## May 1, 2019 Step Adjustment

## **Rate Effective Date**

5/1/2019

Line No.	Description	Inv	vestment Year 2018
	Utility Plant:		
1	Beginning Utility Plant	\$	324,214,118
2	Plant Additions		18,361,098
3	Retirements		(1,766,899)
4	Ending Utility Plant		340,808,317
5	Beginning Accumulated Depreciation		114,418,513
6	Depreciation		12,146,479
7	Retirements		(1,766,899)
8	Cost of Removal and Salvage		(1,358,593)
9	Ending Accumulated Depreciation		123,439,500
10	Ending Net Utility Plant	\$	217,368,817
	Revenue Requirement:		
11	Change in Net Plant	\$	7,573,212
12	80% of Change in Net Plant		6,058,570
13	Pre-Tax Rate of Return		10.15%
14	Return and Taxes		615,133
15	Depreciation Expense on 80% of Plant Additions (1)		640,729
16	Property Taxes on 80% Change in Net Plant (2)		187,210
17	Revenue Requirement	\$	1,443,072
18	Revenue Requirement Limit:		
19	Revenue Requirement	\$	1,443,072
20	May 1, 2017, 2018 & 2019 Step Adjustment Revenue Requirement Cap	\$	4,500,000
21	Less: May 1, 2017 Step Adjustment Revenue Requirement		900,194
22	Add: Tax Rate Reduction to May 1, 2017 Step Adjustment		44,991
23	Less: May 1, 2018 Step Adjustment Revenue Requirement		3,302,989
24	Remaining May 1, 2019 Step Adjustment Revenue Requirement Cap	\$	341,808
25	Allowable Revenue Requirement (Min of Line 19 or 24)	\$	341,808

## Notes:

- (1) See Annualized Depreciation from page 4
- (2) 3.09% rate (2018 Property Taxes of \$6,727,169 / 2018 Net Utility Plant of \$217,368,817)

Docket No. DE 19-\_\_\_ Schedule TRD-1 2019 Step Adjustment Page 2 of 5

## 2018 Gross Plant Detail

Description	Beginning Balance	Additions	Retirements	Ending Balance		
301-00 Organization-E	380	-	-	380		
303-00 Intangible Software-5 Yea-E	4,506,691	760,778	-	5,267,469		
303-01 Intangible Software-3 Yea-E	87,196	-	-	87,196		
303-02 Intangible Software-10 Yea-E	4,705,733	-	-	4,705,733		
343-00 Prime Movers-E	56,575	-	-	56,575		
353-00 Transmission Station Equi-E	-	-	-	-		
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	2,173,616	-	-	2,173,616		
362-00 Distribution Station Equi-E	45,775,957	482,629	(75,409)	46,183,177		
364-00 Distribution Poles, Tower-E	61,567,986	4,348,899	(448,980)	65,467,905		
365-00 Distribution Overhead Con-E	78,753,557	4,677,473	(704,772)	82,726,259		
366-00 Distribution Underground -E	1,921,524	132,716	(4,292)	2,049,948		
367-00 Distribution Underground -E	19,881,802	1,335,215	(93,582)	21,123,436		
368-00 Distribution Line Transfo-E	26,231,769	1,917,442	(5,449)	28,143,763		
368-01 Transformer Installations-E	20,391,273	1,877,682	(5,354)	22,263,600		
369-00 Distribution Services-E	22,441,287	893,128	(200,440)	23,133,974		
370-00 Distribution Meters-E	10,138,977	700,543	-	10,839,521		
370-01 Meter Installation-E	4,933,880	700,543	-	5,634,424		
371-00 Installations on Customer-E	2,139,641	246,648	(141,975)	2,244,314		
373-00 Street Lights & Signal Sy-E	3,320,883	203,123	(86,645)	3,437,361		
373-01 Street Lights & Signal Sy-E	-	-	-	-		
389-00 General & Misc. Land-E	18,620	-	-	18,620		
390-00 Structures-E	4,098,562	12,975	-	4,111,537		
390-01 General & Misc. Structure-E	-	-	-	-		
391-01 Office Furniture & Fixtur-E	278,782	(1,696)	-	277,086		
391-03 Computer Equipment-E	-		-	-		
392-00 Transportation Equipment-E	1,073,695	-	-	1,073,695		
393-00 Stores Equipment-E	79,908	-	-	79,908		
394-00 Tools, Shop and garage Eq-E	1,909,247	123,357	-	2,032,604		
395-00 Laboratory Equipment-E	852,772	284	-	853,056		
397-00 Communication Equipment-E	4,104,932	(50,643)	-	4,054,290		
398-00 Miscellaneous Equipment-E	102,943	-	-	102,943		
399-00 Other Intangible Plant-E	, <u>-</u>	-	-	-		
Grand Total	324,214,118	18,361,098	(1,766,899)	340,808,317		

Docket No. DE 19-\_\_\_ Schedule TRD-1 2019 Step Adjustment Page 3 of 5

### 2018 Accumulated Depreciation Detail

Description	Beginning Balance	Provision	Retirements	Cost of Removal	Salvage	Ending Balance
301-00 Organization	-	-	-	-	-	-
303-00 Intangible Software-5 Year	3,865,915	256,785	-	-	-	4,122,700
303-01 Intangible Software-3 Year	87,196	-	-	-	-	87,196
303-02 Intangible Software-10 Year	1,203,428	470,573	-	-	-	1,674,001
343-00 Prime Movers	25,475	3,774	-	-	-	29,249
353-00 Transmission Station Equi-E	-	-	-	-	-	-
360-01 ROW - Distribution-E	-	-	-	-	-	-
360-02 ROW - Distribution-E	-	-	-	-	-	-
361-00 Distribution Structures	146,398	53,254	-	-	-	199,652
362-00 Distribution Station Equipme	9,049,261	1,186,616	(75,409)	(52,152)	-	10,108,316
364-00 Distribution Poles, Towers &	23,953,300	2,334,398	(448,980)	(598,930)	4,607	25,244,394
365-00 Distribution Overhead Conduc	24,358,610	2,925,997	(704,772)	(587,509)	11,454	26,003,780
366-00 Distribution Underground Con	627,217	40,314	(4,292)	(2,227)	-	661,012
367-00 Distribution Underground Con	5,964,162	521,668	(93,582)	(81,626)	785	6,311,408
368-00 Distribution Line Transforme	10,167,952	795,176	(5,449)	(13,420)	-	10,944,259
368-01 Transformer Installations	5,258,722	597,113	(5,354)	(33)	-	5,850,448
369-00 Distribution Services	15,510,678	1,286,093	(200,440)	(26,675)	79	16,569,734
370-00 Distribution Meters	4,140,985	511,035	-		-	4,652,019
370-01 Meter Installation	798,695	250,780	-	-	-	1,049,475
371-00 Installations on Customers P	512,355	164,982	(141,975)	(17,061)	17,305	535,606
373-00 Street Lights & Signal Syste	2,451,436	262,867	(86,645)	(23,992)	18,459	2,622,126
373-01 Street Lights & Signal Syste	-	-	-	-	-	-
389-00 General & Misc. Land	-	-	-	-	-	-
390-00 Structures	1,594,775	85,362	-	-	-	1,680,137
390-01 General & Misc. Structures	863	-	-	-	-	863
391-01 Office Furniture & Fixtures	(122,521)	16,281	-	-	-	(106,240)
391-03 Computer Equipment	4,346	-	-	-	-	4,346
392-00 Transportation Equipment	1,045,145	-	-	-	-	1,045,145
393-00 Stores Equipment	58,097	2,685	-	-	-	60,782
394-00 Tools, Shop and garage Equip	755,002	71,154	-	-	-	826,156
395-00 Laboratory Equipment	394,803	33,269	-	-	-	428,072
397-00 Communication Equipment	2,477,785	271,281	-	(7,658)	-	2,741,408
398-00 Miscellaneous Equipment	88,434	5,024	-	-	-	93,458
399-00 Other Tangible Property	-	-	-	-	-	-
Grand Total	114,418,513	12,146,479	(1,766,899)	(1,411,283)	52,690	123,439,500

Docket No. DE 19-\_\_\_ Schedule TRD-1 2019 Step Adjustment Page 4 of 5

## **Annualized Depreciation by FERC Account**

Description	Additions	Depreciation Rate	Annual Depreciation
303-00 Intangible Software-5 Yea-E	760,778	20.00%	152,156
303-02 Intangible Software-10 Yea-E	-	10.00%	<u>-</u>
361-00 Distribution Structures-E	-	2.45%	<u>-</u>
362-00 Distribution Station Equi-E	482,629	2.60%	12,548
364-00 Distribution Poles, Tower-E	4,348,899	3.70%	160,909
365-00 Distribution Overhead Con-E	4,677,473	3.64%	170,260
366-00 Distribution Underground -E	132,716	2.04%	2,707
367-00 Distribution Underground -E	1,335,215	2.55%	34,048
368-00 Distribution Line Transfo-E	1,917,442	3.00%	57,523
368-01 Transformer Installations-E	1,877,682	2.89%	54,265
369-00 Distribution Services-E	893,128	5.67%	50,640
370-00 Distribution Meters-E	700,543	5.00%	35,027
370-01 Meter Installation-E	700,543	5.00%	35,027
371-00 Installations on Customer-E	246,648	7.56%	18,647
373-00 Street Lights & Signal Sy-E	203,123	7.79%	15,823
390-00 Structures-E	12,975	2.08%	270
391-01 Office Furniture & Fixtur-E	(1,696)	5.83%	(99)
394-00 Tools, Shop and garage Eq-E	123,357	3.64%	4,490
395-00 Laboratory Equipment-E	284	3.90%	11
397-00 Communication Equipment-E	(50,643)	6.60%	(3,342)
Grand Total	18,361,098	4.36%	800,911

Docket No. DE 19-\_\_\_ Schedule TRD-1 2019 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 <sup>(1)</sup>	Pre-Tax Cost
1	Common Stock Equity	\$ 77,284,950	50.97%	9.50%	4.84%	1.3744	6.65%
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%		10.15%

### Notes:

<sup>(1)</sup> Tax factor calculated using a Federal Tax Rate of 21% and State Tax Rate of 7.9% (effective tax rate of 27.241%)

## UNITIL ENERGY SYSTEMS, INC. MAJOR STORM COST RESERVE COLLECTION BALANCE

Docket No. DE 19-\_\_\_ Schedule TRD-2 MSCR Collection Balance Page 1 of 1

	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18
Beginning (Over)/Under Collection	\$ 406,966	\$ 1,161,973	\$ 1,009,342	\$ 2,862,064	\$ 2,758,708	\$ 4,539,995
Storm Costs	1,374,471	593,310	2,521,986	572,142	2,438,860	2,260,220
Transfers <sup>(1)</sup>	-	-	-	-	-	1,257,109
Customer Revenue	666,667	800,000	800,000	800,000	800,000	800,000
Interest	47,203	54,059	130,737	124,502	142,427	248,944
Ending (Over)/Under Collection	\$ 1,161,973	\$ 1,009,342	\$ 2,862,065	\$ 2,758,708	\$ 4,539,995	\$ 4,992,050
Proposed Adjustment <sup>(2)</sup>	-	-	-	-	-	1,618,723
Adjusted Ending (Over)/Under Collection	 1,161,973	1,009,342	2,862,065	2,758,708	4,539,995	3,373,327

### Note:

<sup>(1)</sup> Per Order No. 26,123, the Company moved \$1,257,109 in costs related to the 10/30/17 Windstorm Event (costs reported in the 2017 MSCR Report, plus associated carrying charges) to the SRAF

<sup>(2)</sup> Proposed adjustment to remove Winter Storm Quinn (costs reported in the 2018 MSCR Report, plus associated carrying charges) to the SRAF

Docket No. DE 19-\_\_\_ Schedule TRD-3 SRAF Amortization Page 1 of 3

# UNITIL ENERGY SYSTEMS, INC. Winter Storm Quinn (March 2018) Incremental Cost - Recovery Calculation of Increment to the Storm Recovery Adjustment Factor Effective May 1, 2019

Description	Amount
Incremental Annual Recovery (Page 2)	\$ 581,518
Sales (kWh) - 12 months ending December 31, 2018	 1,224,436,868
Storm Recovery Adjustment Factor (Increment, \$/kWh)*	\$ 0.00047
* To be added to the current Storm Recovery Adjustment Factor.	
Current SRAF (effective February 2019	\$ 0.00133
less: recovery of December 2008 ice storm & February 2010 wind storm (terminates effective 5/1/2019)	\$ (0.00096)
plus: recovery of Winter Storm Quinn (proposed for effect 5/1/2019)	\$ 0.00047
Total SRAF for effect May 1, 2019:	\$ 0.00084

Docket No. DE 19-\_ Schedule TRD-3 **SRAF Amortization** Page 2 of 3

## UNITIL ENERGY SYSTEMS, INC. Winter Storm Quinn (March 2018) - Recovery Schedule

	<u>Year</u> (A)	Beginning Balance With <u>Interest</u> (B)	Annual <u>Recovery</u> (C)	Ending Balance (D)	В	alance Subject to Interest (E)	Interest <u>Rate</u> (F)		Interest (G)	C	Cumulative Interest (H)
(1)	May 2019 - April 2020	\$ 1,618,723	\$ 581,518	\$ 1,037,204		1,327,964		20%	,	\$	69,054
(2)	May 2020 - April 2021	\$ 1,106,259	\$ 581,518	\$ 524,740	\$	815,499	5.2	20%	\$ 42,406	\$	111,460
(3)	May 2021 - April 2022	\$ 567,146	\$ 581,518	\$ (14,372)	\$	276,387	5.2	20%	\$ 14,372	\$	125,832
	Total Recovery		\$ 1,744,555						\$ 125,832		

## Column

- Notes
  (A)
  (B)
  (C)
  (D)
  (E)
  (F)
  (G) Time period
- Prior period Column (D) + Prior period Column (G)

- Annual Recovery
  Column (B) Column (C)
  ( Column (B) + Column (D)) ÷ 2
  UES's Cost of Debt net of deferred taxes
  Column (E) times Column (F)
  Prior Year Column (H) + Current Year Column (G)

Docket No. DE 19-\_\_\_ Schedule TRD-3 SRAF Amortization Page 3 of 3

## UNITIL ENERGY SYSTEMS, INC. Winter Storm Quinn (March 2018) Incremental Costs

	Month (A)	Beginning <u>Balance</u> (B)	Winter Storm Quinn Charges (C)	Ending <u>Balance</u> (D)	Balance Subject to Interest (E)	Interest <u>Rate</u> (F)	Interest (G)	Balance (H)
(1) (2)	Mar-Oct 2018 Nov 2018 - Apr 2019	\$0 \$1,578,031	\$1,550,964 \$0	\$1,550,964 \$1,578,031	\$775,482 \$1,578,031	5.20% 5.20%	\$27,068 \$40,692	\$1,578,031 \$1,618,723
			\$1,550,964				\$67,759	\$1,618,723

# Unitil Energy Systems, Inc. PUC 308.11 - F-1 Rate of Return

12 Months Ending December 31, 2018

Schedule 1: Calculation of Per Books Rate of Return

Cost of Service	Rolling 12 Months	Rate Base	Period End
Electric Service Revenue	\$ 155,025,055	Utility Plant in Service	\$ 340,808,317
Other Operating Revenue	2,623,127	Less: Reserve for Depreciation & Amortization	123,439,500
Total Operating Revenue	157,648,182	Net Utility Plant	217,368,817
Operating Expenses:		Plus:	
Purchased Power	61,038,767	M&S Inventories	1,794,149
Transmission	29,521,428	Cash Working Capital	2,919,467
Distribution	9,286,501	Prepayments	5,224,634
Cust. Accounting & Service	8,506,053	Regulatory Assets	1,916,999
Admin. & General	10,665,287	• •	
Depreciation	11,419,121	Less:	
Amortization	3,484,160	Deferred Income Taxes	39,777,804
Taxes-Other Than Income	6,519,710	Regulatory Liabilities	15,621,909
State & Federal Income Taxes - Adjusted	3,119,845	Customer Advances	616,161
Int on Customer Deposits	32,204	Customer Deposits	670,910
Total Operating Expenses	143,593,074	Total Rate Base	\$ 172,537,282
Net Operating Income	\$ 14,055,108	Utility Operating Income - Current Cost of Capital	\$ 13,130,087
		Utility Operating Income - Adjusted	\$ 13,234,945
Less: Flow-Through Oper. Inc. (Exc. Lost Base Rev.)	820,163		
,	•	Operating Income Deficiency (Surplus)	\$ (104,858)
Net Operating Income - Adjusted	\$ 13,234,945	Income Tax Gross-Up	\$ (39,259)
, ,	<u> </u>	Revenue Deficiency (Surplus)	\$ (144,117)
		Return on Rate Base - Actual	7.67%
		Return on Rate Base - Current Cost of Capital	7.61%
		ROE - Actual	9.65%
		ROE - Authorized DE 16-384	9.50%

Schedule 2: Current Cost of Capital	c	Amount Outstanding	Percent Total	Weighted Cost Rate		
Common Equity	\$	83,926,900	44.74%	9.50%	4.25%	
Preferred Stock Equity	\$	189,300	0.10%	6.00%	0.01%	
Long Term Debt	\$	96,000,000	51.17%	6.30%	3.22%	
Short Term Debt (a)	\$	7,487,836	3.99%	3.14%	0.13%	
Total	\$	187,604,036	100.00%		7.61%	

<sup>(</sup>a) Excluding Accrued Revenue, Power Supply Working Capital and CWIP

## Unitil Energy Systems, Inc. Rate Design Calculation Individual Rate Design Calculations

Part	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Test Year Consumers		2015 Billing	Adjustment	Adjustment	Adjusted	Revenue		Adjustment	Revenue	
All KWh	Residential - D									
Total Design Revenue	Test Year Consumers	785,306	\$15.24	\$16.12	\$16.12	\$12,661,259		\$16.22	\$12,735,726	0.59%
Semail General Service - G2 kWh		497,875,828	\$0.03566	\$0.03773	\$0.03537	\$17,609,495	-6.25%	\$0.03558	\$17,713,066	
Test Year Consumers	Total Design Revenue					\$30,270,754	-3.73%		\$30,448,792	0.59%
Annual kWh	Small General Service - G2 kWh									
Total Design Revenue	Test Year Consumers	5,238	\$17.27	\$18.27	\$18.27	\$95,717	0.00%	\$18.38	\$96,280	0.59%
Small General Service - G2 QR WH /SH   Test Year Consumers	Annual kWh	607,397	\$0.01440	\$0.01523	\$0.00878	\$5,332		\$0.00883	\$5,364	
Test Year Consumers	Total Design Revenue					\$101,050	-3.73%		\$101,644	0.59%
Annual kWh	Small General Service - G2 QR WH /SH									
Total Design Revenue	Test Year Consumers	-, -	* -	\$9.67	\$9.67			\$9.73	,	0.59%
Small General Service - G2 Demand   Test Year Consumers   123,180   \$27.43   \$29.02   \$29.02   \$3,574,789   0.00%   \$29.19   \$3,595,814   0.59%   Demand kW   1,348,556   \$10.35   \$10.95   \$10.45   \$14,086,374   4.63%   \$10.51   \$14,169,223   0.59%   Annual kWh   347,811,789   \$0.00000   \$0.00000   \$0.00000   \$0.00000   \$0.00000   \$0.00000   \$17,661,162   -3.73%   \$17,765,037   0.59%   \$17,65,037   0.59%   \$17,651,037   0.59%   \$17,651,037   0.59%   \$17,651,037   0.59%   \$17,651,037   0.59%   \$17,651,037   0.59%   \$17,651,037   0.59%   \$17,651,037   0.59%   \$17,651,037   0.59%   \$17,651,037   0.59%   \$17,651,037   0.59%   \$17,651,037   0.59%   \$17,651,037   0.59%   \$17,651,037   0.59%   \$17,651,037   0.59%   \$17,651,037   0.59%   \$17,651,037   0.59%   \$17,651,037   0.00%   \$17,651,037   0.00%   \$17,651,037   0.00%   \$17,651,037   0.00%   \$17,651,037   0.00%   \$17,651,037   0.00%   \$17,651,037   0.00%   \$17,651,037   0.00%   \$17,651,037   0.00%   \$17,651,037   0.00%   \$17,651,037   0.00%   \$17,651,037   0.00%   \$17,651,037   0.00%   \$17,651,037   0.00%   \$17,651,037   0.00%   \$17,651,037   0.00%   \$17,739,903   0.59%   \$17,739		5,742,223	\$0.03149	\$0.03331	\$0.03185	,		\$0.03204	+,	
Test Year Consumers	Total Design Revenue					\$216,294	-3.73%		\$217,566	0.59%
Demand kW	Small General Service - G2 Demand									
Annual kWh Total Design Revenue \$0.00000 \$0.00000\$ \$0.00000 \$0.00000 \$0.00000 \$0.00000 \$0.00000 \$0.00000 \$0.00000\$		•			*					
Total Design Revenue   \$17,661,162   -3.73%   \$117,765,037   0.59%	Demand kW	, ,				\$14,086,374			\$14,169,223	
Carrell No.		347,811,789	\$0.00000	\$0.00000	\$0.00000	, .		\$0.00000	* -	
Test Year kW 50,269 (\$0.50) (\$0.50) (\$0.50) -\$25,134	Total Design Revenue					\$17,661,162	-3.73%		\$17,765,037	0.59%
Total Design Revenue   -\$25,134   0.00%   -\$25,134   0.00%     -\$25,134   0.00%     -\$25,134   0.00%     -\$25,134   0.00%										
Subtotal G2 Demand inc. Transformer Ownership Discount           Total Design Revenue         \$17,636,028         -3.73%         \$17,739,903         0.59%           Large General Service - G1         \$152.40         \$161.23         \$161.23         \$241,357         \$162.18         \$242,776           Test Year Consumers Primary         381         \$81.28         \$85.99         \$85.99         \$32,761         \$86.49         \$32,954           Demand kVA         1,022,850         \$7.42         \$7.85         \$7.55         \$7,723,570         \$7.60         \$7,768,997           Annual kWh         353,924,392         \$0.00000         \$0.00000         \$0         \$0.00000         \$0           Total Design Revenue         \$7,997,688         -3.64%         \$8,044,727         0.59%           G1 - kVA Transformer Ownership Discount         \$0.50         \$0.50         \$207,735         \$0.00%           Subtotal G1 inc. Transformer Ownership Discount         \$0.000         \$0.00%         \$0.00%         \$0.00%		50,269	(\$0.50)	(\$0.50)	(\$0.50)			(\$0.50)		
Total Design Revenue         \$17,636,028         -3.73%         \$17,739,903         0.59%           Large General Service - G1           Test Year Consumers Secondary         1,497         \$152.40         \$161.23         \$241,357         \$162.18         \$242,776           Test Year Consumers Primary         381         \$81.28         \$85.99         \$85.99         \$32,761         \$86.49         \$32,954           Demand kVA         1,022,850         \$7.42         \$7.85         \$7.55         \$7,723,570         \$7.60         \$7,768,997           Annual kWh         353,924,392         \$0.00000         \$0.00000         \$0         \$0.00000         \$0           Total Design Revenue         \$7,997,688         -3.64%         \$8,044,727         0.59%           G1 - kVA Transformer Ownership Discount           Test Year kVA         415,470         (\$0.50)         (\$0.50)         -\$207,735         (\$0.50)         -\$207,735         0.00%           Subtotal G1 inc. Transformer Ownership Discount	Total Design Revenue					-\$25,134	0.00%		-\$25,134	0.00%
Large General Service - G1         Test Year Consumers Secondary       1,497       \$152.40       \$161.23       \$241,357       \$162.18       \$242,776         Test Year Consumers Primary       381       \$81.28       \$85.99       \$85.99       \$32,761       \$86.49       \$32,954         Demand kVA       1,022,850       \$7.42       \$7.85       \$7.55       \$7,723,570       \$7.60       \$7,768,997         Annual kWh       353,924,392       \$0.00000       \$0.00000       \$0       \$0.00000       \$0.00000       \$0         Total Design Revenue       \$7,997,688       -3.64%       \$8,044,727       0.59%         G1 - kVA Transformer Ownership Discount         Test Year kVA       415,470       (\$0.50)       (\$0.50)       -\$207,735       (\$0.50)       -\$207,735       -\$207,735       0.00%         Subtotal G1 inc. Transformer Ownership Discount		nership Discoun	t							
Test Year Consumers Secondary         1,497         \$152.40         \$161.23         \$161.23         \$241,357         \$162.18         \$242,776           Test Year Consumers Primary         381         \$81.28         \$85.99         \$85.99         \$32,761         \$86.49         \$32,954           Demand kVA         1,022,850         \$7.42         \$7.85         \$7.55         \$7,723,570         \$7.60         \$7,768,997           Annual kWh         353,924,392         \$0.00000         \$0.00000         \$0         \$0.00000         \$0           Total Design Revenue         \$7,997,688         -3.64%         \$8,044,727         0.59%           G1 - kVA Transformer Ownership Discount           Test Year kVA         415,470         (\$0.50)         (\$0.50)         -\$207,735         (\$0.50)         -\$207,735         -\$207,735         0.00%           Subtotal G1 inc. Transformer Ownership Discount	Total Design Revenue					\$17,636,028	-3.73%		\$17,739,903	0.59%
Test Year Consumers Primary         381         \$81.28         \$85.99         \$85.99         \$32,761         \$86.49         \$32,954           Demand kVA         1,022,850         \$7.42         \$7.85         \$7.55         \$7,723,570         \$7.60         \$7,768,997           Annual kWh         353,924,392         \$0.00000         \$0.00000         \$0         \$0.00000         \$0           Total Design Revenue         \$7,997,688         -3.64%         \$8,044,727         0.59%           Test Year kVA         415,470         (\$0.50)         (\$0.50)         -\$207,735         (\$0.50)         -\$207,735         (\$0.50)         -\$207,735         0.00%           Subtotal G1 inc. Transformer Ownership Discount         Transformer Ownership Discount         \$0.0000	Large General Service - G1									
Demand kVA         1,022,850         \$7.42         \$7.85         \$7.55         \$7,723,570         \$7.60         \$7,768,997           Annual kWh         353,924,392         \$0.00000         \$0.00000         \$0         \$0.00000         \$0         \$0.00000         \$0           Total Design Revenue         \$7,997,688         -3.64%         \$8,044,727         0.59%           G1 - kVA Transformer Ownership Discount           Test Year kVA         415,470         (\$0.50)         (\$0.50)         -\$207,735         (\$0.50)         -\$207,735         -\$207,735         0.00%         -\$207,735         0.00%           Subtotal G1 inc. Transformer Ownership Discount	Test Year Consumers Secondary	1,497	\$152.40		\$161.23	\$241,357		\$162.18		
Annual kWh 353,924,392 \$0.000000 \$0.000000 \$0.00000 \$0.00	Test Year Consumers Primary	381	\$81.28	\$85.99	\$85.99	\$32,761		\$86.49		
Total Design Revenue         \$7,997,688         -3.64%         \$8,044,727         0.59%           G1 - kVA Transformer Ownership Discount           Test Year kVA         415,470         (\$0.50)         (\$0.50)         -\$207,735         (\$0.50)         -\$207,735         -\$207,735         -\$207,735         0.00%           Subtotal G1 inc. Transformer Ownership Discount	Demand kVA	, ,		\$7.85	\$7.55	\$7,723,570		\$7.60	\$7,768,997	
G1 - kVA Transformer Ownership Discount           Test Year kVA         415,470         (\$0.50)         (\$0.50)         -\$207,735         (\$0.50)         -\$207,735         -\$207,735         -\$207,735         0.00%           Subtotal G1 inc. Transformer Ownership Discount	Annual kWh	353,924,392	\$0.00000	\$0.00000	\$0.00000	, .		\$0.00000	* -	
Test Year kVA       415,470       (\$0.50)       (\$0.50)       -\$207,735       (\$0.50)       -\$207,735         Total Design Revenue       -\$207,735       0.00%       -\$207,735       0.00%    Subtotal G1 inc. Transformer Ownership Discount	Total Design Revenue					\$7,997,688	-3.64%		\$8,044,727	0.59%
Test Year kVA       415,470       (\$0.50)       (\$0.50)       -\$207,735       (\$0.50)       -\$207,735         Total Design Revenue       -\$207,735       0.00%       -\$207,735       0.00%    Subtotal G1 inc. Transformer Ownership Discount	G1 - kVA Transformer Ownership Discount	t								
Subtotal G1 inc. Transformer Ownership Discount			(\$0.50)	(\$0.50)	(\$0.50)	-\$207,735		(\$0.50)	-\$207,735	
	Total Design Revenue			,		-\$207,735	0.00%		-\$207,735	0.00%
	Subtotal G1 inc. Transformer Ownership D	iscount								
						\$7,789,953	-3.73%		\$7,836,992	0.60%

## Unitil Energy Systems, Inc. Rate Design Calculation Individual Rate Design Calculations

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
	Test Year 2015 Billing Units	Step 1 Adjustment Rates	Step 2 Adjustment Rates	Step 2 Tax Adjusted Rates	Tax Adjusted Revenue May 1, 2018	Percent Change	Step 3 Adjustment Rates	Step 3 Adjustment Revenue May 1, 2019	Percent Change
Outdoor Lighting - OL									
Delivery charge - Annual kWh	8,241,454	\$0.00000	\$0.00000	\$0.00000	\$0		\$0.00000	\$0	
Fixture revenue									
100W Mercury Vapor Street	17,494	\$12.96	\$13.72	\$13.20	\$230,973		\$13.28	\$232,331	
175W Mercury Vapor Street	894	\$15.37	\$16.26	\$15.66	\$13,999		\$15.75	\$14,081	
250W Mercury Vapor Street	945	\$17.42	\$18.43	\$17.75	\$16,771		\$17.85	\$16,869	
400W Mercury Vapor Street	1,940	\$20.75	\$21.95	\$21.13	\$40,994		\$21.25	\$41,235	
1000W Mercury Vapor Street	24	\$41.19	\$43.57	\$41.95	\$1,007		\$42.19	\$1,013	
250W Mercury Vapor Flood	850	\$18.56	\$19.64	\$18.90	\$16,062		\$19.02	\$16,157	
400W Mercury Vapor Flood	1,403	\$22.21	\$23.50	\$22.62	\$31,740		\$22.75	\$31,926	
1000W Mercury Vapor Flood	272	\$36.80	\$38.93	\$37.48	\$10,200		\$37.70	\$10,260	
100W Mercury Vapor Power Bracket	4,860	\$13.09	\$13.84	\$13.33	\$64,773		\$13.41	\$65,154	
175W Mercury Vapor Power Bracket	715	\$14.52	\$15.36	\$14.79	\$10,573		\$14.87	\$10,635	
50W Sodium Vapor Street	41,383	\$13.20	\$13.96	\$13.44	\$556,227		\$13.52	\$559,499	
100W Sodium Vapor Street	1,182	\$14.85	\$15.71	\$15.13	\$17,879		\$15.22	\$17,985	
150W Sodium Vapor Street	4,221	\$14.92	\$15.78	\$15.19	\$64,121		\$15.28	\$64,498	
250W Sodium Vapor Street	13,250	\$18.68	\$19.77	\$19.03	\$252,123		\$19.14	\$253,606	
400W Sodium Vapor Street	3,106	\$23.55	\$24.91	\$23.98	\$74,508		\$24.13	\$74,946	
1000W Sodium Vapor Street	1,728	\$40.67	\$43.03	\$41.42	\$71,575		\$41.66	\$71,996	
150W Sodium Vapor Flood	2,796	\$17.19	\$18.19	\$17.51	\$48,947		\$17.61	\$49,235	
250W Sodium Vapor Flood	3,708	\$20.27	\$21.44	\$20.64	\$76,549		\$20.76	\$76,999	
400W Sodium Vapor Flood	4,724	\$23.02	\$24.36	\$23.45	\$110,756		\$23.58	\$111,408	
1000W Sodium Vapor Flood	2,789	\$41.03	\$43.40	\$41.78	\$116,532		\$42.03	\$117,217	
50W Sodium Vapor Power Bracket	1,304	\$12.21	\$12.92	\$12.44	\$16,222		\$12.51	\$16,318	
100W Sodium Vapor Power Bracket	777	\$13.71	\$14.50	\$13.96	\$10,844		\$14.04	\$10,908	
175W Metal Halide Street	19	\$19.44	\$20.56	\$19.79	\$374		\$19.91	\$376	
250W Metal Halide Street	0	\$21.13	\$22.36	\$21.52	\$0		\$21.65	\$0	
400W Metal Halide Street	0	\$21.92	\$23.18	\$22.32	\$0		\$22.45	\$0	
175W Metal Halide Flood	0	\$22.45	\$23.75	\$22.87	\$0		\$23.00	\$0	
250W Metal Halide Flood	0	\$24.24	\$25.65	\$24.69	\$0		\$24.83	\$0	
400W Metal Halide Flood	0	\$24.28	\$25.69	\$24.73	\$0		\$24.88	\$0	
1000W Metal Halide Flood	465	\$31.46	\$33.28	\$32.03	\$14,882		\$32.22	\$14,970	
175W Metal Halide Power Bracket	0	\$18.19	\$19.24	\$18.52	\$0		\$18.63	\$0	
250W Metal Halide Power Bracket	0	\$19.34	\$20.45	\$19.69	\$0		\$19.81	\$0	
400W Metal Halide Power Bracket	0	\$20.67	\$21.86	\$21.05	\$0		\$21.17	\$0	

Docket No. DE 19-\_\_\_ Schedule TRD-5 Rate Design Page 3 of 3

## Unitil Energy Systems, Inc. Rate Design Calculation Individual Rate Design Calculations

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
	Test Year 2015 Billing Units	Step 1 Adjustment Rates	Step 2 Adjustment Rates	Step 2 Tax Adjusted Rates	Tax Adjusted Revenue May 1, 2018	Percent Change	Step 3 Adjustment Rates	Step 3 Adjustment Revenue May 1, 2019	Percent Change
42W 3600 K LED Area Light Fixture	0	\$12.85	\$13.59	\$13.08	\$0		\$13.16	\$0	
57W 5200K LED Area Light Fixture	0	\$12.89	\$13.64	\$13.13	\$0		\$13.21	\$0	
25W 3000K LED Cobra Head Fixture	0	\$12.80	\$13.54	\$13.03	\$0		\$13.11	\$0	
88W 8300K LED Cobra Head Fixture	0	\$12.98	\$13.73	\$13.22	\$0		\$13.30	\$0	
108W 11500K LED Cobra Head Fixture	0	\$13.04	\$13.80	\$13.28	\$0		\$13.36	\$0	
193W 21000K LED Cobra Head Fixture	0	\$13.29	\$14.06	\$13.54	\$0		\$13.62	\$0	
123W 12180K LED Flood Light Fixture	0	\$13.09	\$13.84	\$13.33	\$0		\$13.41	\$0	
194W 25700K LED Flood Light Fixture	0	\$13.30	\$14.07	\$13.54	\$0		\$13.62	\$0	
297W 38100K LED Flood Light Fixture	0	\$13.60	\$14.39	\$13.85	<u>\$0</u>	-	\$13.93	<u>\$0</u>	
Total Design Revenue					\$1,868,631	-3.73%		\$1,879,622	0.59%
Total Design Revenue Total Billed kWh Total Billed kW/kVA	1,214,203,082 2,371,406				\$57,882,710			\$58,224,518	
Step Adjustment \$ (does not include recoupm Step Adjustment Percentage Change (not inc Step Adjustment Percentage Change Total	,	r discounts)						\$341,808 0.59% 0.59%	

## Unitil Energy Systems, Inc. Typical Bill Impacts - January 1, 2019 vs. May 1, 2019 Step Adjustment Filing - February 28, 2019 Impact on D Rate Customers

Average <u>kWh</u>	Total Bill Using Rates <u>1/1/2019</u>	Total Bill Using Rates <u>5/1/2019</u>	Total <u>Difference</u>	% Total <u>Difference</u>
125	\$38.90	\$38.96	\$0.06	0.2%
150	\$43.45	\$43.51	\$0.06	0.1%
200	\$52.57	\$52.61	\$0.04	0.1%
250	\$61.68	\$61.71	\$0.03	0.0%
300	\$70.79	\$70.81	\$0.02	0.0%
350	\$79.90	\$79.90	\$0.00	0.0%
400	\$89.01	\$89.00	(\$0.01)	(0.0%)
450	\$98.12	\$98.10	(\$0.03)	(0.0%)
500	\$107.24	\$107.20	(\$0.04)	(0.0%)
525	\$111.79	\$111.74	(\$0.05)	(0.0%)
550	\$116.35	\$116.29	(\$0.05)	(0.0%)
575	\$120.90	\$120.84	(\$0.06)	(0.1%)
600	\$125.46	\$125.39	(\$0.07)	(0.1%)
625	\$130.01	\$129.94	(\$0.07)	(0.1%)
650	\$134.57	\$134.49	(\$0.08)	(0.1%)
675	\$139.13	\$139.04	(\$0.09)	(0.1%)
700	\$143.68	\$143.59	(\$0.10)	(0.1%)
725	\$148.24	\$148.13	(\$0.10)	(0.1%)
750	\$152.79	\$152.68	(\$0.11)	(0.1%)
775	\$157.35	\$157.23	(\$0.12)	(0.1%)
825	\$166.46	\$166.33	(\$0.13)	(0.1%)
925	\$184.68	\$184.52	(\$0.16)	(0.1%)
1,000	\$198.35	\$198.17	(\$0.18)	(0.1%)
1,250	\$243.91	\$243.66	(\$0.25)	(0.1%)
1,500	\$289.47	\$289.15	(\$0.32)	(0.1%)
2,000	\$380.58	\$380.12	(\$0.46)	(0.1%)
3,500	\$653.93	\$653.05	(\$0.88)	(0.1%)
5,000	\$927.27	\$925.97	(\$1.30)	(0.1%)

	Rates - Effective January 1, 2019	Rates - Proposed May 1, 2019	Difference
Customer Charge	\$16.12	\$16.22	\$0.10
	<u>kWh</u>	<u>kWh</u>	<u>kWh</u>
Distribution Charge:	\$0.03537	\$0.03558	\$0.00021
External Delivery Charge	\$0.02389	\$0.02389	\$0.00000
Stranded Cost Charge	(\$0.00101)	(\$0.00101)	\$0.00000
Storm Recovery Adjustment Factor	\$0.00133	\$0.00084	(\$0.00049)
System Benefits Charge	\$0.00576	\$0.00576	\$0.00000
Default Service Charge	<u>\$0.11689</u>	<u>\$0.11689</u>	\$0.00000
TOTAL	\$0.18223	\$0.18195	(\$0.00028)

## Unitil Energy Systems, Inc. Typical Bill Impacts - January 1, 2019 vs. May 1, 2019 Step Adjustment Filing - February 28, 2019 Impact on G2 Rate Customers

Load Factor	Average Monthly <u>kW</u>	Average Monthly <u>kWh</u>	Total Bill Using Rates <u>1/1/2019</u>	Total Bill Using Rates <u>5/1/2019</u>	Total <u>Difference</u>	% Total <u>Difference</u>
20%	5	730	\$180.05	\$180.16	\$0.11	0.1%
20%	10	1,460	\$331.08	\$331.13	\$0.05	0.0%
20%	15	2,190	\$482.10	\$482.10	(\$0.00)	(0.0%)
20%	25	3,650	\$784.16	\$784.04	(\$0.12)	(0.0%)
20%	50	7,300	\$1,539.30	\$1,538.89	(\$0.41)	(0.0%)
20%	75	10,950	\$2,294.43	\$2,293.74	(\$0.70)	(0.0%)
20%	100	14,600	\$3,049.57	\$3,048.59	(\$0.98)	(0.0%)
20%	150	21,900	\$4,559.85	\$4,558.28	(\$1.56)	(0.0%)
36%	5	1,314	\$259.91	\$259.74	(\$0.17)	(0.1%)
36%	10	2,628	\$490.80	\$490.28	(\$0.52)	(0.1%)
36%	15	3,942	\$721.69	\$720.83	(\$0.86)	(0.1%)
36%	25	6,570	\$1,183.47	\$1,181.92	(\$1.55)	(0.1%)
36%	50	13,140	\$2,337.92	\$2,334.65	(\$3.27)	(0.1%)
36%	75	19,710	\$3,492.36	\$3,487.37	(\$4.99)	(0.1%)
36%	100	26,280	\$4,646.81	\$4,640.10	(\$6.71)	(0.1%)
36%	150	39,420	\$6,955.71	\$6,945.56	(\$10.15)	(0.1%)
50%	5	1,825	\$329.79	\$329.36	(\$0.42)	(0.1%)
50%	10	3,650	\$630.56	\$629.54	(\$1.02)	(0.2%)
50%	15	5,475	\$931.33	\$929.71	(\$1.61)	(0.2%)
50%	25	9,125	\$1,532.86	\$1,530.06	(\$2.80)	(0.2%)
50%	50	18,250	\$3,036.71	\$3,030.94	(\$5.77)	(0.2%)
50%	75	27,375	\$4,540.55	\$4,531.81	(\$8.74)	(0.2%)
50%	100	36,500	\$6,044.40	\$6,032.68	(\$11.72)	(0.2%)
50%	150	54,750	\$9,052.08	\$9,034.43	(\$17.66)	(0.2%)

_	Rates - Effective January 1, 2019	Rates - Proposed May 1, 2019	Difference
Customer Charge	\$29.02	\$29.19	\$0.17
Distribution Charge	All kW	All kW	All kW
Distribution Charge Stranded Cost Charge	\$10.45 ( <u>\$0.21)</u>	\$10.51 (\$0.21)	\$0.06 <u>\$0.00</u>
TOTAL	\$10.24	\$10.30	\$0.06
	<u>kWh</u>	<u>kWh</u>	<u>kWh</u>
Distribution Charge	\$0.00000	\$0.00000	\$0.00000
External Delivery Charge	\$0.02389	\$0.02389	\$0.00000
Stranded Cost Charge	(\$0.00021)	(\$0.00021)	\$0.00000
Storm Recovery Adj. Factor	\$0.00133	\$0.00084	(\$0.00049)
System Benefits Charge	\$0.00576	\$0.00576	\$0.00000
Default Service Charge	<u>\$0.10598</u>	<u>\$0.10598</u>	\$0.00000
TOTAL	\$0.13675	\$0.13626	(\$0.00049)

# Unitil Energy Systems, Inc. Typical Bill Impacts - January 1, 2019 vs. May 1, 2019 Step Adjustment Filing - February 28, 2019 Impact on G2 kWh Meter Rate Customers

Average Monthly <u>kWh</u>	Total Bill Using Rates <u>1/1/2019</u>	Total Bill Using Rates <u>5/1/2019</u>	Total <u>Difference</u>	% Total <u>Difference</u>
15	\$20.44	\$20.54	\$0.10	0.5%
75	\$29.12	\$29.20	\$0.08	0.3%
150	\$39.98	\$40.02	\$0.04	0.1%
250	\$54.45	\$54.45	\$0.00	0.0%
350	\$68.93	\$68.88	(\$0.04)	(0.1%)
450	\$83.40	\$83.31	(\$0.09)	(0.1%)
550	\$97.87	\$97.74	(\$0.13)	(0.1%)
650	\$112.34	\$112.17	(\$0.18)	(0.2%)
750	\$126.82	\$126.60	(\$0.22)	(0.2%)
900	\$148.53	\$148.24	(\$0.29)	(0.2%)

	Rates - Effective January 1, 2019	Rates - Proposed May 1, 2019	Difference
kWh Meter Customer Charge	\$18.27	\$18.38	\$0.11
	All kWh	All kWh	All kWh
Distribution Charge	\$0.00878	\$0.00883	\$0.00005
External Delivery Charge	\$0.02389	\$0.02389	\$0.00000
Stranded Cost Charge	(\$0.00101)	(\$0.00101)	\$0.00000
Storm Recovery Adjustment Factor	\$0.00133	\$0.00084	(\$0.00049)
System Benefits Charge	\$0.00576	\$0.00576	\$0.00000
Default Service Charge	<u>\$0.10598</u>	<u>\$0.10598</u>	\$0.00000
TOTAL	\$0.14473	\$0.14429	(\$0.00044)

Docket No. DE 18-\_\_\_ Schedule TRD-6 Bill Impacts Page 4 of 6

# Unitil Energy Systems, Inc. Typical Bill Impacts - January 1, 2019 vs. May 1, 2019 Step Adjustment Filing - February 28, 2019 Impact on G2 QRWH and SH Rate Customers

	Total Bill	Total Bill		%
Average	Using Rates	Using Rates	Total	Total
<u>kWh</u>	<u>1/1/2019</u>	<u>5/1/2019</u>	<u>Difference</u>	<u>Difference</u>
100	\$26.45	\$26.48	\$0.03	0.1%
200	\$43.23	\$43.23	\$0.00	0.0%
300	\$60.01	\$59.98	(\$0.03)	(0.0%)
400	\$76.79	\$76.73	(\$0.06)	(0.1%)
500	\$93.57	\$93.48	(\$0.09)	(0.1%)
750	\$135.52	\$135.36	(\$0.16)	(0.1%)
1,000	\$177.47	\$177.23	(\$0.24)	(0.1%)
1,500	\$261.37	\$260.98	(\$0.39)	(0.1%)
2,000	\$345.27	\$344.73	(\$0.54)	(0.2%)
2,500	\$429.17	\$428.48	(\$0.69)	(0.2%)

	Rates - Effective January 1, 2019	Rates - Proposed May 1, 2019	Difference	
Customer Charge	\$9.67	\$9.73	\$0.06	
	<u>All kWh</u>	<u>All kWh</u>	<u>All kWh</u>	
Distribution Charge	\$0.03185	\$0.03204	\$0.00019	
External Delivery Charge	\$0.02389	\$0.02389	\$0.00000	
Stranded Cost Charge	(\$0.00101)	(\$0.00101)	\$0.00000	
Storm Recovery Adjustment Factor	\$0.00133	\$0.00084	(\$0.00049)	
System Benefits Charge	\$0.00576	\$0.00576	\$0.00000	
Default Service Charge	<u>\$0.10598</u>	<u>\$0.10598</u>	\$0.00000	
TOTAL	<b>\$0.16780</b>	\$0.16750	(\$0.00030)	

## Unitil Energy Systems, Inc. Typical Bill Impacts - January 1, 2019 vs. May 1, 2019 Step Adjustment Filing - February 28, 2019 Impact on G1 Rate Customers

Load <u>Factor</u>	Average Monthly <u>kVa</u>	Average Monthly <u>kWh</u>	Total Bill Using Rates <u>1/1/2019</u>	Total Bill Using Rates <u>5/1/2019</u>	Total <u>Difference</u>	% Total <u>Differenc</u>
25.0%	200	36,500	\$6,224.61	\$6,217.68	(\$6.93)	(0.1%)
25.0%	400	73,000	\$12,287.99	\$12,273.17	(\$14.82)	(0.1%)
25.0%	600	109,500	\$18,351.37	\$18,328.67	(\$22.71)	(0.1%)
25.0%	800	146,000	\$24,414.75	\$24,384.16	(\$30.59)	(0.1%)
25.0%	1,000	182,500	\$30,478.13	\$30,439.66	(\$38.47)	(0.1%)
25.0%	1,500	273,750	\$45,636.58	\$45,578.39	(\$58.19)	(0.1%)
25.0%	2,000	365,000	\$60,795.03	\$60,717.13	(\$77.90)	(0.1%)
25.0%	2,500	456,250	\$75,953.48	\$75,855.87	(\$97.61)	(0.1%)
25.0%	3,000	547,500	\$91,111.93	\$90,994.61	(\$117.32)	(0.1%)
40.0%	200	58,400	\$8,986.64	\$8,968.97	(\$17.67)	(0.2%)
40.0%	400	116,800	\$17,812.05	\$17,775.76	(\$36.28)	(0.2%)
40.0%	600	175,200	\$26,637.45	\$26,582.56	(\$54.90)	(0.2%)
40.0%	800	233,600	\$35,462.86	\$35,389.35	(\$73.51)	(0.2%)
40.0%	1,000	292,000	\$44,288.27	\$44,196.14	(\$92.13)	(0.2%)
40.0%	1,500	438,000	\$66,351.79	\$66,213.12	(\$138.67)	(0.2%)
40.0%	2,000	584,000	\$88,415.31	\$88,230.10	(\$185.21)	(0.2%)
40.0%	2,500	730,000	\$110,478.83	\$110,247.08	(\$231.75)	(0.2%)
40.0%	3,000	876,000	\$132,542.35	\$132,264.06	(\$278.29)	(0.2%)
57.0%	200	83,220	\$12,116.94	\$12,087.11	(\$29.83)	(0.2%)
57.0%	400	166,440	\$24,072.64	\$24,012.04	(\$60.61)	(0.3%)
57.0%	600	249,660	\$36,028.35	\$35,936.97	(\$91.38)	(0.3%)
57.0%	800	332,880	\$47,984.06	\$47,861.89	(\$122.16)	(0.3%)
57.0%	1,000	416,100	\$59,939.76	\$59,786.82	(\$152.94)	(0.3%)
57.0%	1,500	624,150	\$89,829.03	\$89,599.14	(\$229.88)	(0.3%)
57.0%	2,000	832,200	\$119,718.29	\$119,411.47	(\$306.83)	(0.3%)
57.0%	2,500	1,040,250	\$149,607.56	\$149,223.79	(\$383.77)	(0.3%)
57.0%	3,000	1,248,300	\$179,496.83	\$179,036.11	(\$460.72)	(0.3%)
71.0%	200	103,660	\$14,694.83	\$14,654.99	(\$39.84)	(0.3%)
71.0%	400	207,320	\$29,228.43	\$29,147.79	(\$80.64)	(0.3%)
71.0%	600	310,980	\$43,762.03	\$43,640.60	(\$121.43)	(0.3%)
71.0%	800	414,640	\$58,295.63	\$58,133.40	(\$162.22)	(0.3%)
71.0%	1,000	518,300	\$72,829.23	\$72,626.21	(\$203.02)	(0.3%)
71.0%	1,500	777,450	\$109,163.22	\$108,858.22	(\$305.00)	(0.3%)
71.0%	2,000	1,036,600	\$145,497.22	\$145,090.24	(\$406.98)	(0.3%)
71.0%	2,500	1,295,750	\$181,831.22	\$181,322.25	(\$508.97)	(0.3%)
71.0%	3,000	1,554,900	\$218,165.22	\$217,554.27	(\$610.95)	(0.3%)

	Rates - Effective January 1, 2019	Rates - Proposed May 1, 2019	Difference
Customer Charge	\$161.23	\$162.18	\$0.95
Distribution Charge Stranded Cost Charge TOTAL	All kVA \$7.55 (\$0.25) \$7.30	All kVA \$7.60 (\$0.25) \$7.35	All kVA \$0.05 \$0.00 \$0.05
Distribution Charge External Delivery Charge Stranded Cost Charge Storm Recovery Adjustment Factor System Benefits Charge Default Service Charge* TOTAL	All kWh \$0.00000 \$0.02389 (\$0.00025) \$0.00133 \$0.00576 \$0.09539 \$0.12612	All kWh \$0.00000 \$0.02389 (\$0.00025) \$0.00084 \$0.00576 \$0.09539 \$0.12563	All kWh \$0.00000 \$0.00000 \$0.00000 (\$0.00049) \$0.00000 (\$0.00049)

<sup>\*</sup> Default Service Charge for the G1 class is determined monthly. For purposes of this comparison, the February 2019 rate is unchanged.

Unitil Energy Systems, Inc.
Typical Bill Impacts - January 1, 2019 vs. May 1, 2019
Step Adjustment Filing - February 28, 2019
Impact on OL Rate Customers *

ı					Total Dill	Total Dill		0/	
l	Nominal Watts	Lumens	<u>Type</u>	Average Monthly kWh	Total Bill Using Rates 1/1/2019	Total Bill Using Rates <u>5/1/2019</u>	Total <u>Difference</u>	% Total <u>Difference</u>	
1	Mercury Vapor: 100	3,500	ST	43	\$19.05	\$19.10	\$0.06	0.3%	
2 3	175	7,000	ST ST	71 100	\$25.31 \$31.35	\$25.37 \$31.40	\$0.06 \$0.05	0.2% 0.2%	
4	250 400	11,000 20,000	ST	157	\$42.47	\$42.52	\$0.05 \$0.04	0.2%	
5	1,000	60,000	ST	372	\$92.52	\$92.58	\$0.06	0.1%	
6	250	11,000	FL	100	\$32.50	\$32.57	\$0.07	0.2%	
7 8	400 1,000	20,000 60,000	FL FL	157 380	\$43.96 \$89.14	\$44.02 \$89.17	\$0.05 \$0.03	0.1% 0.0%	
9	100	3,500	PB	48	\$19.86	\$19.91	\$0.06	0.3%	
10	175	7,000	PB	71	\$24.44	\$24.49	\$0.05	0.2%	
	High Pressure Soc	<u>lium:</u>							
11	50	4,000	ST	23	\$16.57	\$16.64	\$0.07	0.4%	
12 13	100 150	9,500 16,000	ST ST	48 65	\$21.66 \$24.03	\$21.72 \$24.08	\$0.07 \$0.06	0.3% 0.2%	
14	250	30,000	ST	102	\$32.90	\$32.96	\$0.06	0.2%	
15	400	50,000	ST	161	\$45.87	\$45.94	\$0.07	0.2%	
16	1,000	140,000	ST	380	\$93.08	\$93.13	\$0.05	0.1%	
17 18	150 250	16,000 30,000	FL FL	65 102	\$26.35 \$34.51	\$26.41 \$34.58	\$0.07 \$0.07	0.3% 0.2%	
19	400	50,000	FL	161	\$45.34	\$45.39	\$0.05	0.1%	
20	1,000	140,000	FL	380	\$93.44	\$93.50	\$0.06	0.1%	
21	50	4,000	PB	23	\$15.57	\$15.63	\$0.06	0.4%	
22	100	95,000	PB	48	\$20.49	\$20.54	\$0.06	0.3%	
23	Metal Halide:	0.000	C.T.	74	¢20.05	¢20.02	ቂስ ስዕ	0.3%	
23 24	175 250	8,800 13,500	ST ST	74 102	\$29.85 \$35.39	\$29.93 \$35.47	\$0.08 \$0.08	0.3%	
25	400	23,500	ST	158	\$43.80	\$43.85	\$0.05	0.1%	
26	175	8,800	FL	74	\$32.93	\$33.02	\$0.09	0.3%	
27 28	250 400	13,500	FL FL	102 158	\$38.56 \$46.21	\$38.65 \$46.28	\$0.09 \$0.07	0.2% 0.2%	
29	400 1,000	23,500 86,000	FL	374	\$82.88	\$82.88	\$0.07	0.2%	
30	175	8,800	PB	74	\$28.58	\$28.65	\$0.07	0.3%	
31	250	13,500	PB	102	\$33.56	\$33.63	\$0.07	0.2%	
32	400	23,500	PB	158	\$42.53	\$42.57	\$0.04	0.1%	
33	Light Emitting Dioc 42	<u>le:</u> 3,600	AL	15	\$15.12	\$15.19	\$0.07	0.5%	
33 34	57	5,200	AL AL	20	\$15.12	\$15.19 \$15.92	\$0.07	0.4%	
35	25	3,000	CH	9	\$14.25	\$14.33	\$0.08	0.5%	
36	88	8,300	CH	30	\$17.30	\$17.36	\$0.07	0.4%	
37 38	108 193	11,500 21,000	CH CH	37 67	\$18.31 \$22.65	\$18.37 \$22.70	\$0.06 \$0.05	0.3% 0.2%	
39	123	12,180	FL	43	\$22.03 \$19.18	\$19.23	\$0.05	0.2%	
40	194	25,700	FL	67	\$22.65	\$22.70	\$0.05	0.2%	
41	297	38,100	FL	103	\$27.85	\$27.88	\$0.03	0.1%	
		Lur	ninaire Charge	es For Year Rou	ınd Service:				
Rates - Effective January 1,	2019	Mercury Vapo	r Rate/Mo.	Sodium Vap	or Rate/Mo.	Metal Halide	e Rate/Mo.	LED Rat	e/Mo.
Customer Charge	\$0.00		1 \$13.20	11	\$13.44	23	\$19.79	33	\$13.08
			2 \$15.66	12	\$15.13	24	\$21.52	34	\$13.13
D:	All kWh		3 \$17.75	13	\$15.19	25	\$22.32	35	\$13.03
Distribution Charge	\$0.00000		4 \$21.13	14	\$19.03	26 27	\$22.87	36 37	\$13.22
External Delivery Charge Stranded Cost Charge	\$0.02389 (\$0.00101)		5 \$41.95 6 \$18.90	15 16	\$23.98 \$41.42	28	\$24.69 \$24.73	38	\$13.28 \$13.54
Storm Recovery Adj. Factor	\$0.00133				\$17.51	29	\$32.03	39	\$13.33
System Benefits Charge	\$0.00576		7 \$22.62	1/					
			7 \$22.62 8 \$37.48	17 18	\$20.64	30	\$18.52	40	\$13.54
Default Service Charge	\$0.10598			18 19		30 31	\$18.52 \$19.69		
_	<u>\$0.10598</u>		8 \$37.48	18 19 20	\$20.64 \$23.45 \$41.78	30		40	\$13.54
_			8 \$37.48 9 \$13.33	18 19 20 21	\$20.64 \$23.45 \$41.78 \$12.44	30 31	\$19.69	40	\$13.54
TOTAL	\$0.10598 <b>\$0.13595</b>	Morousy Van	8 \$37.48 9 \$13.33 10 \$14.79	18 19 20 21 22	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96	30 31 32	\$19.69 \$21.05	40 41	\$13.54 \$13.85
TOTAL  Rates - Proposed May 1, 20	\$0.10598 \$0.13595	Mercury Vapo	8 \$37.48 9 \$13.33 10 \$14.79	18 19 20 21 22 <b>Sodium Vap</b>	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 or Rate/Mo.	30 31 32 Metal Halide	\$19.69 \$21.05	40 41 <u>LED Rat</u>	\$13.54 \$13.85 e/Mo.
TOTAL  Rates - Proposed May 1, 20	\$0.10598 <b>\$0.13595</b>	Mercury Vapo	8 \$37.48 9 \$13.33 10 \$14.79 or Rate/Mo. 1 \$13.28	18 19 20 21 22 <b>Sodium Vap</b>	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 or Rate/Mo. \$13.52	30 31 32 Metal Halide 23	\$19.69 \$21.05 • Rate/Mo. \$19.91	40 41 <u>LED Rat</u> 33	\$13.54 \$13.85 <b>e/Mo.</b> \$13.16
TOTAL  Rates - Proposed May 1, 20	\$0.10598 \$0.13595 19 \$0.00	Mercury Vapo	8 \$37.48 9 \$13.33 10 \$14.79 or Rate/Mo. 1 \$13.28 2 \$15.75	18 19 20 21 22 <b>Sodium Vap</b> 11 12	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 or Rate/Mo. \$13.52 \$15.22	30 31 32 Metal Halide 23 24	\$19.69 \$21.05 <b>E Rate/Mo.</b> \$19.91 \$21.65	40 41 <u>LED Rat</u> 33 34	\$13.54 \$13.85 <b>e/Mo.</b> \$13.16 \$13.21
TOTAL  Rates - Proposed May 1, 20  Customer Charge	\$0.10598 \$0.13595 119 \$0.00 <u>All kWh</u>	Mercury Vapo	8 \$37.48 9 \$13.33 10 \$14.79 or Rate/Mo. 1 \$13.28 2 \$15.75 3 \$17.85	18 19 20 21 22 <b>Sodium Vap</b> 11 12 13	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 or Rate/Mo. \$13.52 \$15.22 \$15.28	30 31 32 Metal Halida 23 24 25	\$19.69 \$21.05 <b>E Rate/Mo.</b> \$19.91 \$21.65 \$22.45	40 41 <u>LED Rat</u> 33 34 35	\$13.54 \$13.85 <b>e/Mo.</b> \$13.16 \$13.21 \$13.11
TOTAL  Rates - Proposed May 1, 20  Customer Charge  Distribution Charge	\$0.10598 \$0.13595 19 \$0.00	Mercury Vapo	8 \$37.48 9 \$13.33 10 \$14.79 or Rate/Mo. 1 \$13.28 2 \$15.75	18 19 20 21 22 <b>Sodium Vap</b> 11 12	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 or Rate/Mo. \$13.52 \$15.22	30 31 32 Metal Halide 23 24	\$19.69 \$21.05 <b>E Rate/Mo.</b> \$19.91 \$21.65	40 41 <u>LED Rat</u> 33 34	\$13.54 \$13.85 <b>e/Mo.</b> \$13.16 \$13.21
Rates - Proposed May 1, 20 Customer Charge  Distribution Charge External Delivery Charge Stranded Cost Charge	\$0.10598 \$0.13595 19 \$0.00 <u>All kWh</u> \$0.0000	Mercury Vapo	8 \$37.48 9 \$13.33 10 \$14.79 or Rate/Mo. 1 \$13.28 2 \$15.75 3 \$17.85 4 \$21.25 5 \$42.19 6 \$19.02	18 19 20 21 22 <b>Sodium Vap</b> 11 12 13 14 15	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 or Rate/Mo. \$13.52 \$15.22 \$15.22 \$15.28 \$19.14 \$24.13 \$41.66	30 31 32 Metal Halidi 23 24 25 26 27 28	\$19.69 \$21.05 <b>B Rate/Mo.</b> \$19.91 \$21.65 \$22.45 \$23.00 \$24.83 \$24.88	40 41 LED Rat 33 34 35 36 37 37	\$13.54 \$13.85 e/Mo. \$13.16 \$13.21 \$13.30 \$13.36 \$13.62
Default Service Charge  TOTAL  Rates - Proposed May 1, 20  Customer Charge  Distribution Charge  External Delivery Charge  Stranded Cost Charge  Storm Recovery Adj. Factor	\$0.10598 \$0.13595 119 \$0.00 All kWh \$0.00000 \$0.02389 (\$0.00101) \$0.00084	Mercury Vapo	8 \$37.48 9 \$13.33 10 \$14.79 or Rate/Mo. 1 \$13.28 2 \$15.75 3 \$17.85 4 \$21.25 5 \$42.19 6 \$19.02 7 \$22.75	18 19 20 21 22 <b>Sodium Vap</b> 11 12 13 14 15 16	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 <b>or Rate/Mo.</b> \$13.52 \$15.22 \$15.28 \$19.14 \$24.13 \$41.66 \$17.61	30 31 32 Metal Halid 23 24 25 26 27 28 29	\$19.69 \$21.05 <b>a Rate/Mo.</b> \$19.91 \$21.65 \$22.45 \$23.00 \$24.83 \$24.88 \$32.22	40 41 LED Rat 33 34 35 36 37 38 38	\$13.54 \$13.85 <b>e/Mo.</b> \$13.16 \$13.21 \$13.11 \$13.30 \$13.36 \$13.62 \$13.41
Rates - Proposed May 1, 20 Customer Charge Distribution Charge External Delivery Charge Stranded Cost Charge Storm Recovery Adj. Factor System Benefits Charge	\$0.10598 \$0.13595 119 \$0.00 All kWh \$0.00000 \$0.02389 (\$0.00101) \$0.00084 \$0.00576	Mercury Vapo	8 \$37.48 9 \$13.33 10 \$14.79 or Rate/Mo. 1 \$13.28 2 \$15.75 3 \$17.85 4 \$21.25 5 \$42.19 6 \$19.02 7 \$22.75 8 \$37.70	18 19 20 21 22 Sodium Vap 11 12 13 14 15 16 17 17	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 or Rate/Mo. \$13.52 \$15.22 \$15.28 \$19.14 \$24.13 \$41.66 \$17.61 \$20.76	30 31 32 Metal Halide 23 24 25 26 27 28 29 30	\$19.69 \$21.05 <b>B Rate/Mo.</b> \$19.91 \$21.65 \$22.45 \$23.00 \$24.83 \$24.83 \$24.83 \$32.22 \$18.63	40 41 LED Rat 33 34 35 36 37 38 39 40	\$13.54 \$13.85 <b>e/Mo.</b> \$13.16 \$13.21 \$13.11 \$13.30 \$13.36 \$13.62 \$13.41 \$13.62
Rates - Proposed May 1, 20 Customer Charge Distribution Charge External Delivery Charge Stranded Cost Charge Storm Recovery Adj. Factor System Benefits Charge	\$0.10598 \$0.13595 119 \$0.00 All kWh \$0.00000 \$0.02389 (\$0.00101) \$0.00084	Mercury Vapo	8 \$37.48 9 \$13.33 10 \$14.79	18 19 20 21 22 Sodium Vap 11 12 13 14 15 16 17 18	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 <b>or Rate/Mo.</b> \$13.52 \$15.22 \$15.28 \$19.14 \$24.13 \$41.66 \$17.61 \$20.76 \$23.58	30 31 32 Metal Halid 23 24 25 26 27 28 29 30	\$19.69 \$21.05 <b>8 Rate/Mo.</b> \$19.91 \$21.65 \$22.45 \$23.00 \$24.83 \$24.88 \$32.22 \$18.63 \$19.81	40 41 LED Rat 33 34 35 36 37 38 38	\$13.54 \$13.85 <b>e/Mo.</b> \$13.16 \$13.21 \$13.11 \$13.30 \$13.36 \$13.62 \$13.41
Rates - Proposed May 1, 20° Customer Charge  Distribution Charge External Delivery Charge Stranded Cost Charge Storm Recovery Adj. Factor System Benefits Charge Default Service Charge	\$0.10598 \$0.13595 \$0.00 All kWh \$0.00000 \$0.02389 (\$0.00101) \$0.0084 \$0.00576 \$0.10598	Mercury Vapo	8 \$37.48 9 \$13.33 10 \$14.79 or Rate/Mo. 1 \$13.28 2 \$15.75 3 \$17.85 4 \$21.25 5 \$42.19 6 \$19.02 7 \$22.75 8 \$37.70	18 19 20 21 22 Sodium Vap 11 12 13 14 15 16 17 18 19 20	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 or Rate/Mo. \$13.52 \$15.22 \$15.28 \$19.14 \$24.13 \$41.66 \$17.61 \$20.76 \$23.58 \$42.03	30 31 32 Metal Halide 23 24 25 26 27 28 29 30	\$19.69 \$21.05 <b>B Rate/Mo.</b> \$19.91 \$21.65 \$22.45 \$23.00 \$24.83 \$24.83 \$24.83 \$32.22 \$18.63	40 41 LED Rat 33 34 35 36 37 38 39 40	\$13.54 \$13.85 <b>e/Mo.</b> \$13.16 \$13.21 \$13.11 \$13.30 \$13.36 \$13.62 \$13.41 \$13.62
Rates - Proposed May 1, 20 Customer Charge Distribution Charge External Delivery Charge Stranded Cost Charge Stom Recovery Adj. Factor System Benefits Charge	\$0.10598 \$0.13595 119 \$0.00 All kWh \$0.00000 \$0.02389 (\$0.00101) \$0.00084 \$0.00576	Mercury Vapo	8 \$37.48 9 \$13.33 10 \$14.79	18 19 20 21 22 Sodium Vap 11 12 13 14 15 16 17 18	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 <b>or Rate/Mo.</b> \$13.52 \$15.22 \$15.28 \$19.14 \$24.13 \$41.66 \$17.61 \$20.76 \$23.58	30 31 32 Metal Halid 23 24 25 26 27 28 29 30	\$19.69 \$21.05 <b>8 Rate/Mo.</b> \$19.91 \$21.65 \$22.45 \$23.00 \$24.83 \$24.88 \$32.22 \$18.63 \$19.81	40 41 LED Rat 33 34 35 36 37 38 39 40	\$13.54 \$13.85 <b>e/Mo.</b> \$13.16 \$13.21 \$13.11 \$13.30 \$13.36 \$13.62 \$13.41 \$13.62
Rates - Proposed May 1, 20 Customer Charge  Distribution Charge External Delivery Charge Stranded Cost Charge Storm Recovery Adj. Factor System Benefits Charge Default Service Charge	\$0.10598 \$0.13595 19 \$0.00 All kWh \$0.00000 \$0.02389 (\$0.00101) \$0.00084 \$0.00576 \$0.10598 \$0.13546	Mercury Vapo	8 \$37.48 9 \$13.33 10 \$14.79 or Rate/Mo. 1 \$13.28 2 \$15.75 3 \$17.85 4 \$21.25 5 \$42.19 6 \$10.27 7 \$22.75 8 \$37.70 9 \$13.41 10 \$14.87	18 19 20 21 22 <b>Sodium Vap</b> 11 12 13 14 15 16 17 18 19 20 20	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 or Rate/Mo. \$13.52 \$15.22 \$15.22 \$15.22 \$19.14 \$24.13 \$41.66 \$17.61 \$20.76 \$23.58 \$42.03 \$12.51 \$14.04	30 31 32 Metal Halid 23 24 25 26 27 28 29 30	\$19.69 \$21.05 <b>B Rate/Mo.</b> \$19.91 \$21.65 \$22.45 \$23.00 \$24.83 \$24.88 \$32.22 \$18.63 \$19.81 \$21.17	40 41 LED Rat 33 34 35 36 37 38 39 40	\$13.54 \$13.85 e/Mo. \$13.16 \$13.11 \$13.30 \$13.36 \$13.36 \$13.62 \$13.41 \$13.93
Rates - Proposed May 1, 20 Customer Charge Distribution Charge External Delivery Charge Stranded Cost Charge Storm Recovery Adj. Factor System Benefits Charge Default Service Charge TOTAL Difference	\$0.10598 \$0.13595 19 \$0.00 All kWh \$0.00000 \$0.02389 (\$0.00101) \$0.00084 \$0.00576 \$0.10598 \$0.13546		8 \$37.48 9 \$13.33 10 \$14.79 or Rate/Mo. 1 \$13.28 2 \$15.75 3 \$17.85 4 \$21.25 5 \$42.19 6 \$19.02 7 \$22.75 8 \$37.70 9 \$13.41 10 \$14.87	18 19 20 21 22  Sodium Vap  11 12 13 14 15 16 17 18 19 20 21 22  Sodium Vap	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 or Rate/Mo. \$13.52 \$15.22 \$15.22 \$15.28 \$19.14 \$24.13 \$41.66 \$17.61 \$20.76 \$23.58 \$42.03 \$12.51 \$14.04 or Rate/Mo.	30 31 32 Metal Halide 23 24 25 26 27 28 29 30 31 32	\$19.69 \$21.05 <b>B Rate/Mo.</b> \$19.91 \$21.65 \$22.45 \$23.00 \$24.83 \$24.88 \$32.22 \$18.63 \$19.81 \$21.17	40 41 33 34 35 36 37 38 39 40 41	\$13.54 \$13.85 e/Mo. \$13.16 \$13.21 \$13.30 \$13.36 \$13.36 \$13.62 \$13.93
Rates - Proposed May 1, 20 Customer Charge  Distribution Charge External Delivery Charge Stranded Cost Charge Stom Recovery Adj. Factor System Benefits Charge Default Service Charge	\$0.10598 \$0.13595 19 \$0.00 All kWh \$0.00000 \$0.02389 (\$0.00101) \$0.00084 \$0.00576 \$0.10598 \$0.13546		8 \$37.48 9 \$13.33 10 \$14.79 or Rate/Mo. 1 \$13.28 2 \$15.75 3 \$17.85 4 \$21.25 5 \$42.19 6 \$10.27 7 \$22.75 8 \$37.70 9 \$13.41 10 \$14.87	18 19 20 21 22 Sodium Vap 11 12 13 14 15 16 17 18 19 20 21 21	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 or Rate/Mo. \$13.52 \$15.22 \$15.22 \$15.22 \$19.14 \$24.13 \$41.66 \$17.61 \$20.76 \$23.58 \$42.03 \$12.51 \$14.04	30 31 32 Metal Halide 23 24 25 26 27 28 29 30 31 32	\$19.69 \$21.05 Parte/Mo. \$19.91 \$21.65 \$22.45 \$23.00 \$24.83 \$24.88 \$32.22 \$18.63 \$19.81 \$21.17	40 41 33 34 35 36 37 38 39 40 41	\$13.54 \$13.85 e/Mo. \$13.16 \$13.11 \$13.30 \$13.36 \$13.36 \$13.62 \$13.41 \$13.93
Rates - Proposed May 1, 20 Customer Charge Distribution Charge External Delivery Charge Stranded Cost Charge Storm Recovery Adj. Factor System Benefits Charge Default Service Charge TOTAL Difference	\$0.10598 \$0.13595 19 \$0.00 All kWh \$0.00000 \$0.02389 (\$0.00101) \$0.00084 \$0.00576 \$0.10598 \$0.13546		8 \$37.48 9 \$13.33 10 \$14.79  Tr Rate/Mo.  1 \$13.28 2 \$15.75 3 \$17.85 4 \$21.25 5 \$42.19 6 \$19.02 7 \$22.75 8 \$37.70 9 \$13.41 10 \$14.87  Tr Rate/Mo. 1 \$0.08	18 19 20 21 22  Sodium Vap  11 12 13 14 15 16 17 18 19 20 21 22  Sodium Vap	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 <b>or Rate/Mo.</b> \$13.52 \$15.22 \$15.28 \$19.14 \$24.13 \$41.66 \$17.61 \$20.76 \$23.58 \$42.03 \$12.51 \$14.04 <b>or Rate/Mo.</b>	30 31 32 Metal Halide 23 24 25 26 27 28 29 30 31 32 Metal Halide	\$19.69 \$21.05 <b>B Rate/Mo.</b> \$19.91 \$21.65 \$22.45 \$23.00 \$24.83 \$24.88 \$32.22 \$18.63 \$19.81 \$21.17	40 41 33 34 35 36 37 38 39 40 41	\$13.54 \$13.85 \$13.16 \$13.11 \$13.30 \$13.62 \$13.41 \$13.62 \$13.93 \$13.93
Rates - Proposed May 1, 20 Customer Charge  Distribution Charge External Delivery Charge Stranded Cost Charge Storm Recovery Adj. Factor System Benefits Charge Default Service Charge  TOTAL  Difference Customer Charge  Distribution Charge	\$0.10598 \$0.13595 119 \$0.000 All kWh \$0.00000 \$0.02389 (\$0.00101) \$0.00576 \$0.10598 \$0.13546 \$0.00 All kWh \$0.0000		8 \$37.48 9 \$13.33 10 \$14.79  Trivial Rate/Mo. 1 \$13.28 2 \$15.75 3 \$17.85 4 \$21.25 5 \$42.19 6 \$19.02 7 \$22.75 8 \$37.70 9 \$13.41 10 \$14.87  Trivial Rate/Mo. 1 \$0.08 2 \$0.09 3 \$0.10 4 \$0.12	18 19 20 21 22  Sodium Vap  11 12 13 14 15 16 17 18 19 20 21 22  Sodium Vap  11 12 13 14 14 15 16 17 18 19 19 20 21 11 12 13 14 14 15 16 17 18 19 19 20 21 11 11 12 13 14 14	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 <b>or Rate/Mo.</b> \$13.52 \$15.22 \$15.22 \$15.22 \$15.28 \$19.14 \$24.13 \$41.66 \$17.61 \$20.76 \$23.58 \$42.03 \$12.51 \$14.04 <b>or Rate/Mo.</b> \$0.08 \$0.09 \$0.09	30 31 32 Metal Halidi 23 24 25 26 27 28 29 30 31 32 Metal Halidi 23 24 25 26 27 28 29 30 31 32 44 25 29 30 31 32 44 25 26 26 27 28 30 30 31 31 32 44 45 46 47 47 47 47 47 47 47 47 47 47 47 47 47	\$19.69 \$21.05 \$19.91 \$21.65 \$22.45 \$23.00 \$24.83 \$24.88 \$32.22 \$18.63 \$19.81 \$21.17 \$0.12 \$0.13 \$0.13	40 41 33 34 35 36 37 38 39 40 41 <b>LED Rat</b> 33 34 35	\$13.54 \$13.85 \$13.16 \$13.16 \$13.21 \$13.30 \$13.36 \$13.62 \$13.41 \$13.62 \$13.41 \$13.62 \$13.93
Rates - Proposed May 1, 20° Customer Charge  Distribution Charge External Delivery Charge Stranded Cost Charge Storm Recovery Adj. Factor System Benefits Charge Default Service Charge  TOTAL  Difference Customer Charge  Distribution Charge External Delivery Charge	\$0.10598 \$0.13595 \$0.00 All kWh \$0.00000 \$0.02389 (\$0.00101) \$0.00084 \$0.00576 \$0.10598 \$0.13546 \$0.00 All kWh \$0.00000 \$0.00000		8 \$37.48 9 \$13.33 10 \$14.79  Trivial Rate/Mo. 1 \$13.28 2 \$15.75 3 \$17.85 4 \$21.25 5 \$42.19 6 \$19.02 7 \$22.75 8 \$37.70 9 \$13.41 10 \$14.87  Trivial Rate/Mo. 1 \$0.08 2 \$0.09 3 \$0.10 4 \$0.12 5 \$0.24	18 19 20 21 22  Sodium Vap  11 12 13 14 15 16 17 18 20 21 22  Sodium Vap  11 12 13 14 15 15 16 17 18 19 20 21 11 12 13 14 15 16 17 18 18 19 19 20 21 11 12 13 14 15	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 or Rate/Mo. \$13.52 \$15.22 \$15.28 \$19.14 \$24.13 \$41.66 \$17.61 \$20.76 \$23.58 \$42.03 \$12.51 \$14.04 or Rate/Mo. \$0.09 \$0.09 \$0.01 \$0.15	Metal Halide  23 24 25 26 27 28 29 30 31 32  Metal Halide 23 24 25 26 27 28 29 30 31 32 24 25 26 27	\$19.69 \$21.05 Parte/Mo. \$19.91 \$21.65 \$22.45 \$23.00 \$24.83 \$24.83 \$32.22 \$18.63 \$19.81 \$21.17 Parte/Mo. \$0.12 \$0.13 \$0.13 \$0.13	40 41 33 34 35 36 37 38 39 40 41 <b>LED Rat</b> 33 34 35 36 37	\$13.54 \$13.85 e/Mo. \$13.16 \$13.21 \$13.30 \$13.30 \$13.36 \$13.62 \$13.62 \$13.41 \$13.62 \$13.93 e/Mo. \$0.08 \$0.08 \$0.08 \$0.08
Rates - Proposed May 1, 20 Customer Charge External Delivery Charge Stranded Cost Charge Stom Recovery Adj. Factor System Benefits Charge Default Service Charge TOTAL  Difference Customer Charge External Delivery Charge External Delivery Charge Stranded Cost Charge	\$0.10598 \$0.13595 \$0.00 All kWh \$0.00000 \$0.02389 (\$0.00101) \$0.00576 \$0.10598 \$0.13546 \$0.00 All kWh \$0.00000 \$0.00000 \$0.00000		8 \$37.48 9 \$13.33 10 \$14.79  or Rate/Mo. 1 \$13.28 2 \$15.75 3 \$17.85 4 \$21.25 5 \$42.19 6 \$19.02 7 \$22.75 8 \$37.70 9 \$13.41 10 \$14.87  or Rate/Mo. 1 \$0.08 2 \$0.09 3 \$0.10 4 \$0.12 5 \$0.24 6 \$0.12	18 19 20 21 22  Sodium Vap  11 12 13 14 15 16 17 18 20 21 22  Sodium Vap  11 12 13 14 15 16 17 18 19 19 20 21 21 21 11 12 13 14 15 16 16 17 17 18 18 19 19 10 11 11 12 13 14 15 16 16 17 17 18 18 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 or Rate/Mo. \$13.52 \$15.22 \$15.22 \$15.28 \$19.14 \$24.13 \$41.66 \$17.61 \$20.76 \$23.58 \$42.03 \$12.51 \$14.04 or Rate/Mo. \$0.09 \$0.09 \$0.09 \$0.11 \$0.24	30 31 32 Metal Halid 23 24 25 26 27 28 29 30 31 32 Metal Halid 23 24 25 26 27 27 28 29 30 30 31 32 44 29 30 30 31 31 32 44 44 45 46 46 46 46 46 46 46 46 46 46 46 46 46	\$19.69 \$21.05 \$19.91 \$21.65 \$22.45 \$23.00 \$24.83 \$24.83 \$32.22 \$18.63 \$19.81 \$21.17 \$21.17 \$21.17	40 41 33 34 35 36 37 38 39 40 41 41 <b>LED Rat</b> 33 34 35 36 37 38	\$13.54 \$13.85 e/Mo. \$13.16 \$13.21 \$13.30 \$13.30 \$13.36 \$13.62 \$13.41 \$13.62 \$13.41 \$13.62 \$0.08 \$0.08 \$0.08 \$0.08 \$0.08 \$0.08
Rates - Proposed May 1, 20 Customer Charge  Distribution Charge External Delivery Charge Stranded Cost Charge Storm Recovery Adj. Factor System Benefits Charge Default Service Charge  TOTAL  Difference Customer Charge  Distribution Charge External Delivery Charge Stranded Cost Charge Stranded Cost Charge Storm Recovery Adj. Factor	\$0.10598 \$0.13595 \$0.00 All kWh \$0.00000 \$0.02389 (\$0.00101) \$0.00576 \$0.10598 \$0.13546 \$0.00 All kWh \$0.00000 \$0.00000 \$0.00000 (\$0.00000 (\$0.00049)		8 \$37.48 9 \$13.33 10 \$14.79  1 \$13.28 2 \$15.75 3 \$17.85 4 \$21.25 5 \$42.19 6 \$19.02 7 \$22.75 8 \$37.70 9 \$13.41 10 \$14.87  1 \$0.08 2 \$0.09 3 \$0.10 4 \$0.12 5 \$0.24 6 \$0.12 7 \$0.13	18 19 20 21 22  Sodium Vap  11 12 13 14 15 16 17 20 20 21 22  Sodium Vap 11 12 13 14 15 16 17 17 18 19 20 21 21 21 11 12 13 14 15 16 17 17 18 19 19 19 10 11 11 12 11 12 11 12 11 12 11 12 11 12 13 14 15 16 16 17	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 <b>or Rate/Mo.</b> \$13.52 \$15.22 \$15.22 \$15.22 \$15.23 \$41.66 \$17.61 \$20.76 \$23.58 \$42.03 \$12.51 \$14.04 <b>or Rate/Mo.</b> \$0.08 \$0.09 \$0.09 \$0.11 \$0.15 \$0.24 \$0.10	Metal Halide  23 24 25 26 27 28 29 30 31 32  Metal Halide  23 24 25 26 27 28 29 30 31 32	\$19.69 \$21.05 \$19.91 \$21.65 \$22.45 \$23.00 \$24.83 \$19.81 \$21.17 \$21.17 \$0.12 \$0.13 \$0.13 \$0.13 \$0.14 \$0.15 \$0.19	LED Rat  LED Rat  LED Rat  LED Rat  LED Rat  33 34 35 36 37 38 39 40 41	\$13.54 \$13.85 \$13.16 \$13.11 \$13.30 \$13.62 \$13.41 \$13.36 \$13.62 \$13.41 \$13.93 \$13.62 \$13.40 \$13.62 \$13.00 \$10.00 \$0
Rates - Proposed May 1, 20 Customer Charge  Distribution Charge External Delivery Charge Stranded Cost Charge Storm Recovery Adj. Factor System Benefits Charge Default Service Charge  TOTAL  Difference Customer Charge External Delivery Charge Stranded Cost Charge Stranded Cost Charge Stranded Cost Charge Storm Recovery Adj. Factor System Benefits Charge	\$0.10598 \$0.13595 119 \$0.00 All kWh \$0.00000 \$0.02389 (\$0.00101) \$0.00084 \$0.00576 \$0.10598 \$0.13546 \$0.00 All kWh \$0.00000 \$0.00000 \$0.00000 \$0.00000 \$0.00000 \$0.00000 \$0.00000		8 \$37.48 9 \$13.33 10 \$14.79  Tr Rate/Mo. 1 \$13.28 2 \$15.75 3 \$17.85 4 \$21.25 5 \$42.19 6 \$19.02 7 \$22.75 8 \$37.70 9 \$13.41 10 \$14.87  Tr Rate/Mo. 1 \$0.08 2 \$0.09 3 \$0.10 4 \$0.12 5 \$0.24 6 \$0.12 7 \$0.13 8 \$0.22	18 19 20 21 22  Sodium Vap  11 12 13 14 15 16 17 18 20 21 22  Sodium Vap  11 12 13 14 15 16 17 18 19 19 20 21 11 12 13 14 15 16 17 18 17 18 18 19 19 19 10 11 11 12 13 14 15 16 17 18	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 or Rate/Mo. \$13.52 \$15.22 \$15.28 \$19.14 \$24.13 \$41.66 \$17.61 \$20.76 \$23.58 \$42.03 \$12.51 \$14.04 or Rate/Mo. \$0.09 \$0.09 \$0.11 \$0.15 \$0.12	Metal Halide  23 24 25 26 27 28 29 30 31 32  Metal Halide  23 24 25 26 27 28 29 30 30 31 32	\$19.69 \$21.05 \$19.91 \$21.65 \$22.45 \$23.00 \$24.83 \$24.83 \$32.22 \$18.63 \$19.81 \$21.17 <b>B Rate/Mo.</b> \$0.12 \$0.13 \$0.13 \$0.14 \$0.15 \$0.19 \$0.11	LED Rat  33 34 35 36 37 38 39 40 41  LED Rat  33 34 35 36 37 38 39 40 40	\$13.54 \$13.85 \$13.16 \$13.16 \$13.21 \$13.30 \$13.30 \$13.30 \$13.62 \$13.41 \$13.62 \$13.93 \$0.08
Rates - Proposed May 1, 20 Customer Charge Distribution Charge External Delivery Charge Stranded Cost Charge Storm Recovery Adj. Factor System Benefits Charge Default Service Charge TOTAL Difference	\$0.10598 \$0.13595 \$0.00 All kWh \$0.00000 \$0.02389 (\$0.00101) \$0.00576 \$0.10598 \$0.13546 \$0.00 All kWh \$0.00000 \$0.00000 \$0.00000 (\$0.00000 (\$0.00049)		8 \$37.48 9 \$13.33 10 \$14.79  or Rate/Mo. 1 \$13.28 2 \$15.75 3 \$17.85 4 \$21.25 5 \$42.19 6 \$19.02 7 \$22.75 8 \$37.70 9 \$13.41 10 \$14.87  or Rate/Mo. 1 \$0.08 2 \$0.09 3 \$0.10 4 \$0.12 7 \$0.13 8 \$0.22 9 \$0.08	18 19 20 21 22  Sodium Vap  11 12 13 14 15 16 17 18 19 20 21 22  Sodium Vap  11 12 13 14 15 16 17 18 19 19 20 11 17 18 19 19 10 10 11 11 12 13 14 15 16 17 18 19 19 19 10 10 11 11 11 11 11 11 11 11 11 11 11	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 or Rate/Mo. \$13.52 \$15.22 \$15.22 \$15.28 \$19.14 \$24.13 \$41.66 \$17.61 \$20.76 \$23.58 \$42.03 \$12.51 \$14.04 or Rate/Mo. \$0.08 \$0.09 \$0.09 \$0.11 \$0.15 \$0.24 \$0.10	Metal Halide  23 24 25 26 27 28 29 30 31 32  Metal Halide 23 24 25 26 27 28 29 30 31 31	\$19.69 \$21.05 \$19.91 \$21.65 \$22.45 \$23.00 \$24.83 \$24.83 \$32.22 \$18.63 \$19.81 \$21.17 \$0.13 \$0.13 \$0.13 \$0.13 \$0.13 \$0.15 \$0.19 \$0.11 \$0.12	LED Rat  LED Rat  LED Rat  LED Rat  LED Rat  33 34 35 36 37 38 39 40 41	\$13.54 \$13.85 \$13.16 \$13.11 \$13.30 \$13.62 \$13.41 \$13.36 \$13.62 \$13.41 \$13.93 \$13.62 \$13.40 \$13.62 \$13.00 \$10.00 \$0
Rates - Proposed May 1, 20 Customer Charge  Distribution Charge External Delivery Charge Stranded Cost Charge Storm Recovery Adj. Factor System Benefits Charge Default Service Charge  TOTAL  Difference Customer Charge External Delivery Charge Stranded Cost Charge Stranded Cost Charge Stranded Cost Charge Storm Recovery Adj. Factor System Benefits Charge	\$0.10598 \$0.13595 119 \$0.00 All kWh \$0.00000 \$0.02389 (\$0.00101) \$0.00084 \$0.00576 \$0.10598 \$0.13546 \$0.00 All kWh \$0.00000 \$0.00000 \$0.00000 \$0.00000 \$0.00000 \$0.00000 \$0.00000		8 \$37.48 9 \$13.33 10 \$14.79  Tr Rate/Mo. 1 \$13.28 2 \$15.75 3 \$17.85 4 \$21.25 5 \$42.19 6 \$19.02 7 \$22.75 8 \$37.70 9 \$13.41 10 \$14.87  Tr Rate/Mo. 1 \$0.08 2 \$0.09 3 \$0.10 4 \$0.12 5 \$0.24 6 \$0.12 7 \$0.13 8 \$0.22	18 19 20 21 22  Sodium Vap  11 12 13 14 15 16 17 18 20 21 22  Sodium Vap  11 12 13 14 15 16 17 18 19 19 20 21 11 12 13 14 15 16 17 18 17 18 18 19 19 19 10 11 11 12 13 14 15 16 17 18	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 or Rate/Mo. \$13.52 \$15.22 \$15.28 \$19.14 \$24.13 \$41.66 \$17.61 \$20.76 \$23.58 \$42.03 \$12.51 \$14.04 or Rate/Mo. \$0.09 \$0.09 \$0.11 \$0.15 \$0.12	Metal Halide  23 24 25 26 27 28 29 30 31 32  Metal Halide  23 24 25 26 27 28 29 30 30 31 32	\$19.69 \$21.05 \$19.91 \$21.65 \$22.45 \$23.00 \$24.83 \$24.83 \$32.22 \$18.63 \$19.81 \$21.17 <b>B Rate/Mo.</b> \$0.12 \$0.13 \$0.13 \$0.14 \$0.15 \$0.19 \$0.11	LED Rat  33 34 35 36 37 38 39 40 41  LED Rat  33 34 35 36 37 38 39 40 40	\$13.54 \$13.85 \$13.16 \$13.16 \$13.21 \$13.30 \$13.30 \$13.30 \$13.62 \$13.41 \$13.62 \$13.93 \$0.08
Rates - Proposed May 1, 20 Customer Charge External Delivery Charge Stranded Cost Charge Storm Recovery Adj. Factor System Benefits Charge Default Service Charge TOTAL Difference Customer Charge Distribution Charge External Delivery Charge Stranded Cost Charge Stranded Cost Charge Storm Recovery Adj. Factor System Benefits Charge Default Service Charge	\$0.10598 \$0.13595 \$0.000 All kWh \$0.00000 \$0.02389 \$0.00101) \$0.00576 \$0.10598 \$0.13546 \$0.0000 All kWh \$0.00000 \$0.00000 \$0.00000 \$0.00000 \$0.00000 \$0.00000 \$0.00000		8 \$37.48 9 \$13.33 10 \$14.79  or Rate/Mo. 1 \$13.28 2 \$15.75 3 \$17.85 4 \$21.25 5 \$42.19 6 \$19.02 7 \$22.75 8 \$37.70 9 \$13.41 10 \$14.87  or Rate/Mo. 1 \$0.08 2 \$0.09 3 \$0.10 4 \$0.12 7 \$0.13 8 \$0.22 9 \$0.08	18 19 20 21 22 Sodium Vap 11 12 21 22 22	\$20.64 \$23.45 \$41.78 \$12.44 \$13.96 <b>or Rate/Mo.</b> \$13.52 \$15.22 \$15.22 \$15.22 \$15.22 \$15.23 \$41.66 \$17.61 \$20.76 \$23.58 \$42.03 \$12.51 \$14.04 <b>or Rate/Mo.</b> \$0.08 \$0.09 \$0.09 \$0.11 \$0.15 \$0.12 \$0.12 \$0.12 \$0.12 \$0.13 \$0.25	Metal Halide  23 24 25 26 27 28 29 30 31 32  Metal Halide 23 24 25 26 27 28 29 30 31 31	\$19.69 \$21.05 \$19.91 \$21.65 \$22.45 \$23.00 \$24.83 \$24.83 \$32.22 \$18.63 \$19.81 \$21.17 \$0.13 \$0.13 \$0.13 \$0.13 \$0.13 \$0.15 \$0.19 \$0.11 \$0.12	LED Rat  33 34 35 36 37 38 39 40 41  LED Rat  33 34 35 36 37 38 39 40 40	\$13.54 \$13.85 \$13.16 \$13.16 \$13.21 \$13.30 \$13.30 \$13.30 \$13.62 \$13.41 \$13.62 \$13.93 \$0.08