EXHIBIT
#19
DE 17-136

PSNH d/b/a Eversource Energy
2019 System Benefits Charge ("SBC") Calculation
($ in 000's)

Year	EE Total Budget	RGGI Revenues	FCM Revenues	Other Revenues	Carryforward with Interest	Current Year Interest	SBC Requirement	Forecasted Distribution (MWH)	SBC Rate EE Portion (cents/kWh)	SBC Rate EAP Portion (cents/kWh)	SBC Rate LBR Portion (cents/kWh)	2019 Total SBC Rate (cents/kWh)
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
2019	$ 36,547	$ 1,868	$ 5,777	$ -	$ (386)	$ (60)	$ 29,348	7,852,026	0.373	0.150	0.063	0.586

Col. A: Effective year (January 1, 2019 - December 31, 2019)
Col. B: Company Forecast
Col. C: Company Forecast
Col. D: Company Forecast
Col. E: Company Forecast
Col. F: Page 2, Line 9 Col. N + Line 11 Col. O
Col. G: Page 3, Line 11, Col. O
Col. H: Col. B - Col. C - Col. D - Col. E - Col. F - Col. G
Col. I: Company Forecast
Col. J: (Col. H / Col. I) x 100
Col. K: EAP Portion of SBC Rate
Col. L: Page 4, Col. G
Col. M: Col. J + Col. K + Col. L

PSNH d/b/a Eversource Energy
Energy Efficiency Expense & SBC Revenue Reconcilliation
January 1, 2018 to December 31, 2018
($ in 000's)

Line	Description	Carryover 12/31/17	Actual Jan 2018	Actual Feb 2018	Actual Mar 2018	Actual Apr 2018	Actual May 2018	Actual Jun 2018	Actual Jul 2018	Forecast Aug 2018	Forecast Sep 2018	Forecast Oct 2018	Forecast Nov 2018	Forecast Dec 2018	2018 Total
	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	Col. O
1	SBC Revenues		1,740	1,837	1,726	1,751	1,503	1,695	1,943	2,003	1,688	1,708	1,690	1,909	21,193
2	RGGI Revenues		-	-	-	419	-	483	-	-	483	-	-	483	1,869
3	FCM Revenues		444	438	433	430	441	449	610	495	495	495	495	495	5,719
4	Other Revenues		-	-	-	-	-	-	-	-	-	-	-	-	-
5	**Total Revenues**		**2,184**	**2,275**	**2,159**	**2,600**	**1,944**	**2,627**	**2,553**	**2,497**	**2,666**	**2,203**	**2,185**	**2,887**	**28,781**
6	Program Expenses		378	1,104	1,796	1,026	1,990	2,094	1,813	3,683	3,761	3,761	3,761	3,761	28,929
7	**Total Program Expenses**		**378**	**1,104**	**1,796**	**1,026**	**1,990**	**2,094**	**1,813**	**3,683**	**3,761**	**3,761**	**3,761**	**3,761**	**28,929**
8	Current Month (Over)/Under Recovery		(1,806)	(1,171)	(363)	(1,574)	46	(534)	(740)	1,185	1,095	1,558	1,576	874	
9	Cumulative (Over)/Under Recovery	386	(1,420)	(2,591)	(2,954)	(4,528)	(4,482)	(5,016)	(5,756)	(4,570)	(3,476)	(1,917)	(341)	533	
10	Interest @ Prime Rate		0.38%	0.38%	0.38%	0.40%	0.40%	0.40%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	
11	**Interest on Deferral Balance**		**(2)**	**(8)**	**(10)**	**(15)**	**(18)**	**(19)**	**(22)**	**(22)**	**(17)**	**(11)**	**(5)**	**0**	**(148)**
12	**Monthly Sales (MWh)**		756,620	667,944	627,520	636,684	546,614	616,421	706,414	728,243	613,972	621,188	614,641	694,243	7,830,504
13	**EE SBC Rate**		0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	

Line 1: (Line 12 x Line 13) / 100
Line 2: Company Forecast
Line 3: Company Forecast
Line 4: Company Forecast
Line 5: Sum of Lines 1 through Lines 4
Line 6: Company Forecast
Line 7: Sum of Line 6
Line 8: Line 7 - Line 5
Line 9: Prior month Line 9 + Current month Line 8
Line 10: Prime Rate / 12
Line 11: (Prior Month Line 9 + Current Month Line 9) / 2 x Line 10
Line 12: Company Forecast
Line 13: 2018 approved rate

PSNH d/b/a Eversource Energy
Energy Efficiency Expense & SBC Revenue Reconcilliation
January 1, 2019 to December 31, 2019
($ in 000's)

Line	Description	Carryover 12/31/2018	Forecast Jan 2019	Forecast Feb 2019	Forecast Mar 2019	Forecast Apr 2019	Forecast May 2019	Forecast June 2019	Forecast Jul 2019	Forecast Aug 2019	Forecast Sep 2019	Forecast Oct 2019	Forecast Nov 2019	Forecast Dec 2019	2019 Total
	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	Col. O
1	SBC Revenues		2,513	2,227	2,286	2,054	2,124	2,279	2,578	2,585	2,182	2,176	2,173	2,463	27,639
2	RGGI Revenues		-	-	467	-	-	467	-	-	467	-	-	467	1,868
3	FCM Revenues		481	481	481	481	481	481	481	481	481	481	481	481	5,777
4	Other Revenues		-	-	-	-	-	-	-	-	-	-	-	-	-
5	**Total Revenues**		**2,995**	**2,709**	**3,234**	**2,535**	**2,606**	**3,227**	**3,059**	**3,066**	**3,130**	**2,657**	**2,654**	**3,411**	**35,284**
6	Program Expenses		3,046	3,046	3,046	3,046	3,046	3,046	3,046	3,046	3,046	3,046	3,046	3,046	36,547
7	**Total Program Expenses**		**3,046**	**3,046**	**3,046**	**3,046**	**3,046**	**3,046**	**3,046**	**3,046**	**3,046**	**3,046**	**3,046**	**3,046**	**36,547**
8	Current Month (Over)/Under Recovery		51	337	(189)	511	440	(182)	(14)	(20)	(85)	388	392	(365)	
9	Cumulative (Over)/Under Recovery	386	437	774	585	1,096	1,535	1,354	1,340	1,319	1,235	1,623	2,015	1,649	
10	Interest @ Prime Rate		0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	
11	**Interest on Deferral Balance**		**2**	**3**	**3**	**4**	**5**	**6**	**6**	**6**	**5**	**6**	**8**	**8**	**60**
12	**Monthly Sales (MWh)**		713,982	632,725	649,381	583,424	603,529	647,459	732,393	734,264	619,828	618,166	617,224	699,653	7,852,026
13	**EE SBC Rate**		0.352	0.352	0.352	0.352	0.352	0.352	0.352	0.352	0.352	0.352	0.352	0.352	

Line 1: (Line 12 x Line 13) / 100
Line 2: Page 1, Col. C
Line 3: Page 1, Col. D
Line 4: Page 1, Col. E
Line 5: Sum of Lines 1 through Lines 4
Line 6: Page 1, Col. B
Line 7: Sum of Line 6
Line 8: Line 7 - Line 5
Line 9: Prior month Line 9 + Current month Line 8
Line 10: Prime Rate / 12
Line 11: (Prior Month Line 9 + Current Month Line 9) / 2 x Line 10
Line 12: Company Forecast
Line 13: Page 1, Col. J

PSNH d/b/a Eversource Energy
2019 System Benefits Charge Calculation (LBR Component)
($ in 000's)

Year	Forecasted LBR Revenue	Prior Year Deferral with Interest	Current Year Interest	Total LBR Revenue	Forecasted Distribution (MWH)	SBC Rate LBR Portion (cents/kWh)
Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G
2019	$ 4,749	$ 167	$ (5)	$ 4,911	7,852,026	0.063

Col. A: Effective year (January 1, 2019 - December 31, 2019)
Col. B: Page 5, Line 21, Col. O / 1000
Col. C: Page 6, Line 7, Col. N
Col. D: Page 7, Line 6, Col. O
Col. E: Col. B + Col. C + Col. D
Col. F: Company Forecast
Col. G: (Col. E * 100) / Col. F

PSNH d/b/a Eversource Energy
Monthly and Cumulative Savings and Lost Base Revenue
January 1, 2019 to December 31, 2019

Line	Description	Cumulative Annual kWh Savings / Monthly kW Savings 12/31/2018	Forecast Jan 2019	Forecast Feb 2019	Forecast Mar 2019	Forecast Apr 2019	Forecast May 2019	Forecast June 2019	Forecast Jul 2019	Forecast Aug 2019	Forecast Sep 2019	Forecast Oct 2019	Forecast Nov 2019	Forecast Dec 2019	2019 Annual kWh and Monthly kW Savings	Cumulative Annual kWh and Monthly kW Savings
	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	Col. O	
1	Residential Annual kWh Savings (2017, 2018, & 2019)	26,186,394	1,362,311	1,362,311	1,362,311	1,362,311	1,362,311	1,362,311	1,362,311	1,362,311	1,362,311	1,362,311	1,362,311	1,362,311	16,347,730	42,534,124
2	C&I Annual kWh Savings (2017 & 2018)	94,971,106	-	-	-	-	-	-	-	-	-	-	-	-	-	94,971,106
3	C&I Annual kWh Savings (2019)	-	5,717,706	5,717,706	5,717,706	5,717,706	5,717,706	5,717,706	5,717,706	5,717,706	5,717,706	5,717,706	5,717,706	5,717,706	68,612,477	68,612,477
4	C&I Monthly Installed kW Savings*		725	725	725	725	725	725	725	725	725	725	725	725	8,703	8,703
			Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Total 2019 Lost Base Revenue	
5	Monthly Residential Savings (2019)		56,763	56,763	56,763	56,763	56,763	56,763	56,763	56,763	56,763	56,763	56,763	56,763		
6	Cumulative Residential Savings	2,182,200	2,238,962	2,352,488	2,466,014	2,579,540	2,693,066	2,806,592	2,920,118	3,033,644	3,147,170	3,260,696	3,374,221	3,487,747		
7	Average Residential kWh Distribution Rate		0.04025	0.04025	0.04025	0.04025	0.04025	0.04025	0.04025	0.04025	0.04025	0.04025	0.04025	0.04025		
8	Total Lost Residential Revenue		$ 90,111	$ 94,680	$ 99,249	$ 103,818	$ 108,387	$ 112,956	$ 117,525	$ 122,095	$ 126,664	$ 131,233	$ 135,802	$ 140,371	$ 1,382,891	
9	Monthly C&I Savings (2017 & 2018)	7,914,259	7,914,259	7,914,259	7,914,259	7,914,259	7,914,259	7,914,259	7,914,259	7,914,259	7,914,259	7,914,259	7,914,259	7,914,259		
10	Average C&I kWh Distribution Rate		0.02767	0.02767	0.02767	0.02767	0.02767	0.02767	0.02767	0.02767	0.02767	0.02767	0.02767	0.02767		
11	Lost C&I kWh Revenue		$ 218,966	$ 218,966	$ 218,966	$ 218,966	$ 218,966	$ 218,966	$ 218,966	$ 218,966	$ 218,966	$ 218,966	$ 218,966	$ 218,966		
12	Monthly C&I Savings (2019)		238,238	238,238	238,238	238,238	238,238	238,238	238,238	238,238	238,238	238,238	238,238	238,238		
13	Cumulative C&I Savings	-	238,238	714,713	1,191,189	1,667,664	2,144,140	2,620,615	3,097,091	3,573,567	4,050,042	4,526,518	5,002,993	5,479,469		
14	Average C&I kWh Distribution Rate		0.01177	0.01177	0.01177	0.01177	0.01177	0.01177	0.01177	0.01177	0.01177	0.01177	0.01177	0.01177		
15	Lost C&I kWH Revenue		$ 2,805	$ 8,414	$ 14,023	$ 19,633	$ 25,242	$ 30,851	$ 36,461	$ 42,070	$ 47,680	$ 53,289	$ 58,898	$ 64,508		
16	Monthly C&I kW Savings (2019)		363	363	363	363	363	363	363	363	363	363	363	363		
17	Cumulative Monthly C&I kW Savings	-	363	1,088	1,813	2,538	3,264	3,989	4,714	5,439	6,165	6,890	7,615	8,340		
18	Average C&I Demand Rate		6.42	6.42	6.42	6.42	6.42	6.42	6.42	6.42	6.42	6.42	6.42	6.42		
19	Lost C&I Demand Revenue		$ 2,327	$ 6,981	$ 11,635	$ 16,289	$ 20,944	$ 25,598	$ 30,252	$ 34,906	$ 39,560	$ 44,214	$ 48,868	$ 53,523		
20	Total Lost C&I kWh and Demand Revenue		$ 224,098	$ 234,361	$ 244,625	$ 254,888	$ 265,152	$ 275,415	$ 285,679	$ 295,942	$ 306,206	$ 316,469	$ 326,733	$ 336,996	$ 3,366,564	
21	**Total Lost Revenue**		**$ 314,209**	**$ 329,041**	**$ 343,874**	**$ 358,707**	**$ 373,539**	**$ 388,372**	**$ 403,204**	**$ 418,037**	**$ 432,869**	**$ 447,702**	**$ 462,534**	**$ 477,367**	**$ 4,749,455**	

Lines 1-4: Company Forecast
Line 5: Line 1 / 24
Line 6: Prior Month Line 6 + Current Month Line 5
Line 7: Page 8, Column 8
Line 8: Line 6 x Line 7
Line 9: Line 1, Column B / 12
Line 10: Page 8, Column 8
Line 11: Line 9 x Line 10
Line 12: Line 3 / 24
Line 13: Prior Month Line 13 + Current Month Line 12
Line 14: Page 8, Column 7
Line 15: Line 13 x Line 14
Line 16: Line 4 / 12
Line 17: Prior Month Line 17 + Current Month Line 16
Line 18: Page 8, Column 6
Line 19: Line 17 x Line 18
Line 20: Line 11 + Line 15 + Line 19
Line 21: Line 8 + Line 20

PSNH d/b/a Eversource Energy
Lost Base Revenue Reconciliation
January 1, 2018 to December 31, 2018
($ in 000's)

Line	Description	Actual Carryover 12/31/2017	Actual Jan 2018	Actual Feb 2018	Actual Mar 2018	Actual Apr 2018	Actual May 2018	Actual Jun 2018	Actual Jul 2018	Forecast Aug 2018	Forecast Sep 2018	Forecast Oct 2018	Forecast Nov 2018	Forecast Dec 2018	2018 Total
	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	Col. O
1	Revenue Recovery		130	200	188	191	164	185	212	218	184	186	184	208	2,252
2	Lost Revenues		135	140	153	161	171	188	198	213	227	244	261	277	2,367
3	Current Month (Over)/Under Recovery		5	(61)	(36)	(30)	7	3	(14)	(6)	43	58	76	69	116
4	Cumulative (Over)/Under Recovery	52	57	(4)	(40)	(70)	(62)	(59)	(73)	(79)	(36)	22	98	167	
5	Interest @ Prime Rate		0.38%	0.38%	0.38%	0.40%	0.40%	0.40%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	
6	Interest on Deferral Balance		0	0	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	0	1	(1)
7	Cummulative (Over)/Under Recovery Incl Carrying Charge		57	(4)	(39)	(70)	(63)	(60)	(74)	(80)	(37)	21	97	167	
8	**Monthly Sales (MWh)**		756,620	667,944	627,520	636,684	546,614	616,421	706,414	728,243	613,972	621,188	614,641	694,243	7,830,504
9	**SBC Rate (LBR Component)**		0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	

Line 1: (Line 8 x Line 9) / 100
Line 2: Company Forecast
Line 3: Line 2 - Line 1
Line 4: Prior month Line 4 + Current month Line 3
Line 5: Prime Rate / 12
Line 6: (Prior Month Line 4 + Current Month Line 4) / 2 x Line 5
Line 7: Line 4 + Line 6
Line 8: Company Actuals and Forecast
Line 9: Approved Rates

PSNH d/b/a Eversource Energy
Lost Base Revenue Reconciliation
January 1, 2019 to December 31, 2019
($ in 000's)

Line	Description	Forecast Carryover 12/31/2018	Forecast Jan 2019	Forecast Feb 2019	Forecast Mar 2019	Forecast Apr 2019	Forecast May 2019	Forecast Jun 2019	Forecast Jul 2019	Forecast Aug 2019	Forecast Sep 2019	Forecast Oct 2019	Forecast Nov 2019	Forecast Dec 2019	2019 Total
	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	Col. O
1	Revenue Recovery		450	399	409	368	380	408	461	463	390	389	389	441	4,947
2	Lost Revenues		314	329	344	359	374	388	403	418	433	448	463	477	4,749
3	Current Month (Over)/Under Recovery		(136)	(70)	(65)	(9)	(7)	(20)	(58)	(45)	42	58	74	37	(197)
4	Cumulative (Over)/Under Recovery	167	31	(38)	(104)	(113)	(119)	(139)	(197)	(242)	(199)	(141)	(67)	(31)	
5	Interest @ Prime Rate		0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	
6	Interest on Deferral Balance		0	(0)	(0)	(0)	(0)	(1)	(1)	(1)	(1)	(1)	(0)	(0)	(5)
7	Cummulative (Over)/Under Recovery Incl Carrying Charge		32	(38)	(104)	(113)	(120)	(140)	(199)	(244)	(203)	(145)	(72)	(36)	
8	**Monthly Sales (MWh)**		713,982	632,725	649,381	583,424	603,529	647,459	732,393	734,264	619,828	618,166	617,224	699,653	7,852,026
9	**SBC Rate (LBR Component)**		0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	

Line 1: (Line 8 x Line 9) / 100
Line 2: Page 5, Line 21 / 1000
Line 3: Line 2 - Line 1
Line 4: Prior month Line 4 + Current month Line 3
Line 5: Prime Rate / 12
Line 6: (Prior Month Line 4 + Current Month Line 4) / 2 x Line 5
Line 7: Line 4 + Line 6
Line 8: Company Forecast
Line 9: Company Forecast

Eversource
Calculation of Forecasted Average Distribution Rate for Lost Revenue
Based on Actual Billing Determinants and Distribution Rates*

For the Period 07/01/17 Through 06/30/18

	(1)	(2)	(3) = (1) + (2)	(4)	(5)	(6) = (1) ÷ (4)	(7) = (2) / (5)	(8) = (3) / (5)
	Revenue							
Rate Class	Demand Charges	kWh Charges	Total Demand and kWh Charges	Delivery kW	Delivery kWh	Average Distribution Rate $/kW	Average Distribution Rate $/kWh[(a)]	Average Distribution Rate $/kWh[(b)]
Residential	$ -	$ 126,308,907	$ 126,308,907	$ -	3,138,357,008	N/A	N/A	$ 0.04025
General Service Rate G	$ 35,256,059	$ 38,175,341	$ 73,431,400	4,046,223	1,703,273,539	$ 9.43	$ 0.02241	$ 0.04311
Primary General Service Rate GV	$ 23,010,148	$ 9,812,649	$ 32,822,797	4,251,134	1,656,083,534	$ 2.31	$ 0.00593	$ 0.01982
Large General Service Rate LG	$ 13,899,519	$ 5,462,448	$ 19,361,967	2,947,989	1,180,885,664	$ 1.85	$ 0.00463	$ 0.01640
Commercial and Industrial	$ 72,165,726	$ 53,450,438	$ 125,616,164	11,245,346	4,540,242,737	$ 6.42	$ 0.01177	$ 0.02767

* Excludes the outdoor lighting rates (Rate OL and Rate EOL), the Customer/Meter charge revenue from each rate, and the on/off peak kWh associated with Rate B >= 115 kV under Rate LG.
(a) For 2019 C&I Savings
(b) For 2017 and 2018 C&I Savings

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

	Current Rates*	2019
System Benefits Charge ($/kWh)	$ 0.00455	$ 0.00586
Bill per month, including PSNH default energy service		
Residential Rate R (625 kWh/month)	$ 126.25	$ 127.07
General Service Rate G, three-phase service (40 kW, 10,000 kWh/month)	$ 1,869.73	$ 1,882.78
Change from previous rate level - $ per month		
Residential Rate R (625 kWh/month)		$ 0.82
General Service Rate G, three-phase service (40 kW, 10,000 kWh/month)		$ 13.05
Change from previous rate level - %		
Residential Rate R (625 kWh/month)		0.6%
General Service Rate G, three-phase service (40 kW, 10,000 kWh/month)		0.7%

* Stated at Eversource's rate levels effective August 1, 2018 - January 31, 2019

Eversource
Calculation of Distribution Revenue at the Rate Levels in Effect July 2017 - June 2018
Based on Billing Determinants for the Twelve Months Ending June 2018

Residential Rate R

Rate	Source	July 1, 2017 - December 31, 2017 Units	Rate/Charge	Revenue	January 1, 2018 - June 30, 2018 Units	Rate/Charge	Revenue	July 2017 - Jun 2018 Total Units	Revenue
Standard	Customer Charge	2,618,086	$ 12.64	$ 33,092,607	2,630,086	$ 12.69	$ 33,375,791	5,248,172	$ 66,468,398
	All kWh	1,488,583,049	$ 0.04125	$ 61,404,051	1,519,610,226	$ 0.04141	$ 62,927,059	3,008,193,275	$ 124,331,110
Uncontrolled Water Heating	Customer Charge	259,829	$ 4.45	$ 1,156,239	257,056	$ 4.47	$ 1,149,040	516,885	$ 2,305,279
	All kWh	42,811,188	$ 0.02022	$ 865,642	51,317,728	$ 0.02030	$ 1,041,750	94,128,916	$ 1,907,392
Controlled Water Heating	Customer Charge	1,560	$ 7.85	$ 12,246	1,511	$ 7.88	$ 11,907	3,071	$ 24,153
	All kWh	257,549	$ 0.00120	$ 309	303,863	$ 0.00120	$ 365	561,412	$ 674
LCS - Radio-controlled & 8 Hour Switch	Customer Charge	20,593	$ 9.07	$ 186,779	20,563	$ 9.11	$ 187,329	41,156	$ 374,107
	All kWh	10,126,170	$ 0.00120	$ 12,151	24,276,216	$ 0.00120	$ 29,131	34,402,386	$ 41,283
LCS - 8 Hour No Switch	Customer Charge	634	$ 7.85	$ 4,977	617	$ 7.88	$ 4,862	1,251	$ 9,839
	All kWh	129,713	$ 0.00120	$ 156	226,656	$ 0.00120	$ 272	356,369	$ 428
LCS - 10,11 Hour Switch	Customer Charge	30	$ 9.07	$ 272	30	$ 9.11	$ 273	60	$ 545
	All kWh	9,274	$ 0.02438	$ 226	7,663	$ 0.02448	$ 188	16,937	$ 414
LCS - 10,11 Hour No Switch	Customer Charge	601	$ 7.85	$ 4,718	579	$ 7.88	$ 4,563	1,180	$ 9,280
	All kWh	120,394	$ 0.02438	$ 2,935	153,037	$ 0.02448	$ 3,746	273,431	$ 6,682
Time of Day	Customer Charge	221	$ 29.35	$ 6,486	231	$ 29.47	$ 6,808	452	$ 13,294
	On Peak kWh	70,792	$ 0.13183	$ 9,333	83,664	$ 0.13235	$ 11,073	154,456	$ 20,405
	Off Peak kWh	114,867	$ 0.00192	$ 221	154,959	$ 0.00193	$ 299	269,826	$ 520
Total Residential	Customer/Meter	2,901,554		$ 34,464,324	2,910,673		$ 34,740,573	5,812,227	$ 69,204,896
	Demand	-		-	-		-	-	-
	kWh	1,542,222,996		$ 62,295,023	1,596,134,012		$ 64,013,883	3,138,357,008	$ 126,308,907
				$ 96,759,347			$ 98,754,456		$ 195,513,803

General Service Rate G

Rate	Source	July 1, 2017 - December 31, 2017 Units	Rate/Charge	Revenue	January 1, 2018 - June 30, 2018 Units	Rate/Charge	Revenue	July 2017 - Jun 2018 Total Units	Revenue
Standard	Single Phase Customer Charge	335,447	$ 14.83	$ 4,974,679	335,734	$ 14.89	$ 4,999,079	671,181	$ 9,973,758
	Three Phase Customer Charge	118,192	$ 29.64	$ 3,503,211	118,793	$ 29.76	$ 3,535,280	236,985	$ 7,038,491
	Demand Charge > 5 kW	2,112,374	$ 8.69	$ 18,356,530	1,923,148	$ 8.72	$ 16,769,854	4,035,522	$ 35,126,384
	First 500 kWh Charge	133,751,554	$ 0.06959	$ 9,307,771	253,196,980	$ 0.06986	$ 17,688,341	386,948,534	$ 26,996,112
	Next 1,000 kWh Charge	141,163,171	$ 0.01724	$ 2,433,653	123,004,126	$ 0.01731	$ 2,129,201	264,167,297	$ 4,562,854
	All Additional kWh Charge	574,696,563	$ 0.00610	$ 3,505,649	463,624,816	$ 0.00612	$ 2,837,384	1,038,321,379	$ 6,343,033
Time of Day	Single Phase Customer Charge	106	$ 38.42	$ 4,073	93	$ 38.57	$ 3,587	199	$ 7,660
	Three Phase Customer Charge	129	$ 54.90	$ 7,082	131	$ 55.12	$ 7,221	260	$ 14,303
	Demand Charge	6,743	$ 12.10	$ 81,590	3,958	$ 12.15	$ 48,085	10,701	$ 129,675
	On peak kWh	184,607	$ 0.04882	$ 9,013	126,879	$ 0.04901	$ 6,218	311,486	$ 15,231
	Off peak kWh	311,687	$ 0.00765	$ 2,384	222,094	$ 0.00768	$ 1,706	533,781	$ 4,090
Space Heating	Meter Charge	2,533	$ 2.97	$ 7,523	2,509	$ 2.98	$ 7,477	5,042	$ 15,000
	All kWh	1,981,927	$ 0.03413	$ 67,643	3,212,845	$ 0.03426	$ 110,072	5,194,772	$ 177,715
Uncontolled Water Heating	Customer Charge	7,772	$ 4.45	$ 34,585	7,666	$ 4.47	$ 34,267	15,438	$ 68,852
	All kWh	1,557,242	$ 0.02022	$ 31,487	1,861,383	$ 0.02030	$ 37,786	3,418,625	$ 69,274
Controlled Water Heating	Customer Charge	-	$ 7.85	$ -	-	$ 7.88	$ -	-	$ -
	All kWh	-	$ 0.00120	$ -	-	$ 0.00120	$ -	-	$ -
LCS - Radio-controlled & 8 Hour Switch	Customer Charge	1,165	$ 9.07	$ 10,567	1,154	$ 9.11	$ 10,513	2,319	$ 21,079
	All kWh	1,322,828	$ 0.00120	$ 1,587	2,910,378	$ 0.00120	$ 3,492	4,233,206	$ 5,080
LCS - 8 Hour No Switch	Customer Charge	41	$ 7.85	$ 322	36	$ 7.88	$ 284	77	$ 606
	All kWh	31,039	$ 0.00120	$ 37	36,759	$ 0.00120	$ 44	67,798	$ 81
LCS - 10,11 Hour Switch	Customer Charge	-	$ 9.07	$ -	-	$ 9.11	$ -	-	$ -
	All kWh	-	$ 0.02438	$ -	-	$ 0.02448	$ -	-	$ -
LCS - 10,11 Hour No Switch	Customer Charge	12	$ 7.85	$ 94	12	$ 7.88	$ 95	24	$ 189
	All kWh	57,360	$ 0.02438	$ 1,398	19,300	$ 0.02448	$ 472	76,660	$ 1,871
Total General Service	Customer/Meter	465,397		$ 8,542,136	466,128		$ 8,597,802	931,525	$ 17,139,937
	Demand	2,119,117		$ 18,438,120	1,927,106		$ 16,817,939	4,046,223	$ 35,256,059
	kWh	855,057,978		$ 15,360,623	848,215,561		$ 22,814,718	1,703,273,539	$ 38,175,341
				$ 42,340,879			$ 48,230,458		$ 90,571,337

Primary General Service Rate GV

Rate	Source	July 1, 2017 - December 31, 2017 Units	Rate/Charge	Revenue	January 1, 2018 - June 30, 2018 Units	Rate/Charge	Revenue	July 2017 - Jun 2018 Total Units	Revenue
Standard	Customer Charge	8,291	$ 193.27	$ 1,602,402	8,298	$ 194.03	$ 1,610,061	16,589	$ 3,212,463
	First 100 kW Demand Charge	803,328	$ 5.56	$ 4,466,504	791,250	$ 5.58	$ 4,415,175	1,594,578	$ 8,881,679
	All Additional kW Demand Charge	1,391,116	$ 5.32	$ 7,400,737	1,231,281	$ 5.34	$ 6,575,041	2,622,397	$ 13,975,778
	First 200,000 kWh	729,664,285	$ 0.00604	$ 4,407,172	711,498,916	$ 0.00606	$ 4,311,683	1,441,163,201	$ 8,718,856
	All Additional kWh	116,319,422	$ 0.00507	$ 589,739	96,332,560	$ 0.00509	$ 490,333	212,651,982	$ 1,080,072
Rate B < 115 KV	Administrative Charge	41	$ 340.50	$ 13,961	47	$ 341.84	$ 16,066	88	$ 30,027
	Translation Charge	18	$ 57.12	$ 1,028	21	$ 57.34	$ 1,204	39	$ 2,232
	Demand Charge	17,049	$ 4.46	$ 76,039	17,110	$ 4.48	$ 76,653	34,159	$ 152,691
	First 200.000 kWh	1,238,528	$ 0.00604	$ 7,481	1,029,823	$ 0.00606	$ 6,241	2,268,351	$ 13,721
	All Additional kWh		$ 0.00507	$ -		$ 0.00509	$ -	-	$ -
Space Heating	Meter Charge	-	$ 2.97	$ -	-	$ 2.98	$ -	-	$ -
	All kWh	-	$ 0.03413	$ -	-	$ 0.03426	$ -	-	$ -
Total GV	Customer/Meter	8,350		$ 1,617,390	8,366		$ 1,627,332	16,716	$ 3,244,722
	Demand	2,211,493		$ 11,943,279	2,039,641		$ 11,066,868	4,251,134	$ 23,010,148
	kWh	847,222,235		$ 5,004,392	808,861,299		$ 4,808,257	1,656,083,534	$ 9,812,649
				$ 18,565,062			$ 17,502,457		$ 36,067,519

Large General Service Rate LG

		July 1, 2017 - December 31, 2017			January 1, 2018 - June 30, 2018			July 2017 - Jun 2018 Total	
Rate	Source	Units	Rate/Charge	Revenue	Units	Rate/Charge	Revenue	Units	Revenue
Standard	Customer Charge	625	$ 604.10	$ 377,563	627	$ 606.47	$ 380,257	1,252	$ 757,819
	Demand Charge	1,408,962	$ 4.73	$ 6,664,390	1,270,776	$ 4.75	$ 6,036,186	2,679,738	$ 12,700,576
	On peak kWh	269,352,227	$ 0.00506	$ 1,362,922	243,903,864	$ 0.00508	$ 1,239,032	513,256,091	$ 2,601,954
	Off Peak kWh	339,194,608	$ 0.00427	$ 1,448,361	318,181,521	$ 0.00429	$ 1,364,999	657,376,129	$ 2 813,360
Rate B < 115 KV	Administrative Charge	54	$ 340.50	$ 18,387	53	$ 341.84	$ 18,118	107	$ 36,505
	Translation Charge	12	$ 57.12	$ 685	21	$ 57.34	$ 1,204	33	$ 1,890
	Demand charge	141 075	$ 4.46	$ 629,195	127 176	$ 4.48	$ 569,748	268,251	$ 1,198,943
	On peak kWh	1 939 150	$ 0.00506	$ 9,812	2 165 816	$ 0.00508	$ 11,002	4,104,966	$ 20,814
	Off Peak kWh	2 859 756	$ 0.00427	$ 12,211	3 288 722	$ 0.00429	$ 14,109	6,148,478	$ 26,320
Rate B >= 115 KV	Administrative Charge	31	$ 340.50	$ 10,556	33	$ 341.84	$ 11,281	64	$ 21,836
	Translation Charge	-	$ 57.12	$ -	13	$ 57.34	$ 745	13	$ 745
	Demand charge	512,892	$ -	$ -	400,636	$ -	$ -	913,528	$ -
	On peak kWh	3,376,729	$ -	$ -	5,384,690	$ -	$ -	8,761,419	$ -
	Off Peak kWh	9,352,794	$ -	$ -	11,674,131	$ -	$ -	21,026,925	$ -
Total LG	Customer/Meter	722		$ 407,190	747		$ 411,604	1,469	$ 818,795
	Demand	2,062,929		$ 7 293,585	1,798,588		$ 6,605,934	3,861,517	$ 13,899,519
	kWh	626 075 264		$ 2,833,307	584 598,744		$ 2,629,141	1,210,674,008	$ 5,462,448
				$ 10,534,082			$ 9,646,680		$ 20,180,762

Outdoor Lighting Rate OL

		July 1, 2017 - December 31, 2017			January 1, 2018 - June 30, 2018			July 2017 - Jun 2018 Total	
Type	Fixture	Units	Rate/Charge	Revenue	Units	Rate/Charge	Revenue	Units	Revenue
High Pressure Sodium	4,000 Lumens	21,216	$ 15.77	$ 334,576	21,279	$ 15.83	$ 336,846	42,495	$ 671,422
	5,800 Lumens	3,766	$ 15.77	$ 59,390	3,706	$ 15.83	$ 58,659	7,472	$ 118,049
	9,500 Lumens	5603	$ 20.97	$ 117,495	5,560	$ 21.05	$ 117,036	11,163	$ 234,531
	16,000 Lumens	4982	$ 29.65	$ 147,716	5,034	$ 29.77	$ 149,862	10,016	$ 297,578
	30,000 Lumens	8180	$ 30.39	$ 248,590	8,257	$ 30.51	$ 251,910	16,437	$ 500,500
	50,000 Lumens	11395	$ 30.73	$ 350,168	11,685	$ 30.85	$ 360,496	23,080	$ 710,664
	130,000 Lumens	1848	$ 49.32	$ 91 143	1,897	$ 49.51	$ 93,914	3,745	$ 185,057
	12,000 Lumens	55	$ 21.68	$ 1 192	55	$ 21.77	$ 1,197	110	$ 2,390
	34,200 Lumens	36	$ 27.76	$ 999	31	$ 27.87	$ 864	67	$ 1,863
Mercury	3,500 Lumens	32675	$ 13.91	$ 454 509	30,146	$ 13.96	$ 420,834	62,821	$ 875,344
	7,000 Lumens	6057	$ 16.73	$ 101 334	5,896	$ 16.80	$ 99,058	11,953	$ 200,392
	11,000 Lumens	499	$ 20.69	$ 10 324	371	$ 20.77	$ 7,710	870	$ 18,034
	20,000 Lumens	2578	$ 25.55	$ 65,868	2,581	$ 25.65	$ 66,205	5,159	$ 132,073
	56,000 Lumens	867	$ 40.61	$ 35,209	858	$ 40.77	$ 34,978	1,725	$ 70,187
	15,000 Lumens	32	$ 23.67	$ 757	20	$ 23.76	$ 464	52	$ 1,222
Metal Halide	5,000 Lumens	1333	$ 16.45	$ 21,928	1,359	$ 16.51	$ 22,435	2,692	$ 44,363
	8,000 Lumens	796	$ 22.51	$ 17,918	788	$ 22.60	$ 17,800	1,584	$ 35,718
	13,000 Lumens	0	$ 30.89	$ -		$ 31.01	$ -	-	$ -
	13,500 Lumens	708	$ 31.55	$ 22,337	727	$ 31.67	$ 23,032	1,435	$ 45,369
	20,000 Lumens	1771	$ 31.55	$ 55,875	1,887	$ 31.67	$ 59,761	3,658	$ 115,636
	36,000 Lumens	2687	$ 31.83	$ 85,527	2,814	$ 31.96	$ 89,935	5,501	$ 175,463
	100,000 Lumens	1649	$ 47.72	$ 78,690	1,666	$ 47.91	$ 79,818	3,315	$ 158,508
Incandescent	600 Lumens	537	$ 9.08	$ 4,876	534	$ 9.12	$ 4,870	1,071	$ 9,746
	1,000 Lumens	1560	$ 10.14	$ 15 818	1,451	$ 10.18	$ 14 768	3,011	$ 30,587
	2,500 Lumens	24	$ 13.01	$ 312	24	$ 13.06	$ 313	48	$ 626
	6,000 Lumens	0	$ 22.35	$ -	0	$ 22.44	$ -	-	$ -
Fluorescent	20,000 Lumens	12	$ 34.65	$ 416	12	$ 34.79	$ 417	24	$ 833
Total Rate OL	Fixtures	110,866		$ 2,322,971	108,637		$ 2,313 184	219,503	$ 4,636 155
	Demand								
	kWh	9,117,859			7,951,982			17,069,841	
				$ 2,322,971			$ 2,313,184		$ 4,636,155

Outdoor Lighting Rate EOL

		July 1, 2017 - December 31, 2017			January 1, 2018 - June 30, 2018			July 2017 - Jun 2018 Total	
Type	Fixture	Units	Rate/Charge	Revenue	Units	Rate/Charge	Revenue	Units	Revenue
High Pressure Sodium	4,000 Lumens	60,617	$ 8.39	$ 508,577	40,760	$ 8 42	$ 343,199	101,377	$ 851,776
	5,800 Lumens	2,807	$ 8.39	$ 23,551	1,507	$ 8 42	$ 12,689	4,314	$ 36,240
	9,500 Lumens	6,521	$ 10.32	$ 67,297	3,871	$ 10.36	$ 40,104	10,392	$ 107,400
	16,000 Lumens	7,577	$ 11.35	$ 85,999	4,504	$ 11.39	$ 51,301	12,081	$ 137,300
	30,000 Lumens	15,189	$ 11.35	$ 172,395	11,894	$ 11.39	$ 135,473	27,083	$ 307,868
	50,000 Lumens	1,095	$ 11.71	$ 12,822	837	$ 11.76	$ 9,843	1,932	$ 22,666
	130,000 Lumens	367	$ 22.23	$ 8,158	350	$ 22.32	$ 7,812	717	$ 15,970
Metal Halide	5,000 Lumens	9,347	$ 8.72	$ 81,506	5,615	$ 8.75	$ 49,131	14,962	$ 130,637
	8,000 Lumens	918	$ 11.52	$ 10,575	577	$ 11.57	$ 6,676	1,495	$ 17,251
	13,000 Lumens	-	$ 12.30	$ -	-	$ 12.35	$ -	-	$ -
	13,500 Lumens	579	$ 12.95	$ 7,498	558	$ 13.00	$ 7,254	1,137	$ 14,752
	20,000 Lumens	486	$ 13.17	$ 6,401	618	$ 13.22	$ 8,170	1,104	$ 14,571
	36,000 Lumens	347	$ 13.54	$ 4,698	435	$ 13.59	$ 5,912	782	$ 10,610
	100,000 Lumens	616	$ 24.12	$ 14,858	315	$ 24.21	$ 7,626	931	$ 22,484
LED's	Per Fixture	137,732	$ 3.36	$ 462,780	178,608	$ 3.37	$ 601,909	316,340	$ 1,064,688
	Per Watt	1,946,547	$ 0.0511	$ 99,469	2,901,583	$ 0.0513	$ 148,851	4,848,130	$ 248,320
	Maintenance credit (contract)			$ (53)			$ (25)		$ (78)
Total Rate EOL	Fixtures	244,198		$ 1,566,530	250,449		$ 1 435,925	494,647	$ 3,002,455
	Demand	-		$ -	-		$ -	-	$ -
	kWh	6,616,388		$ -	5,596,189		$	12,212,577	$ -
				$ 1,566,530			$ 1 435,		$ 3,002,455

Total Retail

Type	Source	July 1, 2017 - December 31, 2017 Units	July 1, 2017 - December 31, 2017 Revenue	January 1, 2018 - June 30, 2018 Units	January 1, 2018 - June 30, 2018 Revenue	July 2017 - Jun 2018 Total Units	July 2017 - Jun 2018 Total Revenue
Total Retail	Customer/Meter	3,376,023	$ 45,031,040	3,385,914	$ 45,377,310	6,761,937	$ 90,408,350
	Fixtures	355,064	$ 3,889,501	359,086	$ 3,749,109	714,150	$ 7,638,609
	Demand	6,393,539	$ 37,674,984	5,765,335	$ 34,490,742	12,158,874	$ 72,165,726
	kWh	3,886,312,720	$ 85,493,346	3,851,357,787	$ 94,265,999	7,737,670,506	$ 179,759,345
			$ 172,088,871		$ 177,883,160		$ 349,972,031

Lost Base Revenue

Summary of Data Included in the Calculation of the Average Distribution Rates*

Type	Source	July 1, 2017 - December 31, 2017 Units	July 1, 2017 - December 31, 2017 Revenue	January 1, 2018 - June 30, 2018 Units	January 1, 2018 - June 30, 2018 Revenue	July 2017 - Jun 2018 Total Units	July 2017 - Jun 2018 Total Revenue
Total Residential	Demand	-	$ -	-	$ -	-	$ -
	kWh	1,542,222,996	$ 62,295,023	1,596,134,012	$ 64,013,883	3,138,357,008	$ 126,308,907
			$ 62,295,023		$ 64,013,883		$ 126,308,907
Total General Service	Demand	2,119,117	$ 18,438,120	1,927,106	$ 16,817,939	4,046,223	$ 35,256,059
	kWh	855,057,978	$ 15,360,623	848,215,561	$ 22,814,718	1,703,273,539	$ 38,175,341
			$ 33,798,744		$ 39,632,656		$ 73,431,400
Total GV	Demand	2,211,493	$ 11,943,279	2,039,641	$ 11,066,868	4,251,134	$ 23,010,148
	kWh	847,222,235	$ 5,004,392	808,861,299	$ 4,808,257	1,656,083,534	$ 9,812,649
			$ 16,947,672		$ 15,875,125		$ 32,822,797
Total LG	Demand	1,550,037	$ 7,293,585	1,397,952	$ 6,605,934	2,947,989	$ 13,899,519
	kWh	613,345,741	$ 2,833,307	567,539,923	$ 2,629,141	1,180,885,664	$ 5,462,448
			$ 10,126,891		$ 9,235,076		$ 19,361,967
Total	Demand	5,880,647	$ 37,674,984	5,364,699	$ 34,490,742	11,245,346	$ 72,165,726
	kWh	3,857,848,950	$ 85,493,346	3,820,750,795	$ 94,265,999	7,678,599,744	$ 179,759,345
			$ 123,168,330		$ 128,756,741		$ 251,925,071

* The Lost Base Revenue calculation excludes the outdoor lighting rates (Rate OL and Rate EOL), the Customer/Meter charge revenue from each rate, and the on/off peak kWh associated with Rate B >= 115 kV under Rate LG.

Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities
2019 System Benefits Charge ("SBC") Calculation
($ in 000's)

Year	EE Total Budget	RGGI Revenues	FCM Revenues	Other Revenues	Carryforward with Interest	Current Year Interest	SBC Requirement	Forecasted Distribution (MWH)	SBC Rate EE Portion (cents/kWh)	SBC Rate EAP Portion (cents/kWh)	SBC Rate LBR Portion (cents/kWh)	2018 Total SBC Rate (cents/kWh)
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
2019	$ 3,425	$ 214	$ 633	$ -	$ (163)	$ 11	$ 2,730	918,145	0.373	0.150	0.012	0.535

Col. A: Effective year (January 1, 2019 - December 31, 2019)
Col. B: Company Forecast
Col. C: Company Forecast
Col. D: Company Forecast
Col. E: Company Forecast
Col. F: Page 2, Line 9 Col. N + Line 11 Col. O
Col. G: Page 3, Line 11, Col. O
Col. H: Col. B - Col. C - Col. D - Col. E - Col. F - Col. G
Col. I: Company Forecast
Col. J: (Col. H / Col. I) x 100
Col. K: EAP Portion of SBC Rate
Col. L: Page 4, Col. G
Col. M: Col. J + Col. K + Col. L

Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities
Energy Efficiency Expense & SBC Revenue Reconcilliation
January 1, 2018 to December 31, 2018
($ in 000's)

Line	Description	Carryover 12/31/17	Actual Jan-18	Actual Feb-18	Actual Mar-18	Actual Apr-18	Actual May-18	Actual Jun-18	Actual Jul-18	Actual Aug-18	Actual Sep-18	Actual Oct-18	Actual Nov-18	Forecast Dec-18	2018 Total
	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	Col. O
1	SBC Revenues		195	204	198	193	190	212	231	248	236	192	180	164	2,443
2	RGGI Revenues		-	-	51	48	-	-	55	-	56	-	-	59	269
3	FCM Revenues		45	44	44	43	55	50	66	66	60	58	66	40	637
4	Other Revenues		-	-	-	-	-	-	-	-	-	-	-	-	-
5	**Total Revenues**		**240**	**248**	**293**	**284**	**245**	**263**	**352**	**314**	**352**	**251**	**246**	**263**	**3,349**
6	Program Expenses		107	192	67	129	125	160	236	196	219	155	261	256	2,103
7	**Total Program Expenses**		**107**	**192**	**67**	**129**	**125**	**160**	**236**	**196**	**219**	**155**	**261**	**256**	**2,103**
8	Current Month (Over)/Under Recovery		(133)	(55)	(226)	(155)	(120)	(103)	(116)	(118)	(133)	(96)	15	(7)	
9	Cumulative (Over)/Under Recovery	(163)	(296)	(351)	(577)	(732)	(852)	(955)	(1,070)	(1,188)	(1,321)	(1,417)	(1,402)	(1,409)	
10	Interest @ Prime Rate		0.38%	0.38%	0.38%	0.40%	0.40%	0.40%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	
11	**Interest on Deferral Balance**		(1)	(1)	(2)	(3)	(3)	(4)	(4)	(5)	(5)	(6)	(6)	(6)	(45)
12	**Monthly Sales (MWh)**		82,892	74,290	71,924	70,283	69,006	77,250	81,180	87,796	76,569	69,399	69,969	76,708	907,266
13	**EE SBC Rate**		0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	

Line 1: (Line 12 x Line 13) / 100
Line 2: Company Forecast
Line 3: Company Forecast
Line 4: Company Forecast
Line 5: Sum of Lines 1 through Lines 4
Line 6: Company Forecast
Line 7: Sum of Line 6
Line 8: Line 7 - Line 5
Line 9: Prior month Line 9 + Current month Line 8
Line 10: Prime Rate / 12
Line 11: (Prior Month Line 9 + Current Month Line 9) / 2 x Line 10
Line 12: Company Forecast
Line 13: 2017 approved rate

Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities
Energy Efficiency Expense & SBC Revenue Reconcilliation
January 1, 2019 to December 31, 2019
($ in 000's)

Line	Description	Carryover 12/31/2018	Forecast Jan 2019	Forecast Feb 2019	Forecast Mar 2019	Forecast Apr 2019	Forecast May 2019	Forecast June 2019	Forecast Jul 2019	Forecast Aug 2019	Forecast Sep 2019	Forecast Oct 2019	Forecast Nov 2019	Forecast Dec 2019	2019 Total
	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	Col. O
1	SBC Revenues		$299	$271	$272	$253	$263	$287	$331	$334	$290	$265	$268	$293	$3,425
2	RGGI Revenues		$0	$0	$53	$0	$0	$53	$0	$0	$53	$0	$0	$53	$214
3	FCM Revenues		$53	$53	$53	$53	$53	$53	$53	$53	$53	$53	$53	$53	$633
4	Other Revenues		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	**Total Revenues**		**$351**	**$324**	**$378**	**$305**	**$316**	**$393**	**$383**	**$386**	**$396**	**$318**	**$320**	**$399**	**$4,271**
6	Program Expenses		$285	$285	$285	$285	$285	$285	$285	$285	$285	$285	$285	$285	$3,425
7	**Total Program Expenses**		**$285**	**$285**	**$285**	**$285**	**$285**	**$285**	**$285**	**$285**	**$285**	**$285**	**$285**	**$285**	**$3,425**
8	Current Month (Over)/Under Recovery		($66)	($38)	($93)	($20)	($30)	($108)	($98)	($101)	($111)	($32)	($35)	($114)	
9	Cumulative (Over)/Under Recovery	$163	$97	$59	($34)	($54)	($84)	($192)	($290)	($391)	($502)	($534)	($569)	($683)	
10	Interest @ Prime Rate		0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	
11	**Interest on Deferral Balance**		**$1**	**$0**	**$0**	**($0)**	**($0)**	**($1)**	**($1)**	**($1)**	**($2)**	**($2)**	**($2)**	**($3)**	**($11)**
12	**Monthly Sales (MWh)**		80,095	72,613	72,933	67,755	70,480	76,884	88,660	89,486	77,813	71,040	71,774	78,613	918,145
13	**EE SBC Rate**		0.373	0.373	0.373	0.373	0.373	0.373	0.373	0.373	0.373	0.373	0.373	0.373	

Line 1: (Line 12 x Line 13) / 100
Line 2: Page 1, Col. C
Line 3: Page 1, Col. D
Line 4: Page 1, Col. E
Line 5: Sum of Lines 1 through Lines 4
Line 6: Page 1, Col. B
Line 7: Sum of Line 6
Line 8: Line 7 - Line 5
Line 9: Prior month Line 9 + Current month Line 8
Line 10: Prime Rate / 12
Line 11: (Prior Month Line 9 + Current Month Line 9) / 2 x Line 10
Line 12: Company Forecast
Line 13: Page 1, Col. J

Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities
2019 System Benefits Charge Calculation (LBR Component)
($ in 000's)

Year	Forecasted LBR Revenue	Prior Year Deferral with Interest	Current Year Interest	Total LBR Revenue	Forecasted Distribution (MWH)	SBC Rate LBR Portion (cents/kWh)
Col. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G
2019	$ 114	$ -	$ (0)	$ 114	918,145	0.012

Col. A: Effective year (January 1, 2019 - December 31, 2019)
Col. B: Page 5, Line 21, Col. O / 1000
Col. C: Page 6, Line 7, Col. N
Col. D: Page 7, Line 6, Col. O
Col. E: Col. B + Col. C + Col. D
Col. F: Company Forecast
Col. G: (Col. E * 100) / Col. F

Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities
Monthly and Cumulative Savings and Lost Base Revenue
January 1, 2019 to December 31, 2019

Line	Description	Cumulative Annual kWh Savings / 12/31/2018	Forecast Jan 2019	Forecast Feb 2019	Forecast Mar 2019	Forecast Apr 2019	Forecast May 2019	Forecast June 2019	Forecast Jul 2019	Forecast Aug 2019	Forecast Sep 2019	Forecast Oct 2019	Forecast Nov 2019	Forecast Dec 2019	2019 Annual MWh and Monthly MW Savings	Cumulative Annual kWh and Monthly kW
	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	Col. O	
1	Residential Annual kWh Savings (2017, 2018, & 2019)	-	187,203	187,203	187,203	187,203	187,203	187,203	187,203	187,203	187,203	187,203	187,203	187,203	2,246,440	2,246,440
2	C&I Annual kWh Savings (2017 & 2018)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	C&I Annual kWh Savings (2019)	-	581,493	581,493	581,493	581,493	581,493	581,493	581,493	581,493	581,493	581,493	581,493	581,493	6,977,921	6,977,921
4	C&I Monthly Installed kW Savings*		736	736	736	736	736	736	736	736	736	736	736	736	736	736
			Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Total 2019 Lost Base Revenue	
5	Monthly Residential Savings (2019)		14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400	14,400		
6	Cumulative Residential Savings	-	14,400	28,800	43,200	57,600	72,000	86,400	100,800	115,200	129,600	144,000	158,400	172,800		
7	Average Residential kWh Distribution Rate		0.04349	0.04349	0.04349	0.04349	0.04349	0.04349	0.04349	0.04349	0.04349	0.04349	0.04349	0.04349		
8	Total Lost Residential Revenue		$ 626	$ 1,253	$ 1,879	$ 2,505	$ 3,131	$ 3,758	$ 4,384	$ 5,010	$ 5,637	$ 6,263	$ 6,889	$ 7,516	$ 48,851	
9	Monthly C&I Savings (2017 & 2018)	-	-	-	-	-	-	-	-	-	-	-	-	-		
10	Average C&I kWh Distribution Rate		-	-	-	-	-	-	-	-	-	-	-	-		
11	Lost C&I kWh Revenue		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
12	Monthly C&I Savings (2019)		44,731	48,458	48,458	48,458	48,458	48,458	48,458	48,458	48,458	48,458	48,458	48,458		
13	Cumulative C&I Savings	-	44,731	89,463	134,194	178,925	223,656	268,388	313,119	357,850	402,581	447,313	492,044	536,775		
14	Average C&I kWh Distribution Rate		0.00872	0.00872	0.00872	0.00872	0.00872	0.00872	0.00872	0.00872	0.00872	0.00872	0.00872	0.00872		
15	Lost C&I kWH Revenue		$ 390	$ 780	$ 1,170	$ 1,560	$ 1,950	$ 2,340	$ 2,730	$ 3,120	$ 3,510	$ 3,900	$ 4,289	$ 4,679	$ 30,416	
16	Monthly C&I kW Savings (2019)		61	61	61	61	61	61	61	61	61	61	61	61		
17	Cumulative Monthly C&I kW Savings	-	61	122	171	227	284	340	396	451	508	564	620	677		
18	Average C&I Demand Rate		7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77		
19	Lost C&I Demand Revenue		$ 476	$ 948	$ 1,328	$ 1,763	$ 2,206	$ 2,641	$ 3,076	$ 3,503	$ 3,945	$ 4,380	$ 4,815	$ 5,258	$ 34,339	
20	Total Lost C&I kWh and Demand Revenue		$ 866	$ 1,727	$ 2,498	$ 3,323	$ 4,155	$ 4,980	$ 5,805	$ 6,622	$ 7,455	$ 8,280	$ 9,105	$ 9,937	$ 64,755	
21	**Total Lost Revenue**		**$ 1,493**	**$ 2,980**	**$ 4,377**	**$ 5,828**	**$ 7,287**	**$ 8,738**	**$ 10,189**	**$ 11,633**	**$ 13,092**	**$ 14,543**	**$ 15,994**	**$ 17,453**	**$ 113,606**	

Lines 1-3: Company Forecast
Line 4: Line 1 + Line 2 + Line 3
Line 5: Company Forecast
Line 6: Line 5
Line 7: Line 2 / 12
Line 8: Prior Month Line 8 + Current Month Line 7
Line 9: Page 8, Column 7
Line 10: Line 8 x Line 9
Line 11: Line 1 / 12
Line 12: Page 8, Column 8
Line 14: Line 3 / 12
Line 15: Prior Month Line 15 + Current Month Line 14
Line 16: Page 8, Column 7
Line 17: Line 15 x Line 16
Line 18: Line 5 / 12
Line 19: Prior Month Line 19 + Current Month Line 18
Line 20: Page 8, Column 6
Line 21: Line 19 x Line 20
Line 22: Line 10 + Line 13 + Line 17 + Line 21

Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities
Lost Base Revenue Reconciliation
January 1, 2019 to December 31, 2019
($ in 000's)

Line	Description	Forecast Carryover 12/31/2018	Forecast Jan 2019	Forecast Feb 2019	Forecast Mar 2019	Forecast Apr 2019	Forecast May 2019	Forecast Jun 2019	Forecast Jul 2019	Forecast Aug 2019	Forecast Sep 2019	Forecast Oct 2019	Forecast Nov 2019	Forecast Dec 2019	2019 Total
	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	Col. O
1	Revenue Recovery		7	7	7	6	6	7	8	8	7	6	6	7	83
2	Lost Revenues		1	3	4	6	7	9	10	12	13	15	16	17	114
3	Current Month (Over)/Under Recovery		(6)	(4)	(2)	(0)	1	2	2	4	6	8	10	10	31
4	Cumulative (Over)/Under Recovery	-	(6)	(9)	(11)	(12)	(11)	(9)	(7)	(3)	3	11	21	31	
5	Interest @ Prime Rate		0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	
6	Interest on Deferral Balance		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	0	0	0	(0)
7	Cummulative (Over)/Under Recovery Incl Carrying Charge		(6)	(9)	(12)	(12)	(11)	(9)	(7)	(3)	3	11	20	31	
8	**Monthly Sales (MWh)**		80,095	72,613	72,933	67,755	70,480	76,884	88,660	89,486	77,813	71,040	71,774	78,613	918,145
9	**SBC Rate (LBR Component)**		0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	

Line 1: (Line 7 x Line 8) / 100
Line 2: Page 5, Line 21 / 1000
Line 3: Line 2 - Line 1
Line 4: Prior month Line 4 + Current month Line 3
Line 5: Prime Rate / 12
Line 6: (Prior Month Line 4 + Current Month Line 4) / 2 x Line 5
Line 7: Company Forecast
Line 8: Company Forecast

Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities
Calculation of Forecasted Average Distribution Rate for Lost Revenue
Based on Actual Billing Determinants and Distribution Rates for 2017*

For the Period 01/01/17 Through 12/31/17

	(1)	(2)	(3) = (1) + (2)	(4)	(5)	(6) = (1) + (4)	(7) = (2) / (5)	(8) = (3) / (5)
	Revenue							
Rate Class	Demand Charges[(a)]	kWh Charges	Total Demand and kWh Charges	Delivery kW	Delivery kWh	Average Distribution Rate $/kW	Average Distribution Rate $/kWh	Average Distribution Rate $/kWh
Rate D	$ -	$ 12,396,923	$ 12,396,923	$ -	285,033,459	N/A	N/A	$ 0.04349
Rate D-10	$ -	$ 196,145	$ 196,145	$ -				
Rate T	$ -	$ 579,942	$ 579,942	$ -				
Total Residential	$ -	$ 13,173,010	$ 13,173,010	$ -				
Rate G-1	$ 7,343,205	$ 816,869	$ 8,160,074	945,482	338,835,206	$ 7.77	$ 0.00241	$ 0.02408
Rate G-2	$ -	$ 297,905	$ 297,905	-	146,641,437	$ -	$ 0.00203	$ 0.00203
Rate G-3	$ -	$ 3,862,813	$ 3,862,813	-	86,877,874	$ -	$ 0.04446	$ 0.04446
Rate V	$ -	$ 14,839	$ 14,839	-	326,822	$ -	$ 0.04540	$ 0.04540
Total Commercial and Industrial	$ 7,343,205	$ 4,992,426	$ 12,335,631	945,482	572,681,339	$ 7.77	$ 0.00872	$ 0.02154

* Excludes the outdoor lighting Rate OL and the Customer/Meter charge revenue from each rate
(a) For Rate G-2, the demand charge is excluded from the average rate calculation as ratchet for rate class is under internal review.

Bill Impacts of Changes in System Benefits Charge - Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities

	Current Rates*	2019
System Benefits Charge ($/kWh)	$ 0.00457	$ 0.00535
Bill per month, including PSNH default energy service		
Residential Rate D (650 kWh/month)	$ 123.44	$ 123.95
Rate G-2, 25 kW, 9,000 kWh per month	$ 1,428.36	$ 1,436.20
Change from previous rate level - $ per month		
Residential Rate D (650 kWh/month)		$ 0.51
Rate G-2, 25 kW, 9,000 kWh per month		$ 7.84
Change from previous rate level - %		
Residential Rate D (650 kWh/month)		0.41%
Rate G-2, 25 kW, 9,000 kWh per month		0.55%

* Stated at Liberty's most recent rate levels (effective August 1, 2018). Rate G-2 energy service rate is based on December 1, 2018 rate.

Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities
Calculation of Distribution Revenue at the Rate Levels in Effect During 2017
Based on Billing Determinants for the Twelve Months Ending December 2017

Residential Rate D

		January 1, 2017 - April 30, 2017			May 1, 2017 - December 31, 2017			2017 Total	
Rate	Source	Units	Rate/Charge	Revenue	Units	Rate/Charge	Revenue	Units	Revenue
Standard	Customer Charge	138,699	$ 12.12	$ 1,681,032	280,699	$ 14.54	$ 4,081,363	419,398	$ 5,762,395
	First 250 kWh	30,668,090	$ 0.03356	$ 1,029,221	64,412,248	$ 0.04061	$ 2,615,781	95,080,338	$ 3,645,002
	Excess 250 kWh	57,407,781	$ 0.05002	$ 2,871,537	109,286,196	$ 0.05273	$ 5,762,661	166,693,977	$ 8,634,198
Off Peak kWh 16 Hour	All kWh	466,825	$ 0.03208	$ 14,976	760,386	$ 0.04185	$ 31,822	1,227,211	$ 46,798
Farm kWh	All kWh	346,145	$ 0.04179	$ 14,465	596,995	$ 0.04576	$ 27,318	943,140	$ 41,784
D-6 kWh	All kWh	271,795	$ 0.03346	$ 9,094	470,356	$ 0.04262	$ 20,047	742,151	$ 29,141
Total Residential	Customer/Meter	138,699		$ 1,681,032	280,699		$ 4,081,363	419,398	$ 5,762,395
	Demand	-		-	-		-	-	-
	kWh	89,160,636		$ 3,939,294	175,526,181		$ 8,457,630	264,686,817	$ 12,396,923
				$ 5,620,326			$ 12,538,993		$ 18,159,319

Residential Rate D-10

		January 1, 2017 - April 30, 2017			May 1, 2017 - December 31, 2017			2017 Total	
Rate	Source	Units	Rate/Charge	Revenue	Units	Rate/Charge	Revenue	Units	Revenue
Standard	Customer Charge	1,747	$ 12.28	$ 21,453	3,522	$ 14.54	$ 51,210	5,269	$ 72,663
	On Peak kWh	740,473	$ 0.09	$ 69,301	1,167,020	$ 0.10	$ 121,627	1,907,493	$ 190,928
	Off Peak kWh	1,556,833	$ 0.00	$ 2,569	1,878,578	$ 0.00	$ 2,649	3,435,411	$ 5,218
Total Rate D-10	Customer/Meter	1,747		$ 21,453	3,522		$ 51,210	5,269	$ 72,663
	Demand	-		$ -	-		$ -	-	$ -
	kWh	2,297,306		$ 71,870	3,045,598		$ 124,276	5,342,904	$ 196,145
				$ 93,323			$ 175,485		$ 268,808

Commercial & Industrial Rate G-1

		January 1, 2017 - April 30, 2017			May 1, 2017 - December 31, 2017			2017 Total	
Rate	Source	Units	Rate/Charge	Revenue	Units	Rate/Charge	Revenue	Units	Revenue
Standard	Customer Charge	543	$ 333.68	$ 181,188	1,089	$ 378.73	$ 412,437	1,632	$ 593,625
	Demand Charge	298,786	$ 7.11	$ 2,124,368	646,696	$ 8.07	$ 5,218,837	945,482	$ 7,343,205
	On Peak kWh	49,493,794	$ 0.00	$ 244,004	82,981,478	$ 0.01	$ 428,184	132,475,272	$ 672,189
	Off Peak kWh	63,406,470	$ 0.00173	$ 109,693	142,540,567	$ 0.00152	$ 216,662	205,947,037	$ 326,355
	Credit for High Voltage Delivery	110,121	$ (0.44)	$ (48,453)	302,776	$ (0.44)	$ (133,221)	412,897	$ (181,675)
Total Rate G-1	Customer/Meter	543		$ 181,188	1,089		$ 412,437	1,632	$ 593,625
	Demand	298,786		$ 2,124,368	646,696		$ 5,218,837	945,482	$ 7,343,205
	kWh	113,010,385		$ 305,244	225,824,821		$ 511,625	338,835,206	$ 816,869
				$ 2,610,801			$ 6,142,898		$ 8,753,699

Commercial Rate G-2

		January 1, 2017 - April 30, 2017			May 1, 2017 - December 31, 2017			2017 Total	
Rate	Source	Units	Rate/Charge	Revenue	Units	Rate/Charge	Revenue	Units	Revenue
Standard	Customer Charge	3,473	$ 55.64	$ 193,238	7,134	$ 63.15	$ 450,512	10,607	$ 643,750
	Demand Charge	164,862	$ 7.15	$ 1,178,763	338,414	$ 8.12	$ 2,747,922	503,276	$ 3,926,685
	All kWh	48,189,518	$ 0.00213	$ 102,644	98,448,203	$ 0.00200	$ 196,896	146,637,721	$ 299,540
	Credit for High Voltage Delivery	1,530	$ (0.44)	$ (673)	2,186	$ (0.44)	$ (962)	3,716	$ (1,635)
Total Rate G-2	Customer/Meter	3,473		$ 193,238	7,134		$ 450,512	10,607	$ 643,750
	Demand	164,862		$ 1,178,763	338,414		$ 2,747,922	503,276	$ 3,926,685
	kWh	48,191,048		$ 101,970	98,450,389		$ 195,935	146,641,437	$ 297,905
				$ 1,473,971			$ 3,394,368		$ 4,868,340

General Service Rate G-3

		January 1, 2017 - April 30, 2017			May 1, 2017 - December 31, 2017			2017 Total	
Rate	Source	Units	Rate/Charge	Revenue	Units	Rate/Charge	Revenue	Units	Revenue
Standard	Customer Charge	22,190	$ 12.03	$ 266,946	44,834	$ 14.54	$ 651,886	67,024	$ 918,832
	All kWh	30,261,252	$ 0.04153	$ 1,256,750	56,616,622	$ 0.04603	$ 2,606,063	86,877,874	$ 3,862,813
Total Rate G-3	Customer/Meter	22,190		$ 266,946	44,834		$ 651,886	67,024	$ 918,832
	Demand	-		$ -	-		$ -	-	$ -
	kWh	30,261,252		$ 1,256,750	56,616,622		$ 2,606,063	86,877,874	$ 3,862,813
				$ 1,523,695			$ 3,257,949		$ 4,781,645

Electric Heat Rate T

Rate	Source	January 1, 2017 - April 30, 2017 Units	Rate/Charge	Revenue	May 1, 2017 - December 31, 2017 Units	Rate/Charge	Revenue	2017 Total Units	Revenue
Standard	Customer Charge	3,950	$ 12.25	$ 48,388	7,934	$ 14.54	$ 115,360	11,884	$ 163,748
	All kWh	6,890,108	$ 0.03702	$ 255,072	8,113,630	$ 0.04004	$ 324,870	15,003,738	$ 579,942
Total Rate T	Customer/Meter	3,950		$ 48,388	7,934		$ 115,360	11,884	$ 163,748
	Demand	-		$ -	-		$ -	-	$ -
	kWh	6,890,108		$ 255,072	8,113,630		$ 324,870	15,003,738	$ 579,942
				$ 303,459			$ 440,230		$ 743,689

Electric Heat Rate V

Rate	Source	January 1, 2017 - April 30, 2017 Units	Rate/Charge	Revenue	May 1, 2017 - December 31, 2017 Units	Rate/Charge	Revenue	2017 Total Units	Revenue
Standard	Customer Charge	71	$ 12.07	$ 857	144	$ 14.54	$ 2,094	215	$ 2,951
	All kWh	131,803	$ 0.04257	$ 5,611	195,019	$ 0.04732	$ 9,228	326,822	$ 14,839
Total Rate V	Customer/Meter	71		$ 857	144		$ 2,094	215	$ 2,951
	Demand	-		$ -	-		$ -	-	$ -
	kWh	131,803		$ 5,611	195,019		$ 9,228	326,822	$ 14,839
				$ 6,468			$ 11,322		$ 17,790

Outdoor Lighting Rate OL

Type	Fixture	January 1, 2017 - April 30, 2017 Units	Rate/Charge	Revenue	May 1, 2017 - December 31, 2017 Units	Rate/Charge	Revenue	2017 Total Units	Revenue
High Pressure Sodium	HPS RWY 50W	9,808	$ 6.71	$ 65,812	19566	$ 7.64	$ 149,484	29,374	$ 215,296
	HPS RWY 100W	7,304	$ 8.14	$ 59,455	14423	$ 9.27	$ 133,701	21,727	$ 193,156
	HPS RWY 250W	2,279	$ 14.30	$ 32,590	4215	$ 16.28	$ 68,620	6,494	$ 101,210
	HPS RWY 400W	980	$ 18.63	$ 18,257	1926	$ 21.21	$ 40,850	2,906	$ 59,108
	HPS POST 100W	1,644	$ 9.38	$ 15,421	3226	$ 10.67	$ 34,421	4,870	$ 49,842
	HPS FLD 250W	1,069	$ 14.42	$ 15,415	2106	$ 16.42	$ 34,581	3,175	$ 49,996
	HPS FLD 400W	1,717	$ 19.91	$ 34,185	3434	$ 22.67	$ 77,849	5,151	$ 112,034
Incandescent	INC RWY 103W	69	$ 8.96	$ 618	207	$ 10.21	$ 2,113	276	$ 2,732
Mercury	MV RWY 100W	246	$ 6.49	$ 1,597	696	$ 7.38	$ 5,136	942	$ 6,733
	MV RWY 175W	595	$ 7.89	$ 4,695	1185	$ 8.99	$ 10,653	1,780	$ 15,348
	MV RWY 400W	204	$ 14.92	$ 3,044	407	$ 16.99	$ 6,915	611	$ 9,959
	MV RWY 1000W	4	$ 28.31	$ 113	8	$ 32.23	$ 258	12	$ 371
	MV FLD 400W	88	$ 16.50	$ 1,452	174	$ 18.78	$ 3,268	262	$ 4,720
	MV FLD 1000W	-	$ 28.50	$ -	0	$ 32.44	$ -	-	$ -
POLES	WOOD	488	$ 7.91	$ 3,860	957	$ 9.01	$ 8,623	1,445	$ 12,483
	POLE FIBER DIRECT EMBEDDED	735	$ 8.19	$ 6,020	2205	$ 9.33	$ 20,573	2,940	$ 26,592
	POLE FIBER RWY <25FT	524	$ 13.90	$ 7,284	1056	$ 15.83	$ 16,716	1,580	$ 24,000
	POLE FIBER RWY =>25FT	-	$ 23.22	$ -	8	$ 26.44	$ 212	8	$ 212
	POLE METAL EMBEDDED	677	$ 16.57	$ 11,218	1319	$ 18.86	$ 24,876	1,996	$ 36,094
	POLE METAL =>25FT	296	$ 19.97	$ 5,911	781	$ 22.74	$ 17,760	1,077	$ 23,671
LED	LED 30W	-	$ -	$ -	0	$ 11.28	$ -	-	$ -
	LED 50W	-	$ -	$ -	0	$ 11.74	$ -	-	$ -
Incandescent	LED 130W	-	$ -	$ -	0	$ 13.57	$ -	-	$ -
	LED 190W	-	$ -	$ -	0	$ 17.86	$ -	-	$ -
	LED 50W URD	-	$ -	$ -	0	$ 12.90	$ -	-	$ -
	LED 90W FLOOD	-	$ -	$ -	0	$ 13.01	$ -	-	$ -
	LED 130W FLOOD	-	$ -	$ -	0	$ 14.24	$ -	-	$ -
	LED 50W BARN	-	$ -	$ -	0	$ 4.97	$ -	-	$ -
	All kWh	-	$ -	$ -	0	$ -	$ -	-	$ -
Total Rate OL	Fixtures	28,727		$ 286,945	57,899		$ 656,610	86,626	$ 943,555
	Demand								
	kWh	-			-			-	
				$ 286,945			$ 656,610		$ 943,555

Total Retail

Type	Source	January 1, 2017 - June 30, 2017 Units	Revenue	July 1, 2017 - December 31, 2017 Units	Revenue	2017 Total Units	Revenue
Total Retail	Customer/Meter	170,673	$ 2,393,101.17	341,834	$ 5,764,863	512,507	$ 8,157,964
	Fixtures	28,727	$ 286,945	57,899	$ 656,610	86,626	$ 943,555
	Demand	463,648	$ 3,303,132	985,110	$ 7,832,575	1,448,758	$ 11,135,707
	kWh	289,942,538	$ 5,935,811	567,772,260	$ 12,229,626	857,714,798	$ 18,165,436
			$ 11,918,989		$ 26,483,674		$ 38,402,662

Lost Base Revenue

Summary of Data Included in the Calculation of the Average Distribution Rates*

Type	Source	January 1, 2017 - June 30, 2017 Units	January 1, 2017 - June 30, 2017 Revenue	July 1, 2017 - December 31, 2017 Units	July 1, 2017 - December 31, 2017 Revenue	2017 Total Units	2017 Total Revenue
Total Rate D	Demand	-	$ -	-	$ -	-	$ -
	kWh	89,160,636	$ 3,939,294	175,526,181	$ 8,457,630	264,686,817	$ 12,396,923
			$ 3,939,294		$ 8,457,630		$ 12,396,923
Total Rate D-10	Demand	-	$ -	-	$ -	-	$ -
	kWh	2,297,306	$ 71,870	3,045,598	$ 124,276	5,342,904	$ 196,145
			$ 71,870		$ 124,276		$ 196,145
Total Rate G-1	Demand	298,786	$ 2,124,368	646,696	$ 5,218,837	945,482	$ 7,343,205
	kWh	113,010,385	$ 305,244	225,824,821	$ 511,625	338,835,206	$ 816,869
			$ 2,429,613		$ 5,730,461		$ 8,160,074
Total Rate G-2	Demand	164,862	$ 1,178,763	338,414	$ 2,747,922	503,276	$ 3,926,685
	kWh	48,191,048	$ 101,970	98,450,389	$ 195,935	146,641,437	$ 297,905
			$ 1,280,734		$ 2,943,856		$ 4,224,590
Total Rate G-3	Demand	-	$ -	-	$ -	-	$ -
	kWh	30,261,252	$ 1,256,750	56,616,622	$ 2,606,063	86,877,874	$ 3,862,813
			$ 1,256,750		$ 2,606,063		$ 3,862,813
Total Rate T	Demand	-	$ -	-	$ -	-	$ -
	kWh	6,890,108	$ 255,072	8,113,630	$ 324,870	15,003,738	$ 579,942
			$ 255,072		$ 324,870		$ 579,942
Total Rate V	Demand	-	$ -	-	$ -	-	$ -
	kWh	131,803	$ 5,611	195,019	$ 9,228	326,822	$ 14,839
			$ 5,611		$ 9,228		$ 14,839
Total	Demand	463,648	$ 3,303,132	176,511,291	$ 7,966,758	1,448,758	$ 11,269,890
	kWh	259,681,286	$ 4,679,061	511,155,638	$ 9,623,563	755,506,364	$ 18,165,436
			$ 7,982,193		$ 17,590,321		$ 29,435,327

New Hampshire Electric Cooperative, Inc.
2019 System Benefits Charge ("SBC") Calculation
($ in 000's)

Year	EE Total Budget	RGGI Revenues	FCM Revenues	Carryforward with Interest	SBC Requirement	Forecasted Distribution (MWH)	SBC Rate EE Portion (cents/kWh)	SBC Rate EAP Portion (cents/kWh)	2018 Total SBC Rate (cents/kWh)
Col. A	Col. B	Col. C	Col. D	Col. F	Col. H	Col. I	Col. J	Col. K	Col. M
2019	$ 3,159	$ 201	$ 75	$ 57	$ 2,826	757,675	0.373	0.150	0.523

Col. A: Effective year (January 1, 2018 - December 31, 2018)
Col. B: Budget Projections
Col. C: Budget Projections
Col. D: Budget Projections
Col. F: Budget Projections
Col. H: Col. B - Col. C - Col. D - Col. E + Col. F - Col. G
Col. I: Company Forecast
Col. J: (Col. H / Col. I) x 100
Col. K: EAP Portion of SBC Rate
Col. M: Col. J + Col. K

2019 System Benefits Charge ("SBC") Calculation
Energy Efficiency Expense & SBC Revenue Reconcilliation
January 1, 2019 to December 31, 2019
($ in 000's)

Line	Description	Carryover 12/31/17	Forecast Jan 2019	Forecast Feb 2019	Forecast Mar 2019	Forecast Apr 2019	Forecast May 2019	Forecast June 2019	Forecast Jul 2019	Forecast Aug 2019	Forecast Sep 2019	Forecast Oct 2019	Forecast Nov 2019	Forecast Dec 2019	2019 Total
	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	Col. O
1	SBC Revenues	56.949	303	289	239	235	179	202	226	224	265	201	213	251	2,826
2	RGGI Revenues		17	17	17	17	17	17	17	17	17	17	17	17	201
3	FCM Revenues		6	6	6	6	6	6	6	6	6	6	6	6	75
5	**Total Revenues**		**326**	**312**	**263**	**258**	**202**	**225**	**249**	**247**	**288**	**224**	**236**	**274**	**3,102**
6	Program Expenses		263	263	263	263	263	263	263	263	263	263	263	263	3,159
7	**Total Program Expenses**		**263**	**263**	**263**	**263**	**263**	**263**	**263**	**263**	**263**	**263**	**263**	**263**	**3,159**
8	Current Month Over/(Under) Recovery		62	49	(1)	(5)	(61)	(38)	(14)	(17)	25	(39)	(28)	11	
9	Cummulative Over/(Under) Recovery	57	119	168	167	162	101	63	48	32	56	17	(11)	0	
12	Interest @ Prime Rate			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
13	**Interest**		-	-	-	-	-	-	-	-	-	-	-	-	-
14	**Monthly Sales (MWh)**		81,153	77,433	64,207	63,119	47,981	54,134	60,534	59,957	71,013	53,897	56,974	67,272	757,676
15	**EE SBC Rate**		0.373	0.373	0.373	0.373	0.373	0.373	0.373	0.373	0.373	0.373	0.373	0.373	

Line 1: (Line 14 x Line 15) / 100
Line 2: Page 1, Col. C
Line 3: Page 1, Col. D
Line 5: Sum of Lines 1 through Lines 4
Line 6: Page 1, Col. B
Line 7: Sum of Line 6
Line 8: Line 5 - Line 7
Line 9: Prior month Line 9 + Current month Line 9
Line 12: Prime Rate / 12
Line 13: (Prior Month Line 9 + Current Month Line 9) / 2 x Line 12
Line 14: Company Forecast
Line 15: Page 1, Col. J

2019 System Benefits Charge ("SBC") Calculation

	01/01/2018	2019
System Benefits Charge ($/kWh)	$ 0.00425	$ 0.00523
Bill per month, including NHEC default energy service		
Residential Rate Basic (625 kWh/month)	$ 200.29	$ 200.90
Commercial B3, three-phase service (<50 kW, 10,000 kWh/month)	$ 1,825.60	$ 1,835.40
Change from previous rate level - $ per month		
Residential Rate R (625 kWh/month)		$ 0.61
General Service Rate G, three-phase service (40 kW, 10,000 kWh/month)		$ 9.80
Change from previous rate level - %		
Residential Rate R (625 kWh/month)		0.3%
General Service Rate G, three-phase service (40 kW, 10,000 kWh/month)		0.5%

Unitil Energy System, Inc.
2019 System Benefits Charge ("SBC") Calculation

Year	EE Total Budget	RGGI Revenues	FCM Revenues	Other Revenues	Prior Year Deferral with Interest	Current Year Interest	Projected Ending Balance	SBC Requirement	Forecasted Distribution (kWh)	SBC Rate EE Portion ($/kWh)	SBC Rate EAP Portion ($/kWh)	SBC Rate LBR Portion ($/kWh)	2018 Total SBC Rate ($/kWh)
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
2019	$ 5,674,619	$ 284,017	$ 650,000	$ (375,000)	$ (751,289)	$ -	$ (116,217)	$ 4,480,530	1,201,214,515	$0.00373	$0.00150	$0.00053	$0.00576

Col. A: Effective year (January 1, 2019 - December 31, 2019)
Col. B: Company Forecast
Col. C: Company Forecast
Col. D: Company Forecast
Col. E: Company Forecast
Col. F: Page 2, Line 15
Col. G: Page 3, Line 14 (2019)
Col. H. Page 3, Line 15 - Line 14 (2019)
Col. I: Col. B - Col. C - Col. D - Col. E + Col. F - Col. H.
Col. J: Company Forecast
Col. K: Col. I / Col. J
Col. L: EAP Portion of SBC Rate
Col. M: Page 4, Col. G
Col. N: Col. K + Col. L + Col. M

Unitil Energy System, Inc.
Energy Efficiency Expense & SBC Revenue Reconciliation
January 1, 2018 to December 31, 2018

	Jan-18 Actual	Feb-18 Actual	Mar-18 Actual	Apr-18 Actual	May-18 Actual	Jun-18 Actual	Jul-18 Estimate	Aug-18 Estimate	Sep-18 Estimate	Oct-18 Estimate	Nov-18 Estimate	Dec-18 Estimate	Total
1 Beginning Balance -- (Over)/Under Recovery	$ (902,211)	$ (1,123,339)	$ (1,372,966)	$ (1,517,981)	$ (1,458,772)	$ (1,570,773)	$ (1,636,334)	$ (1,518,546)	$ (1,417,310)	$ (1,311,413)	$ (1,129,810)	$ (979,521)	
2 **Total Costs**	192,289	94,952	186,137	440,025	206,876	279,686	459,592	475,140	505,072	501,055	516,603	551,718	$ 4,409,145
Revenues													
3 Class Sales (inc. LI) -- kWh	118,288,676	101,459,074	96,543,317	90,962,753	89,782,560	99,348,233	106,831,221	118,664,655	102,211,561	99,131,725	90,622,227	101,145,878	1,214,991,881
4 Charge -- $/kWh	$ 0.00275	$ 0.00275	$ 0.00275	$ 0.00275	$ 0.00275	$ 0.00275	$ 0.00275	$ 0.00275	$ 0.00275	$ 0.00275	$ 0.00275	$ 0.00275	
5 Energy Efficiency Revenues	$ 280,310	$ 278,976	$ 265,486	$ 250,115	$ 246,857	$ 273,208	$ 293,786	$ 326,328	$ 281,082	$ 272,612	$ 249,211	$ 278,151	$ 3,296,122
6 Forward Capacity Market Revenue	$ 62,392	$ 61,540	$ 62,058	$ 61,507	$ 66,241	$ 66,120	$ 41,667	$ 41,667	$ 41,667	$ 41,667	$ 41,667	$ 41,667	$ 629,858
7 RGGI Funding	$ 67,066	$ -	$ -	$ 63,698	$ -	$ -	$ -	$ -	$ 71,111	$ -	$ 71,111	$ -	$ 272,987
8 Other Revenues	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
9 **Total Revenues**	$ 409,768	$ 340,517	$ 327,544	$ 375,321	$ 313,098	$ 339,327	$ 335,453	$ 367,994	$ 393,860	$ 314,279	$ 361,989	$ 319,818	$ 4,198,967
10 (Over)/Under Recovery (excluding interest)	$ (1,119,690)	$ (1,368,903)	$ (1,514,373)	$ (1,453,277)	$ (1,564,994)	$ (1,630,414)	$ (1,512,195)	$ (1,411,400)	$ (1,306,097)	$ (1,124,638)	$ (975,196)	$ (747,622)	
Interest Calculation													
11 Average Monthly Balance	$ (1,010,950)	$ (1,246,121)	$ (1,443,670)	$ (1,485,629)	$ (1,511,883)	$ (1,600,593)	$ (1,574,264)	$ (1,464,973)	$ (1,361,704)	$ (1,218,026)	$ (1,052,503)	$ (863,571)	
12 Interest Rate	4.25%	4.25%	4.25%	4.50%	4.50%	4.50%	4.75%	4.75%	4.75%	5.00%	5.00%	5.00%	
13 Days per Month	31	28	31	30	31	30	31	31	30	31	30	31	365
14 Computed Interest	$ (3,649)	$ (4,063)	$ (3,608)	$ (5,495)	$ (5,778)	$ (5,920)	$ (6,351)	$ (5,910)	$ (5,316)	$ (5,172)	$ (4,325)	$ (3,667)	$ (59,255)
15 **Ending Balance**	$ (1,123,339)	$ (1,372,966)	$ (1,517,981)	$ (1,458,772)	$ (1,570,773)	$ (1,636,334)	$ (1,518,546)	$ (1,417,310)	$ (1,311,413)	$ (1,129,810)	$ (979,521)	$ (751,289)	

Line 1: Prior period ending balance
Line 2: Page 1, Col. B
Line 3: Company Forecast
Line 4: Page 1, Col. J
Line 5: Line 3 * Line 4
Line 6: Page 1, Col. D
Line 7: Page 1, Col. C
Line 8: Page 1, Col. E
Line 9: Sum of Lines 5 through 8
Line 10: Line 1 + Line 2 - Line 9
Line 11: (Line 1 + Line 10)/2
Line 12: Prime Rate
Line 14: Line 11 * ((Line 12/# days per year) * Line 13))
Line 15: Line 10 + Line 14

Unitil Energy System, Inc.
Energy Efficiency Expense & SBC Revenue Reconciliation
January 1, 2019 to December 31, 2019

	Jan-19 Estimate	Feb-19 Estimate	Mar-19 Estimate	Apr-19 Estimate	May-19 Estimate	Jun-19 Estimate	Jul-19 Estimate	Aug-19 Estimate	Sep-19 Estimate	Oct-19 Estimate	Nov-19 Estimate	Dec-19 Estimate	Total
1 Beginning Balance -- (Over)/Under Recovery	$ (751,289)	$ (473,872)	$ (518,337)	$ (575,133)	$ (545,865)	$ (485,140)	$ (470,435)	$ (474,904)	$ (478,903)	$ (448,240)	$ (367,029)	$ (289,588)	
2 **Total Costs**	380,327	396,253	429,731	428,105	444,030	477,508	475,882	491,808	525,286	518,350	534,276	573,063	$ 5,674,619
Revenues													
3 Class Sales (inc. LI) -- kWh	112,908,398	103,123,873	96,257,212	91,788,542	87,655,211	89,992,803	113,721,294	117,860,381	98,538,970	102,210,521	88,557,184	98,600,127	1,201,214,515
4 Charge -- $/kWh	$ 0.00373	$ 0.00373	$ 0.00373	$ 0.00373	$ 0.00373	$ 0.00373	$ 0.00373	$ 0.00373	$ 0.00373	$ 0.00373	$ 0.00373	$ 0.00373	
5 Energy Efficiency Revenues	$ 421,148	$ 384,652	$ 359,039	$ 342,371	$ 326,954	$ 335,673	$ 424,180	$ 439,619	$ 367,550	$ 381,245	$ 330,318	$ 367,778	$ 4,480,530
6 Forward Capacity Market Revenue	$ 54,167	$ 54,167	$ 54,167	$ 54,167	$ 54,167	$ 54,167	$ 54,167	$ 54,167	$ 54,167	$ 54,167	$ 54,167	$ 54,167	$ 650,000
7 RGGI Funding	$ -	$ -	$ 71,004	$ -	$ -	$ 71,004	$ -	$ -	$ 71,004	$ -	$ 71,004	$ -	$ 284,017
8 Other Revenues	$ (375,000)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (375,000)
9 **Total Revenues**	$ 100,315	$ 438,819	$ 484,210	$ 396,538	$ 381,121	$ 460,844	$ 478,347	$ 493,786	$ 492,721	$ 435,412	$ 455,489	$ 421,945	$ 5,039,547
10 (Over)/Under Recovery (excluding interest)	$ (471,276)	$ (516,438)	$ (572,816)	$ (543,567)	$ (482,955)	$ (468,476)	$ (472,901)	$ (476,882)	$ (446,339)	$ (365,301)	$ (288,242)	$ (138,471)	
Interest Calculation													
11 Average Monthly Balance	$ (611,283)	$ (495,155)	$ (545,577)	$ (559,350)	$ (514,410)	$ (476,808)	$ (471,668)	$ (475,893)	$ (462,621)	$ (406,771)	$ (327,635)	$ (214,030)	
12 Interest Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
13 Days per Month	31	28	31	30	31	30	31	31	30	31	30	31	365
14 Computed Interest	$ (2,596)	$ (1,899)	$ (2,317)	$ (2,299)	$ (2,184)	$ (1,959)	$ (2,003)	$ (2,021)	$ (1,901)	$ (1,727)	$ (1,346)	$ (909)	$ (23,162)
15 **Ending Balance**	$ (473,872)	$ (518,337)	$ (575,133)	$ (545,865)	$ (485,140)	$ (470,435)	$ (474,904)	$ (478,903)	$ (448,240)	$ (367,029)	$ (289,588)	$ (139,380)	

Line 1: Prior period ending balance
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Line 10: Line 1 + Line 2 - Line 9
Line 11: (Line 1 + Line 10)/2
Line 12: Prime Rate
Line 14: Line 11 * ((Line 12/# days per year) * Line 13))
Line 15: Line 10 + Line 14

Unitil Energy System, Inc.
2019 System Benefits Charge Calculation (LBR Component)

Year		Forecasted LBR Revenue		Prior Year Deferral with Interest		Current Year Interest		Total LBR Revenue	Forecasted Distribution (kWh)		SBC Rate LBR Portion ($/kWh)
Col. A		Col. B		Col. C		Col. D		Col. E	Col. F		Col. G
2019	$	607,056	$	26,475	$	(149)	$	633,382	1,201,214,515	$	0.00053

Col. A: Effective year (January 1, 2019 - December 31, 2019)
Col. B: Page 5, Line 12, Col. O
Col. C: Prior Year LBR Component Over/(Under) recovery, with interest, Page 6 Line 9
Col. D: Page 7, Col. O, Line 8
Col. E: Col. B + Col. C + Col. D
Col. F: Company Forecast
Col. G: Col. E/Col. F

Unitil Energy System, Inc.
Estimated Monthly and Cumulative Savings (kWh) and Lost Base Revenue
January 1, 2018 to December 31, 2019

Line	Description	12/31/2017	Forecast Jan 2018	Forecast Feb 2018	Forecast Mar 2018	Forecast Apr 2018	Forecast May 2018	Forecast June 2018	Forecast Jul 2018	Forecast Aug 2018	Forecast Sep 2018	Forecast Oct 2018	Forecast Nov 2018	Forecast Dec 2018	2018 Annual Savings
	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	Col. O
1	Residential Annualized Savings		207,085	216,358	225,630	234,903	244,175	253,448	262,720	271,993	281,265	287,447	296,719	309,083	3,090,828
2	C&I Annualized Savings		376,202	393,046	409,891	426,736	443,581	460,426	477,271	494,115	510,960	522,190	539,035	561,495	5,614,948
3	Total		583,287	609,404	635,522	661,639	687,756	713,874	739,991	766,108	792,226	809,637	835,754	870,578	8,705,776
			Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	June 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Cumulative LBR Savings
4	Monthly Residential Savings		17,257	18,030	18,803	19,575	20,348	21,121	21,893	22,666	23,439	23,954	24,727	25,757	
5	Cumulative Residential Savings	112,018	129,275	147,305	166,108	185,683	206,031	227,152	249,045	271,711	295,150	319,104	343,830	369,587	2,909,980
6	Average Residential Distribution Rate		0.03682	0.03682	0.03682	0.03682	0.03537	0.03537	0.03537	0.03537	0.03537	0.03537	0.03537	0.03537	
7	Lost Residential Revenue		$ 4,760	$ 5,424	$ 6,116	$ 6,837	$ 7,287	$ 8,034	$ 8,809	$ 9,610	$ 10,439	$ 11,287	$ 12,161	$ 13,072	$ 103,837
8	Monthly C&I Savings		31,350	32,754	34,158	35,561	36,965	38,369	39,773	41,176	42,580	43,516	44,920	46,791	
9	Cumulative C&I Savings	500,407	531,757	564,511	598,668	634,230	671,195	709,564	749,336	790,512	833,092	876,608	921,528	968,319	8,849,319
10	Average C&I Distribution Rate		0.03351	0.03351	0.03351	0.03351	0.03212	0.03212	0.03212	0.03212	0.03212	0.03212	0.03212	0.03212	
11	Lost C&I Revenue		$ 17,819	$ 18,917	$ 20,061	$ 21,253	$ 21,559	$ 22,791	$ 24,069	$ 25,391	$ 26,759	$ 28,157	$ 29,599	$ 31,102	$ 287,478
12	**Total Lost Revenue**		**$ 22,579**	**$ 24,341**	**$ 26,177**	**$ 28,090**	**$ 28,846**	**$ 30,826**	**$ 32,877**	**$ 35,002**	**$ 37,198**	**$ 39,443**	**$ 41,761**	**$ 44,175**	**391,315**

Line	Description	12/31/2018	Forecast Jan-19	Forecast Feb-19	Forecast Mar-19	Forecast Apr-19	Forecast May-19	Forecast Jun-19	Forecast Jul-19	Forecast Aug-19	Forecast Sep-19	Forecast Oct-19	Forecast Nov-19	Forecast Dec-19	2019 Annual Savings
	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	Col. O
1	Residential Annualized Savings		200,842	209,835	218,827	227,820	236,813	245,806	254,799	263,792	272,785	278,780	287,773	299,764	2,997,636
2	C&I Annualized Savings (2019)		475,384	496,670	517,955	539,241	560,527	581,813	603,099	624,385	645,671	659,861	681,147	709,528	7,095,280
3	Total		676,225	706,504	736,783	767,062	797,340	827,619	857,898	888,177	918,455	938,641	968,920	1,009,292	10,092,917
			Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Cumulative LBR Savings
4	Monthly Residential Savings		16,737	17,486	18,236	18,985	19,734	20,484	21,233	21,983	22,732	23,232	23,981	24,980	
5	Cumulative Residential Savings	369,587	386,324	403,810	422,046	441,031	460,765	481,249	502,482	524,465	547,197	570,429	594,410	619,390	5,953,599
6	Average Residential Distribution Rate		0.03537	0.03537	0.03537	0.03537	0.03537	0.03537	0.03537	0.03537	0.03537	0.03537	0.03537	0.03537	
7	Lost Residential Revenue		$ 13,664	$ 14,283	$ 14,928	$ 15,599	$ 16,297	$ 17,022	$ 17,773	$ 18,550	$ 19,354	$ 20,176	$ 21,024	$ 21,908	$ 210,579
8	Monthly C&I Savings (2017 & 2018)	968,319	968,319	968,319	968,319	968,319	968,319	968,319	968,319	968,319	968,319	968,319	968,319	968,319	
9	Average C&I Distribution Rate		0.03212	0.03212	0.03212	0.03212	0.03212	0.03212	0.03212	0.03212	0.03212	0.03212	0.03212	0.03212	
10	Lost C&I Revenue		$ 31,102	$ 31,102	$ 31,102	$ 31,102	$ 31,102	$ 31,102	$ 31,102	$ 31,102	$ 31,102	$ 31,102	$ 31,102	$ 31,102	$ 373,229
11	Monthly C&I Savings (2019)		39,615	41,389	43,163	44,937	46,711	48,484	50,258	52,032	53,806	54,988	56,762	59,127	
12	Cumulative C&I Savings	-	39,615	81,004	124,167	169,104	215,815	264,299	314,557	366,589	420,395	475,384	532,146	591,273	
13	Average C&I Distribution Rate		0.00024	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024	
14	Lost C&I Revenue		$ 10	$ 19	$ 30	$ 41	$ 52	$ 63	$ 75	$ 88	$ 101	$ 114	$ 128	$ 142	$ 863
15	Monthly C&I kW Savings (2019)		31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	
16	Cumulative C&I kW Savings	-	31.5	63.0	94.5	126.0	157.5	189.0	220.5	252.0	283.5	315.0	346.5	378.0	
17	Average C&I Demand Rate		$ 9.11	$ 9.11	$ 9.11	$ 9.11	$ 9.11	$ 9.11	$ 9.11	$ 9.11	$ 9.11	$ 9.11	$ 9.11	$ 9.11	
18	Lost C&I Demand Revenue		$ 287	$ 574	$ 861	$ 1,148	$ 1,435	$ 1,722	$ 2,009	$ 2,296	$ 2,583	$ 2,870	$ 3,157	$ 3,444	$ 22,386
19	**Total Lost Revenue**		**$ 45,063**	**$ 45,979**	**$ 46,921**	**$ 47,890**	**$ 48,886**	**$ 49,910**	**$ 50,960**	**$ 52,037**	**$ 53,141**	**$ 54,263**	**$ 55,411**	**$ 56,596**	**607,056**

2019
Line 1: Estimated Savings per 2019 Core Filing - Compliance Filing Updated BCR Model. See tab P5a LBR Savings Calc for summary savings
Line 2: Estimated Savings per 2019 Core Filing - Compliance Filing Updated BCR Model. See tab P5a LBR Savings Calc for summary savings.
Line 3: Line 1 + Line 2
Line 4: Line 1 / 12
Line 5: Prior Month Line 5 + Current Month Line 4. 12/31/17 Cumulative savings shown in Col. B from 2017 Annual Report.
Line 6: Page 8, Line 1, Col. 5
Line 7: Line 5 x Line 6
Line 8: Prior Month Line 9 + Current Month Line 8. 12/31/17 Cumulative savings shown in Col. B from 2017 Annual Report.
Line 9: Page 8, line 2, column (b)
Line 10: Line 8 x Line 9
Line 11: Line 2/12
Line 12: Prior month Line 12 + current month Line 11
Line 13: Page 8 Line 4. Column (a)
Line 14: Line 12 x Line 13
Line 15: Page 5a Line 29
Line 16: Prior month Line 16 + Current month Line 15
Line 17: Page 8 Line 4 Column 6
Line 18: Line 16 x Line 17
Line 19: Line 7 + Line 10 + Line 14 + Line 18

UNITIL ENERGY SYSTEM, INC.
Electric Savings for LBR Calculation

		PLAN SAVINGS PROGRAM YEAR 2019	
		Revised Annual kWh	**Revised** kW Peak for LBR Calc
1.	Residential Programs		
2.	Home Energy Assistance	85,861	
3.	EnergyStar Homes	65,093	
4.	Home Performance w/EnergyStar	89,008	
5.	Energy Star Products	1,840,675	
6.	Home Energy Reports	917,000	
7.	Residential	2,997,636	n/a (1)
8.			
9.	Commercial & Industrial Programs		
10.	Large Business Energy Solutions	4,148,221	526
11.	Small Business Energy Solutions	2,535,530	220
12.	Municipal Energy Solutions	411,529	10
13.	Commercial & Industrial	7,095,280	756
14.			
15.	Total 2019 Portfolio	10,092,917	756

	LBR Savings Allocation		Estimate Jan-19	Estimate Feb-19	Estimate Mar-19	Estimate Apr-19	Estimate May-19	Estimate Jun-19	Estimate Jul-19	Estimate Aug-19	Estimate Sep-19	Estimate Oct-19	Estimate Nov-19	Estimate Dec-19	Total
16.	Residential Programs														
17.	Annualized kWh by Month	L. 7 * L. 34	200,842	209,835	218,827	227,820	236,813	245,806	254,799	263,792	272,785	278,780	287,773	299,764	2,997,636
18.															
19.	Monthly Incremental	L. 17 ÷ 12 Mo.	16,737	17,486	18,236	18,985	19,734	20,484	21,233	21,983	22,732	23,232	23,981	24,980	249,803
20.	Monthly Cumulative	Sum of L. 19	16,737	34,223	52,459	71,444	91,178	111,662	132,895	154,878	177,610	200,842	224,823	249,803	1,518,553
21.															
22.	Commercial & Industrial Programs														
23.	Annualized kWh by Month	L. 13 * L. 34	475,384	496,670	517,955	539,241	560,527	581,813	603,099	624,385	645,671	659,861	681,147	709,528	7,095,280
24.	Annualized kW by Mo. -Year 1 @ 50%	L. 13 "kW" * 0.5	378	378	378	378	378	378	378	378	378	378	378	378	378
25.															
26.	Monthly Incremental kWh	L. 23 ÷ 12 Mo.	39,615	41,389	43,163	44,937	46,711	48,484	50,258	52,032	53,806	54,988	56,762	59,127	591,273
27.	Monthly Cumulative kWh - Current Yr	Sum of L. 26	39,615	81,004	124,167	169,104	215,815	264,299	314,557	366,589	420,395	475,384	532,146	591,273	3,594,351
28.															
29.	Monthly Incremental kW	L. 24 ÷ 12 Mo.	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	378.04
30.	Monthly Cumulative kW - Current Yr	Sum of L. 29	31.50	63.01	94.51	126.01	157.52	189.02	220.52	252.03	283.53	315.03	346.54	378.04	
31.															
32.															
33.	Cumulative Annualized kWh by Mo.	Sum L. 17 + L. 23	676,225	1,382,730	2,119,513	2,886,574	3,683,915	4,511,534	5,369,432	6,257,608	7,176,064	8,114,705	9,083,625	10,092,917	
34.	Percent of Plan Savings	(L. 17 + L. 23)÷ L. 15	6.7%	7.0%	7.3%	7.6%	7.9%	8.2%	8.5%	8.8%	9.1%	9.3%	9.6%	10.0%	

NOTES:

(1) LBR associated with residential peak reductions is not applicable. LBR associated with C&I peak reductions was calculated as defined in Appendix A of the New Hampshire Energy Efficiency Calculation of Lost Base Revenue For Measures installed beginning in 2019 issued by the NH Lost Base Revenue (LBR) Working Group, Docket No. DE 17-136.

Unitil Energy System, Inc.
Lost Base Revenue Reconciliation
January 1, 2018 to December 31, 2018

Line	Description	Recast Jan-18	Recast Feb-18	Recast Mar-18	Recast Apr-18	Recast May-18	Recast Jun-18	Forecast Jul-18	Forecast Aug-18	Forecast Sep-18	Forecast Oct-18	Forecast Nov-18	Forecast Dec-18	2018 Total
	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
1	Beginning Balance	$ 227	$ (986)	$ (8,107)	$ (11,900)	$ (12,057)	$ (11,088)	$ (11,106)	$ (12,448)	$ (14,286)	$ (8,818)	$ (125)	$ 13,571	
2	Lost Revenues	$ 22,579	$ 24,341	$ 26,177	$ 28,090	$ 28,846	$ 30,826	$ 32,877	$ 35,002	$ 37,198	$ 39,443	$ 41,761	$ 44,175	391,315
	REVENUE													
3	Revenue ($)	$ 23,791	$ 31,447	$ 29,934	$ 28,203	$ 27,833	$ 30,802	$ 34,172	$ 36,786	$ 31,686	$ 30,731	$ 28,093	$ 31,355	$ 364,832
4	Cumulative Over/(Under) Recovery	$ (985)	$ (8,093)	$ (11,864)	$ (12,013)	$ (11,044)	$ (11,065)	$ (12,401)	$ (14,232)	$ (8,773)	$ (106)	$ 13,543	$ 26,390	
	INTEREST													
5	Average Monthly Balance	$ (379)	$ (4,539)	$ (9,986)	$ (11,957)	$ (11,551)	$ (11,077)	$ (11,753)	$ (13,340)	$ (11,530)	$ (4,462)	$ 6,709	$ 19,980	
6	Interest Rate	4.25%	4.25%	4.25%	4.50%	4.50%	4.50%	4.75%	4.75%	4.75%	5.00%	5.00%	5.00%	5.00%
7	Days per Month	31	28	31	30	31	30	31	31	30	31	30	31	365
8	Computed Interest	$ (1)	$ (15)	$ (36)	$ (44)	$ (44)	$ (41)	$ (47)	$ (54)	$ (45)	$ (19)	$ 28	$ 85	$ (234)
9	**Ending Balance**	$ (986)	$ (8,107)	$ (11,900)	$ (12,057)	$ (11,088)	$ (11,106)	$ (12,448)	$ (14,286)	$ (8,818)	$ (125)	$ 13,571	$ 26,475	

Line 1: Prior period ending balance
Line 2: Page 5, Line 12
Line 3: Actual revenue through June 2018. Estimated revenue July through December.
Line 4: Line 1 + Line 2 - Line 3
Line 5: (Line 1 + Line 4)/2
Line 6: Prime Rate
Line 8: Line 7 * ((Line 5/# days per year) * Line 9))
Line 9: Line 4 + Line 8

Unitil Energy System, Inc.
Lost Base Revenue Reconciliation
January 1, 2019 to December 31, 2019

Line	Description	Estimate Jan-19	Estimate Feb-19	Estimate Mar-19	Estimate Apr-19	Estimate May-19	Estimate Jun-19	Estimate Jul-19	Estimate Aug-19	Estimate Sep-19	Estimate Oct-19	Estimate Nov-19	Estimate Dec-19	2019 Total
	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
1	Beginning Balance	$ 26,475	$ 11,778	$ 3,129	$ (962)	$ (1,725)	$ 702	$ 2,923	$ (6,397)	$ (16,875)	$ (16,028)	$ (16,005)	$ (7,577)	
2	Lost Revenues	$ 45,063	$ 45,979	$ 46,921	$ 47,890	$ 48,886	$ 49,910	$ 50,960	$ 52,037	$ 53,141	$ 54,263	$ 55,411	$ 56,596	607,056
	REVENUE													
3	Revenue ($)	$ 59,841	$ 54,656	$ 51,016	$ 48,648	$ 46,457	$ 47,696	$ 60,272	$ 62,466	$ 52,226	$ 54,172	$ 46,935	$ 52,258	$ 636,644
4	Cumulative Over/(Under) Recovery	$ 11,697	$ 3,101	$ (966)	$ (1,719)	$ 704	$ 2,916	$ (6,389)	$ (16,826)	$ (15,960)	$ (15,937)	$ (7,529)	$ (3,239)	
	INTEREST													
5	Average Monthly Balance	$ 19,086	$ 7,439	$ 1,082	$ (1,340)	$ (510)	$ 1,809	$ (1,733)	$ (11,611)	$ (16,418)	$ (15,982)	$ (11,767)	$ (5,408)	
6	Interest Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
7	Days per Month	31	28	31	30	31	30	31	31	30	31	30	31	365
8	Computed Interest	$ 81	$ 29	$ 5	$ (6)	$ (2)	$ 7	$ (7)	$ (49)	$ (67)	$ (68)	$ (48)	$ (23)	$ (149)
9	**Ending Balance**	$ 11,778	$ 3,129	$ (962)	$ (1,725)	$ 702	$ 2,923	$ (6,397)	$ (16,875)	$ (16,028)	$ (16,005)	$ (7,577)	$ (3,262)	

Line 1: Prior period ending balance
Line 2: Page 5, Line 12
Line 3: Estimated revenue
Line 4: Line 1 + Line 2 - Line 3
Line 5: (Line 1 + Line 4)/2
Line 6: Prime Rate
Line 8: Line 7 * ((Line 5/# days per year) * Line 9))
Line 9: Line 4 + Line 8

Unitil Energy Systems, Inc.
Calculation of Forecasted Average Distribution Rate for Lost Revenue
Based on Actual Billing Determinants for January - December 2017 and Distribution Rates effective May 1, 2018

	(1)	(2)	(3)	(4)	(5)	(6) = (1) / (4)	(7) = (2) / (5)	(8) = (3) / (5)
	Revenue*			Units				
Rate Class	Demand Charges	kWh Charges	Total Demand and kWh Charges	Delivery kW	Delivery kWh	Average Distribution Rate $/kW	Average Distribution Rate $/kWh[(a)]	Average Distribution Rate $/kWh[(b)]
1 **Residential D**	$ -	$ 17,131,066	$ 17,131,066	-	484,338,873	N/A	N/A	$ 0.03537
2 Regular General G2	$ 13,997,246	$ 165,112	$ 14,162,358	1,341,173	326,470,379	10.44	$ 0.00051	$ 0.04338
3 Large General Service Rate G1	$ 7,615,522	$ -	$ 7,615,522	1,032,033	351,603,664	7.38	$ -	$ 0.02166
4 **Commercial and Industrial**	$ 21,612,769	$ 165,112	$ 21,777,881	2,373,206	678,074,043	$ 9.11	$ 0.00024	$ 0.03212

Note: See page 10 for details.
* Revenues include demand charges and kWh charges only.
Customer, meter and per luminaire charges are excluded.
(a) For 2019 C&I Savings.
(b) For 2017 and 2018 C&I Savings (in 2019 calculation).

Bill Impacts of Changes in System Benefits Charge - Unitil Energy Systems, Inc.

	2018	2019
System Benefits Charge ($/kWh)	$ 0.00456	0.00576
Bill per month, including UES Default Service Charge		
Residential Rate R (625 kWh/month)	$ 108.04	$ 108.79
General Service Rate G, three-phase service (40 kW, 10,000 kWh/month)	$ 1,477.52	$ 1,489.49
Change from previous rate level - $ per month		
Residential Rate R (625 kWh/month)		$ 0.75
General Service Rate G, three-phase service (40 kW, 10,000 kWh/month)		$ 11.97
Change from previous rate level - %		
Residential Rate R (625 kWh/month)		0.7%
General Service Rate G, three-phase service (40 kW, 10,000 kWh/month)		0.8%

Unitil Energy Systems, Inc.
Calculation of Distribution Revenue at the Rate Level Effective January 1, 2017 - December 31, 2017
Based on Billing Determinants for the Twelve Months Ending December 31, 2017

Rate Class	Customer Group		(a) 5/1/2018 Monthly Distribution Charge (1)	(b) Jan - Dec Billing Determinants (2)	(c) Calculated Revenue = (a) X (b): Customer/ Meter/ Luminaire	Demand	kWh	Total
Residential Rate R	Standard Rate	Customer Charge	$ 16.12	786,611	$ 12,680,169			
		All kWh	$ 0.03537	484,338,873			$ 17,131,066	$ 29,811,235
Total Rate R		**Customers**		**786,611**				
		Meters		**n/a**				
		KWH		**484,338,873**				
		Revenue			**$ 12,680,169**	**$ -**	**$ 17,131,066**	**$ 29,811,235**
General Rate G2	Standard Rate	Customer Charge	$ 29.02	122,372	$ 3,551,235			
		Demand charge (All KW)	$ 10.45	1,341,173		$ 14,015,260		
		All KWH	$ -	320,931,860			$ -	
		Transformer Ownership Credit, G2	$ (0.50000)	36,028		$ (18,014)		$ 17,548,482
	G2 - kWh Meter	Customer Charge	$ 18.27	5,062	$ 92,483			
		All KWH	$ 0.00878	489,369			$ 4,297	$ 96,779
	QR Water Heating and/or Space Heat	Customer Charge	$ 9.67	3,219	$ 31,128			
		All KWH	$ 0.03185	5,049,150			$ 160,815	$ 191,943
Total Rate G2		**Customers**		**130,653**				
		Meters		**n/a**				
		Billing demand		**1,341,173**				
		KWH		**326,470,379**				
		Revenue			**$ 3,674,846**	**$ 13,997,246**	**$ 165,112**	**$ 17,837,204**
Large General Rate G1	Standard Rate	Customer Charge Secondary Voltage	$ 161.23	1,501	$ 242,006			
		Customer Charge Primary Voltage	$ 85.99	390	$ 33,536			
		All kVA	$ 7.55	1,032,033		$ 7,791,851		
		All KWH	$ -	351,603,664			$ -	
		Transformer Ownership Credit, G1	$ (0.50000)	352,657		$ (176,328)		$ 7,891,065
Total Rate G1		**Customers Secondary Voltage**		**1,501**				
		Customers Primary Voltage		**390**				
		Meters		**n/a**				
		Billing demand		**1,032,033**				
		KWH		**351,603,664**				
		Revenue			**$ 275,542**	**$ 7,615,522**	**$ -**	**$ 7,891,065**

Outdoor Lighting Rate OL	100	Mercury Vapor Street		$13.20	16,195	$ 213,769			
	175	Mercury Vapor Street		$15.66	837	$ 13,112			
	250	Mercury Vapor Street		$17.75	887	$ 15,735			
	400	Mercury Vapor Street		$21.13	1,608	$ 33,978			
	1000	Mercury Vapor Street		$41.95	24	$ 1,007			
	250	Mercury Vapor Flood		$18.90	748	$ 14,142			
	400	Mercury Vapor Flood		$22.62	1,140	$ 25,785			
	1000	Mercury Vapor Flood		$37.48	182	$ 6,823			
	100	Mercury Vapor Power Bracket		$13.33	4,504	$ 60,038			
	175	Mercury Vapor Power Bracket		$14.79	651	$ 9,630			
	50	Sodium Vapor Street		$13.44	42,395	$ 569,792			
	100	Sodium Vapor Street		$15.13	1,289	$ 19,508			
	150	Sodium Vapor Street		$15.19	4,293	$ 65,217			
	250	Sodium Vapor Street		$19.03	13,711	$ 260,923			
	400	Sodium Vapor Street		$23.98	2,945	$ 70,610			
	1000	Sodium Vapor Street		$41.42	1,705	$ 70,611			
	150	Sodium Vapor Flood		$17.51	2,908	$ 50,911			
	250	Sodium Vapor Flood		$20.64	3,904	$ 80,586			
	400	Sodium Vapor Flood		$23.45	4,860	$ 113,976			
	1000	Sodium Vapor Flood		$41.78	2,683	$ 112,106			
	50	Sodium Vapor Power Bracket		$12.44	1,382	$ 17,197			
	100	Sodium Vapor Power Bracket		$13.96	859	$ 11,997			
	175	Metal Halide Street		$19.79	24	$ 475			
	250	Metal Halide Street		$21.52	-	$ -			
	400	Metal Halide Street		$22.32	-	$ -			
	175	Metal Halide Flood		$22.87	-	$ -			
	250	Metal Halide Flood		$24.69	-	$ -			
	400	Metal Halide Flood		$24.73	-	$ -			
	1000	Metal Halide Flood		$32.03	-	$ -			
	175	Metal Halide Power Bracket		$18.52	-	$ -			
	250	Metal Halide Power Bracket		$19.69	-	$ -			
	400	Metal Halide Power Bracket		$21.05	456	$ 9,599			
	42	LED Area Light Fixture		$13.08	-	$ -			
	57	LED Area Light Fixture		$13.13	-	$ -			
	25	LED Cobra Head Fixture		$13.03	-	$ -			
	88	LED Cobra Head Fixture		$13.22	-	$ -			
	108	LED Cobra Head Fixture		$13.28	-	$ -			
	193	LED Cobra Head Fixture		$13.54	-	$ -			
	123	LED Flood Light Fixture		$13.33	-	$ -			
	194	LED Flood Light Fixture		$13.54	-	$ -			
	297	LED Flood Light Fixture		$13.85	-	$ -			
Total Rate OL		**Luminaires**			**110,191**				
		Customers		n/a					
		Meters		-					
		KWH	$ -	**8,073,290**					
		Revenue				**$ 1,847,525**	**$ -**		**$ 1,847,525**
Total Retail		**Customers**		**918,765**					
		Meters		**n/a**					
		Luminaires		**110,191**					
		Billing Demand		**2,373,206**					
		KWH		**1,170,486,207**					
		Revenue			**$ 16,630,558**	**$ 23,460,294**	**$ 17,296,178**		**$ 57,387,030**