

Estimated Total SBC Rate and SBC Rate by Component
 (\$ in Millions)

2017 Company	2014 Sales (MWh)	Company Savings	Savings to Statewide	Annual Savings (MWh)	Total Budget*	Current Funding			Incremental Funding**	LBR Funding	Total Add'l Funding	(cents/kWh)			
						RGGI Funding	SBC Funding	FCM Funding				EAP SBC	EE SBC	LBR SBC	Total SBC
Eversource	7,886,054	0.84%	0.47%	50,503	\$ 23.36	\$ 1.92	\$ 14.19	\$ 3.62	\$ 3.63	\$ 0.58	\$ 4.21	0.150	0.226	0.007	0.383
Unitil	1,225,254	0.51%	0.06%	6,251	3.54	0.30	2.21	0.48	0.58	0.10	0.66	0.150	0.226	0.008	0.384
Liberty	910,825	0.46%	0.04%	4,220	2.62	0.22	1.64	0.34	0.42	0.05	0.47	0.150	0.226	0.005	0.381
NHEC	760,840	0.42%	0.03%	3,222	1.99	0.19	1.37	0.09	0.35	-	0.35	0.150	0.226	0.000	0.376
Total	10,782,973		0.60%	64,197	\$ 31.51	\$ 2.62	\$ 18.41	\$ 4.52	\$ 4.96	\$ 0.73	\$ 5.69				

2018 Company	2014 Sales (MWh)	Company Savings	Savings to Statewide	Annual Savings (MWh)	Total Budget*	Current Funding			Incremental Funding**	LBR Funding	Total Add'l Funding	(cents/kWh)			
						RGGI Funding	SBC Funding	FCM Funding				EAP SBC	EE SBC	LBR SBC	Total SBC
Eversource	7,886,054	0.86%	0.63%	67,734	\$ 32.11	\$ 1.92	\$ 14.19	\$ 5.82	\$ 10.17	\$ 2.25	\$ 12.42	0.150	0.309	0.029	0.488
Unitil	1,225,254	0.67%	0.08%	8,241	4.79	0.30	2.21	0.70	1.58	0.33	1.91	0.150	0.309	0.027	0.486
Liberty	910,825	0.62%	0.05%	5,630	3.58	0.22	1.64	0.54	1.17	0.19	1.36	0.150	0.309	0.021	0.480
NHEC	760,840	0.56%	0.04%	4,225	2.68	0.19	1.37	0.14	0.98	-	0.98	0.150	0.309	0.000	0.459
Total	10,782,973		0.80%	85,829	\$ 43.15	\$ 2.62	\$ 18.41	\$ 7.21	\$ 13.91	\$ 2.77	\$ 16.68				

2019 Company	2014 Sales (MWh)	Company Savings	Savings to Statewide	Annual Savings (MWh)	Total Budget*	Current Funding			Incremental Funding**	LBR Funding	Total Add'l Funding	(cents/kWh)			
						RGGI Funding	SBC Funding	FCM Funding				EAP SBC	EE SBC	LBR SBC	Total SBC
Eversource	7,886,054	1.07%	0.78%	84,417	\$ 41.02	\$ 1.92	\$ 14.19	\$ 5.59	\$ 19.32	\$ 4.41	\$ 23.73	0.150	0.425	0.056	0.631
Unitil	1,225,254	0.85%	0.10%	10,471	6.24	0.30	2.21	0.73	3.00	0.62	3.63	0.150	0.425	0.051	0.628
Liberty	910,825	0.78%	0.07%	7,080	4.61	0.22	1.64	0.52	2.23	0.37	2.60	0.150	0.425	0.040	0.615
NHEC	760,840	0.72%	0.05%	5,471	3.56	0.19	1.37	0.14	1.86	-	1.86	0.150	0.425	0.000	0.575
Total	10,782,973		1.00%	107,439	\$ 55.42	\$ 2.62	\$ 18.41	\$ 6.97	\$ 26.42	\$ 5.41	\$ 31.82				

2020 Company	2014 Sales (MWh)	Company Savings	Savings to Statewide	Annual Savings (MWh)	Total Budget*	Current Funding			Incremental Funding**	LBR Funding	Total Add'l Funding	(cents/kWh)			
						RGGI Funding	SBC Funding	FCM Funding				EAP SBC	EE SBC	LBR SBC	Total SBC
Eversource	7,886,054	1.39%	1.01%	109,369	\$ 54.47	\$ 1.92	\$ 14.19	\$ 4.53	\$ 33.83	\$ 7.18	\$ 40.99	0.150	0.609	0.091	0.850
Unitil	1,225,254	1.11%	0.13%	13,626	8.32	0.30	2.21	0.58	5.28	1.01	6.28	0.150	0.609	0.082	0.841
Liberty	910,825	1.02%	0.09%	9,270	6.19	0.22	1.64	0.42	3.91	0.60	4.51	0.150	0.609	0.066	0.825
NHEC	760,840	0.97%	0.07%	7,400	4.93	0.19	1.37	0.11	3.26	-	3.26	0.150	0.609	0.000	0.759
Total	10,782,973		1.30%	139,665	\$ 73.91	\$ 2.62	\$ 18.41	\$ 5.62	\$ 46.28	\$ 8.76	\$ 55.02				

*Excluding Lost Base Revenue
 **Funding over Current Levels

PSNH d/b/a Eversource Energy					
Calculation of Lost Base Revenue (LBR)					
Estimated Lost Base Revenues for 2017					
Line	Company	2017 (kWh) Savings	LBR (\$/kWh)*	2017 Total LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
1	Residential	4,807,808	0.04043	\$ 194,384	Page 3, Line 6 Col. N
2	CAI	15,225,045	0.02550	388,239	Page 3, Line 6 Col. N
3	Total	20,032,853		\$ 582,622	

Liberty Utilities					
Calculation of Lost Base Revenue (LBR)					
Estimated Lost Base Revenues for 2017					
Line	Company	2017 (kWh) Savings	LBR (\$/kWh)*	2017 Total LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
1	Residential	485,836	0.04151	\$ 20,582	Page 4, Line 9 Col. N
2	CAI	1,198,851	0.02387	27,818	Page 4, Line 9 Col. N
3	Total	1,684,687		\$ 48,399	

Unitil					
Calculation of Lost Base Revenue (LBR)					
Estimated Lost Base Revenues for 2017					
Line	Company	2017 (kWh) Savings	LBR (\$/kWh)*	2017 Total LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
1	Residential	787,832	0.03728	\$ 29,358	Page 5, Line 9 Col. N
2	CAI	2,363,785	0.02870	70,205	Page 5, Line 9 Col. N
3	Total	3,151,617		\$ 99,563	

PSNH d/b/a Eversource Energy					
Calculation of Lost Base Revenue (LBR)					
Estimated Lost Base Revenues for 2018					
Line	Sector	2018 (kWh) Savings	LBR (\$/kWh)*	2018 LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
4	Residential	15,568,045	0.04043	\$ 750,747	Page 3, Line 12 Col. N
5	CAI	55,801,854	0.02550	1,428,451	Page 3, Line 12 Col. N
6	Total	77,371,832		\$ 2,260,197	

Liberty Utilities					
Calculation of Lost Base Revenue (LBR)					
Estimated Lost Base Revenues for 2018					
Line	Sector	2018 (kWh) Savings	LBR (\$/kWh)*	2018 LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
4	Residential	1,827,434	0.04151	\$ 80,008	Page 4, Line 13 Col. N
5	CAI	4,487,345	0.02387	107,352	Page 4, Line 13 Col. N
6	Total	6,434,779		\$ 187,360	

Unitil					
Calculation of Lost Base Revenue (LBR)					
Estimated Lost Base Revenues for 2018					
Line	Sector	2018 (kWh) Savings	LBR (\$/kWh)*	2018 LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
4	Residential	2,201,487	0.03728	\$ 86,832	Page 5, Line 12 Col. N
5	CAI	7,804,488	0.02870	231,753	Page 5, Line 12 Col. N
6	Total	10,005,975		\$ 328,585	

PSNH d/b/a Eversource Energy					
Calculation of Lost Base Revenue (LBR)					
Estimated Lost Base Revenues for 2019					
Line	Sector	2019 (kWh) Savings	LBR (\$/kWh)*	2019 LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
7	Residential	38,413,404	0.04043	\$ 1,472,184	Page 3, Line 20 Col. N
8	CAI	115,308,112	0.02550	2,940,382	Page 3, Line 20 Col. N
9	Total	151,722,516		\$ 4,412,576	

Liberty Utilities					
Calculation of Lost Base Revenue (LBR)					
Estimated Lost Base Revenues for 2019					
Line	Sector	2019 (kWh) Savings	LBR (\$/kWh)*	2019 LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
7	Residential	3,788,724	0.04151	\$ 157,187	Page 4, Line 20 Col. N
8	CAI	8,635,888	0.02387	210,808	Page 4, Line 20 Col. N
9	Total	12,424,612		\$ 368,095	

Unitil					
Calculation of Lost Base Revenue (LBR)					
Estimated Lost Base Revenues for 2019					
Line	Sector	2019 (kWh) Savings	LBR (\$/kWh)*	2019 LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
7	Residential	4,942,824	0.03728	\$ 184,170	Page 5, Line 19 Col. N
8	CAI	14,826,472	0.02870	440,408	Page 5, Line 19 Col. N
9	Total	19,771,296		\$ 624,578	

PSNH d/b/a Eversource Energy					
Calculation of Lost Base Revenue (LBR)					
Estimated Lost Base Revenues for 2020					
Line	Sector	2020 (kWh) Savings	LBR (\$/kWh)*	2020 LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
10	Residential	59,048,943	0.04043	\$ 2,387,348	Page 3, Line 28 Col. N
11	CAI	186,888,319	0.02550	4,788,202	Page 3, Line 27 Col. N
12	Total	246,037,262		\$ 7,155,551	

Liberty Utilities					
Calculation of Lost Base Revenue (LBR)					
Estimated Lost Base Revenues for 2020					
Line	Sector	2020 (kWh) Savings	LBR (\$/kWh)*	2020 LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
10	Residential	8,168,041	0.04151	\$ 256,035	Page 4, Line 28 Col. N
11	CAI	14,382,085	0.02387	343,638	Page 4, Line 27 Col. N
12	Total	20,650,126		\$ 609,673	

Unitil					
Calculation of Lost Base Revenue (LBR)					
Estimated Lost Base Revenues for 2020					
Line	Sector	2020 (kWh) Savings	LBR (\$/kWh)*	2020 LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
10	Residential	7,858,289	0.03728	\$ 298,528	Page 5, Line 28 Col. N
11	CAI	23,874,868	0.02870	706,064	Page 5, Line 27 Col. N
12	Total	31,733,157		\$ 1,004,592	

*Adjusted to exclude revenues associated with the customer charge

PSNH d/b/a Eversource Energy
Estimated Monthly Savings and Cumulative Savings (kWh)
(2017 - 2020)

Line	Sector	Col A	Col B	Col C	Col D	Col E	Col F	Col G	Col H	Col I	Col J	Col K	Col L	Col M	Col N
		Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	June 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Annual Savings	Cumulative Savings
1	Residential	444,429	444,429	444,429	808,052	808,052	808,052	787,848	787,848	787,848	2,020,130	2,020,130	2,020,130	12,120,778	12,120,778
2	C&I	1,407,357	1,407,357	1,407,357	2,859,831	2,859,831	2,859,831	2,430,890	2,430,890	2,430,890	6,397,078	6,397,078	6,397,078	38,382,488	38,382,488
3	Total	1,851,786	1,851,786	1,851,786	3,368,883	3,368,883	3,368,883	3,198,539	3,198,539	3,198,539	8,417,208	8,417,208	8,417,208	60,603,248	60,603,248
4	Months in Service	12	11	10	9	8	7	6	5	4	3	2	1	2017	Cumulative
	Sector	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	June 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	LBR Savings	LBR Savings
5	Residential	444,429	407,393	370,357	808,039	838,701	471,384	393,828	319,854	258,883	506,032	338,688	168,344	4,807,909	4,807,909
6	C&I	1,407,357	1,290,077	1,172,789	1,919,123	1,705,987	1,492,682	1,218,445	1,012,871	810,297	1,599,270	1,099,180	633,080	18,228,048	18,228,048
7	Total	1,851,786	1,697,470	1,543,155	2,525,162	2,244,689	1,964,015	1,689,270	1,332,725	1,069,180	2,104,302	1,402,868	701,434	20,032,958	20,032,958
8	Residential	598,058	598,058	598,058	1,083,743	1,083,743	1,083,743	1,029,555	1,029,555	1,029,555	2,708,358	2,708,358	2,708,358	18,268,138	18,268,138
9	C&I	1,887,818	1,887,818	1,887,818	3,431,891	3,431,891	3,431,891	3,260,289	3,260,289	3,260,289	8,579,829	8,579,829	8,579,829	51,477,771	51,477,771
10	Total	2,483,577	2,483,577	2,483,577	4,515,594	4,515,594	4,515,594	4,289,814	4,289,814	4,289,814	11,288,988	11,288,988	11,288,988	67,733,909	67,733,909
11	Months in Service	12	11	10	9	8	7	6	5	4	3	2	1	2018	Cumulative
	Sector	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	June 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	LBR Savings	LBR Savings
12	Residential	598,058	548,387	498,715	612,807	722,498	832,183	814,778	428,981	343,185	677,339	451,569	228,780	6,448,288	18,688,048
13	C&I	1,887,818	1,730,228	1,572,932	2,573,889	2,287,901	2,001,913	2,630,129	3,358,441	3,088,783	2,144,907	1,429,838	714,988	20,419,518	59,807,984
14	Total	2,483,577	2,278,612	2,069,647	3,386,696	3,010,398	2,834,096	2,144,907	1,787,423	1,429,838	2,822,246	1,881,407	940,748	26,867,784	77,371,032
15	Residential	742,868	742,868	742,868	1,360,870	1,360,870	1,360,870	1,283,138	1,283,138	1,283,138	3,378,878	3,378,878	3,378,878	20,260,048	48,838,987
16	C&I	2,382,417	2,382,417	2,382,417	4,277,122	4,277,122	4,277,122	4,083,285	4,083,285	4,083,285	10,682,804	10,682,804	10,682,804	64,168,823	184,017,882
17	Total	3,095,285	3,095,285	3,095,285	5,627,991	5,627,991	5,627,991	5,346,402	5,346,402	5,346,402	14,069,479	14,069,479	14,069,479	84,419,872	202,854,029
18	Months in Service	12	11	10	9	8	7	6	5	4	3	2	1	2019	Cumulative
	Sector	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	LBR Savings	LBR Savings
19	Residential	742,868	680,983	619,067	1,013,002	900,447	787,881	641,588	534,840	427,712	844,188	582,779	281,390	8,038,488	38,413,404
20	C&I	2,382,417	2,198,382	1,980,347	3,207,841	2,851,414	2,494,988	2,931,833	3,683,027	3,354,422	2,673,201	1,782,134	891,087	25,448,873	116,309,112
21	Total	3,095,285	2,837,345	2,579,404	4,220,844	3,751,861	3,282,878	2,673,201	2,227,867	1,782,134	3,517,370	2,344,913	1,172,467	33,488,368	181,722,516
22	Residential	982,482	982,482	982,482	1,748,912	1,748,912	1,748,912	1,682,416	1,682,416	1,682,416	4,374,780	4,374,780	4,374,780	28,248,678	74,888,648
23	C&I	3,047,783	3,047,783	3,047,783	5,541,388	5,541,388	5,541,388	5,284,318	5,284,318	5,284,318	13,853,488	13,853,488	13,853,488	83,120,818	237,137,878
24	Total	4,010,215	4,010,215	4,010,215	7,291,300	7,291,300	7,291,300	6,926,735	6,926,735	6,926,735	18,228,248	18,228,248	18,228,248	108,368,498	312,023,524
25	Months in Service	12	11	10	9	8	7	6	5	4	3	2	1	2020	Cumulative
	Sector	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	June 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	LBR Savings	LBR Savings
26	Residential	982,482	882,247	802,043	1,312,434	1,188,808	1,020,782	831,208	682,673	554,139	1,083,696	729,130	384,588	10,411,978	69,048,943
27	C&I	3,047,783	2,783,783	2,539,803	4,186,041	3,894,258	3,232,478	2,832,199	2,193,488	1,784,773	3,483,397	2,308,912	1,184,488	32,871,287	188,888,318
28	Total	4,010,215	3,678,030	3,341,848	5,488,475	4,983,066	4,253,258	3,483,387	2,886,139	2,308,912	4,567,082	3,038,042	1,519,021	43,383,233	246,037,262

*LRAM cap of 110% of annual savings would apply to Column M, Lines 3, 10, 17, and 24. If actual annual savings achieved are greater than 110% of the actual planned savings values, the savings greater than 110% will be excluded from the LRAM calculation.

Inputs

Year	Savings Achieved by Quarter ¹		
	Q1	Q2	Q3
	11%	20%	90%
	19%		90%
Year	Savings	Residential	C&I
2017	60,603,248	24%	76%
2018	67,733,909	24%	76%
2019	84,419,872	24%	76%
2020	108,368,485	24%	76%

(1) Eversource 2015 Savings by Quarter

Liberty Utilities
Estimated Monthly Savings and Cumulative Savings (kWh)
(2017 - 2020)

Line	Sector	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H	Col. I	Col. J	Col. K	Col. L	Col. M	Col. N
		Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	June 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	2017 Annual Savings	2017 Cumulative Savings
1	Residential	42,199	42,199	42,199	84,398	84,398	84,398	84,398	84,398	84,398	210,994	210,994	210,994	1,265,964	1,265,964
2	C&I	98,484	98,484	98,484	196,928	196,928	196,928	196,928	196,928	196,928	482,319	482,319	482,319	2,953,917	2,953,917
3	Total	140,683	140,683	140,683	281,325	281,325	281,325	281,325	281,325	281,325	703,313	703,313	703,313	4,219,881	4,219,881
4	Months In Service	12	11	10	9	8	7	6	5	4	3	2	1		
	Sector	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	June 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	2017 LBR Savings	2017 Cumulative LBR Savings
5	Residential	42,199	38,682	38,166	83,298	82,268	49,232	42,199	38,166	28,133	82,748	38,166	17,683	485,636	485,636
6	C&I	98,484	90,259	82,053	147,688	131,288	114,878	98,484	82,053	65,843	123,080	62,053	41,027	1,158,951	1,158,951
7	Total	140,683	128,941	117,219	210,984	187,550	164,108	140,683	117,219	93,776	178,828	117,219	58,809	1,682,787	1,682,787
	Sector	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	June 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	2018 Annual Savings	2018 Cumulative Savings
8	Residential	58,298	58,298	58,298	112,591	112,591	112,591	112,591	112,591	112,591	281,478	281,478	281,478	1,688,688	2,954,822
9	C&I	131,358	131,358	131,358	262,711	262,711	262,711	262,711	262,711	262,711	656,778	656,778	656,778	3,940,669	6,894,688
10	Total	187,651	187,651	187,651	375,302	375,302	375,302	375,302	375,302	375,302	938,256	938,256	938,256	5,629,358	9,849,408
11	Months In Service	12	11	10	9	8	7	6	5	4	3	2	1		
	Sector	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	June 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	2018 LBR Savings	2018 Cumulative LBR Savings
12	Residential	58,298	61,804	48,913	84,443	78,060	65,878	58,298	48,913	37,330	70,369	48,913	23,458	681,489	1,927,434
13	C&I	131,358	129,499	109,483	197,033	176,141	183,248	131,358	109,483	87,870	164,185	108,483	54,732	1,543,428	4,487,345
14	Total	187,651	172,013	158,376	281,478	250,201	218,828	187,651	166,376	125,101	234,554	158,376	78,188	2,204,898	6,424,779
	Sector	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	2019 Annual Savings	2019 Cumulative Savings
15	Residential	70,800	70,800	70,800	141,600	141,600	141,600	141,600	141,600	141,600	354,000	354,000	354,000	2,124,000	5,078,828
16	C&I	169,200	169,200	169,200	330,400	330,400	330,400	330,400	330,400	330,400	826,001	826,001	826,001	4,996,007	11,850,682
17	Total	238,000	238,000	238,000	472,001	472,001	472,001	472,001	472,001	472,001	1,180,002	1,180,002	1,180,002	7,080,009	18,929,418
18	Months In Service	12	11	10	9	8	7	6	5	4	3	2	1		
	Sector	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	2019 LBR Savings	2019 Cumulative LBR Savings
19	Residential	70,800	64,900	69,000	106,200	94,400	82,800	70,800	59,000	47,200	88,500	59,000	29,500	631,901	3,788,724
20	C&I	169,200	181,434	137,887	247,800	220,287	192,734	163,200	137,887	110,133	206,500	137,887	88,933	1,841,103	8,838,898
21	Total	238,000	218,334	198,687	384,000	314,687	278,334	238,000	198,687	167,334	288,000	198,687	88,333	2,773,004	12,622,412
	Sector	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	June 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	2020 Annual Savings	2020 Cumulative Savings
22	Residential	82,899	82,899	82,899	165,398	165,398	165,398	165,398	165,398	165,398	483,498	483,498	483,498	2,780,978	7,888,801
23	C&I	218,298	218,298	218,298	432,598	432,598	432,598	432,598	432,598	432,598	1,081,491	1,081,491	1,081,491	6,488,943	18,339,535
24	Total	308,997	308,997	308,997	617,995	617,995	617,995	617,995	617,995	617,995	1,544,988	1,544,988	1,544,988	9,269,919	26,199,338
25	Months In Service	12	11	10	9	8	7	6	5	4	3	2	1		
	Sector	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	June 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	2020 LBR Savings	2020 Cumulative LBR Savings
26	Residential	82,899	84,974	77,248	138,048	123,589	108,149	82,899	77,249	61,769	118,674	77,249	38,825	1,088,218	6,188,041
27	C&I	218,298	198,273	180,248	324,447	288,387	282,348	218,298	180,248	144,188	270,373	180,248	80,124	2,541,503	14,382,088
28	Total	308,997	283,248	257,498	463,498	411,996	380,497	308,997	257,498	205,988	388,247	257,498	128,749	3,630,718	20,569,130

*LRAM cap of 110% of annual savings would apply to Column M, Lines 3, 10, 17, and 24. If actual annual savings achieved are greater than 110% of the actual planned savings values, the savings greater than 110% will be excluded from the LRAM calculation.

Inputs	Savings Achieved by Quarter			
	Q1	Q2	Q3	Q4
	10%	20%	20%	50%
Year	Savings	Residential	C&I	
2017	4,219,881	30%	70%	
2018	5,629,628	30%	70%	
2019	7,080,009	30%	70%	
2020	9,269,919	30%	70%	

Unitil Energy Systems
Estimated Monthly Savings and Cumulative Savings (kWh)
(2017 - 2020)

Line	Sector	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H	Col. I	Col. J	Col. K	Col. L	Col. M	Col. N
		Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	June 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Annual Savings	Cumulative Savings
1	Residential	93,770	93,770	93,770	151,074	151,074	151,074	119,818	119,818	119,818	158,284	158,284	158,284	1,562,639	1,562,639
2	CAI	281,311	281,311	281,311	453,223	453,223	453,223	369,483	369,483	369,483	499,852	499,852	499,852	4,689,818	4,689,818
3	Total	375,081	375,081	375,081	604,298	604,298	604,298	479,271	479,271	479,271	625,138	625,138	625,138	6,251,358	6,251,358
4	Months in Service	12	11	10	9	8	7	6	5	4	3	2	1		
		Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	June 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	2017 LBR Savings	2017 Cumulative LBR Savings
5	Residential	93,770	85,966	78,142	113,308	100,716	88,127	68,909	48,824	38,939	36,071	26,047	13,024	767,932	767,932
6	CAI	281,311	287,889	234,428	339,818	392,149	284,380	179,727	149,772	119,818	117,213	78,142	39,971	2,383,786	2,383,786
7	Total	375,081	343,825	312,568	453,223	402,865	382,507	238,635	198,686	168,757	158,294	104,169	52,995	3,151,728	3,151,728

Line	Sector	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	June 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	2018 Annual Savings	2018 Cumulative Savings
		Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	June 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	LBR Savings	LBR Savings
8	Residential	123,809	123,809	123,809	199,147	199,147	199,147	157,945	157,945	157,945	208,015	208,015	208,015	2,060,148	3,622,986
9	CAI	370,828	370,828	370,828	597,442	597,442	597,442	473,834	473,834	473,834	618,044	618,044	618,044	6,180,439	10,803,425
10	Total	494,435	494,435	494,435	796,590	796,590	796,590	631,779	631,779	631,779	824,059	824,059	824,059	8,240,587	14,491,943
11	Months in Service	12	11	10	9	8	7	6	5	4	3	2	1		
		Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	June 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	2018 LBR Savings	2018 Cumulative LBR Savings
12	Residential	123,809	113,308	103,007	140,381	132,765	116,169	78,972	65,610	52,048	51,504	34,336	17,168	1,038,657	2,601,497
13	CAI	370,828	339,824	309,022	448,082	398,289	348,908	238,917	197,431	157,848	184,511	103,007	51,804	3,118,971	7,804,490
14	Total	494,435	453,232	412,029	597,442	531,060	464,677	315,899	283,241	210,593	206,015	137,343	68,972	4,154,628	10,406,986

Line	Sector	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	2019 Annual Savings	2019 Cumulative Savings
		Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	LBR Savings	LBR Savings
15	Residential	157,072	157,072	157,072	253,080	253,080	253,080	200,703	200,703	200,703	261,788	261,788	261,788	2,817,881	6,240,847
16	CAI	471,215	471,215	471,215	759,189	759,189	759,189	602,108	602,108	602,108	785,358	785,358	785,358	7,853,583	18,722,540
17	Total	628,287	628,287	628,287	1,012,240	1,012,240	1,012,240	802,811	802,811	802,811	1,047,144	1,047,144	1,047,144	10,471,444	24,963,387
18	Months in Service	12	11	10	9	8	7	6	5	4	3	2	1		
		Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	2019 LBR Savings	2019 Cumulative LBR Savings
19	Residential	157,072	143,982	130,883	189,785	169,707	147,618	100,351	83,820	66,901	65,447	43,831	21,818	1,319,838	4,942,824
20	CAI	471,215	431,847	392,878	569,386	506,120	442,885	301,884	280,878	200,703	196,340	130,893	65,447	3,059,816	14,828,472
21	Total	628,287	575,829	523,572	759,189	674,828	600,473	401,405	334,504	267,604	261,788	174,824	87,262	6,279,353	19,771,296

Line	Sector	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	June 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	2020 Annual Savings	2020 Cumulative Savings
		Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	June 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	LBR Savings	LBR Savings
22	Residential	204,391	204,391	204,391	329,297	329,297	329,297	261,166	261,166	261,166	340,652	340,652	340,652	3,406,618	6,647,363
23	CAI	613,173	613,173	613,173	987,690	987,690	987,690	783,499	783,499	783,499	1,021,959	1,021,959	1,021,959	10,219,549	26,942,989
24	Total	817,564	817,564	817,564	1,317,168	1,317,168	1,317,168	1,044,665	1,044,665	1,044,665	1,362,607	1,362,607	1,362,607	13,626,066	38,669,452
25	Months in Service	12	11	10	9	8	7	6	5	4	3	2	1		
		Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	June 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	2020 LBR Savings	2020 Cumulative LBR Savings
26	Residential	204,391	187,358	170,328	248,072	219,531	192,069	130,563	108,819	87,056	85,163	66,775	28,398	1,717,462	7,959,239
27	CAI	613,173	562,078	510,877	740,817	659,593	578,269	391,749	328,456	281,199	255,491	179,328	85,193	5,192,359	23,974,979
28	Total	817,564	749,434	681,303	987,890	878,124	788,359	522,333	436,277	348,222	340,682	227,101	113,591	6,889,808	31,833,198

*LRAM cap of 116% of annual savings would apply to Column M, Lines 3, 10, 17, and 24. If actual annual savings achieved are greater than 110% of the actual planned savings values, the savings greater than 110% will be excluded from the LRAM calculation.

Inputs	Savings Achieved by Quarter				Installed Notes
	Q1	Q2	Q3	Q4	
	16%	29%	23%	36%	(1)
Year	Savings	Residential	CAI		
2017	6,251,358	25%	75%		(2)
2018	8,240,585	25%	75%		(2)
2019	10,471,444	25%	75%		(2)
2020	13,626,066	25%	75%		(2)

Notes:
(1) Savings Achieved by Quarter: The savings allocation by quarter was estimated based on the allocation of budgeted program costs through out a year (budget models).
(2) Sector Savings Allocation was estimated from the weighted average of 5 years of actual annual savings results, 2011 through 2015.

Bill Impacts of Changes in System Benefits Charge - PSNH d/b/a Eversource Energy

	<u>01/01/2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>Cumulative Change</u>
System Benefits Charge (\$/kWh)	\$ 0.00330	\$ 0.00383	\$ 0.00488	\$ 0.00631	\$ 0.00850	
<u>Bill per month, including PSNH default energy service</u>						
Residential Rate R (625 kWh/month)	\$ 115.79	\$ 116.12	\$ 116.77	\$ 117.67	\$ 119.04	
General Service Rate G, three-phase service (40 kW, 10,000 kWh/month)	\$ 1,702.62	\$ 1,707.96	\$ 1,718.37	\$ 1,732.72	\$ 1,754.59	
<u>Change from previous rate level - \$ per month</u>						
Residential Rate R (625 kWh/month)		\$ 0.33	\$ 0.65	\$ 0.90	\$ 1.37	\$ 3.25
General Service Rate G, three-phase service (40 kW, 10,000 kWh/month)		\$ 5.34	\$ 10.41	\$ 14.34	\$ 21.88	\$ 51.97
<u>Change from previous rate level - %</u>						
Residential Rate R (625 kWh/month)		0.3%	0.6%	0.8%	1.2%	2.8%
General Service Rate G, three-phase service (40 kW, 10,000 kWh/month)		0.3%	0.6%	0.8%	1.3%	3.1%

Bill Impacts of Changes in System Benefits Charge - Liberty

	<u>01/01/2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>Cumulative Change</u>
System Benefits Charge (\$/kWh)	\$ 0.00330	\$ 0.00381	\$ 0.00480	\$ 0.00615	\$ 0.00825	
<u>Bill per month, including PSNH default energy service</u>						
Residential Rate D (625 kWh/month)	\$ 119.17	\$ 119.84	\$ 120.19	\$ 121.02	\$ 122.24	
General Service Rate G-2, three-phase service (40 kW, 10,000 kWh/month)	\$ 1,917.55	\$ 1,922.88	\$ 1,932.51	\$ 1,946.09	\$ 1,967.03	
<u>Change from previous rate level - \$ per month</u>						
Residential Rate D (625 kWh/month)		\$ 0.67	\$ 0.35	\$ 0.83	\$ 1.22	\$ 3.07
General Service Rate G-2, three-phase service (40 kW, 10,000 kWh/month)		\$ 5.13	\$ 9.83	\$ 13.58	\$ 20.94	\$ 49.48
<u>Change from previous rate level - %</u>						
Residential Rate D (625 kWh/month)		0.6%	0.3%	0.7%	1.0%	2.6%
General Service Rate G-2, three-phase service (40 kW, 10,000 kWh/month)		0.3%	0.5%	0.7%	1.1%	2.6%

Bill Impacts of Changes in System Benefits Charge - Unitil Energy Systems, Inc. ("UES")

	<u>01/01/2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>Cumulative Change</u>
System Benefits Charge (\$/kWh)	\$ 0.00330	\$ 0.00384	\$ 0.00486	\$ 0.00626	\$ 0.00841	
<u>Bill per month, including Unitil default energy service</u>						
Residential Rate D (625 kWh/month)	\$ 109.10	\$ 109.44	\$ 110.07	\$ 110.95	\$ 112.29	
General Service Rate G2 (40 kW, 10,000 kWh/month)	\$ 1,614.11	\$ 1,619.52	\$ 1,629.69	\$ 1,643.71	\$ 1,665.22	
<u>Change from previous rate level - \$ per month</u>						
Residential Rate D (625 kWh/month)		\$ 0.34	\$ 0.64	\$ 0.88	\$ 1.34	\$ 3.19
General Service Rate G2 (40 kW, 10,000 kWh/month)		\$ 5.41	\$ 10.17	\$ 14.01	\$ 21.51	\$ 51.11
<u>Change from previous rate level - %</u>						
Residential Rate D (625 kWh/month)		0.3%	0.6%	0.8%	1.2%	2.9%
General Service Rate G2 (40 kW, 10,000 kWh/month)		0.3%	0.6%	0.9%	1.3%	3.2%

Bill Impacts of Changes in System Benefits Charge - NHEC

	<u>01/01/2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>Cumulative Change</u>
System Benefits Charge (\$/kWh)	\$ 0.00330	\$ 0.00376	\$ 0.00459	\$ 0.00575	\$ 0.00759	
<u>Bill per month, including NHEC default energy service</u>						
Residential Rate Basic (625 kWh/month)	\$ 101.49	\$ 101.78	\$ 102.30	\$ 103.02	\$ 104.17	
Commercial B3, three-phase service (<50 kW, 10,000 kWh/month)	\$ 1,809.50	\$ 1,814.10	\$ 1,822.40	\$ 1,834.00	\$ 1,852.40	
<u>Change from previous rate level - \$ per month</u>						
Residential Rate Basic (625 kWh/month)		\$ 0.29	\$ 0.52	\$ 0.72	\$ 1.15	\$ 2.68
Commercial B3, three-phase service (<50 kW, 10,000 kWh/month)		\$ 4.60	\$ 8.30	\$ 11.60	\$ 18.40	\$ 42.90
<u>Change from previous rate level - %</u>						
Residential Rate Basic (625 kWh/month)		0.3%	0.5%	0.7%	1.1%	2.6%
Commercial B3, three-phase service (<50 kW, 10,000 kWh/month)		0.3%	0.5%	0.6%	1.0%	2.4%

Electric Assumptions

2016 Plan Budget	\$ 17,488.8	\$ 2,937.8	\$ 2,130.7	\$ 1,849.5
2016 Planned MWH Savings	40,882.6	5,605.1	3,715.6	2,883.3
2016 Cost To Achieve - No PI	\$0.43	\$0.52	\$0.57	\$0.57

Cost To Achieve	PSNH	UES	Liberty	NHEC	PI	Inflation	SBC Rate	Savings Targets
2017	\$0.46	\$0.57	\$0.62	\$0.62	5.50%	2.50%	0.228	0.80%
2018	\$0.47	\$0.58	\$0.64	\$0.63	5.50%	2.50%	0.309	0.80%
2019	\$0.49	\$0.60	\$0.65	\$0.65	5.50%	2.50%	0.425	1.00%
2020	\$0.50	\$0.61	\$0.67	\$0.67	5.50%	2.50%	0.609	1.30%

Company	Sales 2014 (MWh)	Sales Percent	2017		2017 Savings (MWh)	Incremental Funding	2018		2018 Savings (MWh)	Incremental Funding	2019		2019 Savings (MWh)	Incremental Funding	2020		2020 Savings (MWh)	Incremental Funding
			Company Savings	Savings %			Company Savings	Savings %			Company Savings	Savings %			Company Savings	Savings %		
PSNH	7,888,054	73.1%	0.64%	0.47%	50,503	\$ 3.63	0.86%	0.83%	67,754	\$ 10.17	1.07%	0.76%	84,417	\$ 18.32	1.30%	1.01%	109,389	\$ 33.63
UES	1,225,254	11.4%	0.51%	0.38%	9,251	0.58	0.87%	0.80%	9,241	1.58	0.88%	0.10%	10,471	3.00	1.11%	0.13%	13,528	5.58
Liberty	910,825	8.4%	0.49%	0.34%	4,220	0.42	0.82%	0.65%	5,830	1.17	0.79%	0.07%	7,080	2.23	1.02%	0.08%	9,270	3.91
NHEC	780,840	7.1%	0.42%	0.03%	3,222	0.35	0.58%	0.64%	4,225	0.89	0.72%	0.05%	5,471	1.88	0.97%	0.07%	7,400	3.28
Total	10,782,973	100.0%	0.60%	0.60%	64,197	\$ 4.86	0.80%	0.80%	85,829	\$ 13.91	1.00%	1.00%	107,439	\$ 26.42	1.30%	1.30%	138,665	\$ 48.28

	2017	2018	2019	2020
PSNH	1,918,375	1,918,375	1,918,375	1,918,375
RGGI	14,194,897	14,194,897	14,194,897	14,194,897
SBC - Current	3,627,685	10,173,910	19,320,832	33,831,172
SBC - New	3,817,101	5,824,108	5,586,603	4,529,817
Total PSNH	23,557,058	32,116,389	41,018,708	54,673,261
UES	298,057	298,057	298,057	298,057
RGGI	2,205,487	2,205,487	2,205,487	2,205,487
SBC - Current	563,617	1,580,576	3,001,672	5,256,340
SBC - New	475,817	703,006	728,733	556,492
Total UES	3,542,948	4,787,089	6,234,116	8,318,348
Liberty	221,569	221,569	221,569	221,569
RGGI	1,639,485	1,639,485	1,639,485	1,639,485
SBC - Current	418,880	1,174,964	2,231,521	3,907,439
SBC - New	336,548	541,895	519,704	421,377
Total Liberty	2,616,591	3,577,913	4,812,279	6,189,870
NHEC	185,083	185,083	185,083	185,083
RGGI	1,389,512	1,389,512	1,389,512	1,389,512
SBC - Current	349,988	961,484	1,864,056	3,284,004
SBC - New	89,855	143,070	137,212	111,251
Total NHEC	1,993,437	2,679,148	3,566,865	4,829,859

Gas Utilities Funding & Bill Impacts

Incremental Funding

Residential ¹									car ²							
	Year	Funding	LDAC Rate ³	LBR Rate	Total LDAC Rate ³	LDAC Annual Bill	Annual Impact	Average Monthly Impact	Year	Funding	LDAC Rate	LBR Rate	Total LDAC Rate	LDAC Annual Bill	Annual Impact	Average Monthly Impact
Liberty	2016	\$ -	\$ 0.0585	\$ -	\$ 0.0585	\$ 45.81	\$ -	\$ -	2016	\$ -	\$0.0256	\$ -	\$ 0.0256	\$224.59	\$ -	\$ -
	2017	\$ 268,713	\$ 0.0629	\$ 0.0014	\$ 0.0643	\$ 50.38	\$ 4.55	\$ 0.38	2017	\$248,844	\$0.0280	\$ 0.0006	\$ 0.0286	\$251.18	\$ 26.59	\$ 2.22
	2018	\$ 294,637	\$ 0.0678	\$ 0.0046	\$ 0.0724	\$ 56.69	\$ 8.34	\$ 0.53	2018	\$272,851	\$0.0307	\$ 0.0020	\$ 0.0327	\$286.89	\$ 35.72	\$ 2.98
	2019	\$ 351,441	\$ 0.0738	\$ 0.0080	\$ 0.0817	\$ 63.94	\$ 7.25	\$ 0.60	2019	\$325,455	\$0.0339	\$ 0.0035	\$ 0.0374	\$327.88	\$ 41.09	\$ 3.42
	2020	\$ 321,670	\$ 0.0790	\$ 0.0117	\$ 0.0907	\$ 70.88	\$ 7.04	\$ 0.59	2020	\$297,886	\$0.0368	\$ 0.0051	\$ 0.0419	\$367.58	\$ 39.59	\$ 3.30
Northern	2016	\$ -	\$ 0.0297	\$ -	\$ 0.0297	\$ 23.28	\$ -	\$ -	2016	\$ -	\$0.0148	\$ -	\$ 0.0148	\$126.09	\$ -	\$ -
	2017	\$ 73,417	\$ 0.0336	\$ 0.0011	\$ 0.0347	\$ 27.18	\$ 3.92	\$ 0.33	2017	\$ 53,818	\$0.0156	\$ 0.0003	\$ 0.0159	\$139.65	\$ 11.66	\$ 0.96
	2018	\$ 81,848	\$ 0.0369	\$ 0.0036	\$ 0.0405	\$ 31.74	\$ 4.58	\$ 0.38	2018	\$ 45,338	\$0.0165	\$ 0.0010	\$ 0.0175	\$153.16	\$ 13.52	\$ 1.13
	2019	\$ 64,409	\$ 0.0404	\$ 0.0062	\$ 0.0466	\$ 38.50	\$ 4.76	\$ 0.40	2019	\$ 47,215	\$0.0174	\$ 0.0017	\$ 0.0191	\$167.28	\$ 14.10	\$ 1.18
	2020	\$ 152,312	\$ 0.0485	\$ 0.0081	\$ 0.0576	\$ 45.11	\$ 8.61	\$ 0.72	2020	\$111,652	\$0.0195	\$ 0.0024	\$ 0.0220	\$192.68	\$ 25.42	\$ 2.12

¹Based on Average Liberty Annual Residential Usage 763 Therms
³LDAC rate is only the energy efficiency portion

²Based on Average Liberty Annual C&I Usage 5773 Therms

Funding Summary

Gas Utilities

Historical Results												
		Sector	Residential			C&I			Total			
Utility	Actual vs. Plan	Period	Program	Savings MMBTUs	Expense per Unit of Savings	Program	Savings MMBTUs	Expense per Unit of Savings	Total	Savings MMBTUs	Expense per Unit of Savings	vs. CY2014 Sales
Liberty	Actual	2013	\$2,413,674	40,509	\$ 59.58	\$2,175,389	74,831	\$ 29.07	\$4,589,063	115,340	\$ 39.79	0.71%
	Actual	2014	\$2,788,568	34,401	\$ 80.48	\$2,545,412	82,545	\$ 30.84	\$5,313,980	116,846	\$ 45.44	0.72%
	Actual	2015	\$2,822,937	63,685	\$ 44.33	\$2,354,308	80,069	\$ 29.40	\$5,177,245	143,754	\$ 36.01	0.88%
	Plan	2016	\$2,918,815	57,228	\$ 51.01	\$2,703,000	65,118	\$ 41.51	\$5,621,815	122,344	\$ 45.85	0.75%
	Average	13-16	\$2,730,999	48,955	\$ 55.79	\$2,444,527	75,641	\$ 32.32	\$5,175,526	124,596	\$ 41.54	0.77%
Northern	Actual	2013	\$ 669,087	5,876	\$ 113.86	\$ 454,817	20,336	\$ 22.38	\$1,123,684	26,212	\$ 42.87	0.37%
	Actual	2014	\$ 697,314	8,207	\$ 84.97	\$ 469,495	23,205	\$ 20.23	\$1,166,809	31,412	\$ 37.15	0.44%
	Actual	2015	\$ 812,898	7,479	\$ 108.89	\$ 528,570	25,230	\$ 20.95	\$1,341,468	32,709	\$ 41.01	0.48%
	Plan	2016	\$ 777,617	8,225	\$ 94.54	\$ 570,030	21,923	\$ 26.00	\$1,347,647	30,148	\$ 44.70	0.42%
	Average	13-16	\$ 739,224	7,447	\$ 99.27	\$ 505,678	22,674	\$ 22.30	\$1,244,902	30,120	\$ 41.33	0.42%

CY2014 Utility Sales

Liberty	16,256,975	69.62%	MMBtu
Northern	7,095,697	30.38%	MMBtu
Total	23,352,672	100.00%	MMBtu

Res MMBtu	6,045,954	C&I MMBtu	10,211,021
Res MMBtu	1,868,315	C&I MMBtu	5,227,383

NU - Removed Special Contracts

Proposed Savings Targets

Proposed Savings Targets												
		Sector	Residential			C&I			Total			
Utility	Year	% Sales Reduction	Program	Savings MMBTUs	Expense per Unit of Savings	Program	Savings MMBTUs	Expense per Unit of Savings	Program	Savings MMBTUs	Expense per Unit of Savings	
Liberty	2017	0.76%	\$3,187,528	57,791	\$55.18	\$2,951,844	65,762	\$44.89	\$6,139,372	123,553	\$49.89	
	2018	0.81%	\$3,482,164	81,594	\$58.53	\$3,224,898	70,088	\$48.01	\$6,708,860	131,881	\$50.93	
	2019	0.87%	\$3,833,605	66,156	\$57.95	\$3,550,151	75,280	\$47.16	\$7,383,756	141,436	\$52.21	
	2020	0.92%	\$4,155,275	69,958	\$59.40	\$3,848,037	79,608	\$48.34	\$8,003,313	149,584	\$53.51	
Northern	2017	0.43%	\$ 851,034	8,324	\$102.24	\$ 623,849	22,187	\$28.12	\$1,474,883	30,511	\$48.34	
	2018	0.45%	\$ 912,863	8,711	\$104.79	\$ 669,187	23,219	\$28.82	\$1,582,070	31,931	\$56.53	
	2019	0.47%	\$ 977,292	9,099	\$107.41	\$ 718,401	24,251	\$29.54	\$1,693,693	33,350	\$57.95	
	2020	0.53%	\$1,129,604	10,260	\$110.10	\$ 828,053	27,347	\$30.28	\$1,957,657	37,607	\$59.40	

Incremental Funding

		Year	Funding	\$/therm Rate	% Increase	Year	Funding	\$/therm Rate	% Increase
Liberty	2016	\$ -	0.0585	0%	2016	\$ -	0.0258	0%	
	2017	\$268,713	0.0628	8%	2017	\$ 248,944	0.0280	10%	
	2018	\$294,637	0.0678	8%	2018	\$ 272,851	0.0307	10%	
	2019	\$351,441	0.0736	9%	2019	\$ 325,455	0.0339	10%	
	2020	\$321,670	0.0790	7%	2020	\$ 297,886	0.0368	9%	
Northern	2018	\$ -	0.0297	0%	2018	\$ -	0.0148	0%	
	2017	\$ 73,417	0.0336	13%	2017	\$ 53,818	0.0156	7%	
	2018	\$ 61,848	0.0369	10%	2018	\$ 45,338	0.0165	6%	
	2019	\$ 64,409	0.0404	9%	2019	\$ 47,215	0.0174	5%	
	2020	\$152,312	0.0485	20%	2020	\$ 111,852	0.0195	12%	

**Savings Summary
Gas Utilities**

	2014		2017			2018			2019			2020		
	Sales 2014 MMBtu	Sales Percent	Company Savings	2017 Savings %	2017 Savings (MMBtu)	Company Savings	2018 Savings %	2018 Savings (MMBtu)	Company Savings	2019 Savings %	2019 Savings (MMBtu)	Company Savings	2020 Savings %	2020 Savings (MMBtu)
Liberty	16,256,975	69.62%	0.76%	0.53%	123,553	0.81%	0.58%	131,881	0.67%	0.61%	141,436	0.92%	0.64%	148,584
Northern	7,095,697	30.38%	0.43%	0.13%	30,511	0.45%	0.14%	31,931	0.47%	0.14%	33,350	0.53%	0.16%	37,607
Total	23,352,672	100%		0.66%	154,065		0.70%	163,612		0.75%	174,785		0.80%	187,171

Liberty Utilities					
Calculation of Lost Base Revenue (LBR) Estimated Lost Base Revenues for 2017					
Line	Company	2017 (therm) Savings	LBR (\$/therm)	2017 Total LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
1	Residential	252,356	0.32746	\$ 82,637	Page x, Line 6 Col. N
2	C&I	287,159	0.21116	60,637	Page x, Line 6 Col. N
3	Total	539,515		\$ 143,274	

Northern					
Calculation of Lost Base Revenue (LBR) Estimated Lost Base Revenues for 2017					
Line	Company	2017 (therm) Savings	LBR (\$/therm)	2017 Total LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
1	Residential	36,349	0.5536	\$ 20,123	Page x, Line 5 Col. N
2	C&I	96,885	0.1555	15,068	Page x, Line 6 Col. N
3	Total	133,234		\$ 35,188	

Liberty Utilities					
Calculation of Lost Base Revenue (LBR) Estimated Lost Base Revenues for 2018					
Line	Sector	2018 (therm) Savings	LBR (\$/therm)	2018 Total LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
4	Residential	846,873	0.32746	\$ 277,319	Page x, Line 12 Col. N
5	C&I	983,667	0.21116	203,490	Page x, Line 13 Col. N
6	Total	1,810,539		\$ 480,808	

Northern					
Calculation of Lost Base Revenue (LBR) Estimated Lost Base Revenues for 2018					
Line	Sector	2018 (therm) Savings	LBR (\$/therm)	2018 Total LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
4	Residential	121,281	0.5536	\$ 67,141	Page x, Line 12 Col. N
5	C&I	323,264	0.1555	50,268	Page x, Line 13 Col. N
6	Total	444,545		\$117,409	

Liberty Utilities					
Calculation of Lost Base Revenue (LBR) Estimated Lost Base Revenues for 2019					
Line	Sector	2019 (therm) Savings	LBR (\$/therm)	2019 Total LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
7	Residential	1,482,731	0.32746	\$ 485,538	Page x, Line 19 Col. N
8	C&I	1,687,217	0.21116	356,276	Page x, Line 20 Col. N
9	Total	3,169,948		\$ 841,813	

Northern					
Calculation of Lost Base Revenue (LBR) Estimated Lost Base Revenues for 2019					
Line	Sector	2019 (therm) Savings	LBR (\$/therm)	2019 Total LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
7	Residential	210,085	0.5536	\$116,303	Page x, Line 19 Col. N
8	C&I	559,963	0.1555	87,074	Page x, Line 20 Col. N
9	Total	770,049		\$203,378	

Liberty Utilities					
Calculation of Lost Base Revenue (LBR) Estimated Lost Base Revenues for 2020					
Line	Sector	2020 (therm) Savings	LBR (\$/therm)	2020 Total LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
10	Residential	2,160,893	0.32746	\$ 707,610	Page x, Line 26 Col. N
11	C&I	2,458,906	0.21116	519,227	Page x, Line 27 Col. N
12	Total	4,619,799		\$1,226,837	

Northern					
Calculation of Lost Base Revenue (LBR) Estimated Lost Base Revenues for 2020					
Line	Sector	2020 (therm) Savings	LBR (\$/therm)	2020 Total LBR	Comment
	Col. A	Col. B	Col. C	Col. D	Col. E
10	Residential	306,142	0.5536	\$169,480	Page x, Line 26 Col. N
11	C&I	815,995	0.1555	126,867	Page x, Line 27 Col. N
12	Total	1,122,137		\$296,368	

**Liberty Utilities
Monthly Savings and Cumulative Savings (therms)
(2017 - 2020)**

Line	Sector	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H	Col. I	Col. J	Col. K	Col. L	Col. M	Col. N
		Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	June 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Total Savings	Cummulative Savings
1	Residential	28,896	28,896	28,896	38,528	38,528	38,528	44,307	44,307	44,307	80,908	80,908	80,908	577,814	577,814
2	C&I	32,881	32,881	32,881	43,841	43,841	43,841	50,417	50,417	50,417	92,068	92,068	92,068	657,816	657,816
3	Total	61,777	61,777	61,777	82,369	82,369	82,369	94,724	94,724	94,724	172,974	172,974	172,974	1,235,530	1,235,530
4	Months in Service	12	11	10	9	8	7	6	5	4	3	2	1		
		Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	June 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	2017 LBR Savings	Cummulative LBR Savings
5	Residential	28,896	26,488	24,080	28,896	25,685	22,474	22,153	18,481	14,789	20,227	13,485	6,742	262,356	252,356
6	C&I	32,881	30,141	27,401	32,881	29,227	25,574	25,209	21,007	16,806	23,017	15,344	7,672	287,159	267,159
7	Total	61,777	56,628	51,480	61,777	54,912	48,048	47,362	39,488	31,575	43,244	28,829	14,415	539,515	539,515

Line	Sector	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	June 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	2018 Total Savings	Cummulative Savings
		8	Residential	30,797	30,797	30,797	41,062	41,062	41,062	47,222	47,222	47,222	86,231	86,231	86,231
9	C&I	35,044	35,044	35,044	46,725	46,725	46,725	53,734	53,734	53,734	98,123	98,123	98,123	700,880	1,358,495
10	Total	65,841	65,841	65,841	87,788	87,788	87,788	100,956	100,956	100,956	184,354	184,354	184,354	1,316,815	2,552,345
11	Months in Service	12	11	10	9	8	7	6	5	4	3	2	1		
		Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	June 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	2018 LBR Savings	Cummulative LBR Savings
12	Residential	30,797	28,230	25,664	30,797	27,375	23,853	23,811	18,676	15,741	21,558	14,372	7,186	288,858	846,873
13	C&I	35,044	32,124	29,203	35,044	31,150	27,256	26,867	22,389	17,911	24,531	15,354	8,177	306,051	863,667
14	Total	65,841	60,354	54,867	65,841	58,525	51,208	50,478	42,065	33,652	46,089	30,726	15,363	575,009	1,810,539

Line	Sector	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	2019 Total Savings	Cummulative Savings
		15	Residential	33,078	33,078	33,078	44,104	44,104	44,104	50,720	50,720	50,720	92,618	92,618	92,618
16	C&I	37,640	37,640	37,640	50,186	50,186	50,186	57,714	57,714	57,714	105,392	105,392	105,392	752,787	2,111,292
17	Total	70,718	70,718	70,718	94,290	94,290	94,290	108,434	108,434	108,434	198,010	198,010	198,010	1,414,357	3,966,702
18	Months in Service	12	11	10	9	8	7	6	5	4	3	2	1		
		Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	2019 LBR Savings	Cummulative LBR Savings
19	Residential	33,078	30,321	27,565	33,078	29,403	25,727	25,360	21,133	16,907	23,155	15,436	7,718	288,661	1,462,731
20	C&I	37,640	34,503	31,367	37,640	33,458	29,276	28,857	24,048	19,238	26,348	17,565	8,783	328,721	1,687,217
21	Total	70,718	64,825	58,932	70,718	62,860	55,003	54,217	45,181	36,145	49,502	33,002	16,501	617,602	3,169,948

Line	Sector	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	June 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	2020 Total Savings	Cummulative Savings
		22	Residential	34,979	34,979	34,979	46,639	46,639	46,639	53,635	53,635	53,635	97,941	97,941	97,941
23	C&I	39,803	39,803	39,803	53,071	53,071	53,071	61,031	61,031	61,031	111,448	111,448	111,448	796,061	2,907,353
24	Total	74,782	74,782	74,782	99,709	99,709	99,709	114,666	114,666	114,666	209,390	209,390	209,390	1,495,642	5,462,344
25	Months in Service	12	11	10	9	8	7	6	5	4	3	2	1		
		Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	June 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	2020 LBR Savings	Cummulative LBR Savings
26	Residential	34,979	32,064	29,149	34,979	31,062	27,208	25,617	22,348	17,878	24,465	16,324	8,162	305,464	2,160,693
27	C&I	39,803	36,486	33,169	39,803	35,380	30,958	30,516	25,430	20,344	27,662	18,575	9,287	347,613	2,468,908
28	Total	74,782	68,550	62,318	74,782	66,473	58,164	57,333	47,777	38,222	52,347	34,898	17,449	653,077	4,619,799

Docket No. DE 15-137
Gas Attachment B

**Northern Utilities
Monthly Savings and Cumulative Savings (therms)
(2017 - 2020)**

Line	Sector	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H	Col. I	Col. J	Col. K	Col. L	Col. M	Col. N
		Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	June 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Total Savings	Cummulative Savings
1	Residential	4,162	4,162	4,162	5,549	5,549	5,549	6,382	6,382	6,382	11,654	11,654	11,654	83,242	83,242
2	C&I	11,094	11,094	11,094	14,792	14,792	14,792	17,010	17,010	17,010	31,062	31,062	31,062	221,873	221,873
3	Total	15,256	15,256	15,256	20,341	20,341	20,341	23,392	23,392	23,392	42,716	42,716	42,716	305,115	305,115
4	Months in Service	12	11	10	9	8	7	6	5	4	3	2	1		
	Sector	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	June 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	2017 LBR Savings	Cummulative LBR Savings
5	Residential	4,162	3,815	3,468	4,162	3,700	3,237	3,191	2,859	2,127	2,813	1,942	971	36,349	36,349
6	C&I	11,094	10,169	9,245	11,094	9,861	8,626	8,505	7,088	5,670	7,766	5,177	2,589	96,885	96,885
7	Total	15,256	13,984	12,713	15,256	13,561	11,866	11,696	9,747	7,797	10,679	7,119	3,560	133,234	133,234

Line	Sector	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	June 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	2018 Total Savings	Cummulative Savings
		8	Residential	4,356	4,356	4,356	5,808	5,808	5,808	6,679	6,679	6,679	12,198	12,198	12,198
9	C&I	11,610	11,610	11,610	15,480	15,480	15,480	17,801	17,801	17,801	32,507	32,507	32,507	232,183	454,066
10	Total	15,965	15,965	15,965	21,287	21,287	21,287	24,480	24,480	24,480	44,703	44,703	44,703	319,306	624,421
11	Months in Service	12	11	10	9	8	7	6	5	4	3	2	1		
	Sector	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	June 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	2018 LBR Savings	Cummulative LBR Savings
12	Residential	4,356	3,993	3,630	4,356	3,872	3,388	3,339	2,783	2,226	3,049	2,033	1,016	38,040	121,281
13	C&I	11,610	10,642	9,675	11,610	10,320	9,030	8,901	7,417	5,934	8,127	5,418	2,709	101,391	323,284
14	Total	15,965	14,635	13,304	15,965	14,191	12,417	12,240	10,200	8,160	11,176	7,450	3,725	139,430	444,545

Line	Sector	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	2019 Total Savings	Cummulative Savings
		15	Residential	4,549	4,549	4,549	6,066	6,066	6,066	6,978	6,978	6,978	12,738	12,738	12,738
16	C&I	12,126	12,126	12,126	16,168	16,168	16,168	18,593	18,593	18,593	33,952	33,952	33,952	242,513	696,579
17	Total	16,675	16,675	16,675	22,233	22,233	22,233	25,568	25,568	25,568	46,690	46,690	46,690	333,498	957,919
18	Months in Service	12	11	10	9	8	7	6	5	4	3	2	1		
	Sector	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	2019 LBR Savings	Cummulative LBR Savings
19	Residential	4,549	4,170	3,791	4,549	4,044	3,538	3,488	2,906	2,325	3,184	2,123	1,081	39,730	210,085
20	C&I	12,126	11,115	10,105	12,126	10,778	9,431	9,296	7,747	6,198	8,488	5,659	2,829	105,997	559,963
21	Total	16,675	15,285	13,896	16,675	14,822	12,969	12,784	10,653	8,523	11,672	7,782	3,891	145,627	770,049

Line	Sector	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	June 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	2020 Total Savings	Cummulative Savings
		22	Residential	5,130	5,130	5,130	6,840	6,840	6,840	7,868	7,868	7,868	14,384	14,384	14,384
23	C&I	13,674	13,674	13,674	18,231	18,231	18,231	20,966	20,966	20,966	38,286	38,286	38,286	273,472	970,551
24	Total	18,804	18,804	18,804	25,071	25,071	25,071	28,832	28,832	28,832	52,650	52,650	52,650	376,072	1,333,991
25	Months in Service	12	11	10	9	8	7	6	5	4	3	2	1		
	Sector	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	June 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	2020 LBR Savings	Cummulative LBR Savings
26	Residential	5,130	4,703	4,275	5,130	4,560	3,990	3,933	3,278	2,622	3,581	2,394	1,197	44,802	306,142
27	C&I	13,674	12,534	11,385	13,674	12,154	10,635	10,483	8,738	6,889	9,572	6,381	3,191	118,416	815,985
28	Total	18,804	17,237	15,670	18,804	16,714	14,625	14,416	12,013	9,511	13,163	8,775	4,388	164,218	1,122,137

Calculations - Cost to Achieve

	Res	C&I		Res	C&I	
2016 Plan Budget	\$ 777,617	\$ 570,030	\$ 1,347,647	\$ 2,918,815	\$ 2,703,000	\$ 5,621,815
2016 Planned MWH Savings	8,225	21,923	30,148	57,226	65,118	122,344
2016 Cost To Achieve - No PI	\$ 94.54	\$ 28.00	\$ 44.70	\$ 51.01	\$ 41.51	\$ 45.85
Cost To Achieve		Northern	Overall		Liberty	Overall
2017	\$102.24	\$28.12	\$48.34	\$55.16	\$44.89	\$49.69
2018	\$104.79	\$28.82	\$49.55	\$56.53	\$46.01	\$50.83
2019	\$107.41	\$29.54	\$50.79	\$57.95	\$47.16	\$52.21
2020	\$110.10	\$30.28	\$52.08	\$59.40	\$48.34	\$53.51
	PI	Inflation	Savings	Targets		
	5.50%	2.50%	2017	0.66%		
	5.50%	2.50%	2018	0.70%		
	5.50%	2.50%	2019	0.75%		
	5.50%	2.50%	2020	0.80%		