

LIST OF ATTACHMENTS

- Attachment 1: May 1, 2017 Step Adjustment Revenue Requirement
- Attachment 2: Recoupment
- Attachment 3: Rate Design - Permanent Rates
- Attachment 4: Rate Design - Step Adjustment and Recoupment
- Attachment 5: Summary of Bill Impacts Based on Average Use (Current Rates versus May 1, 2017 Permanent Rates plus Step Adjustment and Recoupment)
- Attachment 6: Typical Bill Impacts Based on Various Uses

Unitil Energy Systems, Inc.
Docket DE 16-384
May 1, 2017 Step Adjustment
Page 1 of 5

May 1, 2017 Step Adjustment

Line No.	Rate Effective Date	Description	5/1/2017	Investment Year 2016
Utility Plant:				
1		Beginning Utility Plant ⁽¹⁾	\$ 283,122,968	
2		Plant Additions ⁽²⁾	13,666,114	
3		Retirements	(2,345,862)	
4		Ending Utility Plant	<u>294,443,220</u>	
5		Beginning Accumulated Depreciation	98,980,036	
6		Depreciation	10,260,907	
7		Retirements	(2,340,795)	
8		Cost of Removal and Salvage	(725,971)	
9		Ending Accumulated Depreciation	<u>106,174,178</u>	
10		Ending Net Utility Plant	\$ <u>188,269,043</u>	
Revenue Requirement:				
11		Change in Net Plant	\$ 4,126,111	
12		80% of Change in Net Plant	3,300,889	
13		Pre-Tax Rate of Return	11.52%	
14		Return and Taxes	<u>380,134</u>	
15		Depreciation Expense on 80% of Plant Additions ⁽³⁾	415,422	
16		Property Taxes on 80% Change in Net Plant ⁽⁴⁾	104,638	
17		Revenue Requirement	\$ <u>900,194</u>	
Revenue Cap:				
18				
19		May 1, 2017, 2018 & 2019 Step Adjustment Revenue Requirement Cap	\$ 4,500,000	
20		Less: May 1, 2017 Step Adjustment Revenue Requirement	<u>900,194</u>	
21		Remaining May 1, 2018 & 2019 Step Adjustment Revenue Requirement Cap	\$ 3,599,806	

Notes:

(1) Beginning Utility Plant from page 2, plus Kingston substation of \$10,336,281

(2) Plant Additions from page 2, less Kingston substation of \$10,336,281

(3) See page 4

(4) 3.17% rate (2016 Property Taxes of \$5,971,944 / 2016 Net Utility Plant of \$188,269,043)

2016 Gross Plant Detail

Description	Beginning Balance	Additions	Retirements	Ending Balance
301-00 Organization-E	380	-	-	380
303-00 Intangible Software-5 Yea-E	3,958,942	92,040	-	4,050,981
303-01 Intangible Software-3 Yea-E	87,196	-	-	87,196
303-02 Intangible Software-10 Yea-E	2,307,249	-	-	2,307,249
343-00 Prime Movers-E	56,575	-	-	56,575
353-00 Transmission Station Equi-E	34,220	(34,220)	-	-
360-01 ROW - Distribution-E	991,116	-	-	991,116
360-02 ROW - Distribution-E	1,674,812	-	-	1,674,812
361-00 Distribution Structures-E	167,773	-	-	167,773
362-00 Distribution Station Equi-E	23,696,229	12,947,587	(180,145)	36,463,670
364-00 Distribution Poles, Tower-E	54,781,196	2,794,857	(348,903)	57,227,150
365-00 Distribution Overhead Con-E	71,213,961	3,065,702	(701,357)	73,578,306
366-00 Distribution Underground -E	1,841,623	35,257	(6,337)	1,870,543
367-00 Distribution Underground -E	18,242,829	818,757	(88,835)	18,972,752
368-00 Distribution Line Transfo-E	24,590,384	820,798	(298,373)	25,112,809
368-01 Transformer Installations-E	18,572,941	912,800	(42,638)	19,443,103
369-00 Distribution Services-E	20,341,811	982,496	(253,675)	21,070,632
370-00 Distribution Meters-E	9,636,392	385,812	(61,974)	9,960,229
370-01 Meter Installation-E	4,027,591	508,276	(16,358)	4,519,509
371-00 Installations on Customer-E	1,886,935	297,589	(129,864)	2,054,660
373-00 Street Lights & Signal Sy-E	3,237,653	178,950	(137,473)	3,279,130
373-01 Street Lights & Signal Sy-E	-	-	-	-
389-00 General & Misc. Land-E	18,620	-	-	18,620
390-00 Structures-E	3,787,332	26,053	(3,908)	3,809,477
390-01 General & Misc. Structure-E	-	-	-	-
391-01 Office Furniture & Fixtur-E	267,375	4,296	-	271,671
391-03 Computer Equipment-E	-	-	-	-
392-00 Transportation Equipment-E	1,078,761	-	(5,067)	1,073,695
393-00 Stores Equipment-E	79,908	-	-	79,908
394-00 Tools, Shop and garage Eq-E	1,539,171	79,463	(2,858)	1,615,777
395-00 Laboratory Equipment-E	792,711	30,751	-	823,462
397-00 Communication Equipment-E	3,772,058	55,130	(68,098)	3,759,091
398-00 Miscellaneous Equipment-E	102,943	-	-	102,943
399-00 Other Intangible Plant-E	-	-	-	-
Grand Total	272,786,687	24,002,395	(2,345,862)	294,443,220

2016 Accumulated Depreciation Detail

Description	Beginning Balance	Provision	Retirements	Cost of Removal	Salvage	Ending Balance
301-00 Organization	-	-	-	-	-	-
303-00 Intangible Software-5 Year	3,273,350	304,704	-	-	-	3,578,054
303-01 Intangible Software-3 Year	87,196	-	-	-	-	87,196
303-02 Intangible Software-10 Year	721,991	230,725	-	-	-	952,715
343-00 Prime Movers	17,747	3,955	-	-	-	21,702
350-01 ROW - Transmission	-	-	-	-	-	-
350-02 ROW - Transmission	-	-	-	-	-	-
352-00 Transmission Structures	-	-	-	-	-	-
353-00 Transmission Station Equipme	-	-	-	-	-	-
354-00 Transmission Towers & Fixtur	-	-	-	-	-	-
355-00 Transmission Poles & Fixture	-	-	-	-	-	-
356-00 Transmission Overhead Conduc	-	-	-	-	-	-
360-01 ROW - Distribution	-	-	-	-	-	-
360-02 ROW - Distribution	-	-	-	-	-	-
361-00 Distribution Structures	143,327	(7,007)	-	-	-	136,320
362-00 Distribution Station Equipme	7,364,421	988,538	(180,145)	(36,398)	385	8,136,801
364-00 Distribution Poles, Towers &	22,341,062	507,501	(348,903)	(256,752)	4,862	22,247,770
365-00 Distribution Overhead Conduc	22,691,293	694,550	(701,357)	(318,438)	15,453	22,381,501
366-00 Distribution Underground Con	587,417	10,316	(6,337)	(465)	0	590,932
367-00 Distribution Underground Con	6,939,941	(1,243,333)	(88,835)	(16,627)	8,084	5,599,232
368-00 Distribution Line Transforme	8,931,881	1,186,352	(298,373)	(111,182)	-	9,708,678
368-01 Transformer Installations	3,997,430	904,602	(42,638)	(621)	-	4,858,773
368-02 Transformers Installations	-	-	-	-	-	-
369-00 Distribution Services	13,235,456	1,441,734	(253,675)	(13,597)	138	14,410,056
370-00 Distribution Meters	2,066,303	1,979,406	(61,974)	-	-	3,983,736
370-01 Meter Installation	(2,077,150)	2,774,788	(16,358)	-	-	681,280
370-02 Meter Installations	-	-	-	-	-	-
371-00 Installations on Customers P	363,888	218,398	(129,864)	(14,109)	10,368	448,681
373-00 Street Lights & Signal Syste	1,881,836	520,889	(137,473)	(16,746)	24,549	2,273,055
373-01 Street Lights & Signal Syste	-	-	-	-	-	-
389-00 General & Misc. Land	-	-	-	-	-	-
390-00 Structures	1,803,802	(284,858)	(3,908)	-	-	1,515,037
390-01 General & Misc. Structures	863	-	-	-	-	863
391-01 Office Furniture & Fixtures	(525,150)	386,757	-	-	-	(138,394)
391-03 Computer Equipment	518	3,828	-	-	-	4,346
392-00 Transportation Equipment	1,048,135	(2,991)	-	-	-	1,045,145
393-00 Stores Equipment	58,463	(3,051)	-	-	-	55,412
394-00 Tools, Shop and garage Equip	672,614	24,824	(2,858)	-	-	694,581
395-00 Laboratory Equipment	297,321	65,228	-	-	-	362,549
397-00 Communication Equipment	2,978,647	(450,925)	(68,098)	(4,877)	-	2,454,746
398-00 Miscellaneous Equipment	77,433	5,978	-	-	-	83,411
399-00 Other Tangible Property	-	-	-	-	-	-
Grand Total	98,980,036	10,260,907	(2,340,795)	(789,812)	63,841	106,174,178

2016 Depreciation by FERC Account

Description	Additions	Less: Kingston	Net Additions	Depreciation Rate	Annual Depreciation
303-00 Intangible Software-5 Yea-E	92,040	-	92,040	20.00%	18,408
353-00 Transmission Station Equi-E	(34,220)	-	(34,220)	N/A	N/A
362-00 Distribution Station Equi-E	12,947,587	10,336,281	2,611,306	2.60%	67,894
364-00 Distribution Poles, Tower-E	2,794,857	-	2,794,857	3.70%	103,410
365-00 Distribution Overhead Con-E	3,065,702	-	3,065,702	3.64%	111,592
366-00 Distribution Underground -E	35,257	-	35,257	2.04%	719
367-00 Distribution Underground -E	818,757	-	818,757	2.55%	20,878
368-00 Distribution Line Transfo-E	820,798	-	820,798	3.00%	24,624
368-01 Transformer Installations-E	912,800	-	912,800	2.89%	26,380
369-00 Distribution Services-E	982,496	-	982,496	5.67%	55,708
370-00 Distribution Meters-E	385,812	-	385,812	5.00%	19,291
370-01 Meter Installation-E	508,276	-	508,276	5.00%	25,414
371-00 Installations on Customer-E	297,589	-	297,589	7.56%	22,498
373-00 Street Lights & Signal Sy-E	178,950	-	178,950	7.79%	13,940
390-00 Structures-E	26,053	-	26,053	2.08%	542
391-01 Office Furniture & Fixtur-E	4,296	-	4,296	5.83%	250
394-00 Tools, Shop and garage Eq-E	79,463	-	79,463	3.64%	2,892
395-00 Laboratory Equipment-E	30,751	-	30,751	3.90%	1,199
397-00 Communication Equipment-E	55,130	-	55,130	6.60%	3,639
Grand Total	24,002,395	10,336,281	13,666,114	3.80%	519,277

Unitil Energy Systems, Inc.
Docket DE 16-384
May 1, 2017 Step Adjustment
Page 5 of 5

Pre-Tax Rate of Return
December 31, 2015 Pro Forma

Line No.	Description	Proformed Amount	Weight	Cost of Capital	Weighted Cost of Capital	Tax Factor	Pre-Tax Cost
1	Common Stock Equity	\$ 77,284,950	50.97%	9.50%	4.84%	1.6559	8.02%
2	Preferred Stock Equity	189,800	0.13%	6.00%	0.01%		0.01%
3	Long Term Debt	74,000,000	48.80%	7.15%	3.49%		3.49%
4	Short Term Debt	161,783	0.11%	1.54%	0.00%		0.00%
5	Total	\$ 151,636,533	100.00%		8.34%		11.52%

Unitil Energy Systems, Inc.
Docket DE 16-384

May 1, 2017 Recoupment

Settlement Revenue Requirement	Order No. 25,915 Temporary Revenue	Annualized Revenue Difference	
\$ 4,109,022	\$ 2,415,744	\$ 1,693,278	
		<u>\$ 141,106.50</u>	Monthly Amount
		<u>\$ 1,411,065</u>	(10 months July, 2016 - April 2017)

		<u>Total</u>	<u>Domestic</u>	<u>G2: Sec</u>	<u>G1: Sec</u>	<u>OL</u>
1	Current Rates per ACOSS	\$ 51,823,377	\$ 26,615,662	\$ 16,442,452	\$ 7,114,162	\$ 1,651,100
2	Revenue Excess/Deficiency for ACOSS	\$ (4,109,023)	\$ (10,570,378)	\$ 5,733,248	\$ 2,370,490	\$ (1,642,383)
3	Percent Excess/Deficiency	-7.93%	-39.71%	34.87%	33.32%	-99.47%
4	Revenue to Cost ratio	0.93	0.72	1.54	1.50	0.50
5	Increase based on Actuals					
6	Total Increase Amount	\$ 4,109,023				
7	% Total Increase	7.93%				
8	Parity Increase %		125%			125%
9	Class % Increase (Parity)		9.91%	0.00%	0.00%	9.91%
10	Class Parity Increase	\$ 2,801,554	\$ 2,637,911	\$ -	\$ -	\$ 163,643
13	Total Class Increase	\$ 4,109,023	\$ 2,637,911	\$ 912,610	\$ 394,859	\$ 163,643
14	% Final Increase	7.93%	9.91%	5.55%	5.55%	9.91%
15	Proposed Revenue	\$ 55,932,400	\$ 29,253,573	\$ 17,355,062	\$ 7,509,022	\$ 1,814,743
16	Revenue to Cost ratio		0.79	1.62	1.58	0.55

Row	Description	Units	Actual Bill Units	Actual Rates & Revenue		Proposed Rates & Revenue		Difference Over Normalize		Rounding Error	
				Rate	Revenue	Rate	Revenue	Amount	%	Amount	%
A	B	C	D	E	F	G	H	I	J	K	L
1	Domestic										
2	Customer Charge		785,306	\$ 10.27	\$ 8,065,095	\$ 15.00	\$ 11,779,594	\$3,714,499	46.1%		
3	Energy Charge										
4	First 250 kWh	kWh	177,320,752	\$ 0.03404	\$ 6,035,998	\$ 0.03510	\$ 17,475,442	\$11,439,443	189.5%		
5	Excess 250 kWh	kWh	320,555,076	\$ 0.03904	\$ 12,514,470		\$ -	(\$12,514,470)	-100.0%		
6	Subtotal: Energy Charge				\$ 18,550,469		\$ 17,475,442	(\$1,075,027)	-5.8%		
7	Subtotal: Domestic				\$ 26,615,564		\$ 29,255,035				
8	Total Schedule D				\$ 26,615,564		\$ 29,255,035	\$2,639,472	9.9%	\$1,560	0.0%
9	G2 - kWh										
10	Customer Charge		5,238	\$ 13.94	\$ 73,023	\$ 17.00	\$ 89,052	\$16,029	22.0%		
11	Energy Charge	kWh	607,397	\$ 0.03211	\$ 19,504	\$ 0.01417	\$ 8,607	(\$10,897)	-55.9%		
12	Subtotal G2 kWh				\$ 92,526		\$ 97,659	\$5,133	5.5%		
13	G2 QR WH /SH										
14	Customer Charge		3,454	\$ 6.25	\$ 21,587	\$ 9.00	\$ 31,085	\$9,498	44.0%		
15	Energy Charge	kWh	5,742,223	\$ 0.03073	\$ 176,459	\$ 0.03099	\$ 177,951	\$1,493	0.8%		
16	Subtotal G2 QR WH/SH				\$ 198,045		\$ 209,036	\$10,991	5.5%		
17	G2 Demand										
18	Customer Charge		123,180	\$ 18.41	\$ 2,267,743	\$ 27.00	\$ 3,325,859	\$1,058,116	46.7%		
19	Demand Charge	kW	1,348,556	\$ 10.31	\$ 13,903,613	\$ 10.19	\$ 13,741,786	(\$161,827)	-1.2%		
20	Transformer Ownership credit	kW	50,269	(\$0.39)	\$ (19,605)	\$ (0.50)	\$ (25,134)	(\$5,530)	28.2%		
21	Energy Charge	kWh	347,811,789	\$ -	\$ -	\$ -	\$ -	\$0	0.0%		
22	Subtotal G2 Demand				\$ 16,151,751		\$ 17,042,511	\$890,760	5.5%		
23	Total G2				\$ 16,442,322		\$ 17,349,206	\$906,883	5.5%	(\$5,727)	0.0%

Row	Description	Units	Actual Bill Units	Actual Rates & Revenue		Proposed Rates & Revenue		Difference Over Normalize		Rounding Error	
				Rate	Revenue	Rate	Revenue	Amount	%	Amount	%
A	B	C	D	E	F	G	H	I	J	K	L
24	G1										
25	Customer Charge										
26	Secondary		1,497	\$ 97.16	\$ 145,449	\$ 150.00	\$ 224,550	\$79,101	54.4%		
27	Primary		381	\$ 57.58	\$ 21,938	\$ 80.00	\$ 30,480	\$8,542	38.9%		
28	Subtotal: Customer Charge				\$ 167,387		\$ 255,030	\$87,644	52.4%		
29	Demand Charge	kVA	1,022,850	\$ 6.95	\$ 7,108,808	\$ 7.30	\$ 7,466,805	\$357,998	5.0%		
30	Energy Charge	kWh	353,924,392	\$ -	\$ -	\$ -	\$ -	\$0	0.0%		
31	Transformer Ownership credit	kVA	415,470	(\$0.39)	(\$162,033)	(\$0.50)	(\$207,735)	(\$45,702)	28.2%		
32	Total G2				\$ 7,114,161		\$ 7,514,100	\$399,939	5.6%	\$5,080	0.1%
33	OL										
34	100W Mercury Vapor Street		17,494	\$ 11.28	\$ 197,331	\$ 12.76	\$ 223,222	\$25,891	13.1%		
35	175W Mercury Vapor Street		894	\$ 13.65	\$ 12,206	\$ 15.13	\$ 13,529	\$1,323	10.8%		
36	250W Mercury Vapor Street		945	\$ 15.67	\$ 14,809	\$ 17.15	\$ 16,208	\$1,399	9.4%		
37	400W Mercury Vapor Street		1,940	\$ 18.94	\$ 36,747	\$ 20.42	\$ 39,618	\$2,871	7.8%		
38	1000W Mercury Vapor Street		24	\$ 39.06	\$ 937	\$ 40.54	\$ 973	\$36	3.8%		
39	250W Mercury Vapor Flood		850	\$ 16.79	\$ 14,266	\$ 18.27	\$ 15,523	\$1,258	8.8%		
40	400W Mercury Vapor Flood		1,403	\$ 20.38	\$ 28,598	\$ 21.86	\$ 30,675	\$2,077	7.3%		
41	1000W Mercury Vapor Flood		272	\$ 34.74	\$ 9,455	\$ 36.22	\$ 9,858	\$403	4.3%		
42	100W Mercury Vapor Power Bracket		4,860	\$ 11.40	\$ 55,407	\$ 12.88	\$ 62,600	\$7,193	13.0%		
43	175W Mercury Vapor Power Bracket		715	\$ 12.81	\$ 9,160	\$ 14.29	\$ 10,218	\$1,058	11.6%		
44	50W Sodium Vapor Street		41,383	\$ 11.51	\$ 476,317	\$ 12.99	\$ 537,563	\$61,247	12.9%		
45	100W Sodium Vapor Street		1,182	\$ 13.14	\$ 15,530	\$ 14.62	\$ 17,279	\$1,749	11.3%		
46	150W Sodium Vapor Street		4,221	\$ 13.20	\$ 55,721	\$ 14.68	\$ 61,969	\$6,248	11.2%		
47	250W Sodium Vapor Street		13,250	\$ 16.91	\$ 224,054	\$ 18.39	\$ 243,663	\$19,610	8.8%		
48	400W Sodium Vapor Street		3,106	\$ 21.70	\$ 67,410	\$ 23.18	\$ 72,007	\$4,598	6.8%		
49	1000W Sodium Vapor Street		1,728	\$ 38.55	\$ 66,616	\$ 40.03	\$ 69,173	\$2,557	3.8%		
50	150W Sodium Vapor Flood		2,796	\$ 15.44	\$ 43,167	\$ 16.92	\$ 47,305	\$4,138	9.6%		
51	250W Sodium Vapor Flood		3,708	\$ 18.47	\$ 68,492	\$ 19.95	\$ 73,980	\$5,488	8.0%		
52	400W Sodium Vapor Flood		4,724	\$ 21.18	\$ 100,049	\$ 22.66	\$ 107,040	\$6,991	7.0%		
53	1000W Sodium Vapor Flood		2,789	\$ 38.90	\$ 108,494	\$ 40.38	\$ 112,622	\$4,128	3.8%		
54	50W Sodium Vapor Power Bracket		1,304	\$ 10.54	\$ 13,748	\$ 12.02	\$ 15,678	\$1,930	14.0%		
55	100W Sodium Vapor Power Bracket		777	\$ 12.01	\$ 9,330	\$ 13.49	\$ 10,480	\$1,150	12.3%		
56	175W Metal Halide Street		19	\$ 17.65	\$ 334	\$ 19.13	\$ 362	\$28	8.4%		
57	250W Metal Halide Street		0	\$ 19.32	\$ -	\$ 20.80	\$ -	\$0	0.0%		
58	400W Metal Halide Street		0	\$ 20.09	\$ -	\$ 21.57	\$ -	\$0	0.0%		
59	175W Metal Halide Flood		0	\$ 20.62	\$ -	\$ 22.10	\$ -	\$0	0.0%		
60	250W Metal Halide Flood		0	\$ 22.38	\$ -	\$ 23.86	\$ -	\$0	0.0%		
61	400W Metal Halide Flood		0	\$ 22.42	\$ -	\$ 23.90	\$ -	\$0	0.0%		
62	175W Metal Halide Power Bracket		0	\$ 16.42	\$ -	\$ 17.90	\$ -	\$0	0.0%		
63	250W Metal Halide Power Bracket		0	\$ 17.55	\$ -	\$ 19.03	\$ -	\$0	0.0%		
64	400W Metal Halide Power Bracket		0	\$ 18.86	\$ -	\$ 20.34	\$ -	\$0	0.0%		
65	1000W Metal Halide Flood (Contracts)		465	\$ 29.48	\$ 13,696	\$ 30.96	\$ 14,383	\$688	5.0%		

Row	Description	Units	Actual Bill Units	Actual Rates & Revenue		Proposed Rates & Revenue		Difference Over Normalized		Rounding Error	
				Rate	Revenue	Rate	Revenue	Amount	%	Amount	%
A	B	C	D	E	F	G	H	I	J	K	L
66	LED										
67	42W 3780 K LED Area Light Fixture		0	\$ -	\$ -	\$ 12.64	\$ -	\$0	0.0%		
68	57W 5130K LED Area Light Fixture		0	\$ -	\$ -	\$ 12.69	\$ -	\$0	0.0%		
69	25W 2500K LED Cobra Head Fixture		0	\$ -	\$ -	\$ 12.59	\$ -	\$0	0.0%		
70	88W 8800K LED Cobra Head Fixture		0	\$ -	\$ -	\$ 12.78	\$ -	\$0	0.0%		
71	108W 10800K LED Cobra Head Fixture		0	\$ -	\$ -	\$ 12.84	\$ -	\$0	0.0%		
72	193W 19300K LED Cobra Head Fixture		0	\$ -	\$ -	\$ 13.08	\$ -	\$0	0.0%		
73	123W 11070K LED Flood Light Fixture		0	\$ -	\$ -	\$ 12.88	\$ -	\$0	0.0%		
74	227W 20340K LED Flood Light Fixture		0	\$ -	\$ -	\$ 13.09	\$ -	\$0	0.0%		
75	365W 32850K LED Flood Light Fixture		0	\$ -	\$ -	\$ 13.39	\$ -	\$0	0.0%		
76	Pole Charges				\$ 9,247		\$ 9,247	\$0	0.0%		
77	Total OL				\$ 1,651,120		\$ 1,815,177	\$164,057	9.9%	\$415	0.0%
78	Total System				\$ 51,823,167		\$ 55,933,518	\$ 4,110,352	7.9%	\$ 1,329	0.0%

Unitil Energy Systems, Inc.
Docket DE16-384
Rate Design - Step Adjustment and Recoupment

	Test Year 2015 Billing Units	Settlement - Proposed Rates	Settlement - Design Revenue May 1, 2017	Step 1 Adjustment Rates	Step 1 Adjustment Revenue May 1, 2017 (No recoupment or rate case expense)	Percent Increase
Residential - D						
Test Year Consumers	785,306	\$15.00	\$11,779,594	\$15.24	\$11,968,419	
All kWh	497,875,828	\$0.03510	\$17,475,442	\$0.03566	\$17,755,571	
Total Design Revenue			\$29,255,035		\$29,723,991	1.60%
Small General Service - G2 kWh						
Test Year Consumers	5,238	\$17.00	\$89,052	\$17.27	\$90,480	
Annual kWh	607,397	\$0.01417	\$8,607	\$0.01440	\$8,745	
Total Design Revenue			\$97,659		\$99,224	1.60%
Small General Service - G2 QR WH /SH						
Test Year Consumers	3,454	\$9.00	\$31,085	\$9.14	\$31,583	
Annual kWh	5,742,223	\$0.03099	\$177,951	\$0.03149	\$180,804	
Total Design Revenue			\$209,036		\$212,387	1.60%
Small General Service - G2 Demand						
Test Year Consumers	123,180	\$27.00	\$3,325,859	\$27.43	\$3,379,172	
Demand kW	1,348,556	\$10.19	\$13,741,786	\$10.35	\$13,962,065	
Annual kWh	347,811,789	\$0.00000	\$0	\$0.00000	\$0	
Total Design Revenue			\$17,067,645		\$17,341,238	1.60%
G2 Demand - kW Transformer Ownership Discount						
Test Year kW	50,269	(\$0.50)	-\$25,134	(\$0.50)	-\$25,134	
Total Design Revenue			-\$25,134		-\$25,134	0.00%
Subtotal G2 Demand inc. Transformer Ownership Discount						
Total Design Revenue			\$17,042,511		\$17,316,103	1.61%
Large General Service - G1						
Test Year Consumers Secondary	1,497	\$150.00	\$224,550	\$152.40	\$228,150	
Test Year Consumers Primary	381	\$80.00	\$30,480	\$81.28	\$30,969	
Demand kVA	1,022,850	\$7.30	\$7,466,805	\$7.42	\$7,586,497	
Annual kWh	353,924,392	\$0.00000	\$0	\$0.00000	\$0	
Total Design Revenue			\$7,721,835		\$7,845,615	1.60%
G1 - kVA Transformer Ownership Discount						
Test Year kVA	415,470	(\$0.50)	-\$207,735	(\$0.50)	-\$207,735	
Total Design Revenue			-\$207,735		-\$207,735	0.00%
Subtotal G1 inc. Transformer Ownership Discount						
Total Design Revenue			\$7,514,100		\$7,637,880	1.65%

Unitil Energy Systems, Inc.
Docket DE16-384
Rate Design - Step Adjustment and Recoupment

	Test Year 2015 Billing Units	Settlement - Proposed Rates	Settlement - Design Revenue May 1, 2017	Step 1 Adjustment Rates	Step 1 Adjustment Revenue May 1, 2017 (No recoupment or rate case expense)	Percent Increase
Outdoor Lighting - OL						
Delivery charge - Annual kWh	8,241,454	\$0.00000	\$0	\$0.00000	\$0	
Fixture revenue						
100W Mercury Vapor Street	17,494	\$12.76	\$223,222	\$12.96	\$226,801	
175W Mercury Vapor Street	894	\$15.13	\$13,529	\$15.37	\$13,746	
250W Mercury Vapor Street	945	\$17.15	\$16,208	\$17.42	\$16,468	
400W Mercury Vapor Street	1,940	\$20.42	\$39,618	\$20.75	\$40,253	
1000W Mercury Vapor Street	24	\$40.54	\$973	\$41.19	\$989	
250W Mercury Vapor Flood	850	\$18.27	\$15,523	\$18.56	\$15,772	
400W Mercury Vapor Flood	1,403	\$21.86	\$30,675	\$22.21	\$31,166	
1000W Mercury Vapor Flood	272	\$36.22	\$9,858	\$36.80	\$10,016	
100W Mercury Vapor Power Bracket	4,860	\$12.88	\$62,600	\$13.09	\$63,603	
175W Mercury Vapor Power Bracket	715	\$14.29	\$10,218	\$14.52	\$10,382	
50W Sodium Vapor Street	41,383	\$12.99	\$537,563	\$13.20	\$546,180	
100W Sodium Vapor Street	1,182	\$14.62	\$17,279	\$14.85	\$17,556	
150W Sodium Vapor Street	4,221	\$16.68	\$61,969	\$14.92	\$62,962	
250W Sodium Vapor Street	13,250	\$18.39	\$243,663	\$18.68	\$247,569	
400W Sodium Vapor Street	3,106	\$23.18	\$72,007	\$23.55	\$73,162	
1000W Sodium Vapor Street	1,728	\$40.03	\$69,173	\$40.67	\$70,282	
150W Sodium Vapor Flood	2,796	\$16.92	\$47,305	\$17.19	\$48,063	
250W Sodium Vapor Flood	3,708	\$19.95	\$73,980	\$20.27	\$75,166	
400W Sodium Vapor Flood	4,724	\$22.66	\$107,040	\$23.02	\$108,756	
1000W Sodium Vapor Flood	2,789	\$40.38	\$112,622	\$41.03	\$114,427	
50W Sodium Vapor Power Bracket	1,304	\$12.02	\$15,678	\$12.21	\$15,929	
100W Sodium Vapor Power Bracket	777	\$13.49	\$10,480	\$13.71	\$10,648	
175W Metal Halide Street	19	\$19.13	\$362	\$19.44	\$367	
250W Metal Halide Street	0	\$20.80	\$0	\$21.13	\$0	
400W Metal Halide Street	0	\$21.57	\$0	\$21.92	\$0	
175W Metal Halide Flood	0	\$22.10	\$0	\$22.45	\$0	
250W Metal Halide Flood	0	\$23.86	\$0	\$24.24	\$0	
400W Metal Halide Flood	0	\$23.90	\$0	\$24.28	\$0	
175W Metal Halide Power Bracket	0	\$17.90	\$0	\$18.19	\$0	
250W Metal Halide Power Bracket	0	\$19.03	\$0	\$19.34	\$0	
400W Metal Halide Power Bracket	0	\$20.34	\$0	\$20.67	\$0	
1000W Metal Halide Flood (Contracts)	465	\$30.96	\$14,383	\$31.46	\$14,614	
42W 3780 K LED Area Light Fixture	0	\$12.64	\$0	\$12.85	\$0	
57W 5130K LED Area Light Fixture	0	\$12.69	\$0	\$12.89	\$0	
25W 2500K LED Cobra Head Fixture	0	\$12.59	\$0	\$12.80	\$0	
88W 8800K LED Cobra Head Fixture	0	\$12.78	\$0	\$12.98	\$0	
108W 10800K LED Cobra Head Fixture	0	\$12.84	\$0	\$13.04	\$0	
193W 19300K LED Cobra Head Fixture	0	\$13.08	\$0	\$13.29	\$0	
123W 11070K LED Flood Light Fixture	0	\$12.88	\$0	\$13.09	\$0	
227W 20340K LED Flood Light Fixture	0	\$13.09	\$0	\$13.30	\$0	
365W 32850K LED Flood Light Fixture	0	\$13.39	\$0	\$13.60	\$0	
Total Design Revenue			\$1,805,930		\$1,834,879	1.60%
Total Design Revenue			\$55,924,271		\$56,824,465	
Total Billed kWh	1,214,203,082					
Total Billed kW/kVA	2,371,406					
Step Adjustment (does not include recoupment)					\$900,194	
Step Adjustment Percentage Increase (not including transformer discounts, which are fixed)					1.60%	
Recoupment \$					\$1,411,065	
Recoupment \$/kWh					\$0.00116	

Unitil Energy System's Inc
Docket DE 16-384

Summary of Bill Impacts Based on Average Use

(Current Rates versus May 1, 2017 Permanent Rates plus Step Adjustment and Recoupment)

<u>Rate Schedule</u>	<u>Customer</u>	<u>Use kWh</u>	<u>Use kW or kVA</u>	<u>Monthly Bill Existing Rates</u>	<u>Monthly Bill Settlement Rates</u>	<u>Difference</u>	<u>%</u>
D	Residential	630	n/a	\$ 100.35	\$ 103.92	\$ 3.57	3.6%
G2	Commercial	2,821	11	\$ 420.28	\$ 427.40	\$ 7.12	1.7%
G2 w kWh meter	Commercial	115	n/a	\$ 29.39	\$ 30.59	\$ 1.20	4.1%
G2 - QRWH	Commercial	1,715	n/a	\$ 234.35	\$ 237.11	\$ 2.76	1.2%
G1	Commercial	187,682	545	\$ 20,488.82	\$ 20,644.48	\$ 155.66	0.8%
OL	Outdoor Lights	21	50 Watts (HPS 4K Lumens)	\$ 13.66	\$ 15.53	\$ 1.87	13.7%

Unitil Energy Systems, Inc.
Typical Bill Impacts as a Result of Proposed Rates - Includes Step/Recoupment
Impacts do NOT include the Electricity Consumption Tax
Impact on D Rate Customers

<u>Range Monthly kWh</u>	<u>Percentage Bills</u>	<u>Average kWh</u>	<u>Total Bill Using Rates Effective 1/1/2017</u>	<u>Total Bill Using Rates Proposed 5/1/17</u>	<u>Total Difference</u>	<u>% Total Difference</u>
0-100	7.2%	40	\$15.92	\$20.93	\$5.00	31.4%
101-200	8.2%	153	\$31.74	\$36.83	\$5.09	16.0%
201-300	10.5%	251	\$45.47	\$50.63	\$5.16	11.4%
301-400	11.1%	351	\$59.85	\$64.59	\$4.74	7.9%
401-500	10.9%	450	\$74.26	\$78.59	\$4.33	5.8%
501-750	21.9%	617	\$98.46	\$102.08	\$3.62	3.7%
750-1,000	13.4%	864	\$134.22	\$136.81	\$2.58	1.9%
1,000-1,500	11.2%	1,200	\$182.98	\$184.15	\$1.17	0.6%
1,501-2,000	3.5%	1,705	\$256.22	\$255.26	(\$0.96)	-0.4%
2,001-3,500	1.7%	2,358	\$350.89	\$347.18	(\$3.71)	-1.1%
3,501-5,000	0.3%	3,312	\$489.14	\$481.42	(\$7.72)	-1.6%
5,000+	0.2%	4,342	\$638.48	\$626.42	(\$12.06)	-1.9%
Approx. Average		630	\$100.35	\$103.92	\$3.57	3.6%

Unitil Energy Systems, Inc.
Rates - Effective 1/1/2017:

Customer Charge	\$10.27	
	<u>First 250 kWh</u>	<u>Over 250 kWh</u>
Distribution Charge	\$0.03603	\$0.04103
External Delivery Charge	\$0.02144	\$0.02144
Stranded Cost Charge	(\$0.00018)	(\$0.00018)
System Benefits Charge	\$0.00357	\$0.00357
Storm Recovery Adjustment Factor	\$0.00221	\$0.00221
Fixed Default Service Charge	<u>\$0.07690</u>	<u>\$0.07690</u>
TOTAL	<u>\$0.13997</u>	<u>\$0.14497</u>

Unitil Energy Systems, Inc.
Rates - Proposed 5/1/17:

Customer Charge	\$15.24	
	<u>All kWh</u>	
Distribution Charge	\$0.03682	
External Delivery Charge	\$0.02144	
Stranded Cost Charge	(\$0.00018)	
System Benefits Charge	\$0.00357	
Storm Recovery Adjustment Factor	\$0.00221	
Fixed Default Service Charge	<u>\$0.07690</u>	
TOTAL	<u>\$0.14076</u>	

Unitil Energy Systems, Inc.
Typical Bill Impacts as a Result of Proposed Rates - Includes Step/Recoupment
Impacts do NOT include the Electricity Consumption Tax
Impact on G2 Rate Customers

Average Load Factor	kW Range	Percentage Bills	Average Monthly kW	Average Monthly kWh	Total Bill Using Rates Effective 1/1/2017	Total Bill Using Rates Proposed 5/1/17	Total Difference	% Total Difference
23%	0-1.0	26.0%	0.9	145	\$42.27	\$51.20	\$8.93	21.1%
26%	1.1-2	8.9%	1.5	285	\$62.94	\$71.79	\$8.84	14.1%
23%	2.1-3	7.0%	2.5	427	\$88.16	\$96.93	\$8.77	9.9%
24%	3.1-4	6.3%	3.5	620	\$118.23	\$126.87	\$8.65	7.3%
24%	4.1-5	5.8%	4.5	789	\$145.88	\$154.43	\$8.55	5.9%
24%	5.1-6	5.0%	5.5	960	\$173.55	\$182.00	\$8.44	4.9%
24%	6.1-7	4.4%	6.5	1,153	\$203.57	\$211.89	\$8.32	4.1%
25%	7.1-8	3.8%	7.5	1,365	\$235.51	\$243.70	\$8.19	3.5%
26%	8.1-9	3.1%	8.5	1,613	\$271.30	\$279.33	\$8.02	3.0%
27%	9.1-10	2.8%	9.5	1,880	\$308.84	\$316.69	\$7.84	2.5%
28%	10.1-12	4.4%	11.0	2,277	\$364.59	\$372.16	\$7.57	2.1%
30%	12.1-14	3.2%	13.0	2,810	\$439.70	\$446.91	\$7.21	1.6%
30%	14.1-16	2.6%	15.0	3,309	\$511.55	\$518.43	\$6.87	1.3%
31%	16.1-18	2.0%	17.0	3,906	\$593.11	\$599.57	\$6.46	1.1%
33%	18.1-20	1.7%	19.0	4,553	\$680.03	\$686.03	\$6.00	0.9%
34%	20.1-22.5	1.7%	21.3	5,345	\$784.08	\$789.51	\$5.43	0.7%
36%	22.6-25	1.3%	23.7	6,269	\$904.15	\$908.92	\$4.77	0.5%
37%	25.1-30	2.0%	27.4	7,404	\$1,057.91	\$1,061.88	\$3.97	0.4%
38%	30.1-35	1.4%	32.4	8,999	\$1,272.85	\$1,275.70	\$2.85	0.2%
39%	35.1-40	1.0%	37.4	10,567	\$1,484.40	\$1,486.15	\$1.74	0.1%
41%	40.1-45	0.8%	42.4	12,750	\$1,759.11	\$1,759.24	\$0.13	0.0%
42%	45.1-50	0.6%	47.6	14,526	\$1,994.96	\$1,993.83	(\$1.13)	-0.1%
43%	50.1-60	1.0%	54.8	17,048	\$2,326.84	\$2,323.90	(\$2.94)	-0.1%
44%	60.1-70	0.8%	64.6	20,680	\$2,799.63	\$2,794.07	(\$5.56)	-0.2%
44%	70.1-80	0.5%	74.9	23,880	\$3,233.24	\$3,225.44	(\$7.80)	-0.2%
45%	80.1-90	0.5%	84.8	27,839	\$3,740.33	\$3,729.64	(\$10.69)	-0.3%
45%	90.1-100	0.3%	94.8	31,026	\$4,169.41	\$4,156.47	(\$12.94)	-0.3%
42%	100.1-120	0.5%	109.1	33,479	\$4,567.65	\$4,553.25	(\$14.40)	-0.3%
43%	120.1-140	0.3%	129.1	40,246	\$5,465.58	\$5,446.35	(\$19.22)	-0.4%
44%	140.1-160	0.2%	149.4	47,800	\$6,447.98	\$6,423.30	(\$24.68)	-0.4%
43%	160.1-200	0.2%	176.4	55,654	\$7,529.59	\$7,499.47	(\$30.12)	-0.4%
27%	200.1+	0.1%	325.0	63,883	\$9,898.16	\$9,867.16	(\$31.00)	-0.3%
	Approx. Average		11.0	2,821	\$420.28	\$427.40	\$7.12	1.7%

Unitil Energy Systems, Inc. Rates - Effective 1/1/2017:		Unitil Energy Systems, Inc. Rates - Proposed 5/1/17:	
Customer Charge	\$18.41	Customer Charge	\$27.43
	<u>All kW</u>		<u>All kW</u>
Distribution Charge	\$10.31	Distribution Charge	\$10.35
Stranded Cost Charge	(\$0.04)	Stranded Cost Charge	(\$0.04)
TOTAL	\$10.27	TOTAL	\$10.31
	<u>kWh</u>		<u>kWh</u>
Distribution Charge	\$0.00199	Distribution Charge	\$0.00116
External Delivery Charge	\$0.02144	External Delivery Charge	\$0.02144
Stranded Cost Charge	(\$0.00004)	Stranded Cost Charge	(\$0.00004)
System Benefits Charge	\$0.00357	System Benefits Charge	\$0.00357
Storm Recovery Adjustment Factor	\$0.00221	Storm Recovery Adjustment Factor	\$0.00221
Fixed Default Service Charge	<u>\$0.07324</u>	Fixed Default Service Charge	<u>\$0.07324</u>
TOTAL	\$0.10241	TOTAL	\$0.10158

Unitil Energy Systems, Inc.
Typical Bill Impacts as a Result of Proposed Rates - Includes Step/Recoupment
Impacts do NOT include the Electricity Consumption Tax
Impact on G2 - kWh meter Rate Customers

Range Monthly kWh	Percentage Bills	Average Monthly kWh	Total Bill Using Rates Effective 1/1/2017	Total Bill Using Rates Proposed 5/1/17	Total Difference	% Total Difference
0-50	53.8%	18	\$16.35	\$19.34	\$3.00	18.3%
51-100	15.8%	71	\$23.54	\$25.55	\$2.00	8.5%
101-200	15.0%	147	\$33.66	\$34.27	\$0.61	1.8%
201-300	6.4%	246	\$46.99	\$45.76	(\$1.23)	-2.6%
301-400	3.4%	345	\$60.31	\$57.25	(\$3.07)	-5.1%
401-500	2.1%	445	\$73.79	\$68.86	(\$4.93)	-6.7%
501-600	1.3%	545	\$87.15	\$80.38	(\$6.77)	-7.8%
601-700	0.4%	647	\$100.92	\$92.25	(\$8.67)	-8.6%
701-800	0.4%	745	\$114.05	\$103.56	(\$10.48)	-9.2%
801-1,000	0.5%	884	\$132.79	\$119.72	(\$13.07)	-9.8%
1,000+	1.0%	1,930	\$273.23	\$240.79	(\$32.44)	-11.9%
Approx. Average		115	\$29.39	\$30.59	\$1.20	4.1%

Unitil Energy Systems, Inc.
Rates - Effective 1/1/2017:

Customer Charge	\$13.94
	<u>All kWh</u>
Distribution Charge	\$0.03410
External Delivery Charge	\$0.02144
Stranded Cost Charge	(\$0.00018)
System Benefits Charge	\$0.00357
Storm Recovery Adjustment Factor	\$0.00221
Fixed Default Service Charge	<u>\$0.07324</u>
TOTAL	\$0.13438

Unitil Energy Systems, Inc.
Rates - Proposed 5/1/17:

Customer Charge	\$17.27
	<u>All kWh</u>
Distribution Charge	\$0.01556
External Delivery Charge	\$0.02144
Stranded Cost Charge	(\$0.00018)
System Benefits Charge	\$0.00357
Storm Recovery Adjustment Factor	\$0.00221
Fixed Default Service Charge	<u>\$0.07324</u>
TOTAL	\$0.11584

Unitil Energy Systems, Inc. Typical Bill Impacts as a Result of Proposed Rates - Includes Step/Recoupment Impacts do NOT include the Electricity Consumption Tax Impact on G2 - QRWH and SH Rate Customers							
Range Monthly kWh	Percentage Bills	Average kWh	Total Bill Using Rates Effective 1/1/2017	Total Bill Using Rates Proposed 5/1/17	Total Difference	% Total Difference	
0-250	40.5%	84	\$17.40	\$20.28	\$2.88	16.6%	
251-500	12.2%	365	\$54.79	\$57.65	\$2.86	5.2%	
501-750	7.6%	621	\$88.91	\$91.75	\$2.85	3.2%	
751-1,000	5.9%	875	\$122.61	\$125.44	\$2.83	2.3%	
1,001-2,000	12.7%	1,405	\$193.16	\$195.95	\$2.79	1.4%	
2,001-3,000	6.6%	2,488	\$337.16	\$339.87	\$2.72	0.8%	
3,001-4,000	4.3%	3,490	\$470.43	\$473.08	\$2.65	0.6%	
4,001-5,000	2.4%	4,475	\$601.37	\$603.94	\$2.58	0.4%	
5,001-6,000	1.6%	5,507	\$738.67	\$741.18	\$2.50	0.3%	
6,001-7,000	1.4%	6,429	\$861.25	\$863.69	\$2.44	0.3%	
7,001-8,000	0.5%	7,499	\$1,003.67	\$1,006.03	\$2.37	0.2%	
8,001-9,000	0.5%	8,496	\$1,136.20	\$1,138.49	\$2.30	0.2%	
9,001-10,000	0.6%	9,442	\$1,262.01	\$1,264.24	\$2.23	0.2%	
10,001+	3.1%	20,118	\$2,681.92	\$2,683.40	\$1.48	0.1%	
Approx. Average		1,715	\$234.35	\$237.11	\$2.77	1.2%	

Unitil Energy Systems, Inc. Rates - Effective 1/1/2017:		Unitil Energy Systems, Inc. Rates - Proposed 5/1/17:	
Customer Charge	\$6.25	Customer Charge	\$9.14
	<u>All kWh</u>		<u>All kWh</u>
Distribution Charge	\$0.03272	Distribution Charge	\$0.03265
External Delivery Charge	\$0.02144	External Delivery Charge	\$0.02144
Stranded Cost Charge	(\$0.00018)	Stranded Cost Charge	(\$0.00018)
System Benefits Charge	\$0.00357	System Benefits Charge	\$0.00357
Storm Recovery Adjustment Factor	\$0.00221	Storm Recovery Adjustment Factor	\$0.00221
Fixed Default Service Charge	<u>\$0.07324</u>	Fixed Default Service Charge	<u>\$0.07324</u>
TOTAL	\$0.13300	TOTAL	\$0.13293

Unitil Energy Systems, Inc.
Typical Bill Impacts as a Result of Proposed Rates - Includes Step/Recoupment
Impacts do NOT include the Electricity Consumption Tax
Impact on G1 Rate Customers

Customer	Load Factor	Average Monthly kVA	Average kWh	Voltage Discount Tier	Transformer Ownership Credit	Total Bill Using Rates Effective 1/1/2017	Total Bill Using Rates Proposed 5/1/17	Total Difference	% Total Difference
1	48.4%	426	150,200		Yes	\$16,176.65	\$16,260.42	\$83.77	0.5%
2	37.5%	218	59,575	1	Yes	\$6,620.62	\$6,672.71	\$52.09	0.8%
3	23.5%	163	27,950		Yes	\$3,635.07	\$3,725.80	\$90.73	2.5%
4	23.9%	467	81,500		Yes	\$10,362.03	\$10,517.91	\$155.88	1.5%
5	15.8%	205	23,650		Yes	\$3,524.73	\$3,634.00	\$109.27	3.1%
6	36.0%	368	96,550	1	Yes	\$10,786.41	\$10,861.23	\$74.82	0.7%
7	27.9%	187	38,093			\$4,764.92	\$4,876.57	\$111.65	2.3%
8	50.0%	345	125,917			\$13,633.39	\$13,746.15	\$112.76	0.8%
9	28.0%	304	62,280			\$7,715.23	\$7,861.78	\$146.55	1.9%
10	48.8%	250	89,025	1	Yes	\$9,381.42	\$9,420.80	\$39.38	0.4%
11	28.7%	666	139,525	1	Yes	\$16,424.31	\$16,569.59	\$145.27	0.9%
12	52.6%	509	195,600			\$20,942.41	\$21,074.60	\$132.19	0.6%
13	46.3%	326	110,225			\$12,115.46	\$12,232.56	\$117.10	1.0%
14	36.9%	406	109,267			\$12,581.28	\$12,736.69	\$155.41	1.2%
15	56.0%	334	136,500			\$14,496.85	\$14,595.77	\$98.91	0.7%
16	40.9%	393	117,450			\$13,215.41	\$13,357.83	\$142.42	1.1%
17	27.1%	466	92,200			\$11,479.80	\$11,677.36	\$197.56	1.7%
18	53.1%	924	358,267	1	Yes	\$37,063.52	\$37,121.79	\$58.27	0.2%
19	65.5%	546	261,450			\$27,034.81	\$27,129.88	\$95.07	0.4%
20	65.0%	1,313	622,708	2	Yes	\$61,552.83	\$61,533.90	(\$18.93)	0.0%
21	27.4%	721	144,433	1	Yes	\$17,200.62	\$17,361.26	\$160.64	0.9%
22	45.9%	291	97,487	1	Yes	\$10,379.30	\$10,426.35	\$47.05	0.5%
23	27.1%	342	67,700	1	Yes	\$8,120.81	\$8,210.24	\$89.42	1.1%
24	59.9%	298	130,325	1	Yes	\$13,276.95	\$13,299.84	\$22.89	0.2%
25	55.2%	491	197,600			\$20,991.08	\$21,112.86	\$121.78	0.6%
26	63.4%	396	183,373			\$19,079.87	\$19,169.14	\$89.27	0.5%
27	45.5%	1,380	458,000	1	Yes	\$48,634.44	\$48,772.52	\$138.08	0.3%
28	49.8%	662	240,771	2	Yes	\$24,805.98	\$24,866.90	\$60.92	0.2%
29	55.1%	634	255,160		Yes	\$26,836.79	\$26,908.63	\$71.84	0.3%
30	35.9%	407	106,750	1	Yes	\$11,922.92	\$12,003.32	\$80.39	0.7%
31	15.4%	295	33,253		Yes	\$4,967.33	\$5,101.35	\$134.01	2.7%
32	40.7%	218	64,880			\$7,352.62	\$7,456.62	\$104.00	1.4%
33	21.3%	573	89,250	1	Yes	\$11,461.76	\$11,614.92	\$153.16	1.3%
34	26.6%	531	103,000			\$12,884.81	\$13,103.92	\$219.11	1.7%
35	41.7%	235	71,550			\$8,057.10	\$8,163.29	\$106.19	1.3%
36	54.0%	3,688	1,455,125	2	Yes	\$147,653.08	\$147,792.57	\$139.49	0.1%
37	48.4%	283	100,000			\$10,911.95	\$11,017.28	\$105.32	1.0%
38	63.5%	516	239,050			\$24,839.78	\$24,939.13	\$99.35	0.4%
39	55.5%	469	190,167	2	Yes	\$19,265.58	\$19,299.94	\$34.36	0.2%
40	40.3%	300	88,183			\$9,977.98	\$10,100.82	\$122.84	1.2%
41	24.8%	353	63,800		Yes	\$8,047.81	\$8,177.14	\$129.33	1.6%
42	39.8%	310	90,130			\$10,222.60	\$10,348.74	\$126.13	1.2%
43	75.3%	2,750	1,511,663	2	Yes	\$146,596.45	\$146,364.88	(\$231.57)	-0.2%
44	58.6%	1,370	586,031	2	Yes	\$58,774.71	\$58,804.96	\$30.25	0.1%
45	58.9%	3,286	1,413,417	2		\$142,796.38	\$143,178.35	\$381.96	0.3%
46	52.6%	532	204,213	1	Yes	\$21,182.09	\$21,227.21	\$45.12	0.2%
47	25.0%	458	83,417			\$10,647.99	\$10,849.19	\$201.20	1.9%
48	57.5%	1,297	544,250	2	Yes	\$54,740.94	\$54,779.15	\$38.21	0.1%
49	70.2%	705	361,250			\$36,970.02	\$37,056.64	\$86.62	0.2%
50	33.1%	260	62,967			\$7,472.41	\$7,597.71	\$125.30	1.7%
51	25.1%	345	63,133			\$8,072.00	\$8,236.99	\$165.00	2.0%
52	28.8%	250	52,700			\$6,494.49	\$6,623.67	\$129.18	2.0%
53	16.9%	384	47,417			\$6,946.97	\$7,143.24	\$196.27	2.8%
54	11.0%	466	37,292			\$6,620.25	\$6,863.78	\$243.53	3.7%
Approx. Average		545	187,682			\$20,488.82	\$20,644.48	\$155.66	0.8%

Unitil Energy Systems, Inc. Rates - Effective 1/1/2017:		Unitil Energy Systems, Inc. Rates - Proposed 5/1/17:	
Customer Charge - Secondary	\$97.16	Customer Charge - Secondary	\$152.40
Customer Charge - Primary	\$57.58	Customer Charge - Primary	\$81.28
	<u>All kVA</u>		<u>All kVA</u>
Distribution Charge	\$6.95	Distribution Charge	\$7.42
Stranded Cost Charge	(\$0.05)	Stranded Cost Charge	(\$0.05)
TOTAL	\$6.90	TOTAL	\$7.37
	<u>All kWh</u>		<u>All kWh</u>
Distribution Charge	\$0.00199	Distribution Charge	\$0.00116
External Delivery Charge	\$0.02144	External Delivery Charge	\$0.02144
Stranded Cost Charge	(\$0.00005)	Stranded Cost Charge	(\$0.00005)
System Benefits Charge	\$0.00357	System Benefits Charge	\$0.00357
Storm Recovery Adjustment Factor	\$0.00221	Storm Recovery Adjustment Factor	\$0.00221
February 2017 Default Service Charge	\$0.05945	February 2017 Default Service Charge	\$0.05945
TOTAL	\$0.08861	TOTAL	\$0.08778
High Voltage Discount 1 for 4-13.8 kV	2.0%	High Voltage Discount 1 for 4-13.8 kV	2.0%
High Voltage Discount 2 for 34.5 kV	3.5%	High Voltage Discount 2 for 34.5 kV	3.5%
Transformer Ownership Credit \$/kVA	\$0.39	Transformer Ownership Credit \$/kVA	\$0.50

Unitil Energy Systems, Inc.
Typical Bill Impacts as a Result of Proposed Rates - Includes Step/Recoupment
Impacts do NOT include the Electricity Consumption Tax
Impact on G1 Rate Customers

Customer	Load Factor	Average Monthly kVA	Average kWh	Voltage Discount Tier	Transformer Ownership Credit	Total Bill Using Rates Effective 1/1/2017	Total Bill Using Rates Proposed 5/1/17	Total Difference	% Total Difference
55	14.5%	404	42,798		Yes	\$6,519.03	\$6,684.16	\$165.13	2.5%
56	53.7%	756	296,083			\$31,548.93	\$31,713.70	\$164.77	0.5%
57	36.2%	263	69,567			\$8,078.42	\$8,199.68	\$121.26	1.5%
58	37.7%	770	211,750			\$24,173.33	\$24,414.72	\$241.39	1.0%
59	45.5%	243	80,650			\$8,917.40	\$9,019.72	\$102.32	1.1%
60	48.4%	260	91,633			\$10,007.48	\$10,108.64	\$101.16	1.0%
61	43.4%	297	93,880			\$10,461.72	\$10,578.39	\$116.67	1.1%
62	34.5%	348	87,750			\$10,276.37	\$10,422.51	\$146.14	1.4%
63	34.0%	597	148,125			\$17,339.47	\$17,552.20	\$212.73	1.2%
64	53.2%	346	134,250			\$14,379.42	\$14,485.78	\$106.36	0.7%
65	27.2%	1,406	278,971		Yes	\$33,966.68	\$34,296.36	\$329.68	1.0%
66	29.9%	194	42,360			\$5,190.90	\$5,302.27	\$111.37	2.1%
67	59.9%	354	154,700			\$16,247.47	\$16,340.68	\$93.20	0.6%
68	46.2%	333	112,250			\$12,340.41	\$12,458.93	\$118.52	1.0%
69	34.2%	218	54,467			\$6,426.80	\$6,539.24	\$112.43	1.7%
70	6.9%	378	19,158			\$4,405.81	\$4,623.00	\$217.19	4.9%
71	2.1%	1,727	26,800			\$14,387.10	\$15,231.71	\$844.61	5.9%
72	41.4%	365	110,320			\$12,392.76	\$12,528.10	\$135.34	1.1%
73	55.7%	510	207,490			\$22,004.30	\$22,127.19	\$122.89	0.6%
74	25.5%	370	68,898			\$8,752.67	\$8,924.45	\$171.78	2.0%
75	46.7%	329	112,290			\$12,320.70	\$12,437.61	\$116.90	0.9%
76	49.3%	532	191,717			\$20,759.12	\$20,905.49	\$146.37	0.7%
77	51.7%	453	170,900			\$18,367.37	\$18,493.74	\$126.38	0.7%
78	46.4%	230	77,905			\$8,588.90	\$8,687.68	\$98.79	1.2%
79	74.2%	516	279,470			\$28,420.78	\$28,486.53	\$65.76	0.2%
80	51.7%	410	154,733			\$16,637.40	\$16,756.94	\$119.53	0.7%
81	46.8%	264	90,293			\$9,922.24	\$10,026.79	\$104.55	1.1%
82	35.4%	233	60,240			\$7,045.34	\$7,160.27	\$114.93	1.6%
83	60.1%	450	197,280			\$20,683.12	\$20,786.11	\$103.00	0.5%
84	67.7%	718	354,850			\$36,492.55	\$36,590.58	\$98.03	0.3%
85	33.0%	240	57,780			\$6,871.49	\$6,991.47	\$119.98	1.7%
86	65.3%	203	96,850			\$10,081.12	\$10,151.48	\$70.36	0.7%
87	12.6%	619	56,775			\$9,401.82	\$9,701.05	\$299.23	3.2%
88	63.0%	254	116,867			\$12,207.39	\$12,285.15	\$77.76	0.6%
89	8.6%	521	32,760			\$6,594.79	\$6,867.70	\$272.91	4.1%
90	31.0%	287	64,760			\$7,813.15	\$7,949.35	\$136.20	1.7%
91	62.5%	499	227,520			\$23,698.77	\$23,799.56	\$100.79	0.4%
92	57.1%	876	365,200			\$38,501.07	\$38,664.85	\$163.79	0.4%
93	29.8%	419	91,125			\$11,061.47	\$11,237.91	\$176.44	1.6%
94	21.2%	385	59,613		Yes	\$7,884.61	\$8,028.90	\$144.29	1.8%
95	39.4%	301	86,460			\$9,832.24	\$9,956.99	\$124.74	1.3%
96	64.8%	571	270,160			\$27,975.75	\$28,075.12	\$99.36	0.4%
97	37.6%	319	87,480			\$10,050.55	\$10,183.16	\$132.61	1.3%
98	66.4%	374	181,176			\$18,730.87	\$18,811.45	\$80.58	0.4%
99	46.2%	375	126,342			\$13,879.50	\$14,006.11	\$126.60	0.9%
100	9.4%	242	16,704			\$3,250.21	\$3,405.53	\$155.33	4.8%
101	19.3%	311	43,824			\$6,125.68	\$6,290.68	\$164.99	2.7%
102	21.6%	225	35,467			\$4,789.35	\$4,920.70	\$131.35	2.7%
103	50.2%	510	186,760			\$20,165.46	\$20,305.42	\$139.96	0.7%
104	57.3%	416	173,952			\$18,381.91	\$18,488.32	\$106.41	0.6%
105	44.4%	388	125,563	2	Yes	\$13,228.72	\$13,286.47	\$57.76	0.4%
106	35.1%	480	123,000	1	Yes	\$13,798.72	\$13,891.60	\$92.87	0.7%
107	67.8%	317	156,890			\$16,185.05	\$16,258.96	\$73.91	0.5%
108	65.1%	508	241,344			\$24,986.47	\$25,080.06	\$93.59	0.4%
Approx. Average		545	187,682			\$20,488.82	\$20,644.48	\$155.66	0.8%

Unitil Energy Systems, Inc. Rates - Effective 1/1/2017:		Unitil Energy Systems, Inc. Rates - Proposed 5/1/17:	
Customer Charge - Secondary	\$97.16	Customer Charge - Secondary	\$152.40
Customer Charge - Primary	\$57.58	Customer Charge - Primary	\$81.28
	<u>All kVA</u>		<u>All kVA</u>
Distribution Charge	\$6.95	Distribution Charge	\$7.42
Stranded Cost Charge	(\$0.05)	Stranded Cost Charge	(\$0.05)
TOTAL	\$6.90	TOTAL	\$7.37
	<u>All kWh</u>		<u>All kWh</u>
Distribution Charge	\$0.00199	Distribution Charge	\$0.00116
External Delivery Charge	\$0.02144	External Delivery Charge	\$0.02144
Stranded Cost Charge	(\$0.00005)	Stranded Cost Charge	(\$0.00005)
System Benefits Charge	\$0.00357	System Benefits Charge	\$0.00357
Storm Recovery Adjustment Factor	\$0.00221	Storm Recovery Adjustment Factor	\$0.00221
February 2017 Default Service Charge	\$0.05945	February 2017 Default Service Charge	\$0.05945
TOTAL	\$0.08861	TOTAL	\$0.08778
High Voltage Discount 1 for 4-13.8 kV	2.0%	High Voltage Discount 1 for 4-13.8 kV	2.0%
High Voltage Discount 2 for 34.5 kV	3.5%	High Voltage Discount 2 for 34.5 kV	3.5%
Transformer Ownership Credit \$/kVA	\$0.39	Transformer Ownership Credit \$/kVA	\$0.50

Unitil Energy Systems, Inc.
Typical Bill Impacts as a Result of Proposed Rates - Includes Step/Recoupment
Impacts do NOT include the Electricity Consumption Tax
Impact on G1 Rate Customers

Customer	Load Factor	Average Monthly kVA	Average kWh	Voltage Discount Tier	Transformer Ownership Credit	Total Bill Using Rates Effective 1/1/2017	Total Bill Using Rates Proposed 5/1/17	Total Difference	% Total Difference
109	17.7%	237	30,528			\$4,436.74	\$4,577.98	\$141.24	3.2%
110	52.6%	302	116,000			\$12,461.53	\$12,562.55	\$101.02	0.8%
111	51.4%	659	246,908	2	Yes	\$25,307.94	\$25,362.69	\$54.75	0.2%
112	36.2%	420	110,840			\$12,815.92	\$12,976.51	\$160.59	1.3%
113	37.6%	316	86,633			\$9,953.96	\$10,085.80	\$131.84	1.3%
114	48.7%	275	97,635	2	Yes	\$10,131.96	\$10,172.89	\$40.93	0.4%
115	50.3%	400	146,733			\$15,856.35	\$15,977.61	\$121.26	0.8%
116	44.1%	151	48,576			\$5,441.91	\$5,527.70	\$85.79	1.6%
117	56.5%	679	280,160			\$29,608.70	\$29,750.63	\$141.94	0.5%
118	72.7%	425	225,780			\$23,038.62	\$23,106.39	\$67.77	0.3%
119	63.2%	225	103,979			\$10,864.83	\$10,939.63	\$74.79	0.7%
120	28.9%	413	87,250			\$10,681.05	\$10,858.18	\$177.13	1.7%
121	46.7%	493	167,860			\$18,372.07	\$18,519.64	\$147.57	0.8%
122	43.1%	387	121,680			\$13,548.63	\$13,684.70	\$136.07	1.0%
123	44.7%	513	167,708	2	Yes	\$17,623.88	\$17,691.64	\$67.76	0.4%
124	40.5%	271	80,080			\$9,061.91	\$9,177.99	\$116.07	1.3%
125	40.2%	306	89,713			\$10,157.43	\$10,281.98	\$124.55	1.2%
126	9.9%	599	43,094	2	Yes	\$7,504.45	\$7,701.67	\$197.22	2.6%
127	23.9%	313	54,720			\$7,105.48	\$7,262.41	\$156.92	2.2%
128	28.7%	278	58,250	2	Yes	\$6,785.05	\$6,858.68	\$73.63	1.1%
129	64.1%	695	325,375		Yes	\$33,454.36	\$33,489.81	\$35.45	0.1%
130	55.7%	2,629	1,069,542	2	Yes	\$108,025.48	\$108,105.68	\$80.20	0.1%
131	79.2%	2,071	1,196,935	2	Yes	\$115,416.21	\$115,200.69	(\$215.52)	-0.2%
132	62.0%	2,738	1,239,005	2	Yes	\$123,204.13	\$123,186.65	(\$17.48)	0.0%
133	60.5%	294	129,875			\$13,632.83	\$13,718.38	\$85.55	0.6%
134	48.0%	240	84,328			\$9,228.49	\$9,326.74	\$98.25	1.1%
135	24.3%	175	30,955			\$4,044.29	\$4,155.86	\$111.57	2.8%
136	37.0%	393	106,128			\$12,214.32	\$12,366.29	\$151.96	1.2%
137	15.0%	313	34,192			\$5,286.97	\$5,460.96	\$173.99	3.3%
138	54.5%	956	380,064		Yes	\$39,994.94	\$40,078.70	\$83.77	0.2%
139	16.3%	247	29,500			\$4,418.42	\$4,565.47	\$147.05	3.3%
140	53.0%	413	159,960			\$17,123.22	\$17,239.96	\$116.74	0.7%
141	33.2%	541	130,941			\$15,429.50	\$15,630.11	\$200.61	1.3%
142	38.2%	246	68,774			\$7,891.67	\$8,005.66	\$113.98	1.4%
143	66.7%	532	259,029			\$26,717.72	\$26,807.82	\$90.10	0.3%
144	43.2%	869	273,977			\$30,371.79	\$30,608.15	\$236.37	0.8%
145	80.9%	182	107,225			\$10,851.13	\$10,902.71	\$51.58	0.5%
146	56.4%	435	179,087			\$18,969.54	\$19,080.73	\$111.19	0.6%
147	42.6%	390	121,200			\$13,526.11	\$13,663.94	\$137.84	1.0%
148	28.3%	647	133,675			\$16,407.75	\$16,656.22	\$248.47	1.5%
149	55.6%	472	191,775			\$20,350.18	\$20,468.29	\$118.11	0.6%
150	51.6%	473	178,067			\$19,138.70	\$19,268.41	\$129.71	0.7%
151	33.5%	470	114,833			\$13,513.33	\$13,694.01	\$180.68	1.3%
152	66.3%	475	229,967			\$23,751.98	\$23,839.60	\$87.62	0.4%
153	26.4%	883	170,467			\$21,297.63	\$21,626.57	\$328.95	1.5%
154	70.9%	1,070	553,664			\$56,538.88	\$56,637.38	\$98.50	0.2%
155	59.1%	424	182,800			\$19,217.82	\$19,320.42	\$102.60	0.5%
156	39.4%	243	69,730			\$7,950.47	\$8,061.90	\$111.43	1.4%
157	7.0%	323	16,600			\$3,795.71	\$3,988.91	\$193.20	5.1%
158	54.0%	532	209,900			\$22,367.89	\$22,499.00	\$131.11	0.6%
159	54.4%	509	202,050			\$21,513.43	\$21,640.23	\$126.80	0.6%
160	45.2%	619	204,500			\$22,492.00	\$22,668.63	\$176.64	0.8%
161	37.4%	343	93,580			\$10,753.91	\$10,892.55	\$138.64	1.3%
162	42.9%	578	181,050			\$20,126.86	\$20,303.40	\$176.54	0.9%
Approx. Average		545	187,682			\$20,488.82	\$20,644.48	\$155.66	0.8%

Unitil Energy Systems, Inc. Rates - Effective 1/1/2017:		Unitil Energy Systems, Inc. Rates - Proposed 5/1/17:	
Customer Charge - Secondary	\$97.16	Customer Charge - Secondary	\$152.40
Customer Charge - Primary	\$57.58	Customer Charge - Primary	\$81.28
	<u>All kVA</u>		<u>All kVA</u>
Distribution Charge	\$6.95	Distribution Charge	\$7.42
Stranded Cost Charge	(\$0.05)	Stranded Cost Charge	(\$0.05)
TOTAL	\$6.90	TOTAL	\$7.37
	<u>All kWh</u>		<u>All kWh</u>
Distribution Charge	\$0.00199	Distribution Charge	\$0.00116
External Delivery Charge	\$0.02144	External Delivery Charge	\$0.02144
Stranded Cost Charge	(\$0.00005)	Stranded Cost Charge	(\$0.00005)
System Benefits Charge	\$0.00357	System Benefits Charge	\$0.00357
Storm Recovery Adjustment Factor	\$0.00221	Storm Recovery Adjustment Factor	\$0.00221
February 2017 Default Service Charge	\$0.05945	February 2017 Default Service Charge	\$0.05945
TOTAL	\$0.08861	TOTAL	\$0.08778
High Voltage Discount 1 for 4-13.8 kV	2.0%	High Voltage Discount 1 for 4-13.8 kV	2.0%
High Voltage Discount 2 for 34.5 kV	3.5%	High Voltage Discount 2 for 34.5 kV	3.5%
Transformer Ownership Credit \$/kVA	\$0.39	Transformer Ownership Credit \$/kVA	\$0.50

Unitil Energy Systems, Inc. Typical Bill Impacts as a Result of Proposed Rates - Includes Step/Recoupment Impacts do NOT include the Electricity Consumption Tax Impact on OL Rate Customers										
	Nominal Watts	Lumens	Type	Current Average Monthly kWh	Proposed Average Monthly kWh	Percentage of Lights	Total Bill Using Rates Effective 1/1/2017	Total Bill Using Rates Proposed 5/1/17	Total Difference	% Total Difference
<u>Mercury Vapor:</u>										
1	100	3,500	ST	40	43	15.8%	\$15.37	\$17.33	\$1.96	12.7%
2	175	7,000	ST	67	71	0.8%	\$20.50	\$22.57	\$2.07	10.1%
3	250	11,000	ST	95	100	0.9%	\$25.39	\$27.57	\$2.18	8.6%
4	400	20,000	ST	154	157	1.8%	\$34.69	\$36.67	\$1.98	5.7%
5	1,000	60,000	ST	388	372	0.0%	\$78.74	\$78.93	\$0.18	0.2%
6	250	11,000	FL	95	100	0.8%	\$26.51	\$28.71	\$2.20	8.3%
7	400	20,000	FL	154	157	1.3%	\$36.13	\$38.14	\$2.01	5.6%
8	1,000	60,000	FL	388	380	0.2%	\$74.42	\$75.35	\$0.93	1.2%
9	100	3,500	PB	40	48	4.4%	\$15.49	\$17.96	\$2.46	15.9%
10	175	7,000	PB	67	71	0.6%	\$19.66	\$21.72	\$2.06	10.5%
<u>High Pressure Sodium:</u>										
11	50	4,000	ST	21	23	37.3%	\$13.66	\$15.53	\$1.87	13.7%
12	100	9,500	ST	43	48	1.1%	\$17.54	\$19.72	\$2.19	12.5%
13	150	16,000	ST	60	65	3.8%	\$19.34	\$21.51	\$2.17	11.2%
14	250	30,000	ST	101	102	12.0%	\$27.24	\$29.03	\$1.79	6.6%
15	400	50,000	ST	161	161	2.8%	\$38.17	\$39.88	\$1.72	4.5%
16	1,000	140,000	ST	398	380	1.6%	\$79.25	\$79.22	(\$0.03)	0.0%
17	150	16,000	FL	60	65	2.5%	\$21.58	\$23.78	\$2.21	10.2%
18	250	30,000	FL	101	102	3.3%	\$28.80	\$30.62	\$1.82	6.3%
19	400	50,000	FL	161	161	4.3%	\$37.65	\$39.36	\$1.71	4.5%
20	1,000	140,000	FL	398	380	2.5%	\$79.60	\$79.57	(\$0.03)	0.0%
21	50	4,000	PB	21	23	1.2%	\$12.69	\$14.55	\$1.86	14.6%
22	100	9,500	PB	43	48	0.7%	\$16.41	\$18.58	\$2.17	13.2%
<u>Metal Halide</u>										
23	175	8,800	ST	66	74	0.0%	\$24.40	\$26.94	\$2.54	10.4%
24	250	13,500	ST	92	102	0.0%	\$28.73	\$31.48	\$2.75	9.6%
25	400	23,500	ST	148	158	0.0%	\$35.23	\$37.94	\$2.72	7.7%
26	175	8,800	FL	66	74	0.0%	\$27.37	\$29.96	\$2.59	9.5%
27	250	13,500	FL	92	102	0.0%	\$31.79	\$34.59	\$2.80	8.8%
28	400	23,500	FL	148	158	0.0%	\$37.56	\$40.31	\$2.75	7.3%
29	175	8,800	PB	66	74	0.0%	\$23.17	\$25.69	\$2.52	10.9%
30	250	13,500	PB	92	102	0.0%	\$26.96	\$29.68	\$2.72	10.1%
31	400	23,500	PB	148	158	0.0%	\$34.00	\$36.69	\$2.70	7.9%
32	1,000	86,000	FL	356	374	0.4%	\$65.89	\$69.39	\$3.51	5.3%
Unitil Energy Systems, Inc. Rates - Effective 1/1/2017:							Unitil Energy Systems, Inc. Rates - Proposed 5/1/17:			
Customer Charge	\$0.00			Customer Charge	\$0.00					
Distribution Charge	All kWh \$0.00199			Distribution Charge	All kWh \$0.00116					
External Delivery Charge	\$0.02144			External Delivery Charge	\$0.02144					
Stranded Cost Charge	(\$0.00018)			Stranded Cost Charge	(\$0.00018)					
System Benefits Charge	\$0.00357			System Benefits Charge	\$0.00357					
Storm Recovery Adjustment Factor	\$0.00221			Storm Recovery Adjustment Factor	\$0.00221					
Fixed Default Service Charge	\$0.07324			Fixed Default Service Charge	\$0.07324					
TOTAL	\$0.10227			TOTAL	\$0.10144					
Luminaire Charges:							Luminaire Charges:			
	Mercury Vapor Rate/Mo.	Sodium Vapor Rate/Mo.	Metal Halide Rate/Mo.		Mercury Vapor Rate/Mo.	Sodium Vapor Rate/Mo.	Metal Halide Rate/Mo.			
1	\$11.28	\$11.51	\$17.65	1	\$12.96	\$13.20	\$19.44			
2	\$13.65	\$13.14	\$19.32	2	\$15.37	\$14.85	\$21.13			
3	\$15.67	\$13.20	\$20.09	3	\$17.42	\$14.92	\$21.92			
4	\$18.94	\$16.91	\$20.62	4	\$20.75	\$18.68	\$22.45			
5	\$39.06	\$21.70	\$22.38	5	\$41.19	\$23.55	\$24.24			
6	\$16.79	\$38.55	\$22.42	6	\$16.56	\$40.67	\$24.28			
7	\$20.38	\$15.44	\$16.42	7	\$22.21	\$17.19	\$18.19			
8	\$34.74	\$18.47	\$17.55	8	\$36.80	\$20.27	\$19.34			
9	\$11.40	\$21.18	\$18.86	9	\$13.09	\$23.02	\$20.67			
#	\$12.81	\$38.90	\$29.48	#	\$14.52	\$41.03	\$31.46			
		\$10.54				\$12.21				
		\$12.01				\$13.71				