Eversource Energy
NHPUC Docket No. DE 20-092
September 1, 2020
Attachment L1
Actual C&I kW Savings - New Component for Year 2021

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### PSNH d/b/a Eversource Energy

### **C&I Savings - New Component for Year 2021**

Line	Description	Eversource
1	Gross Annualized kWh Savings	93,121,456
2	Maximum Demand Factor (MDF)	Varies based on measure mix
3	Extended Max. Load Reduction kW	16,535.5
4	% kW Demand Reduction at Customer Peak	Varies based on measure mix
5	Sub-Total Customer Peak kW Reduction	11,141.1
6	% Net to Gross	Varies based on measure mix
7	Sub-Total Customer Peak kW Reduction	10,721.6
8	% In-Service Rate	Varies based on measure mix
9	Sub-Total Customer Peak kW Reduction	10,662.8
10	% kW Realization Rate	Varies based on measure mix
11	Sub-Total Customer Peak kW Reduction	10,637.5
12	% Billing Adjustment to Reflect Ratchets (1)	100.00%
13	Sub-Total Customer Peak kW Reduction	10,637.5
14	% Retirement Adjustment	100.00%
15	Total Customer Peak kW Reduction, Full Year	10,637.5
16	% Annual Savings Achieved in First Year	50.00%
17	Total Customer Peak Red. in First Year	10,194
18	Annualized (x12)	127,650
19	Average Distribution Rate (ADR)	\$ 6.46
20	Total C&I kW LBR	\$ 412,233

### Comments:

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### PSNH d/b/a Eversource Energy

### **C&I Savings - New Component for Year 2022**

Line	Description	Eversource
1	Gross Annualized kWh Savings	118,548,300
2	Maximum Demand Factor (MDF)	Varies based on measure mix
3	Extended Max. Load Reduction kW	20,447.4
4	% kW Demand Reduction at Customer Peak	Varies based on measure mix
5	Sub-Total Customer Peak kW Reduction	13,499.8
6	% Net to Gross	Varies based on measure mix
7	Sub-Total Customer Peak kW Reduction	13,017.8
8	% In-Service Rate	Varies based on measure mix
9	Sub-Total Customer Peak kW Reduction	12,976.3
10	% kW Realization Rate	Varies based on measure mix
11	Sub-Total Customer Peak kW Reduction	12,958.1
12	% Billing Adjustment to Reflect Ratchets (1)	100.00%
13	Sub-Total Customer Peak kW Reduction	12,958.1
14	% Retirement Adjustment	100.00%
15	Total Customer Peak kW Reduction, Full Year	12,958.1
16	% Annual Savings Achieved in First Year	50.00%
17	Total Customer Peak Red. in First Year	12,418
18	Annualized (x12)	155,497
19	Average Distribution Rate (ADR)	\$ 6.46
20	Total C&I kW LBR	\$ 502,161

### Comments:

Eversource Energy
NHPUC Docket No. DE 20-092
September 1, 2020
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Actual C&I kW Savings - New Component for Year 2023

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# PSNH d/b/a Eversource Energy

### **C&I Savings - New Component for Year 2023**

Line	Description	Eversource
1	Gross Annualized kWh Savings	149,242,141
2	Maximum Demand Factor (MDF)	Varies based on measure mix
3	Extended Max. Load Reduction kW	25,290.7
4	% kW Demand Reduction at Customer Peak	Varies based on measure mix
5	Sub-Total Customer Peak kW Reduction	16,408.9
6	% Net to Gross	Varies based on measure mix
7	Sub-Total Customer Peak kW Reduction	16,009.3
8	% In-Service Rate	Varies based on measure mix
9	Sub-Total Customer Peak kW Reduction	15,987.8
10	% kW Realization Rate	Varies based on measure mix
11	Sub-Total Customer Peak kW Reduction	15,822.3
12	% Billing Adjustment to Reflect Ratchets (1)	100.00%
13	Sub-Total Customer Peak kW Reduction	15,822.3
14	% Retirement Adjustment	100.00%
15	Total Customer Peak kW Reduction, Full Year	15,822.3
16	% Annual Savings Achieved in First Year	50.00%
17	Total Customer Peak Red. in First Year	15,163
18	Annualized (x12)	189,868
19	Average Distribution Rate (ADR)	\$ 6.46
20	Total C&I kW LBR	\$ 613,160

### Comments:

#### PSNH d/b/a Eversource Energy

#### Calculation for LBR New Methodology for Year 2021

Line	Description	Re	sidential kWh	Cor	mmercial kWh	C	&I kW	Total	Reference
	Legacy (Measures Installed in 2017 and 2018): (1)								
1	Program Year 2017 LBR Savings (2)		-		-		-		Company Records
2	Average Distribution Rate (ADR)	\$	0.04400	\$	0.02798	N	/A		Attachment E3
3	Sub-Total LBR	\$	-	\$	-	\$	-	\$ -	Line 1 * Line 2
4	Program Year 2018 LBR Savings (2)		7,121,114		38,157,478		-		Company Records
5	Average Distribution Rate (ADR)	\$	0.04400	\$	0.02798	N	/A		Attachment E3
6	Sub-Total LBR	\$	313,354	\$	1,067,675	\$	-	\$ 1,381,029	Line 4 * Line 5
7	Sub-Total Legacy Methodology LBR	\$	313,354	\$	1,067,675	\$	-	\$ 1,381,029	Line 3 + Line 6
	New Methodology (Measures Installed in 2019 and forward): (3)								
8	Program Year 2019 LBR Savings		18,035,905		70,845,870		127,768		Company Records
9	Average Distribution Rate (ADR)	\$	0.04400	\$	0.01121	\$	6.46		Attachment E3
10	Sub-Total LBR	\$	793,642	\$	794,264	\$	825,226	\$ 2,413,132	Line 8 * Line 9
11	Program Year 2020 LBR Savings estimated		26,377,578		58,915,156		117,072		Company Forecast
12	Average Distribution Rate (ADR)	\$	0.04400	\$	0.01121	\$	6.46		Attachment E3
13	Sub-Total LBR	\$	1,160,705	\$	660,507	\$	756,144	\$ 2,577,356	Line 11 * Line 12
14	Program Year 2021 LBR Savings estimated (annualized)		18,910,761		91,761,370		127,650		Company Forecast
15	Program Year 2021 LBR Savings in 2021		9,455,380		45,880,685		63,825		Company Forecast
16	Average Distribution Rate (ADR)	\$	0.04400	\$	0.01121	\$	6.46		Attachment E3
17	Sub-Total LBR	\$	416,069	\$	514,375	\$	412,233	\$ 1,342,678	Line 15 * Line 16
18	Sub-Total New Methodology LBR	\$	2,370,417	\$	1,969,146	\$	1,993,604	\$ 6,333,166	Line 10 + Line 13 + Line 17
19	Total LBR - Year 2021	\$	2,683,770	\$	3,036,821	\$	1,993,604	\$ 7,714,195	Line 7 + Line 18

<sup>\*</sup>Numbers may not add due to rounding.

- (1) Legacy portion utilizes old methodology for calculating LBR i.e. it utilizes a combined ADR for measures installed in 2017 and 2018.

  (2) Actual LBR Savings reset as part of DE 19-057 Rate Case

  (3) New metholody disaggregates kWh and kW components as specified in the Settlement Agreement in DE 17.36 (Order No. 26,095)

#### PSNH d/b/a Eversource Energy

#### Calculation for LBR New Methodology for Year 2022

Line	Description	Res	idential kWh	Cor	nmercial kWh	C8	l kW	Total	Reference
	Legacy (Measures Installed in 2017 and 2018): (1)								
1	Program Year 2017 LBR Savings (2)		=		=		-		Company Records
2	Average Distribution Rate (ADR)	\$	0.04400	\$	0.02798	N,	/A		Attachment E3
3	Sub-Total LBR	\$	-	\$	-	\$	-	\$ -	Line 1 * Line 2
4	Program Year 2018 LBR Savings (2)		6,795,031		38,157,478		-		Company Records
5	Average Distribution Rate (ADR)	\$	0.04400	\$	0.02798	N,	/A		Attachment E3
6	Sub-Total LBR	\$	299,005	\$	1,067,675	\$	-	\$ 1,366,680	Line 4 * Line 5
7	Sub-Total Legacy Methodology LBR	\$	299,005	\$	1,067,675	\$	-	\$ 1,366,680	Line 3 + Line 6
	New Methodology (Measures Installed in 2019 and forward): (3)								
8	Program Year 2019 LBR Savings		14,909,999		70,845,870		127,768		Company Records
9	Average Distribution Rate (ADR)	\$	0.04400	\$	0.01121	\$	6.46		Attachment E3
10	Sub-Total LBR	\$	656,092	\$	794,264	\$	825,226	\$ 2,275,582	Line 8 * Line 9
11	Program Year 2020 LBR Savings estimated		26,377,578		58,915,156		117,072		Company Forecast
12	Average Distribution Rate (ADR)	\$	0.04400	\$	0.01121	\$	6.46		Attachment E3
13	Sub-Total LBR	\$	1,160,705	\$	660,507	\$	756,144	\$ 2,577,356	Line 11 * Line 12
14	Program Year 2021 LBR Savings estimated		18,910,761		91,761,370		127,650		Company Forecast
15	Average Distribution Rate (ADR)	\$	0.04400	\$	0.01121	\$	6.46		Attachment E3
16	Sub-Total LBR	\$	832,139	\$	1,028,751	\$	824,466	\$ 2,685,356	Line 14 * Line 15
17	Program Year 2022 LBR Savings estimated (annualized)		14,193,803		116,764,842		155,497		Company Forecast
18	Program Year 2022 LBR Savings in 2022		7,096,901		58,382,421		77,748		Company Forecast
19	Average Distribution Rate (ADR)	\$	0.04400	\$	0.01121	\$	6.46		Attachment E3
20	Sub-Total LBR	\$	312,288	\$	654,534	\$	502,161	\$ 1,468,984	Line 18 * Line 19
21	Sub-Total New Methodology LBR	\$	2,961,224	\$	3,138,055	\$2	2,907,998	\$ 9,007,277	Line 10 + Line 13 + Line 16 + Line 20
22	Total LBR - Year 2022	\$	3,260,229	\$	4,205,731	\$2	2,907,998	\$10,373,957	Line 7 + Line 21

<sup>\*</sup>Numbers may not add due to rounding.

Comments
(1) Legacy portion utilizes old methodology for calculating LBR i.e. it utilizes a combined ADR for measures installed in 2017 and 2018.
(2) Actual LBR Savings reset as part of DE 19-057 Rate Case
(3) New metholody disaggregates kWh and kW components as specified in the Settlement Agreement in DE 17/136 (Order No. 26,095)

#### PSNH d/b/a Eversource Energy

#### Calculation for LBR New Methodology for Year 2023

Line	Description	Re	sidential kWh	Со	mmercial kWh	C&I kW	Total	Reference
	Legacy (Measures Installed in 2017 and 2018): (1)							
1	Program Year 2017 LBR Savings (2)		-		-	=		Company Records
2	Average Distribution Rate (ADR)	\$	0.04400	\$	0.02798	N/A		Attachment E3
3	Sub-Total LBR	\$	-	\$	-	\$ -	\$ -	Line 1 * Line 2
4	Program Year 2018 LBR Savings (2)		6,684,435		38,157,478	=		Company Records
5	Average Distribution Rate (ADR)	\$	0.04400	\$	0.02798	N/A		Attachment E3
6	Sub-Total LBR	\$	294,138	\$	1,067,675	\$ -	\$ 1,361,814	Line 4 * Line 5
7	Sub-Total Legacy Methodology LBR	\$	294,138	\$	1,067,675	\$ -	\$ 1,361,814	Line 3 + Line 6
	New Methodology (Measures Installed in 2019 and forward): (3)							
8	Program Year 2019 LBR Savings		13,767,029		70,845,870	127,768		Company Records
9	Average Distribution Rate (ADR)	\$	0.04400	\$	0.01121	\$ 6.46		Attachment E3
10	Sub-Total LBR	\$	605,797	\$	794,264	\$ 825,226	\$ 2,225,287	Line 8 * Line 9
11	Program Year 2020 LBR Savings estimated		26,377,578		58,915,156	117,072		Company Forecast
12	Average Distribution Rate (ADR)	\$	0.04400	\$		\$ 6.46		Attachment E3
13	Sub-Total LBR	\$	1,160,705	\$	660,507	\$ 756,144	\$ 2,577,356	Line 11 * Line 12
14	Program Year 2021 LBR Savings estimated		18,910,761		91,761,370	127,650		Company Forecast
15	Average Distribution Rate (ADR)	\$	0.04400	\$	0.01121	\$ 6.46		Attachment E3
16	Sub-Total LBR	\$	832,139	\$	1,028,751	\$ 824,466	\$ 2,685,356	Line 14 * Line 15
17	Program Year 2022 LBR Savings estimated		14,193,803		116,764,842	155,497		Company Forecast
18	Average Distribution Rate (ADR)	\$	0.04400	\$	0.01121	\$ 6.46		Attachment E3
19	Sub-Total LBR	\$	624,576	\$	1,309,068	\$1,004,323	\$ 2,937,968	Line 17 * Line 18
20	Program Year 2023 LBR Savings estimated (annualized)		13,211,175		147,526,270	189,868		Company Forecast
	Program Year 2023 LBR Savings estimated (annualized) Program Year 2023 LBR Savings in 2023					94,934		Company Forecast Company Forecast
21 22	Average Distribution Rate (ADR)	,	6,605,587 0.04400	Ś	73,763,135 0.01121	\$ 6.46		Attachment E3
	Sub-Total LBR	\$					ć 4 720 700	
23	SUD-10tal LBK	\$	290,669	\$	826,970	\$ 613,160	\$ 1,730,798	Line 21 * Line 22
24	Sub-Total New Methodology LBR	\$	3,513,886	\$	4,619,559	\$4,023,319	\$12,156,765	Line 10 + Line 13 + Line 16 + Line 19 + Line 23
25	Total LBR - Year 2023	\$	3,808,024	\$	5,687,235	\$4,023,319	\$13,518,578	Line 7 + Line 24

<sup>\*</sup>Numbers may not add due to rounding.

<sup>(1)</sup> Legacy portion utilizes old methodology for calculating LBR i.e. it utilizes a combined ADR for measures installed in 2017 and 2018.

(2) Actual LBR Savings reset as part of DE 19-057 Rate Case

(3) New metholody disaggregates kWh and kW components as specified in the Settlement Agreement in DE 17.36 (Order No. 26,095)

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# Unitil Energy Systems, Inc.

# **C&I Savings - New Component for Year 2021**

Line	Description	Unitil
1	Gross Annualized kWh Savings	10,616,063
2	Maximum Demand Factor (MDF)	Varies based on measure mix
3	Extended Max. Load Reduction kW	1,440.2
4	% kW Demand Reduction at Customer Peak	Varies based on measure mix
5	Sub-Total Customer Peak kW Reduction	816.0
6	% Net to Gross	Varies based on measure mix
7	Sub-Total Customer Peak kW Reduction	766.5
8	% In-Service Rate	Varies based on measure mix
9	Sub-Total Customer Peak kW Reduction	766.5
10	% kW Realization Rate	Varies based on measure mix
11	Sub-Total Customer Peak kW Reduction	766.5
12	% Billing Adjustment to Reflect Ratchets (1)	100.00%
13	Sub-Total Customer Peak kW Reduction	766.5
14	% Retirement Adjustment	100.00%
15	Total Customer Peak kW Reduction, Full Year	766.5
16	% Annual Savings Achieved in First Year	51%
17	Total Customer Peak Red. in First Year	388.2
18	Annualized (x12)	4,659.0
19	Average Distribution Rate (ADR)	\$ 9.16
20	Total C&I kW LBR	\$ 42,676

### Comments:

Projected C&I kW Savings - New Component for Year 2023

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# Unitil Energy Systems, Inc.

# **C&I Savings - New Component for Year 2022**

Line	Description	Unitil
1	Gross Annualized kWh Savings	12,339,688
2	Maximum Demand Factor (MDF)	Varies based on measure mix
3	Extended Max. Load Reduction kW	1,166.2
4	% kW Demand Reduction at Customer Peak	Varies based on measure mix
5	Sub-Total Customer Peak kW Reduction	612.8
6	% Net to Gross	Varies based on measure mix
7	Sub-Total Customer Peak kW Reduction	571.7
8	% In-Service Rate	Varies based on measure mix
9	Sub-Total Customer Peak kW Reduction	571.7
10	% kW Realization Rate	Varies based on measure mix
11	Sub-Total Customer Peak kW Reduction	571.7
12	% Billing Adjustment to Reflect Ratchets (1)	100.00%
13	Sub-Total Customer Peak kW Reduction	571.7
14	% Retirement Adjustment	100.00%
15	Total Customer Peak kW Reduction, Full Year	571.7
16	% Annual Savings Achieved in First Year	50%
17	Total Customer Peak Red. in First Year	285.9
18	Annualized (x12)	3,430.4
19	Average Distribution Rate (ADR)	\$ 9.16
20	Total C&I kW LBR	\$ 31,423

### Comments:

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# Unitil Energy Systems, Inc.

# **C&I Savings - New Component for Year 2023**

Line	Description	Unitil
1	Gross Annualized kWh Savings	14,862,555
2	Maximum Demand Factor (MDF)	Varies based on measure mix
3	Extended Max. Load Reduction kW	1,236.5
4	% kW Demand Reduction at Customer Peak	Varies based on measure mix
5	Sub-Total Customer Peak kW Reduction	625.6
6	% Net to Gross	Varies based on measure mix
7	Sub-Total Customer Peak kW Reduction	588.6
8	% In-Service Rate	Varies based on measure mix
9	Sub-Total Customer Peak kW Reduction	588.6
10	% kW Realization Rate	Varies based on measure mix
11	Sub-Total Customer Peak kW Reduction	588.6
12	% Billing Adjustment to Reflect Ratchets (1)	100.00%
13	Sub-Total Customer Peak kW Reduction	588.6
14	% Retirement Adjustment	100.00%
15	Total Customer Peak kW Reduction, Full Year	588.6
16	% Annual Savings Achieved in First Year	50%
17	Total Customer Peak Red. in First Year	294.3
18	Annualized (x12)	3,531.6
19	Average Distribution Rate (ADR)	\$ 9.16
20	Total C&I kW LBR	\$ 32,349

### Comments:

DE 20-092 Calculation of the Estimated LBR for 2021 (cumulative 2017-2021) Unitil Energy Systems, Inc.

Unitil Enery Systems, Inc.
NHPUC Docket No. DE 20-092
Calculation of the Estimated LBR for 2022 (cumulative 2017-2021)
Page 1 of 1

Description		Residential kWh	Commercial kWh	C&I kW	Total	Reference
Legacy (Measures Installed in 2017 and 2018):	(Note 1)					
Program Year 2017 Actual LBR Savings		1,344,216	6,004,884	-	7,349,100	DE 14-216, 2017 Annual Report, P. 3
2. Average Distribution Rate (ADR)		<u>\$0.03558</u>	\$0.03217	-		DE 20-092, Attachment H3 Page 8
3. Sub-Total LBR		\$ 47,827	\$ 193,177	\$ -	241,004	Line 1 * Line 2
4. Program Year 2018 Actual LBR Savings	(Note 2)	2,868,216	6,708,144	-	9,576,360	DE 17-136, 2018 Annual Report, P. 3
5. Program Year 2018 Actual Retired LBR Savings		(385,652)	-	-	(385,652)	DE 17-136, 2019 Annual Report, P. 3
6. Average Distribution Rate (ADR)		<u>\$0.03558</u>	\$0.03217	-		DE 20-092, Attachment H3 Page 8
7. Sub-Total LBR		\$ 88,330	\$ 215,801	\$ - \$	304,130	(Line 4 + Line 5) * Line 6
8. Sub-Total Legacy Savings (Measures Installed in 2017 and 2018)		\$ 136,157	\$ 408,978	\$ - \$	545,135	Line 3 + Line 7
New Methodology (Measures Installed in 2019 and forward):	(Note 3)					
9. Program Year 2019 Actual LBR Savings		4,692,054	6,410,154	13,686	11,115,894	DE 17-136, 2019 Annual Report, P. 3
10. Average Distribution Rate (ADR)		<u>\$0.03558</u>	\$0.00024	<u>\$9.16</u>		DE 20-092, Attachment H3 Page 8
11. Sub-Total LBR		\$ 166,943	\$ 1,538	\$ 125,362	293,843	Line 9 * Line 10
12. Program Year 2020 Estimated LBR Savings		3,214,309	10,734,644	13,216	13,962,169	DE 17-136, 2020 Planned Savings
13. Average Distribution Rate (ADR)		<u>\$0.03558</u>	\$0.00024	<u>\$9.16</u>		DE 20-092, Attachment H3 Page 8
14. Sub-Total LBR		\$ 114,365	\$ 2,576	\$ 121,061 \$	238,003	Line 12 * Line 13
15. Program Year 2021 Estimated LBR Savings (annualized)		5,418,938	10,495,391	9,318	15,923,647	DE 20-092 Planned Savings
16. Program Year 2021 Estimated LBR Savings in 2021		2,745,144	5,316,790	4,659	8,066,593	DE 20-092 Attachment H3
17. Average Distribution Rate (ADR)		\$0.03558	\$0.00024	<u>\$9.16</u>		DE 20-092, Attachment H3 Page 8
18. Sub-Total LBR		\$ 97,672	\$ 1,276	\$ 42,676	141,624	Line 16 * Line 17
19. Sub-Total "New Method" LBR - 2019 Forward		\$ 378,981	\$ 5,391	\$ 289,099 \$	673,470	Line 11 + Line 14 + Line 18
20. Total 2021 Estimated LBR		\$ 515,137	\$ 414,369	\$ 289,099	1,218,605	Line 8 + Line 19

- 1. Legacy portion utilizes old methodology for calculating LBR i.e. it utilizes a combined ADR for measures installed in 2017 and 2018.
- 2. Actual LBR Savings differ from program savings as the 110% LBR cap was reached
- 3. New metholody disaggregates kWh and kW components as specified in the Settlement Agreement in DE 17-136 (Order No. 26,095).

DE 20-092 Calculation of the Estimated LBR for 2022 (cumulative 2017-2022) Unitil Energy Systems, Inc.

Unitil Enery Systems, Inc.
NHPUC Docket No. DE 20-092
Calculation of the Estimated LBR for 2022 (cumulative 2017-2022)
Page 1 of 1

Description		Residential kWh	Co	ommercial kWh	C&I kW	Total	Reference
Legacy (Measures Installed in 2017 and 2018):	(Note 1)			<u> </u>			
1. Program Year 2017 Actual LBR Savings		1,344,216		6,004,884	-	7,349,100	DE 14-216, 2017 Annual Report, P. 3
2. Average Distribution Rate (ADR)		\$0.03558		\$0.03217	-		DE 20-092, Attachment H3 Page 8
3. Sub-Total LBR		\$ 47,827	\$	193,177	\$ -	\$ 241,004	Line 1 * Line 2
4. Program Year 2018 Actual LBR Savings	(Note 2)	2,868,216		6,708,144	-	9,576,360	DE 17-136, 2018 Annual Report, P. 3
5. Program Year 2018 Actual Retired LBR Savings		(385,652	)	-	-	(385,652)	DE 17-136, 2019 Annual Report, P. 3
6. Average Distribution Rate (ADR)		\$0.03558		\$0.03217	-		DE 20-092, Attachment H3 Page 8
7. Sub-Total LBR		\$ 88,330	\$	215,801	\$ -	\$ 304,130	(Line 4 + Line 5) * Line 6
8. Sub-Total Legacy Savings (Measures Installed in 2017 and 20	18)	\$ 136,157	\$	408,978	\$ -	\$ 545,135	Line 3 + Line 7
New Methodology (Measures Installed in 2019 and forward)	: (Note 3)						
9. Program Year 2019 Actual LBR Savings		4,692,054		6,410,154	13,686	11,115,894	DE 17-136, 2019 Annual Report, P. 3
Average Distribution Rate (ADR)		\$0.03558		\$0.00024	<u>\$9.16</u>		DE 20-092, Attachment H3 Page 8
1. Sub-Total LBR		\$ 166,943	\$	1,538	\$ 125,362	\$ 293,843	Line 9 * Line 10
2. Program Year 2020 Estimated LBR Savings		3,214,309		10,734,644	13,216	13,962,169	DE 17-136, 2020 Planned Savings
3. Average Distribution Rate (ADR)		\$0.03558		\$0.00024	<u>\$9.16</u>		DE 20-092, Attachment H3 Page 8
4. Sub-Total LBR		\$ 114,365	\$	2,576	\$ 121,061	\$ 238,003	Line 12 * Line 13
5. Program Year 2021 Estimated LBR Savings		5,418,938		10,495,391	9,318	15,923,647	DE 20-092 Planned Savings
6. Average Distribution Rate (ADR)		\$0.03558		\$0.00024	\$9.1 <u>6</u>		DE 20-092, Attachment H3 Page 8
7. Sub-Total LBR		\$ 192,806	\$	2,519	\$ 85,352	\$ 280,677	Line 15 * Line 16
3. Program Year 2022 Estimated LBR Savings (annualized)		4,986,468		12,163,006	6,861	17,156,334	DE 20-092 Planned Savings
9. Program Year 2022 Estimated LBR Savings in 2022		2,526,062		6,161,576	3,430	8,691,068	DE 20-092 Attachment H3
0. Average Distribution Rate (ADR)		\$0.03558		\$0.00024	<u>\$9.16</u>		DE 20-092, Attachment H3 Page 8
1. Sub-Total LBR		\$ 89,877	\$	1,479	\$ 31,423	\$ 122,779	Line 19 * Line 20
2. Sub-Total "New Method" LBR - 2019 Forward		\$ 563,991	\$	8,112	\$ 363,198	\$ 935,302	Line 11 + Line 14 + Line 17 + Line 21
3. Total 2022 Estimated LBR		\$ 700,148	\$	417,090	\$ 363,198	\$ 1,480,436	Line 8 + Line 22

- 1. Legacy portion utilizes old methodology for calculating LBR i.e. it utilizes a combined ADR for measures installed in 2017 and 2018.
- 2. Actual LBR Savings differ from program savings as the 110% LBR cap was reached
- 3. New metholody disaggregates kWh and kW components as specified in the Settlement Agreement in DE 17-136 (Order No. 26,095).

DE 20-092 Calculation of the Estimated LBR for 2023 (cumulative 2017-2023) Unitil Energy Systems, Inc.

Unitil Enery Systems, Inc.
NHPUC Docket No. DE 20-092
Calculation of the Estimated LBR for 2022 (cumulative 2017-2023)
Page 1 of 1

	Description		Resi	dential kWh	Co	mmercial kWh	C&I kW	Total	Reference
	Legacy (Measures Installed in 2017 and 2018):	(Note 1)							
1.	Program Year 2017 Actual LBR Savings			1,344,216		6,004,884	-	7,349,100	DE 14-216, 2017 Annual Report, P. 3
2.	Average Distribution Rate (ADR)			\$0.03558		\$0.03217	-		DE 20-092, Attachment H3 Page 8
3.	Sub-Total LBR		\$	47,827	\$	193,177	\$ -	\$ 241,004	Line 1 * Line 2
4.	Program Year 2018 Actual LBR Savings	(Note 2)		2,868,216		6,708,144	-	9,576,360	DE 17-136, 2018 Annual Report, P. 3
5.	Program Year 2018 Actual Retired LBR Savings			(385,652)		-	-	(385,652)	DE 17-136, 2019 Annual Report, P. 3
6.	Average Distribution Rate (ADR)			\$0.03558		\$0.03217	-		DE 20-092, Attachment H3 Page 8
7.	Sub-Total LBR		\$	88,330	\$	215,801	\$ -	\$ 304,130	(Line 4 + Line 5) * Line 6
8.	Sub-Total Legacy Savings (Measures Installed in 2017 and 2018)		\$	136,157	\$	408,978	\$ -	\$ 545,135	Line 3 + Line 7
	New Methodology (Measures Installed in 2019 and forward):	(Note 3)							
9.	Program Year 2019 Actual LBR Savings	(Note 2)		4,692,054		6,410,154	13,686	11,115,894	DE 17-136, 2019 Annual Report, P. 3
0.	Average Distribution Rate (ADR)			\$0.03558		\$0.00024	<u>\$9.16</u>		DE 20-092, Attachment H3 Page 8
1.	Sub-Total LBR		\$	166,943	\$	1,538	\$ 125,362	\$ 293,843	Line 9 * Line 10
2.	Program Year 2020 Estimated LBR Savings			3,214,309		10,734,644	13,216	13,962,169	DE 17-136, 2020 Planned Savings
3.	Average Distribution Rate (ADR)			\$0.03558		\$0.00024	<u>\$9.16</u>		DE 20-092, Attachment H3 Page 8
4.	Sub-Total LBR		\$	114,365	\$	2,576	\$ 121,061	\$ 238,003	Line 12 * Line 13
5.	Program Year 2021 Estimated LBR Savings			5,418,938		10,495,391	9,318	15,923,647	DE 20-092 Planned Savings
6.	Average Distribution Rate (ADR)			\$0.03558		\$0.00024	<u>\$9.16</u>		DE 20-092, Attachment H3 Page 8
7.	Sub-Total LBR		\$	192,806	\$	2,519	\$ 85,352	\$ 280,677	Line 15 * Line 16
8.	Program Year 2022 Estimated LBR Savings			4,986,468		12,163,006	6,861	17,156,334	DE 20-092 Planned Savings
9.	Average Distribution Rate (ADR)			\$0.03558		\$0.00024	<u>\$9.16</u>		DE 20-092, Attachment H3 Page 8
0.	Sub-Total LBR		\$	177,419	\$	2,919	\$ 62,845	\$ 243,183	Line 18 * Line 19
1.	Program Year 2023 Estimated LBR Savings (annualized)			5,690,806		14,624,676	7,063	20,322,545	DE 20-092 Planned Savings
2.	Program Year 2023 Estimated LBR Savings in 2023			2,882,867		7,408,617	3,532	10,295,016	DE 20-092 Attachment H3
3.	Average Distribution Rate (ADR)			\$0.03558		\$0.00024	<u>\$9.16</u>		DE 20-092, Attachment H3 Page 8
4.	Sub-Total LBR		\$	102,572	\$	1,778	\$ 32,349	\$ 136,700	Line 22 * Line 23
5.	Sub-Total "New Method" LBR - 2019 Forward		\$	754,105	\$	11,331	\$ 426,969	\$ 1,192,405	Line 11 + Line 14 + Line 17 + Line 20
26.	Total 2023 Estimated LBR		\$	890,262	\$	420,309	\$ 426,969	\$ 1,737,540	Line 8 + Line 25

- 1. Legacy portion utilizes old methodology for calculating LBR i.e. it utilizes a combined ADR for measures installed in 2017 and 2018.
- 2. Actual LBR Savings differ from program savings as the 110% LBR cap was reached
- 3. New metholody disaggregates kWh and kW components as specified in the Settlement Agreement in DE 17-136 (Order No. 26,095).

				The	rm Savings			
	Description	Re	sidential		C&I		Total	Ref.
	Measures Installed in 2017:							
1.	Program Year 2017 Actual Therm Savings (Nov - Apr)		35,378		132,787		168,165	2017 Annual Report, P2, Annualized Savings/12*6
2.	Average Distribution Rates (ADR) (Nov - Apr)		\$0.6916		\$0.1993			Attachment J5, P3
3.	Sub-Total LBR	Ś	24,466	Ś	26,470	Ś	50,936	Ln 1 * Ln 2
	Program Year 2017 Actual Therm Savings (May - Oct)	*	35,378	*	132,787	*	168,165	2017 Annual Report, P2, Annualized Savings/12*6
5.	Average Distribution Rates (ADR) (May - Oct)		\$0.6108		\$0.1198			Attachment J5, P3
6.	Sub-Total LBR	\$	21,608	Ś	15,914	Ś	37,522	Ln 4 * Ln 5
	Total LBR (Measures Installed in 2017)	\$	46,074		42,383		88,458	Ln 3 + Ln 6
	Measures Installed in 2018:							
8.	Program Year 2018 Actual Therm Savings (Nov - Apr)		57,884		91,060		148,944	2018 Annual Reports, P2, Annualized Savings/12*6
9.	Average Distribution Rates (ADR) (Nov - Apr)		\$0.6916		\$0.1993		140,344	Attachment J5, P3
10.	Sub-Total LBR	\$	40,031	¢	18,152	¢	58,182	Ln 8 * Ln 9
	Program Year 2018 Actual Therm Savings (May - Oct)	Ţ	57,884	Y	91,060	Y	148,944	2018 Annual Reports, P2, Annualized Savings/12*6
12.	Average Distribution Rates (ADR) (May - Oct)		\$0.6108		\$0.1198		110,511	Attachment J5, P3
13.	Sub-Total LBR	\$	35,354	Ś	10,913	Ś	46,267	Ln 11 * Ln 12
	Total LBR (Measures Installed in 2018)	\$	75,385		29,065		104,450	Ln 10 + Ln 13
	Measures Installed in 2019							
15.	Program Year 2019 Estimated Therm Savings (Nov - Apr)		81,308		120,580		201,888	2019 Annual Reports, P2, Annualized Savings/12*6
16.	Average Distribution Rates (ADR) (Nov - Apr)		\$0.6916		\$0.1993			Attachment J5, P3
17.	Sub-Total LBR	\$	56,230	\$	24,036	\$	80,266	Ln 15 * Ln 16
18.	3, 1, 1,		81,308		120,580		201,888	2019 Update, Att J5, P4 & P5, Annualized Therms
19.	Average Distribution Rates (ADR) (May - Oct)		\$0.6108		\$0.1198			Attachment J5, P3
20.	Sub-Total LBR	\$	49,661		14,451		64,112	Ln 18 * Ln 19
21.	Total LBR (Measures Installed in 2019)	\$	105,891	\$	38,487	\$	144,378	Ln 17 + Ln 20
	Measures Installed in 2020							
22.	Program Year 2020 Estimated Therm Savings (Nov - Apr)		64,728		132,554		197,283	Attachment J5, P4
23.	Average Distribution Rates (ADR) (Nov - Apr)		\$0.6916		\$0.1993			Attachment J5, P3
24.	Sub-Total LBR	\$	44,764	\$	26,423	\$	71,187	Ln 22 * Ln 23
25.	Program Year 2020 Estimated Therm Savings (May - Oct)		65,603		135,953		201,556	Attachment J5, P4
26.	Average Distribution Rates (ADR) (May - Oct)		\$0.6108		\$0.1198			Attachment J5, P3
27.	Sub-Total LBR	\$	40,069	\$	16,293	\$	56,362	Ln 25 * Ln 26
28.	Total LBR (Measures Installed in 2020)	\$	84,833	\$	42,716	\$	127,549	Ln 24 + Ln 27
	Measures Installed in 2021							
29.	Program Year 2021 Estimated Therm Savings (Nov - Apr)		6,228		10,929		17,157	Attachment J5, P4
30.	Average Distribution Rates (ADR) (Nov - Apr)		\$0.6916		\$0.1993			Attachment J5, P3
31.	Sub-Total LBR	\$	4,307	\$	2,179	\$	6,486	Ln 29 * Ln 30
32.	Program Year 2021 Estimated Therm Savings (May - Oct)		45,898		63,479		109,378	Attachment J5, P4
33.	Average Distribution Rates (ADR) (May - Oct)		\$0.6108		\$0.1198			Attachment J5, P3
34.	Sub-Total LBR	\$	28,034	\$	7,608	\$	35,641	Ln 32 * Ln 33
35.	Total LBR (Measures Installed in 2021)	\$	32,341	\$	9,786	\$	42,127	Ln 31 + Ln 34
36.	Grand Total Forecasted LBR (Nov 2020 to Oct 2021)	\$	344,524	\$	162,437	\$	506,960	Ln 7 + Ln 14 + Ln 21 + Ln 28 + Ln 35

<sup>\*</sup>November 2020 through October 2021

		Therm Savings							
	Description	Re	sidential		C&I		Total	Ref.	
	Management to shall add to 2047.								
1.	Measures Installed in 2017: Program Year 2017 Actual Therm Savings (Nov - Apr)		35,378		132,787		168,165	2017 Annual Report, P2, Annualized Savings/12*6	
			\$0.6916		\$0.1993		100,103	Attachment J5, P3	
2.	Average Distribution Rates (ADR) (Nov - Apr) Sub-Total LBR	Ś	24,466	ć		ć	50,936	Ln 1 * Ln 2	
3.		Ş		Þ	26,470	Ş	•		
4.	Program Year 2017 Actual Therm Savings (May - Oct)		35,378		132,787		168,165	2017 Annual Report, P2, Annualized Savings/12*6	
5.	Average Distribution Rates (ADR) (May - Oct)	_	\$0.6108	٠,	\$0.1198	ć	27.522	Attachment J5, P3	
6. 7	Sub-Total LBR (Massures Installed in 2017)	\$ \$	21,608 46,074		15,914 42,383		37,522	Ln 4 * Ln 5	
7.	Total LBR (Measures Installed in 2017)	Ş	40,074	Þ	42,303	Ş	88,458	Ln 3 + Ln 6	
	Measures Installed in 2018:								
8	Program Year 2018 Actual Therm Savings (Nov - Apr)		57,884		91,060		148,944	2018 Annual Reports, P2, Annualized Savings/12*6	
9.	Average Distribution Rates (ADR) (Nov - Apr)		\$0.6916		\$0.1993		110,511	Attachment J5, P3	
10.	Sub-Total LBR	\$	40,031	ς.	18,152	\$	58,182	Ln 8 * Ln 9	
	Program Year 2018 Actual Therm Savings (May - Oct)	Ţ	57,884	Y	91,060	Y	148,944	2018 Annual Reports, P2, Annualized Savings/12*6	
12.	Average Distribution Rates (ADR) (May - Oct)		\$0.6108		\$0.1198		140,544	Attachment J5, P3	
13.	Sub-Total LBR	\$	35,354	ς.	10,913	\$	46,267	Ln 11 * Ln 12	
	Total LBR (Measures Installed in 2018)	\$	75,385		29,065		104,450	Ln 10 + Ln 13	
		Ψ	, 5,555	Ψ.	25,005	Ψ.	20 ., .00	1.10 - 1.12	
	Measures Installed in 2019								
15.	Program Year 2019 Estimated Therm Savings (Nov - Apr)		81,308		120,580		201,888	2019 Annual Reports, P2, Annualized Savings/12*6	
16.	Average Distribution Rates (ADR) (Nov - Apr)		\$0.6916		\$0.1993			Attachment J5, P3	
17.	Sub-Total LBR	\$	56,230	\$	24,036	\$	80,266	Ln 15 * Ln 16	
18.	Program Year 2019 Estimated Therm Savings (May - Oct)		81,308		120,580		201,888	2019 Update, Att J5, P4 & P5, Annualized Therms	
19.	Average Distribution Rates (ADR) (May - Oct)		\$0.6108		\$0.1198			Attachment J5, P3	
20.	Sub-Total LBR	\$	49,661	\$	14,451	\$	64,112	Ln 18 * Ln 19	
21.	Total LBR (Measures Installed in 2019)	\$	105,891	\$	38,487	\$	144,378	Ln 17 + Ln 20	
	Measures Installed in 2020								
22.	Program Year 2020 Estimated Therm Savings (Nov - Apr)		65,603		135,953		201,556	Attachment J5, P4	
23.	Average Distribution Rates (ADR) (Nov - Apr)		\$0.6916		\$0.1993			Attachment J5, P3	
24.	Sub-Total LBR	\$	45,369	\$	27,101	\$	72,469	Ln 22 * Ln 23	
25.	Program Year 2020 Estimated Therm Savings (May - Oct)		65,603		135,953		201,556	Attachment J5, P4	
26.	Average Distribution Rates (ADR) (May - Oct)		\$0.6108		\$0.1198			Attachment J5, P3	
27.	Sub-Total LBR	\$	40,069	\$	16,293	\$	56,362	Ln 25 * Ln 26	
28.	Total LBR (Measures Installed in 2020)	\$	85,438	\$	43,394	\$	128,831	Ln 24 + Ln 27	
	Measures Installed in 2021								
29.	Program Year 2021 Estimated Therm Savings (Nov - Apr)		80,152		136,027		216,180	Attachment J5, P4	
30.	Average Distribution Rates (ADR) (Nov - Apr)		\$0.6916		\$0.1993			Attachment J5, P3	
31.	Sub-Total LBR	\$	55,431	\$	27,115	\$	82,546	Ln 29 * Ln 30	
32.	Program Year 2021 Estimated Therm Savings (May - Oct)		81,236		139,515		220,751	Attachment J5, P4	
33.	Average Distribution Rates (ADR) (May - Oct)		\$0.6108		\$0.1198			Attachment J5, P3	
34.	Sub-Total LBR	\$	49,617		16,720		66,337	Ln 32 * Ln 33	
35.	Total LBR (Measures Installed in 2021)	\$	105,048	\$	43,835	\$	148,883	Ln 31 + Ln 34	
2.0	Measures Installed in 2022		7.047		46.040		24.000	411 1 115 04	
36.	Program Year 2022 Estimated Therm Savings (Nov - Apr)		7,847		16,242		24,088	Attachment J5, P4	
37.	Average Distribution Rates (ADR) (Nov - Apr)		\$0.6916	<u>,</u>	\$0.1993	<u>,</u>	0.555	Attachment J5, P3	
38.	Sub-Total LBR	\$	5,427	\$	3,238	\$	8,664	Ln 36 * Ln 37	
39.	Program Year 2022 Estimated Therm Savings (May - Oct)		57,827		94,340		152,167	Attachment J5, P4	
40.	Average Distribution Rates (ADR) (May - Oct)	_	\$0.6108	<u>,</u>	\$0.1198	_	46.655	Attachment J5, P3	
41.	Sub-Total LBR	\$	35,320		11,306		46,626	Ln 39 * Ln 40	
42.	Total LBR (Measures Installed in 2022)	\$	40,746	\$	14,543	\$	55,290	Ln 38 + Ln 41	
43.	Grand Total Forecasted LBR (Nov 2021 to Oct 2022)	\$	458,582	\$	211,707	Ś	670,289	Ln 7 + Ln 14 + Ln 21 + Ln 28 + Ln 35 + Ln 42	
	,			_		_			

<sup>\*</sup>November 2021 through October 2022

	Beautation		atala anti-t	The	rm Savings		T-4-1	-,
	Description	Re	esidential		C&I		Total	Ref.
	Measures Installed in 2017:							
1.	Program Year 2017 Actual Therm Savings (Nov - Apr)		35,378		132,787		168,165	2017 Annual Report, P2, Annualized Savings/12*6
2.	Average Distribution Rates (ADR) (Nov - Apr)		\$0.6916		\$0.1993			Attachment J5, P3
3.	Sub-Total LBR	\$	24,466	\$	26,470	\$	50,936	Ln 1 * Ln 2
4.	Program Year 2017 Actual Therm Savings (May - Oct)		35,378		132,787		168,165	2017 Annual Report, P2, Annualized Savings/12*6
5.	Average Distribution Rates (ADR) (May - Oct)		\$0.6108		\$0.1198			Attachment J5, P3
6.	Sub-Total LBR	\$	21,608	\$	15,914	\$	37,522	Ln 4 * Ln 5
	Total LBR (Measures Installed in 2017)	\$	46,074		42,383		88,458	Ln 3 + Ln 6
	Measures Installed in 2018:							
8.	Program Year 2018 Actual Therm Savings (Nov - Apr)		57,884		91,060		148,944	2018 Annual Reports, P2, Annualized Savings/12*6
9.	Average Distribution Rates (ADR) (Nov - Apr)		\$0.6916		\$0.1993			Attachment J5, P3
0.	Sub-Total LBR	\$	40,031	\$	18,152	\$	58,182	Ln 8 * Ln 9
1.	Program Year 2018 Actual Therm Savings (May - Oct)		57,884		91,060		148,944	2018 Annual Reports, P2, Annualized Savings/12*6
2.	Average Distribution Rates (ADR) (May - Oct)		\$0.6108		\$0.1198			Attachment J5, P3
3.	Sub-Total LBR	\$	35,354	\$	10,913	\$	46,267	Ln 11 * Ln 12
4.	Total LBR (Measures Installed in 2018)	\$	75,385	\$	29,065	\$	104,450	Ln 10 + Ln 13
	Measures Installed in 2019							
5.	Program Year 2019 Estimated Therm Savings (Nov - Apr)		81,308		120,580		201,888	2019 Annual Reports, P2, Annualized Savings/12*6
6.	Average Distribution Rates (ADR) (Nov - Apr)		\$0.6916		\$0.1993		•	Attachment J5, P3
7.	Sub-Total LBR	\$	56,230	\$	24,036	\$	80,266	Ln 15 * Ln 16
	Program Year 2019 Estimated Therm Savings (May - Oct)		81,308		120,580		201,888	2019 Update, Att J5, P4 & P5, Annualized Therms
9.	Average Distribution Rates (ADR) (May - Oct)		\$0.6108		\$0.1198		. ,	Attachment J5, P3
0.	Sub-Total LBR	\$	49,661	\$	14,451	\$	64,112	
	Total LBR (Measures Installed in 2019)	\$	105,891		38,487		144,378	Ln 17 + Ln 20
	Measures Installed in 2020							
,	Program Year 2020 Estimated Therm Savings (Nov - Apr)		65,603		135,953		201,556	Attachment J5, P4
3.	Average Distribution Rates (ADR) (Nov - Apr)		\$0.6916		\$0.1993		201,330	Attachment J5, P3
۶. 4.	Sub-Total LBR	\$	45,369	ċ	27,101	ċ	72,469	Ln 22 * Ln 23
		٠	65,603	ڔ		ڔ	201,556	Attachment J5, P4
	Program Year 2020 Estimated Therm Savings (May - Oct)				135,953		201,556	
6.	Average Distribution Rates (ADR) (May - Oct)	_	\$0.6108	ć	\$0.1198	ć	FC 2C2	Attachment J5, P3
7. 8.	Sub-Total LBR  Total LBR (Measures Installed in 2020)	\$ \$	40,069 85,438		16,293 43,394		56,362 128,831	Ln 25 * Ln 26 Ln 24 + Ln 27
	Measures Installed in 2021							
۵	Program Year 2021 Estimated Therm Savings (Nov - Apr)		81,236		139,515		220,751	Attachment J5, P4
0.	Average Distribution Rates (ADR) (Nov - Apr)		\$0.6916		\$0.1993		220,731	Attachment J5, P3
	Sub-Total LBR	\$	56,180	ċ	27,811	ć	92.001	Ln 29 * Ln 30
1.		Ş	,	Ş		Ş	83,991	
	Program Year 2021 Estimated Therm Savings (May - Oct)		81,236		139,515		220,751	Attachment J5, P4
3.	Average Distribution Rates (ADR) (May - Oct)	_	\$0.6108	_	\$0.1198	•		Attachment J5, P3
1. 5.	Sub-Total LBR  Total LBR (Measures Installed in 2021)	\$ \$	49,617 105,797		16,720 44,531		66,337 150,327	Ln 32 * Ln 33 Ln 31 + Ln 34
	Management and Haddy 2002							
6	Measures Installed in 2022 Program Year 2022 Estimated Therm Savings (Nov - Apr)		100 005		202 156		202 141	Attachment J5, P4
			100,985		202,156		303,141	•
7.	Average Distribution Rates (ADR) (Nov - Apr)		\$0.6916	ċ	\$0.1993	ŕ	110 125	Attachment J5, P3
8.	Sub-Total LBR	\$	69,838	Þ	40,297	Þ	110,135	Ln 36 * Ln 37
	Program Year 2022 Estimated Therm Savings (May - Oct)		102,349		207,340		309,689	Attachment J5, P4
0.	Average Distribution Rates (ADR) (May - Oct)		\$0.6108	_	\$0.1198	_		Attachment J5, P3
1. 2.	Sub-Total LBR  Total LBR (Measures Installed in 2022)	\$ \$	62,513 132,350		24,848 65,146		87,361 197,496	Ln 39 * Ln 40 Ln 38 + Ln 41
	·	7	,555		,2.0	,	,,,,,,,,	
	Measures Installed in 2023							
3.			10,256		21,761		32,017	Attachment J5, P4
4.	Average Distribution Rates (ADR) (Nov - Apr)		\$0.6916		\$0.1993			Attachment J5, P3
5.	Sub-Total LBR	\$	7,093	\$	4,338	\$	11,430	Ln 43 * Ln 44
ŝ.	Program Year 2023 Estimated Therm Savings (May - Oct)		75,581		126,399		201,979	Attachment J5, P4
7.	Average Distribution Rates (ADR) (May - Oct)		\$0.6108		\$0.1198			Attachment J5, P3
3.	Sub-Total LBR	\$	46,163	\$	15,148	\$	61,311	Ln 46 * Ln 47
Э.	Total LBR (Measures Installed in 2023)	\$	53,256	\$	19,486	\$	72,741	Ln 45 + Ln 48
3.	Grand Total Forecasted LBR (Nov 2022 to Oct 2023)	\$	604,191		282,490		886,681	Ln 7 + Ln 14 + Ln 21 + Ln 28 + Ln 35 + Ln 42
		\$	604,191	\$	282,490	\$	886,681	

### Attachment M: Bill and Rate Impacts of 2021-2023 Plan

The regulated utilities estimated the following bill and rate impacts of the 2021-2023 plan using Synapse Energy Economics' bill and rate impact model, which is still in the process of being finalized, and is meant to calculate the impacts of the proposed energy efficiency programs relative to a scenario with no energy efficiency programs. As proposed, the 2021- 2023 energy efficiency programs are expected to reduce the regulated electric utilities' revenue requirements by -1.36% on average, or -\$410.4M in total, over the life of the measures installed during the 2021-2023 term and across all programs. The regulated gas utilities' revenue requirements are expected to reduce by -2.24% on average, or -\$72.5M in total. Table 1 provides changes in revenue requirements by utility.

This rate and bill impact analysis reflects changes in electric and gas utility rates and bills and does not account for the significant fuel neutral savings to customers consuming oil, propane, or other unregulated fuels.

Table 1. Long-term Revenue Requirement Changes due to 2021-2023 Plan, by Utility

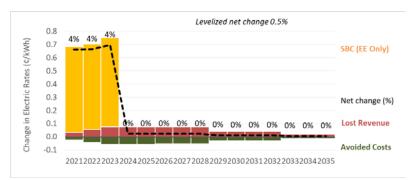
Utility	Percent Change	Dollar Change (millions)
Eversource	-1.5%	-\$348.4
Liberty Electric	-1.7%	-\$50.1
Unitil Electric	-0.3%	-\$11.9
Electric Total	-1.36%	-\$410.4
Liberty Gas	-2.3%	-\$51.5
Unitil Gas	-2.2%	-\$21.0
Gas Total	-2.27%	-\$72.5

The graphs below show long-term bill and rate impacts over the life of the installed measures for each of four customer segments: residential, low-income, small C&I, and large C&I. Bill impacts are shown separately for the following types of customers:

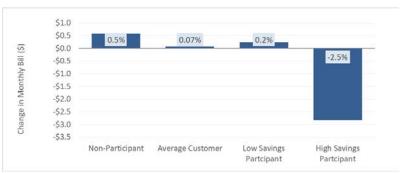
- non-participant—customers who do not participate in any year of the term
- low savings participant—For Electric an illustrative residential participant (e.g. a customer swapping out their lighting for LEDs) who saves 1% of usage, or C&I participant (e.g. a customer performing a few off-the shelf offerings) who saves 5% of usage during year 1 of the plan; For Gas, an illustrative low savings residential participant would save 1% of their usage, and a low savings C&I participant would save 5% of their usage.
- high savings participant— For Electric an illustrative residential participant (e.g. a customer performing a comprehensive HPwES project including weatherization and HVAC) who saves 10% of usage, or C&I participant (e.g. a customer performing a comprehensive custom project) who saves 20% of usage during year 1 of the plan; For Gas, an illustrative high savings residential participant would save 7% of their usage, and a high savings C&I participant would save 10% of their usage.
- average customer—a hypothetical blend between non-participants and participants, calculated based on the segment's program savings divided by the segment's total customers.

### **Eversource Electric**

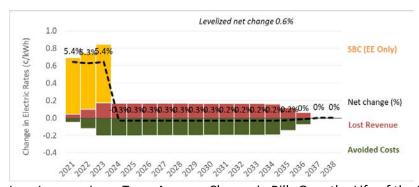
Residential, Change in Rates Over the Life of the Measures



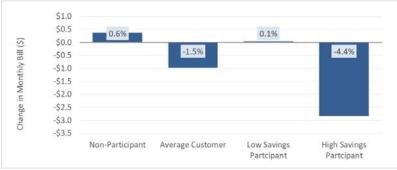
Residential, Long-Term Average Change in Bills Over the Life of the Measures



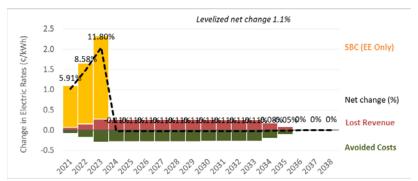
Low-Income, Change in Rates Over the Life of the Measures



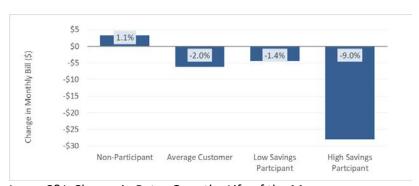
Low-Income, Long-Term Average Change in Bills Over the Life of the Measures



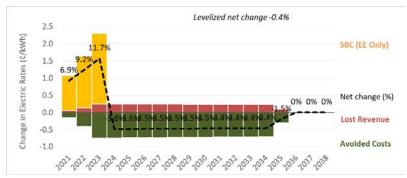
Small C&I, Change in Rates Over the Life of the Measures



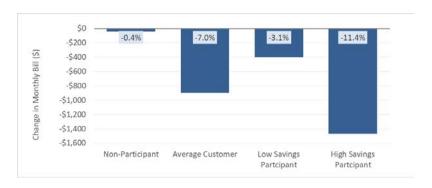
Small C&I, Long-Term Average Change in Bills Over the Life of the Measures



Large C&I, Change in Rates Over the Life of the Measures

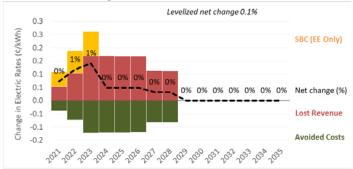


Large C&I, Long-Term Average Change in Bills Over the Life of the Measures



## **Liberty Electric**

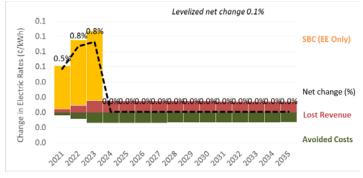
### Residential, Change in Rates Over the Life of the Measures



### Residential, Long-Term Average Change in Bills Over the Life of the Measures

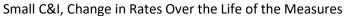


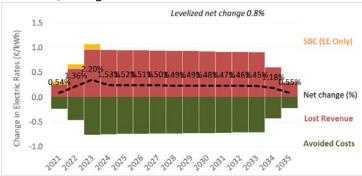
### Low-Income, Change in Rates Over the Life of the Measures



## Low-Income, Long-Term Average Change in Bills Over the Life of the Measures



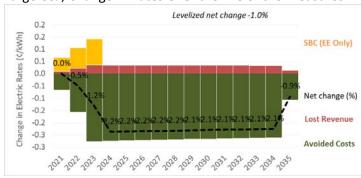




Small C&I, Long-Term Average Change in Bills Over the Life of the Measures



Large C&I, Change in Rates Over the Life of the Measures

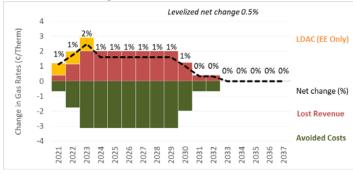


Large C&I, Long-Term Average Change in Bills Over the Life of the Measures

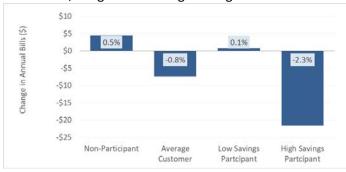


# **Liberty Gas**

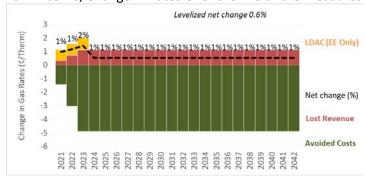
### Residential, Change in Rates Over the Life of the Measures



### Residential, Long-Term Average Change in Bills Over the Life of the Measures

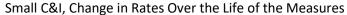


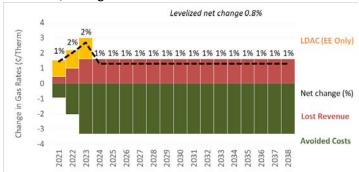
### Low-Income, Change in Rates Over the Life of the Measures



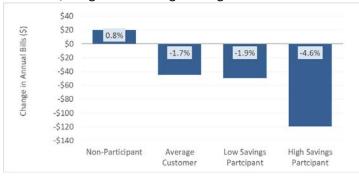
## Low-Income, Long-Term Average Change in Bills Over the Life of the Measures



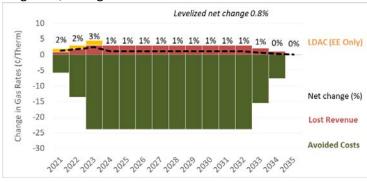




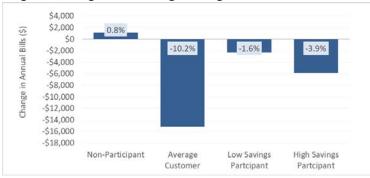
Small C&I, Long-Term Average Change in Bills Over the Life of the Measures



Large C&I, Change in Rates Over the Life of the Measures

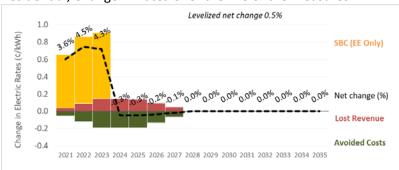


Large C&I, Long-Term Average Change in Bills Over the Life of the Measures

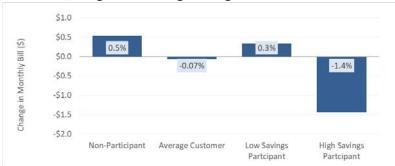


# **Unitil Energy Systems, Inc.**

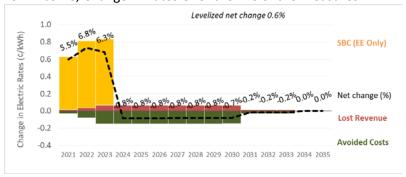
### Residential, Change in Rates Over the Life of the Measures



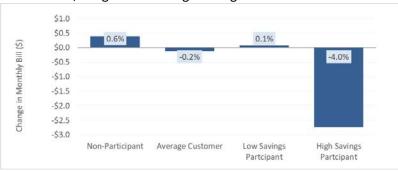
### Residential, Long-Term Average Change in Bills Over the Life of the Measures



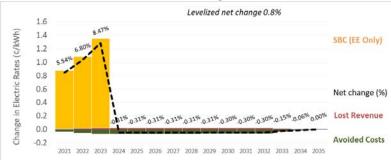
### Low Income, Change in Rates Over the Life of the Measures



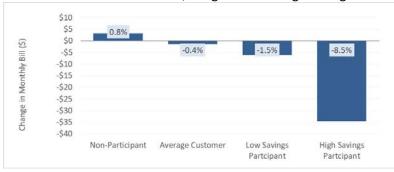
Low-Income, Long-Term Average Change in Bills Over the Life of the Measures



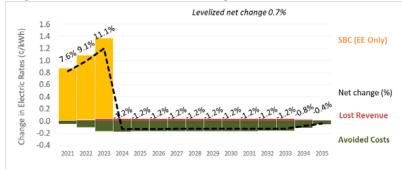
### Small Commercial & Industrial, Change in Rates Over the Life of the Measures



### Small Commercial & Industrial, Long-Term Average Change in Bills Over the Life of the Measures



Large Commercial & Industrial, Change in Rates Over the Life of the Measures

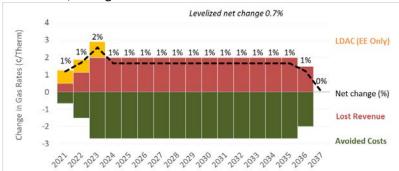


Large Commercial & Industrial, Long-Term Average Change in Bills Over the Life of the Measures

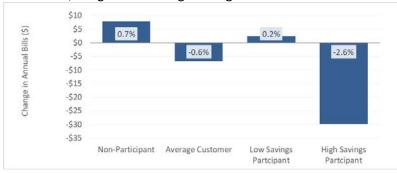


### Northern Utilities, Inc.

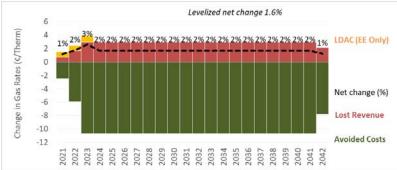
### Residential, Change in Rates Over the Life of the Measures



Residential, Long-Term Average Change in Bills Over the Life of the Measures



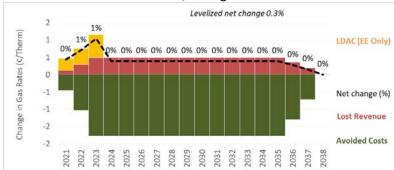
Low Income, Change in Rates Over the Life of the Measures



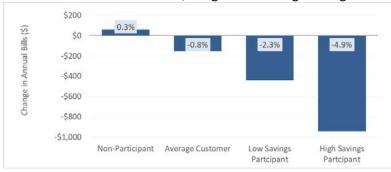
Low Income, Long-Term Average Change in Bills Over the Life of the Measures



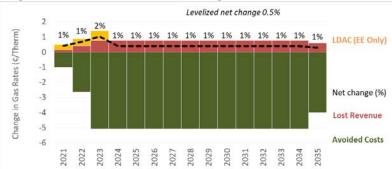
### Small Commercial & Industrial, Change in Rates Over the Life of the Measures



Small Commercial & Industrial, Long-Term Average Change in Bills Over the Life of the Measures



Large Commercial & Industrial, Change in Rates Over the Life of the Measures



Large Commercial & Industrial, Long-Term Average Change in Bills Over the Life of the Measures

