK)	(AL)	(AM)	(AN)	(AO)	(AP)	
1	Residential Non-heat	R-1	\$121.73	\$107.34	\$329,373	3,101	\$106.21	\$1.13	\$3,499	\$368,107	3,073	\$119.80	\$1.93	\$5,915
2	Residential Heat	R-3, R-4	\$347.12	\$184.96	\$13,440,224	74,595	\$180.18	\$4.79	\$356,979	\$23,899,279	76,081	\$314.13	\$32.99	\$2,509,631
3	Total Residential				\$13,440,224					\$23,899,279				
4														
5	Small, High Winter	G-41			\$3,384,256	8,163				\$7,115,946	8,445			
6	Medium, High Winter	G-42			\$3,260,739	1,621				\$8,015,245	1,664			
7	Large High Winter	G-43			\$581,137	50				\$1,415,144	50			
8	Small, Low Winter	G-51			\$596,770	1,252				\$776,716	1,274			
9	Medium, Low Winter	G-52			\$681,154	311				\$886,259	310			
10	Large Low Winter	G-53			\$525,103	39				\$753,469	36			
11	Large LF > 90%	G-54			\$422,274	28				\$463,685	27			
12	Total C&I		\$1,744.83	\$787.74	\$9,451,432	11,463	\$824.49	(\$36.74)	(\$421,197)	\$19,426,465	11,805	\$1,645.59	\$99.25	\$1,171,639
13	TOTAL				\$23,221,030	89,159			-\$60,720	\$43,693,851	90,959			\$3,687,184
14	Seasonal RDM Adjustment								(\$60,720)					\$3,687,184

Notes

Lines 1, 2, 12 Columns(U), (V)	Attachment GHT/DECPL-5
Columns (AG), (AL)	Workpapers
Columns (AH), (AM)	Workpapers
Columns (AI), (AN)	Column (AG) / Column (AH); Column (AL) / Column (AM)
Columns (AJ), (AO)	Column (B) - Column (AI), Column (A) - Column (AN)
Columns (AK), (AP)	Column (AJ) x Column (AH), Column (AM) x Column (AO)

Actual Revenues are restated at 2016 rates

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Example RDM Calculations: Actual data

Line		Target Revenue per Customer	Summer 2016						
			Winter (A)	Summer (B)	Actual Summer Data			Shortfall (Surplus)	
					Revenues at 2016 rates (AQ)	Customers (AR)	Revenue Per Customer (AS)	Per Customer (AT)	Total (AT)
1	Residential Non-heat	R-1	\$121.73	\$107.34	\$319,355	3,009	\$106.13	\$1.21	\$3,656
2	Residential Heat	R-3, R-4	\$347.12	\$184.96	\$13,592,320	75,548	\$179.92	\$5.05	\$381,248
3	Total Residential				\$13,592,320				
4									
5	Small, High Winter	G-41			\$3,379,440	8,266			
6	Medium, High Winter	G-42			\$3,368,966	1,670			
7	Large High Winter	G-43			\$557,697	48			
8	Small, Low Winter	G-51			\$594,855	1,237			
9	Medium, Low Winter	G-52			\$661,495	307			
10	Large Low Winter	G-53			\$463,563	32			
11	Large LF > 90%	G-54			\$401,843	28			
12	Total C&I		\$1,744.83	\$787.74	\$9,427,859	11,588	\$813.57	(\$25.82)	(\$299,262)
13	TOTAL				\$23,339,534	90,146			\$85,642
14	Seasonal RDM Adjustment								\$85,642

Notes

**Liberty Utilities (EnergyNorth Natural Gas) Corp.
RDM Timeline**

	Start	End
2017 Summer RDM True Up Period	5/1/2017	10/31/2017
Prepare Filing	2/2/2018	3/1/2018
Submit Filing	3/1/2018	3/1/2018
2017 Summer RDM Adjustment effective dates	5/1/2018	10/31/2018
2017-18 Winter RDM True Up Period	11/1/2017	4/30/2018
Prepare Filing	8/1/2018	8/31/2018
Submit Filing	9/1/2018	9/1/2018
2015-16 Winter RDM Adjustment effective dates	11/1/2018	4/30/2019
2018 Summer RDM True Up Period	5/1/2018	10/31/2018
Prepare Filing	2/1/2019	3/1/2019
Submit Filing	3/1/2019	3/1/2019
2018 Summer RDM Adjustment effective dates	5/1/2019	10/31/2019
2018-19 Winter RDM True Up Period	11/1/2018	4/30/2019
Prepare Filing	8/1/2019	8/31/2019
Submit Filing	9/1/2019	9/1/2019
2018-19 Winter RDM Adjustment effective dates	11/1/2019	4/30/2020

Liberty Utilities (EnergyNorth Natural Gas) Corp.
RDM Target Revenues: Permanent Rates

Line	Class		Rate Year 1 Pro-forma Base Rate Revenues		Rate Year 1 Average Customers		Rate Year 1 Target Revenue per Customer	
			Winter	Summer	Winter	Summer	Winter	Summer
			(A)	(B)	(C)	(D)	(E)	(F)
1								
2	Residential Non-heat	R-1	\$577,648	\$519,062	3,485	3,567	\$165.77	\$145.53
3	Residential Heat	R-3, R-4	\$33,116,584	\$16,129,504	76,309	76,479	\$433.98	\$210.90
4	Total Residential		\$33,694,233	\$16,648,566	79,794	80,045		
5	Small, High Winter Use	G-41	\$9,797,494	\$4,118,770	8,900	8,859		
6	Medium, High Winter Use	G-42	\$11,032,480	\$4,010,218	1,714	1,738		
7	Large High Winter Use	G-43	\$2,207,715	\$469,223	51	50		
8	Total High Winter Use		\$ 23,037,690	\$ 8,598,211	10,665	10,646		
9	Small, Low Winter Use	G-51	\$1,064,357	\$785,147	1,345	1,358		
10	Medium, Low Winter Use	G-52	\$1,328,109	\$779,591	318	320		
11	Large Low Winter Use	G-53	\$1,161,177	\$479,674	33	34		
12	Large Use, LF >90%	G-54	\$668,388	\$442,320	27	28		
13	Total Low Winter Use		\$4,222,031	\$2,486,733	1,723	1,740		
14	Total C&I		\$27,259,721	\$11,084,944	12,388	12,386	\$2,200.52	\$894.95
15	TOTAL		\$60,953,954	\$27,733,510	92,182	92,431		