

**DEFAULT SERVICE CHARGE****Non-G1 Class Default Service:**

	<u>Dec-19</u>	<u>Jan-20</u>	<u>Feb-20</u>	<u>Mar-20</u>	<u>Apr-20</u>	<u>May-20</u>	<u>Total</u>
<b>Power Supply Charge</b>							
As shown on Schedule LSM-2, Page 1							
<b>Residential Class</b>							
1 Reconciliation	(\$59,275)	(\$70,707)	(\$65,757)	(\$57,553)	(\$51,934)	(\$46,716)	(\$351,942)
2 Total Costs	\$4,548,355	\$5,066,531	\$4,726,969	\$3,546,463	\$2,108,403	\$2,312,628	\$22,309,348
3 Reconciliation plus Total Costs (L.1 + L.2)	\$4,489,080	\$4,995,824	\$4,661,212	\$3,488,910	\$2,056,468	\$2,265,912	\$21,957,407
4 kWh Purchases	<u>39,390,837</u>	<u>46,988,063</u>	<u>43,698,594</u>	<u>38,246,456</u>	<u>34,512,811</u>	<u>31,044,896</u>	<u>233,881,657</u>
5 Total, Before Losses (L.3 / L.4)	\$0.11396	\$0.10632	\$0.10667	\$0.09122	\$0.05959	\$0.07299	\$0.09388
6 Losses	<u>6.40%</u>						
Total Retail Rate - Residential Variable Power Supply Charge (L.5 * (1+L.6))	\$0.12126	\$0.11313	\$0.11349	\$0.09706	\$0.06340	\$0.07766	
8 Total Retail Rate - Residential Fixed Power Supply Charge (L.5 * (1+L.6))							\$0.09989
<b>G2 and OL Class</b>							
9 Reconciliation	(\$23,716)	(\$26,872)	(\$26,044)	(\$24,373)	(\$23,651)	(\$22,610)	(\$147,266)
10 Total Costs	\$1,670,408	\$1,820,540	\$1,797,117	\$1,187,065	\$751,155	\$873,934	\$8,100,219
11 Reconciliation plus Total Costs (L.9 + L.10)	\$1,646,692	\$1,793,668	\$1,771,073	\$1,162,692	\$727,504	\$851,324	\$7,952,953
12 kWh Purchases	<u>15,760,447</u>	<u>17,857,895</u>	<u>17,307,915</u>	<u>16,197,583</u>	<u>15,717,685</u>	<u>15,025,602</u>	<u>97,867,127</u>
13 Total, Before Losses (L.11 / L.12)	\$0.10448	\$0.10044	\$0.10233	\$0.07178	\$0.04629	\$0.05666	\$0.08126
14 Losses	<u>6.40%</u>						
Total Retail Rate - G2 and OL Variable Power Supply Charge (L.13 * (1+L.14))	\$0.11117	\$0.10687	\$0.10888	\$0.07638	\$0.04925	\$0.06028	
16 Total Retail Rate - G2 and OL Fixed Power Supply Charge (L.13 * (1+L.14))							\$0.08646

	<u>Dec-19</u>	<u>Jan-20</u>	<u>Feb-20</u>	<u>Mar-20</u>	<u>Apr-20</u>	<u>May-20</u>	<u>Total</u>
<b>Renewable Portfolio Standard (RPS) Charge</b>							
As shown on Schedule LSM-3, Page 1							
17 Reconciliation	(\$172,405)	(\$202,711)	(\$190,709)	(\$170,194)	(\$157,023)	(\$144,018)	(\$1,037,061)
18 Total Costs	<u>\$352,137</u>	<u>\$409,863</u>	<u>\$385,598</u>	<u>\$344,122</u>	<u>\$317,493</u>	<u>\$291,202</u>	<u>\$2,100,415</u>
19 Reconciliation plus Total Costs (L.17 + L.18)	\$179,732	\$207,152	\$194,889	\$173,928	\$160,471	\$147,183	\$1,063,354
20 kWh Purchases	<u>55,151,284</u>	<u>64,845,959</u>	<u>61,006,509</u>	<u>54,444,039</u>	<u>50,230,496</u>	<u>46,070,498</u>	<u>331,748,784</u>
21 Total, Before Losses (L.19 / L.20)	\$0.00326	\$0.00319	\$0.00319	\$0.00319	\$0.00319	\$0.00319	\$0.00321
22 Losses	<u>6.40%</u>						
23 Total Retail Rate - Variable RPS Charge (L.21 * (1+L.22))	\$0.00347	\$0.00340	\$0.00340	\$0.00340	\$0.00340	\$0.00340	
24 Total Retail Rate - Fixed RPS Charge (L.21 * (1+L.22))							\$0.00341

<b>TOTAL DEFAULT SERVICE CHARGE</b>							
25 Total Retail Rate - Residential Variable Default Service Charge (L.7 + L.23)	<b>\$0.12473</b>	<b>\$0.11653</b>	<b>\$0.11689</b>	<b>\$0.10046</b>	<b>\$0.06680</b>	<b>\$0.08106</b>	
26 Total Retail Rate - Residential Fixed Default Service Charge (L.8+L.24)							<b>\$0.10330</b>
27 Total Retail Rate - G2 and OL Variable Default Service Charge (L.15 + L.23)	<b>\$0.11464</b>	<b>\$0.11027</b>	<b>\$0.11228</b>	<b>\$0.07978</b>	<b>\$0.05265</b>	<b>\$0.06368</b>	
28 Total Retail Rate - G2 and OL Fixed Default Service Charge (L.16+L.24)							<b>\$0.08987</b>

Authorized by NHPUC Order No. 26,233 in Case No. DE 19-049, dated April 12, 2019

CALCULATION OF THE DEFAULT SERVICE CHARGE

Non-G1 Class Default Service:

	<u>Jun-19</u>	<u>Jul-19</u>	<u>Aug-19</u>	<u>Sep-19</u>	<u>Oct-19</u>	<u>Nov-19</u>	<u>Total</u>
<b>Power Supply Charge</b>							
<b>Residential Class</b>							
1 Reconciliation	(\$47,414)	(\$65,454)	(\$70,611)	(\$54,852)	(\$55,562)	(\$49,737)	(\$343,630)
2 Total Costs	\$2,408,295	\$3,496,382	\$3,128,904	\$2,581,527	\$2,614,687	\$2,697,146	\$16,926,942
3 Reconciliation plus Total Costs (L.1 + L.2)	\$2,360,881	\$3,430,928	\$3,058,293	\$2,526,675	\$2,559,125	\$2,647,409	\$16,583,311
4 kWh Purchases	<u>31,509,144</u>	<u>43,498,146</u>	<u>46,925,177</u>	<u>36,452,359</u>	<u>36,923,994</u>	<u>33,053,245</u>	<u>228,362,066</u>
5 Total, Before Losses (L.3 / L.4)	\$0.07493	\$0.07888	\$0.06517	\$0.06931	\$0.06931	\$0.08010	\$0.07262
6 Losses	<u>6.40%</u>						
Total Retail Rate - Residential Variable Power Supply Charge (L.5 * (1+L.6))	\$0.07972	\$0.08392	\$0.06934	\$0.07375	\$0.07374	\$0.08522	
8 Total Retail Rate - Residential Fixed Power Supply Charge (L.5 * (1+L.6))							\$0.07727
<b>G2 and OL Class</b>							
9 Reconciliation	(\$22,834)	(\$28,390)	(\$30,217)	(\$24,723)	(\$27,194)	(\$22,619)	(\$155,978)
10 Total Costs	\$989,505	\$1,445,851	\$1,296,935	\$1,084,490	\$904,382	\$1,141,148	\$6,862,312
11 Reconciliation plus Total Costs (L.9 + L.10)	\$966,671	\$1,417,461	\$1,266,718	\$1,059,767	\$877,188	\$1,118,529	\$6,706,334
12 kWh Purchases	<u>15,171,431</u>	<u>18,863,021</u>	<u>20,076,830</u>	<u>16,426,885</u>	<u>18,068,617</u>	<u>15,028,943</u>	<u>103,635,726</u>
13 Total, Before Losses (L.11 / L.12)	\$0.06372	\$0.07514	\$0.06309	\$0.06451	\$0.04855	\$0.07442	\$0.06471
14 Losses	<u>6.40%</u>						
Total Retail Rate - G2 and OL Variable Power Supply Charge (L.13 * (1+L.14))	\$0.06779	\$0.07995	\$0.06713	\$0.06864	\$0.05165	\$0.07919	
16 Total Retail Rate - G2 and OL Fixed Power Supply Charge (L.13 * (1+L.14))							\$0.06885

<b>Renewable Portfolio Standard (RPS) Charge</b>							
17 Reconciliation	(\$145,933)	(\$194,953)	(\$209,462)	(\$165,311)	(\$171,918)	(\$150,314)	(\$1,037,891)
18 Total Costs	<u>\$140,077</u>	<u>\$187,128</u>	<u>\$201,054</u>	<u>\$158,676</u>	<u>\$165,020</u>	<u>\$144,282</u>	<u>\$996,238</u>
19 Reconciliation plus Total Costs (L.17 + L.18)	(\$5,855)	(\$7,825)	(\$8,408)	(\$6,634)	(\$6,897)	(\$6,032)	(\$41,653)
20 kWh Purchases	<u>46,680,575</u>	<u>62,361,168</u>	<u>67,002,007</u>	<u>52,879,245</u>	<u>54,992,611</u>	<u>48,082,188</u>	<u>331,997,793</u>
21 Total, Before Losses (L.19 / L.20)	(\$0.00013)	(\$0.00013)	(\$0.00013)	(\$0.00013)	(\$0.00013)	(\$0.00013)	(\$0.00013)
22 Losses	<u>6.40%</u>						
23 Total Retail Rate - Variable RPS Charge (L.21 * (1+L.22))	(\$0.00013)	(\$0.00013)	(\$0.00013)	(\$0.00013)	(\$0.00013)	(\$0.00013)	(\$0.00013)
24 Total Retail Rate - Fixed RPS Charge (L.21 * (1+L.22))							(\$0.00013)

<b>TOTAL DEFAULT SERVICE CHARGE</b>							
25 Total Retail Rate - Residential Variable Default Service Charge (L.7 + L.23)	\$0.07959	\$0.08379	\$0.06921	\$0.07362	\$0.07361	\$0.08509	
26 Total Retail Rate - Residential Fixed Default Service Charge (L.8+L.24)							\$0.07714
27 Total Retail Rate - G2 and OL Variable Default Service Charge (L.15 + L.23)	\$0.06766	\$0.07982	\$0.06700	\$0.06851	\$0.05152	\$0.07906	
28 Total Retail Rate - G2 and OL Fixed Default Service Charge (L.16+L.24)							\$0.06872

**CALCULATION OF THE DEFAULT SERVICE CHARGE**

**G1 Class Default Service:**

	<u>Dec-19</u>	<u>Jan-20</u>	<u>Feb-20</u>	<u>Mar-20</u>	<u>Apr-20</u>	<u>May-20</u>	<u>Total</u>
<b>Power Supply Charge</b>	As shown on Schedule LSM-4, Page 1						
1 Reconciliation							(\$1,402)
2 Total Costs excl. wholesale supplier charge							<u>\$24,259</u>
3 (L.1 + L.2)							\$22,857
4 kWh Purchases							<u>20,464,644</u>
5 Total, Before Losses (L.3 / L.4)							\$0.00112
6 Losses							<u>4.591%</u>
7 Power Supply Charge excl. wholesale supplier charge (L.5 * (1+L.6))	\$0.00117	\$0.00117	\$0.00117	\$0.00117	\$0.00117	\$0.00117	\$0.00117
8a Wholesale Supplier Charge	MARKET	MARKET	MARKET	MARKET	MARKET	MARKET	
8b Losses	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	
8 Retail Rate - Wholesale Supplier Charge (L.8a * (1+L.8b))	MARKET	MARKET	MARKET	MARKET	MARKET	MARKET	
9 Total Retail Rate - Power Supply Charge (L.7 + L. 8)	MARKET	MARKET	MARKET	MARKET	MARKET	MARKET	
<b>Renewable Portfolio Standard (RPS) Charge</b>	As shown on Schedule LSM-5, Page 1						
10 Reconciliation	(\$11,719)	(\$11,312)	(\$11,328)	(\$11,367)	(\$10,555)	(\$10,601)	(\$66,882)
11 Total Costs	<u>\$23,262</u>	<u>\$22,229</u>	<u>\$22,259</u>	<u>\$22,337</u>	<u>\$20,740</u>	<u>\$20,832</u>	<u>\$131,658</u>
12 Reconciliation plus Total Costs (L.10+ L.11)	\$11,543	\$10,917	\$10,932	\$10,969	\$10,185	\$10,230	\$64,776
13 kWh Purchases	<u>3,585,707</u>	<u>3,461,409</u>	<u>3,466,117</u>	<u>3,478,142</u>	<u>3,229,499</u>	<u>3,243,770</u>	20,464,644
14 Total, Before Losses (L.12 / L.13)	\$0.00322	\$0.00315	\$0.00315	\$0.00315	\$0.00315	\$0.00315	
15 Losses	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	
16 Total Retail Rate - RPS Charge (L.14 * (1+L.15))	\$0.00337	\$0.00330	\$0.00330	\$0.00330	\$0.00330	\$0.00330	
<b>TOTAL DEFAULT SERVICE CHARGE</b>							
17 Total Retail Rate - Default Service Charge (L.9 + L.16)	MARKET	MARKET	MARKET	MARKET	MARKET	MARKET	

Authorized by NHPUC Order No. ~~26,233~~ in Case No. DE 19-049, dated April 12, 2019

NHPUC No. 3 - Electricity Delivery  
Unitil Energy Systems, Inc.

**CALCULATION OF THE DEFAULT SERVICE CHARGE**

<b>G1 Class Default Service:</b>	<u>Jun-19</u>	<u>Jul-19</u>	<u>Aug-19</u>	<u>Sep-19</u>	<u>Oct-19</u>	<u>Nov-19</u>	<u>Total</u>
<b><i>Power Supply Charge</i></b>							
1 Reconciliation							(\$1,576)
2 Total Costs excl. wholesale supplier charge							<u>\$24,908</u>
3 (L.1 + L.2)							<u>\$23,332</u>
4 kWh Purchases							<u>23,008,856</u>
5 Total, Before Losses (L.3 / L.4)							\$0.00101
6 Losses							<u>4.591%</u>
7 Power Supply Charge excl. wholesale supplier charge (L.5 * (1+L.6))	\$0.00106	\$0.00106	\$0.00106	\$0.00106	\$0.00106	\$0.00106	\$0.00106
8a Wholesale Supplier Charge	MARKET	MARKET	MARKET	MARKET	MARKET	MARKET	
8b Losses	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	
8 Retail Rate - Wholesale Supplier Charge (L.8a * (1+L.8b))	MARKET	MARKET	MARKET	MARKET	MARKET	MARKET	
9 Total Retail Rate - Power Supply Charge (L.7 + L. 8)	MARKET	MARKET	MARKET	MARKET	MARKET	MARKET	
<b><i>Renewable Portfolio Standard (RPS) Charge</i></b>							
10 Reconciliation	(\$12,099)	(\$13,876)	(\$13,174)	(\$12,515)	(\$12,622)	(\$10,922)	(\$75,208)
11 Total Costs	<u>\$11,283</u>	<u>\$12,940</u>	<u>\$12,286</u>	<u>\$11,671</u>	<u>\$11,771</u>	<u>\$10,186</u>	<u>\$70,138</u>
12 Reconciliation plus Total Costs (L.10+ L.11)	(\$816)	(\$936)	(\$888)	(\$844)	(\$851)	(\$736)	(\$5,071)
13 kWh Purchases	<u>3,701,568</u>	<u>4,245,116</u>	<u>4,030,393</u>	<u>3,828,806</u>	<u>3,861,455</u>	<u>3,341,517</u>	23,008,856
14 Total, Before Losses (L.12 / L.13)	(\$0.00022)	(\$0.00022)	(\$0.00022)	(\$0.00022)	(\$0.00022)	(\$0.00022)	
15 Losses	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	
16 Total Retail Rate - RPS Charge (L.14 * (1+L.15))	(\$0.00023)	(\$0.00023)	(\$0.00023)	(\$0.00023)	(\$0.00023)	(\$0.00023)	
<b><i>TOTAL DEFAULT SERVICE CHARGE</i></b>							
17 Total Retail Rate - Default Service Charge (L.9 + L.16)	MARKET	MARKET	MARKET	MARKET	MARKET	MARKET	

**SUMMARY OF LOW-INCOME  
ELECTRIC ASSISTANCE PROGRAM DISCOUNTS**

**Low-Income Electric Assistance Program (LI-EAP) Discounts for Eligible Customers**

Tier	Percentage of Federal Poverty Guidelines	Discount (5)	Blocks	LI-EAP discount Delivery Only; Excludes Supply	LI-EAP discount Fixed Default Service Supply Only	LI-EAP discount Variable Default Service Supply Only											
				Aug-Nov-2019 (1) Dec 2019-May 2020 (1)	Aug-Nov-2019 (2)	Dec 2019-May 2020 (2)	Aug-19 (3)	Sep-19 (3)	Oct-19 (3)	Nov-19 (3)	Dec-19 (3)	Jan-20 (3)	Feb-20 (3)	Mar-20 (3)	Apr-20 (3)	May-20 (3)	
1 (4)	N/A	N/A															
2	151 - 200	8%	Customer Charge	(\$1.30)													
			First 750 kWh	(\$0.00537)	(\$0.00617)	(\$0.00826)	(\$0.00554)	(\$0.00589)	(\$0.00589)	(\$0.00681)	(\$0.00998)	(\$0.00932)	(\$0.00935)	(\$0.00804)	(\$0.00534)	(\$0.00648)	
			Excess 750 kWh	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000
3	126 - 150	22%	Customer Charge	(\$3.57)													
			First 750 kWh	(\$0.01476)	(\$0.01697)	(\$0.02273)	(\$0.01523)	(\$0.01620)	(\$0.01619)	(\$0.01872)	(\$0.02744)	(\$0.02564)	(\$0.02572)	(\$0.02210)	(\$0.01470)	(\$0.01783)	
			Excess 750 kWh	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000
4	101 - 125	36%	Customer Charge	(\$5.84)													
			First 750 kWh	(\$0.02415)	(\$0.02777)	(\$0.03719)	(\$0.02492)	(\$0.02650)	(\$0.02650)	(\$0.03063)	(\$0.04490)	(\$0.04195)	(\$0.04208)	(\$0.03617)	(\$0.02405)	(\$0.02918)	
			Excess 750 kWh	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000
5	76 - 100	52%	Customer Charge	(\$8.43)													
			First 750 kWh	(\$0.03488)	(\$0.04011)	(\$0.05372)	(\$0.03599)	(\$0.03828)	(\$0.03828)	(\$0.04425)	(\$0.06486)	(\$0.06060)	(\$0.06078)	(\$0.05224)	(\$0.03474)	(\$0.04215)	
			Excess 750 kWh	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000
6	0 - 75	76%	Customer Charge	(\$12.33)													
			First 750 kWh	(\$0.05098)	(\$0.05862)	(\$0.07851)	(\$0.05260)	(\$0.05595)	(\$0.05594)	(\$0.06467)	(\$0.09479)	(\$0.08856)	(\$0.08884)	(\$0.07635)	(\$0.05077)	(\$0.06161)	
			Excess 750 kWh	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000	\$0.00000

(1) Discount calculated using total utility charges from Page 4 multiplied by the appropriate discount. These figures exclude default service and are applicable to customers choosing a Competitive Supplier or self-supply. Customers taking default service from the Company would receive these discounts plus the appropriate discount applicable to default service supply. Competitively supplied customers billed on a consolidated basis would receive these discounts plus the appropriate fixed default service supply discount.

(2) Discount calculated using Non-G1 class (Residential) Fixed Default Service Rate multiplied by the appropriate discount. These figures exclude delivery.

(3) Discount calculated using Non-G1 class (Residential) Variable Default Service Rate, for the applicable month, multiplied by the appropriate discount. These figures exclude delivery.

(4) Tier 1 was eliminated by Order No. 25,200 in DE 10-192 dated March 4, 2011.

(5) Discounts effective July 1, 2016 in accordance with Order No. 25-901 in DE 14-078.

Authorized by NHPUC Order No. 26,278 in Case No. DE 19-111, dated July 31, 2019

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	<u>Dec-18</u> <u>Estimated</u>	<u>Jan-19</u> <u>Estimated</u>	<u>Feb-19</u> <u>Estimated</u>	<u>Mar-19</u> <u>Estimated</u>	<u>Apr-19</u> <u>Estimated</u>	<u>May-19</u> <u>Estimated</u>	<u>Total</u>
<b>Residential Class</b>							
1 Reconciliation (1)	(\$59,275)	(\$70,707)	(\$65,757)	(\$57,553)	(\$51,934)	(\$46,716)	(\$351,942)
2 Total Costs (Page 2)	<u>\$4,548,355</u>	<u>\$5,066,531</u>	<u>\$4,726,969</u>	<u>\$3,546,463</u>	<u>\$2,108,403</u>	<u>\$2,312,628</u>	<u>\$22,309,348</u>
3 Reconciliation plus Total Costs (L.1 + L.2)	\$4,489,080	\$4,995,824	\$4,661,212	\$3,488,910	\$2,056,468	\$2,265,912	\$21,957,407
4 kWh Purchases	<u>39,390,837</u>	<u>46,988,063</u>	<u>43,698,594</u>	<u>38,246,456</u>	<u>34,512,811</u>	<u>31,044,896</u>	<u>233,881,657</u>
5 Total, Before Losses (L.3 / L.4)	\$0.11396	\$0.10632	\$0.10667	\$0.09122	\$0.05959	\$0.07299	\$0.09388
6 Losses	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>
7 Total Retail Rate - Residential Variable Power Supply Charge (L.5 * (1+L.6))	\$0.12126	\$0.11313	\$0.11349	\$0.09706	\$0.06340	\$0.07766	\$0.09989
8 Total Retail Rate - Residential Fixed Power Supply Charge (L.5 * (1+L.6))							
<b>G2 and OL Class</b>							
9 Reconciliation (1)	(\$23,716)	(\$26,872)	(\$26,044)	(\$24,373)	(\$23,651)	(\$22,610)	(\$147,266)
10 Total Costs (Page 2)	<u>\$1,670,408</u>	<u>\$1,820,540</u>	<u>\$1,797,117</u>	<u>\$1,187,065</u>	<u>\$751,155</u>	<u>\$873,934</u>	<u>\$8,100,219</u>
11 Reconciliation plus Total Costs (L.9 + L.10)	\$1,646,692	\$1,793,668	\$1,771,073	\$1,162,692	\$727,504	\$851,324	\$7,952,953
12 kWh Purchases	<u>15,760,447</u>	<u>17,857,895</u>	<u>17,307,915</u>	<u>16,197,583</u>	<u>15,717,685</u>	<u>15,025,602</u>	<u>97,867,127</u>
13 Total, Before Losses (L.11 / L.12)	\$0.10448	\$0.10044	\$0.10233	\$0.07178	\$0.04629	\$0.05666	\$0.08126
14 Losses	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>
15 Total Retail Rate - G2 and OL Variable Power Supply Charge (L.13 * (1+L.14))	\$0.11117	\$0.10687	\$0.10888	\$0.07638	\$0.04925	\$0.06028	\$0.08646
16 Total Retail Rate - G2 and OL Fixed Power Supply Charge (L.13 * (1+L.14))							

(1) As filed in DE 19-049 (April 5, 2019). Power Supply Charge balance as of February 28, 2019, as adjusted, allocated between rate periods (June-November 2019 and December 2019-May 2020) and rate classes (Residential and G2/OL), and then to each month, December 2019 through May 2020, on equal per kWh basis.

Rate period: June-November 2019	Reconciliation	
Rate period: December 2019-May 2020	<u>per period</u>	
Total	(\$499,608)	
	<u>(\$499,208)</u>	
	(\$998,816)	
		December 2019-May 2020
Residential class	<u>kWh purchases</u>	<u>Reconciliation</u>
G2 and OL class	233,881,657	<u>by class</u>
Total	97,867,127	(\$351,942)
	331,748,784	<u>(\$147,266)</u>
		(\$499,208)

00187

Redacted

Unitil Energy Systems, Inc.  
Itemized Costs for Non-G1 Class Default Service Charge

<i>Calculation of Working Capital Supplier Charges and GIS Support Payments</i>															
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
Non-G1 Class (Residential) DS Supplier Charges (1)	Non-G1 Class (G2 and OL) DS Supplier Charges (1)	GIS Support Payments	Number of Days of Lag / 365 (2)	Working Capital Requirement ((a+b+c)*d)	Prime Rate	Supply Related Working Capital (e * f)	Provision for Uncollected Accounts	Internal Company Administrative Costs	Legal Charges	Consulting Outside Service Charges	Default Service Portion of the annual PUC Assessment	Non-G1 Class (Residential) DS Supplier Charges (col. a)	Non-G1 Class (G2 and OL) DS Supplier Charges (col. b)	Total Remaining Costs (sum col. c + g + h + i + j + k + l)	Total All Costs (sum col. m + n + o)
Dec-19		\$365	7.49%		5.00%			\$2,911	\$0	\$0	\$784				\$6,218,763
Jan-20		\$419	7.49%		5.00%			\$2,911	\$0	\$0	\$784				\$6,887,071
Feb-20		\$493	7.49%		5.00%			\$2,911	\$0	\$0	\$784				\$6,524,086
Mar-20		\$464	7.49%		5.00%			\$2,911	\$0	\$0	\$784				\$4,733,529
Apr-20		\$414	7.49%		5.00%			\$2,911	\$0	\$0	\$784				\$2,859,558
May-20		\$382	7.49%		5.00%			\$2,911	\$0	\$0	\$784				\$3,186,562
Total		\$2,536						\$17,468	\$0	\$0	\$4,705				\$30,409,568

Total Costs Allocated to the Residential Class and the G2/OL Class

Non-G1 Class (Residential) DS Supplier Charges (col. a)	Allocation of Remaining Costs (col. o) to Residential Class (3)	Total Non-G1 Class (Residential) Power Supply Charges (iii) = (i) + (ii)	Non-G1 Class (G2 and OL) DS Supplier Charges (col. b)	Allocation of Remaining Costs (col. o) to G2 and OL Class (3)	Total Non-G1 Class (G2 and OL) Power Supply Charges (vi) = (iv) + (v)
(i)	(ii)	(iii)	(iv)	(v)	(vi)
Dec-19		\$4,548,355			\$1,670,408
Jan-20		\$5,066,531			\$1,820,540
Feb-20		\$4,726,969			\$1,797,117
Mar-20		\$3,546,463			\$1,187,065
Apr-20		\$2,108,403			\$751,155
May-20		\$2,312,628			\$873,934
Total		\$22,309,348			\$8,100,219

- (1) Estimates based on monthly average wholesale rate times estimated monthly purchases.
- (2) Number of days lag equals 27.35. Calculated using revenue lag of 63.94 days less cost lead of 36.59 days. Revenue lag per Schedule DTN-1, Page 4 of 23 and cost lead per Schedule DTN-1, Page 22 of 23, DE 19-049 filed April 5, 2019.
- (3) Remaining Costs (column o) allocated between the Residential Class and the G2 and Outdoor Lighting Class based on estimated monthly kWh purchases, as shown below:

	Estimated kWh Purchases - Residential Class	Estimated kWh Purchases - G2 and OL Class	Total Non-G1 Class kWh Purchases	Residential Class kWh Purchases / Total Non-G1 Class kWh Purchases	G2 and OL Class kWh Purchases / Total Non-G1 Class kWh Purchases
Dec-19	39,390,837	15,760,447	55,151,284	71.4%	28.6%
Jan-20	46,988,063	17,857,895	64,845,959	72.5%	27.5%
Feb-20	43,698,594	17,307,915	61,006,509	71.6%	28.4%
Mar-20	38,246,456	16,197,583	54,444,039	70.2%	29.8%
Apr-20	34,512,811	15,717,685	50,230,496	68.7%	31.3%
May-20	31,044,896	15,025,602	46,070,498	67.4%	32.6%
Total	233,881,657	97,867,127	331,748,784		

88100

Unitil Energy Systems, Inc.  
 Calculation of Non-G1 Class Default Service Renewable Portfolio Standard (RPS) Charge

	<b><u>Dec-19</u></b>	<b><u>Jan-20</u></b>	<b><u>Feb-20</u></b>	<b><u>Mar-20</u></b>	<b><u>Apr-20</u></b>	<b><u>May-20</u></b>	<b><u>Total</u></b>
1 Reconciliation (1)	(\$172,405)	(\$202,711)	(\$190,709)	(\$170,194)	(\$157,023)	(\$144,018)	(\$1,037,061)
2 Total Costs (Page 2)	<u>\$352,137</u>	<u>\$409,863</u>	<u>\$385,598</u>	<u>\$344,122</u>	<u>\$317,493</u>	<u>\$291,202</u>	<u>\$2,100,415</u>
3 Reconciliation plus Total Costs (L.1 + L.2)	\$179,732	\$207,152	\$194,889	\$173,928	\$160,471	\$147,183	\$1,063,354
4 kWh Purchases	<u>55,151,284</u>	<u>64,845,959</u>	<u>61,006,509</u>	<u>54,444,039</u>	<u>50,230,496</u>	<u>46,070,498</u>	<u>331,748,784</u>
5 Total, Before Losses (L.3 / L.4)	\$0.00326	\$0.00319	\$0.00319	\$0.00319	\$0.00319	\$0.00319	\$0.00321
6 Losses	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>	<u>6.40%</u>
7 Total Retail Rate - Variable RPS Charge (L.5 * (1+L.6))	\$0.00347	\$0.00340	\$0.00340	\$0.00340	\$0.00340	\$0.00340	
8 Total Retail Rate - Fixed RPS Charge (L.5 * (1+L.6))							\$0.00341

(1) As filed in DE 19-049 (April 5, 2019). Renewable Portfolio Standard Charge balance as of February 28, 2019, as adjusted, allocated between rate periods (June-November 2019 and December 2019-May 2020) and then to each month on equal per kWh basis.

Reconciliation amount for June-November 2019	(\$1,037,891)
Reconciliation amount for December 2019-May 2020	<u>(\$1,037,061)</u>
Total	(\$2,074,951)

001690

	(a) Renewable Energy Credits (1)	<i>Calculation of Working Capital</i>				(f) Total Costs (sum a + e)
		(b) Number of Days of Lag / 365 (2)	(c) Working Capital Requirement (a*b)	(d) Prime Rate	(e) Supply Related Working Capital (c * d)	
Dec-19	\$365,165	(71.35%)	(\$260,558)	5.00%	(\$13,028)	\$352,137
Jan-20	\$425,027	(71.35%)	(\$303,271)	5.00%	(\$15,164)	\$409,863
Feb-20	\$399,864	(71.35%)	(\$285,316)	5.00%	(\$14,266)	\$385,598
Mar-20	\$356,854	(71.35%)	(\$254,627)	5.00%	(\$12,731)	\$344,122
Apr-20	\$329,239	(71.35%)	(\$234,924)	5.00%	(\$11,746)	\$317,493
May-20	<u>\$301,975</u>	(71.35%)	<u>(\$215,470)</u>	5.00%	<u>(\$10,773)</u>	<u>\$291,202</u>
Total	\$2,178,123		(\$1,554,165)		(\$77,708)	\$2,100,415

(1) Schedule JMP-4.

(2) Number of days lag equals (260.44). Calculated using revenue lag of 63.94 days less cost lead of 324.38 days. Revenue lag per Schedule DTN-1, Page 4 of 23 and cost lead per Schedule DTN-1, Page 22 of 23, DE 19-049 filed April 5, 2019.

Unitil Energy Systems, Inc.  
 Calculation of G1 Large General Service Class Default Service Power Supply Charge

	<b>Total</b> <b><u>December 2019-May 2020</u></b>
1 Reconciliation (1)	(\$1,402)
2 Total Costs excl. wholesale supplier charge (Page 2)	<u>\$24,259</u>
3 Reconciliation plus Total Costs excl. wholesale supplier charge (L.1 + L.2)	\$22,857
4 kWh Purchases	<u>20,464,644</u>
5 Total, Before Losses (L.3 / L.4)	\$0.00112
6 Losses	<u>4.591%</u>
7 Power Supply Charge excl. wholesale supplier charge (L.5 * (1+L.6)) (2)	\$0.00117

(1) As filed in DE 19-049 (April 5, 2019). Power Supply Charge balance as of February 28, 2019, as adjusted, allocated between rate periods (June-November 2019 and December 2019-May 2020) on equal per kWh basis.

Reconciliation amount for June-November 2019	(\$1,576)
Reconciliation amount for December 2019-May 2020	<u>(\$1,402)</u>
Total	(\$2,978)

(2) The total G1 Power Supply Charge will equal the sum of Line 7 plus a wholesale supplier charge which shall be determined at the end of each month. The wholesale supply charges will be determined as the sum of the average ISO-New England real time hourly locational marginal prices for the New Hampshire load zone, weighted by the wholesale hourly kWh volumes of the Company's G1 Default Service customers, and charges for capacity, ancillary services, and other supplier costs established through a competitive bidding process.

<i>Calculation of Working Capital</i>											
<i>Supplier Charges and GIS Support Payments</i>											
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
Total G1 Class DS Supplier Charges (1)	GIS Support Payments	Number of Days of Lag / 365 (2)	Working Capital Requirement (3)	Prime Rate	Supply Related Working Capital (d * e)	Provision for Uncollected Accounts	Internal Company Administrative Costs	Legal Charges	Consulting Outside Service Charges	Default Service Portion of the annual PUC Assessment	Total Costs (sum a + b + f + g + h + i + j + k)
Dec-19	\$25	(4.84%)	(\$14,257)	5.00%	(\$713)	\$0	\$4,509	\$0	\$0	\$49	\$3,871
Jan-20	\$27	(4.84%)	(\$13,049)	5.00%	(\$652)	\$0	\$4,509	\$0	\$0	\$49	\$3,933
Feb-20	\$26	(4.84%)	(\$13,208)	5.00%	(\$660)	\$0	\$4,509	\$0	\$0	\$49	\$3,924
Mar-20	\$26	(4.84%)	(\$10,379)	5.00%	(\$519)	\$0	\$4,509	\$0	\$0	\$49	\$4,065
Apr-20	\$26	(4.84%)	(\$6,301)	5.00%	(\$315)	\$0	\$4,509	\$0	\$0	\$49	\$4,269
May-20	<u>\$25</u>	(4.84%)	(\$7,706)	5.00%	<u>(\$385)</u>	<u>\$0</u>	<u>\$4,509</u>	<u>\$0</u>	<u>\$0</u>	<u>\$49</u>	<u>\$4,197</u>
Total	\$156				(\$3,245)	\$0	\$27,053	\$0	\$0	\$295	\$24,259

(1) DS Supplier Charges to be determined at the end of each month.

(2) Number of days lag equals (17.66). Calculated using revenue lag of 39.90 days less cost lead of 57.56 days. Revenue lag per Schedule DTN-1, Page 4 of 23 and cost lead per Schedule DTN-1, Page 20 of 23, DE 19-049 filed April 5, 2019.

(3) The working capital requirement equals the supplier charge plus GIS Support payment times the number of days lag divided by 365. As the G1 class supplier charge is not determined using a contract price, estimates of the G1 class power supply costs were calculated based on the forecasted G1 class kWh purchases and an estimated price per kWh. The estimated price per kWh was determined by comparing a historical relationship between G1 and Non-G1 class supplier pricing and then applying that relationship to the current average Non-G1 supplier price per kWh. Actual working capital will be determined using the actual supplier charges in each month.

00192

Unitil Energy Systems, Inc.  
 Calculation of G1 Class Default Service Renewable Portfolio Standard (RPS) Charge

	<u>Dec-19</u> <u>Estimated</u>	<u>Jan-20</u> <u>Estimated</u>	<u>Feb-20</u> <u>Estimated</u>	<u>Mar-20</u> <u>Estimated</u>	<u>Apr-20</u> <u>Estimated</u>	<u>May-20</u> <u>Estimated</u>	<u>Total</u>
1 Reconciliation (1)	(\$11,719)	(\$11,312)	(\$11,328)	(\$11,367)	(\$10,555)	(\$10,601)	(\$66,882)
2 Total Costs (Page 2)	<u>\$23,262</u>	<u>\$22,229</u>	<u>\$22,259</u>	<u>\$22,337</u>	<u>\$20,740</u>	<u>\$20,832</u>	<u>\$131,658</u>
3 Reconciliation plus Total Costs (L.1 + L.2)	\$11,543	\$10,917	\$10,932	\$10,969	\$10,185	\$10,230	\$64,776
4 kWh Purchases	<u>3,585,707</u>	<u>3,461,409</u>	<u>3,466,117</u>	<u>3,478,142</u>	<u>3,229,499</u>	<u>3,243,770</u>	20,464,644
5 Total, Before Losses (L.3 / L.4)	\$0.00322	\$0.00315	\$0.00315	\$0.00315	\$0.00315	\$0.00315	
6 Losses	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	<u>4.591%</u>	
7 Total Retail Rate - Variable RPS Charge (L.5 * (1+L.6))	\$0.00337	\$0.00330	\$0.00330	\$0.00330	\$0.00330	\$0.00330	

(1) As filed in DE 19-049 (April 5, 2019). Renewable Portfolio Standard Charge balance as of February 28, 2019, as adjusted, allocated between rate periods (June-November 2019 and December 2019-May 2020) and then to each month on equal per kWh basis.

Reconciliation amount for June-November 2019	(\$75,208)
Reconciliation amount for December 2019-May 2020	<u>(\$66,882)</u>
Total	(\$142,090)

00198

Unitil Energy Systems, Inc.  
 Itemized Costs for G1 Class Default Service Renewable Portfolio Standard Charge

	<i>Calculation of Working Capital</i>					
(a)	(b)	(c)	(d)	(e)	(f)	
Renewable Energy Credits (1)	Number of Days of Lag / 365 (2)	Working Capital Requirement (a*b)	Prime Rate	Supply Related Working Capital (c * d)	Total Costs (sum a + e)	
Dec-19	\$24,163	(74.58%)	(\$18,019)	5.00%	(\$901)	\$23,262
Jan-20	\$23,090	(74.58%)	(\$17,220)	5.00%	(\$861)	\$22,229
Feb-20	\$23,122	(74.58%)	(\$17,243)	5.00%	(\$862)	\$22,259
Mar-20	\$23,202	(74.58%)	(\$17,303)	5.00%	(\$865)	\$22,337
Apr-20	\$21,543	(74.58%)	(\$16,066)	5.00%	(\$803)	\$20,740
May-20	<u>\$21,638</u>	(74.58%)	(\$16,137)	5.00%	<u>(\$807)</u>	<u>\$20,832</u>
Total	\$136,758				(\$5,099)	\$131,658

(1) Schedule JMP-4.

(2) Number of days lag equals (272.20). Calculated using revenue lag of 39.90 days less cost lead of 312.10 days. Revenue lag per Schedule DTN-1, Page 4 of 23 and cost lead per Schedule DTN-1, Page 20 of 23, DE 19-049 filed April 5, 2019.

00194

**Unitil Energy Systems, Inc.**  
**Internal Administrative Costs associated with Default Service**

		<u>G1 Class</u>	<u>Non-G1 Class</u>	<u>Total</u>	Notes:
<b>Energy Contracts Department:</b>					
1	Average Cost of Labor per Hour	\$52.64	\$52.64	\$52.64	1
2	Estimated Annual Hours Required to Accomplish Tasks	<u>249.4</u>	<u>150.6</u>	<u>400.0</u>	
3	Cost of Labor	\$13,128	\$7,928	\$21,056	
4	Overhead (Line 3 * Overhead rate)	<u>\$15,229</u>	<u>\$9,196</u>	<u>\$24,425</u>	2
5	<b>Total Labor and Overhead Cost</b>	<u>\$28,357</u>	<u>\$17,124</u>	<u>\$45,481</u>	
<b>Regulatory Services Department:</b>					
1	Average Cost of Labor per Hour	\$59.87	\$59.87	\$59.87	1
2	Estimated Annual Hours Required to Accomplish Tasks	<u>88.0</u>	<u>35.0</u>	<u>123.0</u>	
3	Cost of Labor	\$5,269	\$2,095	\$7,364	
4	Overhead (Line 3 * Overhead rate)	<u>\$6,112</u>	<u>\$2,431</u>	<u>\$8,542</u>	2
5	<b>Total Labor and Overhead Cost</b>	<u>\$11,380</u>	<u>\$4,526</u>	<u>\$15,906</u>	
<b>Accounts Payable Department:</b>					
1	Average Cost of Labor per Hour	\$27.92	\$27.92	\$27.92	1
2	Estimated Annual Hours Required to Accomplish Tasks	<u>6.0</u>	<u>6.0</u>	<u>12.0</u>	
3	Cost of Labor	\$168	\$168	\$335	
4	Overhead (Line 3 * Overhead rate)	<u>\$194</u>	<u>\$194</u>	<u>\$389</u>	2
5	<b>Total Labor and Overhead Cost</b>	<u>\$362</u>	<u>\$362</u>	<u>\$724</u>	
<b>General Accounting Department:</b>					
1	Average Cost of Labor per Hour	\$50.84	\$50.84	\$50.84	1
2	Estimated Annual Hours Required to Accomplish Tasks	<u>6.0</u>	<u>6.0</u>	<u>12.0</u>	
3	Cost of Labor	\$305	\$305	\$610	
4	Overhead (Line 3 * Overhead rate)	<u>\$354</u>	<u>\$354</u>	<u>\$708</u>	2
5	<b>Total Labor and Overhead Cost</b>	<u>\$659</u>	<u>\$659</u>	<u>\$1,318</u>	
<b>Finance Department:</b>					
1	Average Cost of Labor per Hour	\$41.94	\$41.94	\$41.94	1
2	Estimated Annual Hours Required to Accomplish Tasks	<u>26.0</u>	<u>26.0</u>	<u>52.0</u>	
3	Cost of Labor	\$1,090	\$1,090	\$2,181	
4	Overhead (Line 3 * Overhead rate)	<u>\$1,265</u>	<u>\$1,265</u>	<u>\$2,530</u>	2
5	<b>Total Labor and Overhead Cost</b>	<u>\$2,355</u>	<u>\$2,355</u>	<u>\$4,711</u>	
<b>Communications Department:</b>					
1	Average Cost of Labor per Hour	\$52.98	\$52.98	\$52.98	1
2	Estimated Annual Hours Required to Accomplish Tasks	<u>60.0</u>	<u>60.0</u>	<u>120.0</u>	
3	Cost of Labor	\$3,179	\$3,179	\$6,358	
4	Overhead (Line 3 * Overhead rate)	<u>\$3,687</u>	<u>\$3,687</u>	<u>\$7,375</u>	2
5	<b>Total Labor and Overhead Cost</b>	<u>\$6,866</u>	<u>\$6,866</u>	<u>\$13,732</u>	
<b>Customer Energy Solutions (formerly Business Development) Department:</b>					
1	Average Cost of Labor per Hour	\$49.41	\$49.41	\$49.41	1
2	Estimated Annual Hours Required to Accomplish Tasks	<u>8.0</u>	<u>0.0</u>	<u>8.0</u>	
3	Cost of Labor	\$395	\$0	\$395	
4	Overhead (Line 3 * Overhead rate)	<u>\$459</u>	<u>\$0</u>	<u>\$459</u>	2
5	<b>Total Labor and Overhead Cost</b>	<u>\$854</u>	<u>\$0</u>	<u>\$854</u>	
<b>Information Systems Department:</b>					
1	Average Cost of Labor per Hour	\$48.00	\$48.00	\$48.00	1
2	Estimated Annual Hours Required to Accomplish Tasks	<u>3.6</u>	<u>1.4</u>	<u>5.0</u>	
3	Cost of Labor	\$173	\$67	\$240	
4	Overhead (Line 3 * Overhead rate)	<u>\$200</u>	<u>\$78</u>	<u>\$278</u>	2
5	<b>Total Labor and Overhead Cost</b>	<u>\$373</u>	<u>\$145</u>	<u>\$518</u>	
<b>Customer Service Department:</b>					
1	Average Cost of Labor per Hour	\$27.96	\$27.96	\$27.96	1
2	Estimated Annual Hours Required to Accomplish Tasks	<u>48.0</u>	<u>48.0</u>	<u>96.0</u>	
3	Cost of Labor	\$1,342	\$1,342	\$2,684	
4	Overhead (Line 3 * Overhead rate)	<u>\$1,557</u>	<u>\$1,557</u>	<u>\$3,114</u>	2
5	<b>Total Labor and Overhead Cost</b>	<u>\$2,899</u>	<u>\$2,899</u>	<u>\$5,798</u>	
<b>TOTAL ANNUAL COST</b>		<u>\$54,106</u>	<u>\$34,936</u>	<u>\$89,042</u>	

Notes:

- 1) See Schedule LSM-6, Page 2 of 2.
- 2) Based on Unitil Service Corp. overhead rate of 116% (2018 average rate).

**Unitil Service Corp.**  
**Average Cost of Labor per Hour by Department**

<u>Department</u> (a)	<u>Full Time Equivalent (1)</u> (b)	<u>Annualized Base Labor</u> (c)	<u>Open Positions</u> (d)	<u>Open Positions (2)</u> (e)	<u>Total Positions</u> (b) + (d) = (f)	<u>Total Salaries</u> (c) + (e) = (g)	<u>Avg Hrly Labor Cost (3)</u> (g) ÷ (f) ÷ 2080 = (h)
Energy Contracts	8.0	\$875,883			8.00	\$875,883	\$52.64
Regulatory / Legal	13.0	\$1,618,852			13.00	\$1,618,852	\$59.87
Accounts Payable	5.0	\$290,376			5.00	\$290,376	\$27.92
General Accounting	17.5 (4)	\$1,887,867	1.0	\$68,457	18.50	\$1,956,324	\$50.84
Finance	6.8 (4)	\$593,144			6.80	\$593,144	\$41.94
Communications	7.0	\$839,714	2.0	\$151,980	9.00	\$991,694	\$52.98
Customer Energy Solutions (formerly Business Services)	26.0	\$2,672,267			26.00	\$2,672,267	\$49.41
Information Technology	27.0	\$2,683,002	1.0	\$112,285	28.00	\$2,795,287	\$48.00
Customer Service	72.0	\$4,187,086			72.00	\$4,187,086	\$27.96

(1) Annualized salaries of active employees as of September 1, 2019.

(2) Salary range midpoint of open positions as of September 1, 2019.

(3) Total Salaries ÷ Total Positions ÷ (40 hours/wk \* 52 weeks/yr).

(4) Includes one part-time employee.

**Unitil Energy Systems, Inc.**  
**Typical Bill Impacts by Rate Component**

**Residential Rate D 650 kWh Bill**

Rate Components	9/1/2019	12/1/2019	Difference	Current Bill	As Revised Bill	Difference	%
	Current Rate	As Revised					Difference to Total Bill
Customer Charge	\$16.22	\$16.22	\$0.00	\$16.22	\$16.22	\$0.00	0.0%
	<b><u>\$/kWh</u></b>	<b><u>\$/kWh</u></b>					
Distribution Charge	\$0.03558	\$0.03558	\$0.00000	\$23.13	\$23.13	\$0.00	0.0%
External Delivery Charge	\$0.02502	\$0.02502	\$0.00000	\$16.26	\$16.26	\$0.00	0.0%
Stranded Cost Charge	(\$0.00012)	(\$0.00012)	\$0.00000	(\$0.08)	(\$0.08)	\$0.00	0.0%
Storm Recovery Adj.	\$0.00084	\$0.00084	\$0.00000	\$0.55	\$0.55	\$0.00	0.0%
System Benefits Charge	\$0.00576	\$0.00576	\$0.00000	\$3.74	\$3.74	\$0.00	0.0%
Default Service Charge	<u>\$0.07714</u>	<u>\$0.10330</u>	<u>\$0.02616</u>	<u>\$50.14</u>	<u>\$67.15</u>	<u>\$17.00</u>	<u>15.5%</u>
Total kWh Charges	\$0.14422	\$0.17038	\$0.02616				
Total Bill				\$109.96	\$126.97	\$17.00	15.5%

**Regular General G2 Demand, 11 kW, 2,800 kWh Typical Bill**

Rate Components	9/1/2019	12/1/2019	Difference	Current Bill	As Revised Bill	Difference	%
	Current Rate	As Revised					Difference to Total Bill
Customer Charge	\$29.19	\$29.19	\$0.00	\$29.19	\$29.19	\$0.00	0.0%
	<b><u>All kW</u></b>	<b><u>All kW</u></b>					
Distribution Charge	\$10.51	\$10.51	\$0.00	\$115.61	\$115.61	\$0.00	0.0%
Stranded Cost Charge	<u>(\$0.02)</u>	<u>(\$0.02)</u>	<u>\$0.00</u>	<u>(\$0.22)</u>	<u>(\$0.22)</u>	<u>\$0.00</u>	<u>0.0%</u>
Total kW Charges	\$10.49	\$10.49	\$0.00	\$115.39	\$115.39	\$0.00	0.0%
	<b><u>\$/kWh</u></b>	<b><u>\$/kWh</u></b>					
Distribution Charge	\$0.00000	\$0.00000	\$0.00000	\$0.00	\$0.00	\$0.00	0.0%
External Delivery Charge	\$0.02502	\$0.02502	\$0.00000	\$70.06	\$70.06	\$0.00	0.0%
Stranded Cost Charge	(\$0.00002)	(\$0.00002)	\$0.00000	(\$0.06)	(\$0.06)	\$0.00	0.0%
Storm Recovery Adj.	\$0.00084	\$0.00084	\$0.00000	\$2.35	\$2.35	\$0.00	0.0%
System Benefits Charge	\$0.00576	\$0.00576	\$0.00000	\$16.13	\$16.13	\$0.00	0.0%
Default Service Charge	<u>\$0.06872</u>	<u>\$0.08987</u>	<u>\$0.02115</u>	<u>\$192.42</u>	<u>\$251.64</u>	<u>\$59.22</u>	<u>13.9%</u>
Total kWh Charges	\$0.10032	\$0.12147	\$0.02115	\$280.90	\$340.12	\$59.22	13.9%
Total Bill				\$425.48	\$484.70	\$59.22	13.9%

**Unitil Energy Systems, Inc.  
Typical Bill Impacts by Rate Component**

<b><u>Regular General G2 Quick Recovery Water Heating and Space Heating 1,660 kWh Typical Bill</u></b>							
	9/1/2019	12/1/2019					%
<u>Rate Components</u>	<u>Current Rate</u>	<u>As Revised</u>	<u>Difference</u>	<u>Current Bill</u>	<u>As Revised Bill</u>	<u>Difference</u>	<u>Difference to Total Bill</u>
Customer Charge	\$9.73	\$9.73	\$0.00	\$9.73	\$9.73	\$0.00	0.0%
	<b><u>\$/kWh</u></b>	<b><u>\$/kWh</u></b>					
Distribution Charge	\$0.03204	\$0.03204	\$0.00000	\$53.19	\$53.19	\$0.00	0.0%
External Delivery Charge	\$0.02502	\$0.02502	\$0.00000	\$41.53	\$41.53	\$0.00	0.0%
Stranded Cost Charge	(\$0.00012)	(\$0.00012)	\$0.00000	(\$0.20)	(\$0.20)	\$0.00	0.0%
Storm Recovery Adj.	\$0.00084	\$0.00084	\$0.00000	\$1.39	\$1.39	\$0.00	0.0%
System Benefits Charge	\$0.00576	\$0.00576	\$0.00000	\$9.56	\$9.56	\$0.00	0.0%
Default Service Charge	<u>\$0.06872</u>	<u>\$0.08987</u>	<u>\$0.02115</u>	<u>\$114.08</u>	<u>\$149.18</u>	<u>\$35.11</u>	<u>15.3%</u>
Total kWh Charges	\$0.13226	\$0.15341	\$0.02115	\$219.55	\$254.66	\$35.11	15.3%
Total Bill				\$229.28	\$264.39	\$35.11	15.3%

<b><u>Regular General G2 kWh Meter 115 kWh Typical Bill</u></b>							
	9/1/2019	12/1/2019					%
<u>Rate Components</u>	<u>Current Rate</u>	<u>As Revised</u>	<u>Difference</u>	<u>Current Bill</u>	<u>As Revised Bill</u>	<u>Difference</u>	<u>Difference to Total Bill</u>
Customer Charge	\$18.38	\$18.38	\$0.00	\$18.38	\$18.38	\$0.00	0.0%
	<b><u>\$/kWh</u></b>	<b><u>\$/kWh</u></b>					
Distribution Charge	\$0.00883	\$0.00883	\$0.00000	\$1.02	\$1.02	\$0.00	0.0%
External Delivery Charge	\$0.02502	\$0.02502	\$0.00000	\$2.88	\$2.88	\$0.00	0.0%
Stranded Cost Charge	(\$0.00012)	(\$0.00012)	\$0.00000	(\$0.01)	(\$0.01)	\$0.00	0.0%
Storm Recovery Adj.	\$0.00084	\$0.00084	\$0.00000	\$0.10	\$0.10	\$0.00	0.0%
System Benefits Charge	\$0.00576	\$0.00576	\$0.00000	\$0.66	\$0.66	\$0.00	0.0%
Default Service Charge	<u>\$0.06872</u>	<u>\$0.08987</u>	<u>\$0.02115</u>	<u>\$7.90</u>	<u>\$10.34</u>	<u>\$2.43</u>	<u>7.9%</u>
Total kWh Charges	\$0.10905	\$0.13020	\$0.02115	\$12.54	\$14.97	\$2.43	7.9%
Total Bill				\$30.92	\$33.35	\$2.43	7.9%

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**Unitol Energy Systems, Inc.**  
**Typical Bill Impacts for Residential Rate Class based on Mean and Median Usage**

**Residential Rate D 646 kWh Bill - Mean Use\***

Rate Components	9/1/2019	12/1/2019	Difference	Current Bill	As Revised Bill	Difference	%
	<u>Current Rate</u>	<u>As Revised</u>					<u>Difference</u>
Customer Charge	\$16.22	\$16.22	\$0.00	\$16.22	\$16.22	\$0.00	0.0%
	<b><u>\$/kWh</u></b>	<b><u>\$/kWh</u></b>					
Distribution Charge	\$0.03558	\$0.03558	\$0.00000	\$22.98	\$22.98	\$0.00	0.0%
External Delivery Charge	\$0.02502	\$0.02502	\$0.00000	\$16.16	\$16.16	\$0.00	0.0%
Stranded Cost Charge	(\$0.00012)	(\$0.00012)	\$0.00000	(\$0.08)	(\$0.08)	\$0.00	0.0%
Storm Recovery Adj.	\$0.00084	\$0.00084	\$0.00000	\$0.54	\$0.54	\$0.00	0.0%
System Benefits Charge	\$0.00576	\$0.00576	\$0.00000	\$3.72	\$3.72	\$0.00	0.0%
Default Service Charge	<u>\$0.07714</u>	<u>\$0.10330</u>	<u>\$0.02616</u>	<u>\$49.83</u>	<u>\$66.73</u>	<u>\$16.90</u>	<u>15.4%</u>
Total kWh Charges	\$0.14422	\$0.17038	\$0.02616				
Total Bill				\$109.39	\$126.29	\$16.90	15.4%

**Residential Rate D 524 kWh Bill - Median Use\***

Rate Components	9/1/2019	12/1/2019	Difference	Current Bill	As Revised Bill	Difference	%
	<u>Current Rate</u>	<u>As Revised</u>					<u>Difference</u>
Customer Charge	\$16.22	\$16.22	\$0.00	\$16.22	\$16.22	\$0.00	0.0%
	<b><u>\$/kWh</u></b>	<b><u>\$/kWh</u></b>					
Distribution Charge	\$0.03558	\$0.03558	\$0.00000	\$18.64	\$18.64	\$0.00	0.0%
External Delivery Charge	\$0.02502	\$0.02502	\$0.00000	\$13.11	\$13.11	\$0.00	0.0%
Stranded Cost Charge	(\$0.00012)	(\$0.00012)	\$0.00000	(\$0.06)	(\$0.06)	\$0.00	0.0%
Storm Recovery Adj.	\$0.00084	\$0.00084	\$0.00000	\$0.44	\$0.44	\$0.00	0.0%
System Benefits Charge	\$0.00576	\$0.00576	\$0.00000	\$3.02	\$3.02	\$0.00	0.0%
Default Service Charge	<u>\$0.07714</u>	<u>\$0.10330</u>	<u>\$0.02616</u>	<u>\$40.42</u>	<u>\$54.13</u>	<u>\$13.71</u>	<u>14.9%</u>
Total kWh Charges	\$0.14422	\$0.17038	\$0.02616				
Total Bill				\$91.79	\$105.50	\$13.71	14.9%

\* Based on billing period January through December 2018.

Unitil Energy Systems, Inc.  
Average Class Bill Impacts  
Due to Proposed Default Service Rate Changes Effective December 1, 2019

(A) <u>Class of Service</u>	(B) <u>Annual Number of Customers (luminaires for Outdoor Lighting)</u>	(C) <u>Annual kWh Sales</u>	(D) <u>Annual kW / kVA Sales</u>	(E) <u>Proposed DSC Change \$</u>	(F) <u>Estimated Annual Revenue \$ Under Present Rates</u>	(G) <u>Estimated Annual Revenue \$ Under Proposed Rates</u>	(H) <u>Proposed Net Change Revenue \$</u>	(I) <u>% Change DSC Revenue</u>
Residential	785,306	497,875,828	n/a	\$13,024,432	\$84,541,319	\$97,565,751	\$13,024,432	15.4%
General Service	131,872	354,161,409	1,348,556	\$7,490,514	\$53,564,910	\$61,055,424	\$7,490,514	14.0%
Outdoor Lighting	110,850	8,241,454	n/a	\$174,307	\$2,705,558	\$2,879,865	\$174,307	6.4%
Total	1,028,028	860,278,690		\$20,689,252	\$140,811,788	\$161,501,040	\$20,689,252	14.7%

(B), (C), (D) Test year billing determinants in DE 16-384.

(E) Difference in proposed rate and current rate, times the billing determinants shown in Column (C).

(F) Based on current rates times billing determinants shown in Columns (B), (C) and (D).

(G) Sum of Columns (E) and (F)

(H) Column (G) minus Column (F)

(I) Column (H) divided by Column (F)

**Unitil Energy Systems, Inc.**  
**Typical Bill Impacts - September 1, 2019 vs. December 1, 2019**  
**Due to Changes in the Default Service Charge**  
**Impact on D Rate Customers**

<u>Average kWh</u>	<u>Total Bill Using Rates 9/1/2019</u>	<u>Total Bill Using Rates 12/1/2019</u>	<u>Total Difference</u>	<u>% Total Difference</u>
125	\$34.25	\$37.52	\$3.27	9.5%
150	\$37.85	\$41.78	\$3.92	10.4%
200	\$45.06	\$50.30	\$5.23	11.6%
250	\$52.28	\$58.82	\$6.54	12.5%
300	\$59.49	\$67.33	\$7.85	13.2%
350	\$66.70	\$75.85	\$9.16	13.7%
400	\$73.91	\$84.37	\$10.46	14.2%
450	\$81.12	\$92.89	\$11.77	14.5%
500	\$88.33	\$101.41	\$13.08	14.8%
525	\$91.94	\$105.67	\$13.73	14.9%
550	\$95.54	\$109.93	\$14.39	15.1%
575	\$99.15	\$114.19	\$15.04	15.2%
600	\$102.75	\$118.45	\$15.70	15.3%
625	\$106.36	\$122.71	\$16.35	15.4%
650	\$109.96	\$126.97	\$17.00	15.5%
675	\$113.57	\$131.23	\$17.66	15.5%
700	\$117.17	\$135.49	\$18.31	15.6%
725	\$120.78	\$139.75	\$18.97	15.7%
750	\$124.39	\$144.01	\$19.62	15.8%
775	\$127.99	\$148.26	\$20.27	15.8%
825	\$135.20	\$156.78	\$21.58	16.0%
925	\$149.62	\$173.82	\$24.20	16.2%
1,000	\$160.44	\$186.60	\$26.16	16.3%
1,250	\$196.50	\$229.20	\$32.70	16.6%
1,500	\$232.55	\$271.79	\$39.24	16.9%
2,000	\$304.66	\$356.98	\$52.32	17.2%
3,500	\$520.99	\$612.55	\$91.56	17.6%
5,000	\$737.32	\$868.12	\$130.80	17.7%

	<u>Rates - Effective September 1, 2019</u>	<u>Rates - Proposed December 1, 2019</u>	<u>Difference</u>
Customer Charge	\$16.22	\$16.22	\$0.00
	<u>kWh</u>	<u>kWh</u>	<u>kWh</u>
Distribution Charge:	\$0.03558	\$0.03558	\$0.00000
External Delivery Charge	\$0.02502	\$0.02502	\$0.00000
Stranded Cost Charge	(\$0.00012)	(\$0.00012)	\$0.00000
Storm Recovery Adjustment Factor	\$0.00084	\$0.00084	\$0.00000
System Benefits Charge	\$0.00576	\$0.00576	\$0.00000
Default Service Charge	<u>\$0.07714</u>	<u>\$0.10330</u>	<u>\$0.02616</u>
<b>TOTAL</b>	<b>\$0.14422</b>	<b>\$0.17038</b>	<b>\$0.02616</b>

**Unitil Energy Systems, Inc.**  
**Typical Bill Impacts - September 1, 2019 vs. December 1, 2019**  
**Due to Changes in the Default Service Charge**  
**Impact on G2 Rate Customers**

<u>Load Factor</u>	<u>Average Monthly kW</u>	<u>Average Monthly kWh</u>	<u>Total Bill Using Rates 9/1/2019</u>	<u>Total Bill Using Rates 12/1/2019</u>	<u>Total Difference</u>	<u>% Total Difference</u>
20%	5	730	\$154.87	\$170.31	\$15.44	10.0%
20%	10	1,460	\$280.56	\$311.44	\$30.88	11.0%
20%	15	2,190	\$406.24	\$452.56	\$46.32	11.4%
20%	25	3,650	\$657.61	\$734.81	\$77.20	11.7%
20%	50	7,300	\$1,286.03	\$1,440.42	\$154.40	12.0%
20%	75	10,950	\$1,914.44	\$2,146.04	\$231.59	12.1%
20%	100	14,600	\$2,542.86	\$2,851.65	\$308.79	12.1%
20%	150	21,900	\$3,799.70	\$4,262.88	\$463.18	12.2%
36%	5	1,314	\$213.46	\$241.25	\$27.79	13.0%
36%	10	2,628	\$397.73	\$453.31	\$55.58	14.0%
36%	15	3,942	\$582.00	\$665.37	\$83.37	14.3%
36%	25	6,570	\$950.54	\$1,089.50	\$138.96	14.6%
36%	50	13,140	\$1,871.89	\$2,149.81	\$277.91	14.8%
36%	75	19,710	\$2,793.25	\$3,210.11	\$416.87	14.9%
36%	100	26,280	\$3,714.60	\$4,270.42	\$555.82	15.0%
36%	150	39,420	\$5,557.30	\$6,391.04	\$833.73	15.0%
50%	5	1,825	\$264.72	\$303.32	\$38.60	14.6%
50%	10	3,650	\$500.26	\$577.46	\$77.20	15.4%
50%	15	5,475	\$735.79	\$851.59	\$115.80	15.7%
50%	25	9,125	\$1,206.86	\$1,399.85	\$192.99	16.0%
50%	50	18,250	\$2,384.53	\$2,770.52	\$385.99	16.2%
50%	75	27,375	\$3,562.20	\$4,141.18	\$578.98	16.3%
50%	100	36,500	\$4,739.87	\$5,511.85	\$771.98	16.3%
50%	150	54,750	\$7,095.21	\$8,253.17	\$1,157.96	16.3%
		<u>Rates - Effective September 1, 2019</u>	<u>Rates - Proposed December 1, 2019</u>	<u>Difference</u>		
Customer Charge		\$29.19	\$29.19	\$0.00		
		<u>All kW</u>	<u>All kW</u>	<u>All kW</u>		
Distribution Charge		\$10.51	\$10.51	\$0.00		
Stranded Cost Charge		(\$0.02)	(\$0.02)	\$0.00		
<b>TOTAL</b>		\$10.49	\$10.49	\$0.00		
		<u>kWh</u>	<u>kWh</u>	<u>kWh</u>		
Distribution Charge		\$0.00000	\$0.00000	\$0.00000		
External Delivery Charge		\$0.02502	\$0.02502	\$0.00000		
Stranded Cost Charge		(\$0.00002)	(\$0.00002)	\$0.00000		
Storm Recovery Adj. Factor		\$0.00084	\$0.00084	\$0.00000		
System Benefits Charge		\$0.00576	\$0.00576	\$0.00000		
Default Service Charge		\$0.06872	\$0.08987	\$0.02115		
<b>TOTAL</b>		\$0.10032	\$0.12147	\$0.02115		

<b>Unitil Energy Systems, Inc.</b> <b>Typical Bill Impacts - September 1, 2019 vs. December 1, 2019</b> <b>Due to Changes in the Default Service Charge</b> <b>Impact on G2 kWh Meter Rate Customers</b>																																												
Average Monthly kWh	Total Bill Using Rates 9/1/2019	Total Bill Using Rates 12/1/2019	Total Difference	% Total Difference																																								
15	\$20.02	\$20.33	\$0.32	1.6%																																								
75	\$26.56	\$28.15	\$1.59	6.0%																																								
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650	\$89.26	\$103.01	\$13.75	15.4%																																								
750	\$100.17	\$116.03	\$15.86	15.8%																																								
900	\$116.53	\$135.56	\$19.04	16.3%																																								
<table border="1"> <thead> <tr> <th></th> <th style="text-align: center;"><u>Rates - Effective September 1, 2019</u></th> <th style="text-align: center;"><u>Rates - Proposed December 1, 2019</u></th> <th style="text-align: center;"><u>Difference</u></th> </tr> </thead> <tbody> <tr> <td>kWh Meter Customer Charge</td> <td style="text-align: center;"><b>\$18.38</b></td> <td style="text-align: center;"><b>\$18.38</b></td> <td style="text-align: center;"><b>\$0.00</b></td> </tr> <tr> <td></td> <td style="text-align: center;"><u>All kWh</u></td> <td style="text-align: center;"><u>All kWh</u></td> <td style="text-align: center;"><u>All kWh</u></td> </tr> <tr> <td>Distribution Charge</td> <td style="text-align: center;">\$0.00883</td> <td style="text-align: center;">\$0.00883</td> <td style="text-align: center;">\$0.00000</td> </tr> <tr> <td>External Delivery Charge</td> <td style="text-align: center;">\$0.02502</td> <td style="text-align: center;">\$0.02502</td> <td style="text-align: center;">\$0.00000</td> </tr> <tr> <td>Stranded Cost Charge</td> <td style="text-align: center;">(\$0.00012)</td> <td style="text-align: center;">(\$0.00012)</td> <td style="text-align: center;">\$0.00000</td> </tr> <tr> <td>Storm Recovery Adjustment Factor</td> <td style="text-align: center;">\$0.00084</td> <td style="text-align: center;">\$0.00084</td> <td style="text-align: center;">\$0.00000</td> </tr> <tr> <td>System Benefits Charge</td> <td style="text-align: center;">\$0.00576</td> <td style="text-align: center;">\$0.00576</td> <td style="text-align: center;">\$0.00000</td> </tr> <tr> <td>Default Service Charge</td> <td style="text-align: center;"><u>\$0.06872</u></td> <td style="text-align: center;"><u>\$0.08987</u></td> <td style="text-align: center;"><u>\$0.02115</u></td> </tr> <tr> <td><b>TOTAL</b></td> <td style="text-align: center;"><b>\$0.10905</b></td> <td style="text-align: center;"><b>\$0.13020</b></td> <td style="text-align: center;"><b>\$0.02115</b></td> </tr> </tbody> </table>						<u>Rates - Effective September 1, 2019</u>	<u>Rates - Proposed December 1, 2019</u>	<u>Difference</u>	kWh Meter Customer Charge	<b>\$18.38</b>	<b>\$18.38</b>	<b>\$0.00</b>		<u>All kWh</u>	<u>All kWh</u>	<u>All kWh</u>	Distribution Charge	\$0.00883	\$0.00883	\$0.00000	External Delivery Charge	\$0.02502	\$0.02502	\$0.00000	Stranded Cost Charge	(\$0.00012)	(\$0.00012)	\$0.00000	Storm Recovery Adjustment Factor	\$0.00084	\$0.00084	\$0.00000	System Benefits Charge	\$0.00576	\$0.00576	\$0.00000	Default Service Charge	<u>\$0.06872</u>	<u>\$0.08987</u>	<u>\$0.02115</u>	<b>TOTAL</b>	<b>\$0.10905</b>	<b>\$0.13020</b>	<b>\$0.02115</b>
	<u>Rates - Effective September 1, 2019</u>	<u>Rates - Proposed December 1, 2019</u>	<u>Difference</u>																																									
kWh Meter Customer Charge	<b>\$18.38</b>	<b>\$18.38</b>	<b>\$0.00</b>																																									
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**Unitil Energy Systems, Inc.**  
**Typical Bill Impacts - September 1, 2019 vs. December 1, 2019**  
**Due to Changes in the Default Service Charge**  
**Impact on G2 QRWH and SH Rate Customers**

<b>Average kWh</b>	<b>Total Bill Using Rates 9/1/2019</b>	<b>Total Bill Using Rates 12/1/2019</b>	<b>Total Difference</b>	<b>% Total Difference</b>
100	\$22.96	\$25.07	\$2.12	9.2%
200	\$36.18	\$40.41	\$4.23	11.7%
300	\$49.41	\$55.75	\$6.35	12.8%
400	\$62.63	\$71.09	\$8.46	13.5%
500	\$75.86	\$86.44	\$10.58	13.9%
750	\$108.93	\$124.79	\$15.86	14.6%
1,000	\$141.99	\$163.14	\$21.15	14.9%
1,500	\$208.12	\$239.85	\$31.73	15.2%
2,000	\$274.25	\$316.55	\$42.30	15.4%
2,500	\$340.38	\$393.26	\$52.88	15.5%

	<b>Rates - Effective September 1, 2019</b>	<b>Rates - Proposed December 1, 2019</b>	<b>Difference</b>
Customer Charge	<b>\$9.73</b>	<b>\$9.73</b>	<b>\$0.00</b>
	<b><u>All kWh</u></b>	<b><u>All kWh</u></b>	<b><u>All kWh</u></b>
Distribution Charge	\$0.03204	\$0.03204	\$0.00000
External Delivery Charge	\$0.02502	\$0.02502	\$0.00000
Stranded Cost Charge	(\$0.00012)	(\$0.00012)	\$0.00000
Storm Recovery Adjustment Factor	\$0.00084	\$0.00084	\$0.00000
System Benefits Charge	\$0.00576	\$0.00576	\$0.00000
Default Service Charge	<u>\$0.06872</u>	<u>\$0.08987</u>	<u>\$0.02115</u>
<b>TOTAL</b>	<b><u>\$0.13226</u></b>	<b><u>\$0.15341</u></b>	<b><u>\$0.02115</u></b>

Unitil Energy Systems, Inc. Typical Bill Impacts - September 1, 2019 vs. December 1, 2019 Due to Changes in the Default Service Charge Impact on OL Rate Customers *								
	Nominal Watts	Lumens	Type	Average Monthly kWh	Total Bill Using Rates 9/1/2019	Total Bill Using Rates 12/1/2019	Total Difference	% Total Difference
<u>Mercury Vapor:</u>								
1	100	3,500	ST	43	\$17.59	\$18.50	\$0.91	5.2%
2	175	7,000	ST	71	\$22.87	\$24.37	\$1.50	6.6%
3	250	11,000	ST	100	\$27.87	\$29.99	\$2.12	7.6%
4	400	20,000	ST	157	\$36.98	\$40.31	\$3.32	9.0%
5	1,000	60,000	ST	372	\$79.47	\$87.34	\$7.87	9.9%
6	250	11,000	FL	100	\$29.04	\$31.16	\$2.12	7.3%
7	400	20,000	FL	157	\$38.48	\$41.81	\$3.32	8.6%
8	1,000	60,000	FL	380	\$75.78	\$83.82	\$8.04	10.6%
9	100	3,500	PB	48	\$18.22	\$19.24	\$1.02	5.6%
10	175	7,000	PB	71	\$21.99	\$23.49	\$1.50	6.8%
<u>High Pressure Sodium:</u>								
11	50	4,000	ST	23	\$15.83	\$16.31	\$0.49	3.1%
12	100	9,500	ST	48	\$20.03	\$21.05	\$1.02	5.1%
13	150	16,000	ST	65	\$21.79	\$23.17	\$1.37	6.3%
14	250	30,000	ST	102	\$29.36	\$31.52	\$2.16	7.3%
15	400	50,000	ST	161	\$40.27	\$43.67	\$3.41	8.5%
16	1,000	140,000	ST	380	\$79.74	\$87.78	\$8.04	10.1%
17	150	16,000	FL	65	\$24.12	\$25.50	\$1.37	5.7%
18	250	30,000	FL	102	\$30.98	\$33.14	\$2.16	7.0%
19	400	50,000	FL	161	\$39.72	\$43.12	\$3.41	8.6%
20	1,000	140,000	FL	380	\$80.11	\$88.15	\$8.04	10.0%
21	50	4,000	PB	23	\$14.82	\$15.30	\$0.49	3.3%
22	100	9,500	PB	48	\$18.85	\$19.87	\$1.02	5.4%
<u>Metal Halide:</u>								
23	175	8,800	ST	74	\$27.33	\$28.89	\$1.57	5.7%
24	250	13,500	ST	102	\$31.87	\$34.03	\$2.16	6.8%
25	400	23,500	ST	158	\$38.28	\$41.63	\$3.34	8.7%
26	175	8,800	FL	74	\$30.42	\$31.98	\$1.57	5.1%
27	250	13,500	FL	102	\$35.05	\$37.21	\$2.16	6.2%
28	400	23,500	FL	158	\$40.71	\$44.06	\$3.34	8.2%
29	1,000	86,000	FL	374	\$69.70	\$77.61	\$7.91	11.3%
30	175	8,800	PB	74	\$26.05	\$27.61	\$1.57	6.0%
31	250	13,500	PB	102	\$30.03	\$32.19	\$2.16	7.2%
32	400	23,500	PB	158	\$37.00	\$40.35	\$3.34	9.0%
<u>Light Emitting Diode:</u>								
33	42	3,600	AL	15	\$14.66	\$14.98	\$0.32	2.2%
34	57	5,200	AL	20	\$15.21	\$15.64	\$0.42	2.8%
35	25	3,000	CH	9	\$14.01	\$14.20	\$0.19	1.4%
36	88	8,300	CH	30	\$16.31	\$16.94	\$0.63	3.9%
37	108	11,500	CH	37	\$17.07	\$17.85	\$0.78	4.6%
38	193	21,000	CH	67	\$20.33	\$21.75	\$1.42	7.0%
39	123	12,180	FL	43	\$17.72	\$18.63	\$0.91	5.1%
40	194	25,700	FL	67	\$20.33	\$21.75	\$1.42	7.0%
41	297	38,100	FL	103	\$24.25	\$26.43	\$2.18	9.0%
<b>Luminaire Charges For Year Round Service:</b>								
<b>Rates - Effective September 1, 2019</b>								
		<u>Mercury Vapor Rate/Mo.</u>		<u>Sodium Vapor Rate/Mo.</u>		<u>Metal Halide Rate/Mo.</u>		<u>LED Rate/Mo.</u>
Customer Charge	\$0.00	1	\$13.28	11	\$13.52	23	\$19.91	33 \$13.16
		2	\$15.75	12	\$15.22	24	\$21.65	34 \$13.21
	<u>All kWh</u>	3	\$17.85	13	\$15.28	25	\$22.45	35 \$13.11
Distribution Charge	\$0.00000	4	\$21.25	14	\$19.14	26	\$23.00	36 \$13.30
External Delivery Charge	\$0.02502	5	\$42.19	15	\$24.13	27	\$24.83	37 \$13.36
Stranded Cost Charge	(\$0.00012)	6	\$19.02	16	\$41.66	28	\$24.88	38 \$13.62
Storm Recovery Adj. Factor	\$0.00084	7	\$22.75	17	\$17.61	29	\$32.22	39 \$13.41
System Benefits Charge	\$0.00576	8	\$37.70	18	\$20.76	30	\$18.63	40 \$13.62
Default Service Charge	\$0.06872	9	\$13.41	19	\$23.58	31	\$19.81	41 \$13.93
<b>TOTAL</b>	<b>\$0.10022</b>	10	\$14.87	20	\$42.03	32	\$21.17	
		21	\$12.51	22	\$14.04			
<b>Rates - Proposed December 1, 2019</b>								
		<u>Mercury Vapor Rate/Mo.</u>		<u>Sodium Vapor Rate/Mo.</u>		<u>Metal Halide Rate/Mo.</u>		<u>LED Rate/Mo.</u>
Customer Charge	\$0.00	1	\$13.28	11	\$13.52	23	\$19.91	33 \$13.16
		2	\$15.75	12	\$15.22	24	\$21.65	34 \$13.21
	<u>All kWh</u>	3	\$17.85	13	\$15.28	25	\$22.45	35 \$13.11
Distribution Charge	\$0.00000	4	\$21.25	14	\$19.14	26	\$23.00	36 \$13.30
External Delivery Charge	\$0.02502	5	\$42.19	15	\$24.13	27	\$24.83	37 \$13.36
Stranded Cost Charge	(\$0.00012)	6	\$19.02	16	\$41.66	28	\$24.88	38 \$13.62
Storm Recovery Adj. Factor	\$0.00084	7	\$22.75	17	\$17.61	29	\$32.22	39 \$13.41
System Benefits Charge	\$0.00576	8	\$37.70	18	\$20.76	30	\$18.63	40 \$13.62
Default Service Charge	\$0.08987	9	\$13.41	19	\$23.58	31	\$19.81	41 \$13.93
<b>TOTAL</b>	<b>\$0.12137</b>	10	\$14.87	20	\$42.03	32	\$21.17	
		21	\$12.51	22	\$14.04			
<b>Difference</b>								
		<u>Mercury Vapor Rate/Mo.</u>		<u>Sodium Vapor Rate/Mo.</u>		<u>Metal Halide Rate/Mo.</u>		<u>LED Rate/Mo.</u>
Customer Charge	\$0.00	1	\$0.00	11	\$0.00	23	\$0.00	33 \$0.00
		2	\$0.00	12	\$0.00	24	\$0.00	34 \$0.00
	<u>All kWh</u>	3	\$0.00	13	\$0.00	25	\$0.00	35 \$0.00
Distribution Charge	\$0.00000	4	\$0.00	14	\$0.00	26	\$0.00	36 \$0.00
External Delivery Charge	\$0.00000	5	\$0.00	15	\$0.00	27	\$0.00	37 \$0.00
Stranded Cost Charge	\$0.00000	6	\$0.00	16	\$0.00	28	\$0.00	38 \$0.00
Storm Recovery Adj. Factor	\$0.00000	7	\$0.00	17	\$0.00	29	\$0.00	39 \$0.00
System Benefits Charge	\$0.00000	8	\$0.00	18	\$0.00	30	\$0.00	40 \$0.00
Default Service Charge	\$0.02115	9	\$0.00	19	\$0.00	31	\$0.00	41 \$0.00
<b>TOTAL</b>	<b>\$0.02115</b>	10	\$0.00	20	\$0.00	32	\$0.00	
		21	\$0.00	22	\$0.00			

\* Luminaire charges based on All-Night Service option.

**Unitil Energy Systems, Inc.  
Typical Bill Impacts by Rate Component**

**Residential Rate D 650 kWh Bill**

Rate Components	12/1/2018*	12/1/2019	Difference	Current Bill	As Revised Bill	Difference	%
	Prior Rate	As Revised					Difference to Total Bill
Customer Charge	\$16.12	\$16.22	\$0.10	\$16.12	\$16.22	\$0.10	0.1%
	<b><u>\$/kWh</u></b>	<b><u>\$/kWh</u></b>					
Distribution Charge	\$0.03537	\$0.03558	\$0.00021	\$22.99	\$23.13	\$0.14	0.1%
External Delivery Charge	\$0.02389	\$0.02502	\$0.00113	\$15.53	\$16.26	\$0.73	0.5%
Stranded Cost Charge	(\$0.00101)	(\$0.00012)	\$0.00089	(\$0.66)	(\$0.08)	\$0.58	0.4%
Storm Recovery Adj.	\$0.00133	\$0.00084	(\$0.00049)	\$0.86	\$0.55	(\$0.32)	(0.2%)
System Benefits Charge	\$0.00456	\$0.00576	\$0.00120	\$2.96	\$3.74	\$0.78	0.6%
Default Service Charge	<u>\$0.11689</u>	<u>\$0.10330</u>	<u>(\$0.01359)</u>	<u>\$75.98</u>	<u>\$67.15</u>	<u>(\$8.83)</u>	<u>(6.6%)</u>
Total kWh Charges	\$0.18103	\$0.17038	(\$0.01065)				
Total Bill				\$133.79	\$126.97	(\$6.82)	(5.1%)

**Regular General G2 Demand, 11 kW, 2,800 kWh Typical Bill**

Rate Components	12/1/2018*	12/1/2019	Difference	Current Bill	As Revised Bill	Difference	%
	Prior Rate	As Revised					Difference to Total Bill
Customer Charge	\$29.02	\$29.19	\$0.17	\$29.02	\$29.19	\$0.17	0.0%
	<b><u>All kW</u></b>	<b><u>All kW</u></b>					
Distribution Charge	\$10.45	\$10.51	\$0.06	\$114.95	\$115.61	\$0.66	0.1%
Stranded Cost Charge	<u>(\$0.21)</u>	<u>(\$0.02)</u>	<u>\$0.19</u>	<u>(\$2.31)</u>	<u>(\$0.22)</u>	<u>\$2.09</u>	<u>0.4%</u>
Total kW Charges	\$10.24	\$10.49	\$0.25	\$112.64	\$115.39	\$2.75	0.5%
	<b><u>\$/kWh</u></b>	<b><u>\$/kWh</u></b>					
Distribution Charge	\$0.00000	\$0.00000	\$0.00000	\$0.00	\$0.00	\$0.00	0.0%
External Delivery Charge	\$0.02389	\$0.02502	\$0.00113	\$66.89	\$70.06	\$3.16	0.6%
Stranded Cost Charge	(\$0.00021)	(\$0.00002)	\$0.00019	(\$0.59)	(\$0.06)	\$0.53	0.1%
Storm Recovery Adj.	\$0.00133	\$0.00084	(\$0.00049)	\$3.72	\$2.35	(\$1.37)	(0.3%)
System Benefits Charge	\$0.00456	\$0.00576	\$0.00120	\$12.77	\$16.13	\$3.36	0.6%
Default Service Charge	<u>\$0.10598</u>	<u>\$0.08987</u>	<u>(\$0.01611)</u>	<u>\$296.74</u>	<u>\$251.64</u>	<u>(\$45.11)</u>	<u>(8.7%)</u>
Total kWh Charges	\$0.13555	\$0.12147	(\$0.01408)	\$379.54	\$340.12	(\$39.42)	(7.6%)
Total Bill				\$521.20	\$484.70	(\$36.50)	(7.0%)

\* Impacts do not include the Electricity Consumption Tax.

**Unitil Energy Systems, Inc.  
Typical Bill Impacts by Rate Component**

<b>Regular General G2 Quick Recovery Water Heating and Space Heating 1,660 kWh Typical Bill</b>							
	12/1/2018*	12/1/2019					%
<u>Rate Components</u>	<u>Prior Rate</u>	<u>As Revised</u>	<u>Difference</u>	<u>Current Bill</u>	<u>As Revised Bill</u>	<u>Difference</u>	<u>Difference to Total Bill</u>
Customer Charge	\$9.67	\$9.73	\$0.06	\$9.67	\$9.73	\$0.06	0.0%
	<b><u>\$/kWh</u></b>	<b><u>\$/kWh</u></b>					
Distribution Charge	\$0.03185	\$0.03204	\$0.00019	\$52.87	\$53.19	\$0.32	0.1%
External Delivery Charge	\$0.02389	\$0.02502	\$0.00113	\$39.66	\$41.53	\$1.88	0.7%
Stranded Cost Charge	(\$0.00101)	(\$0.00012)	\$0.00089	(\$1.68)	(\$0.20)	\$1.48	0.5%
Storm Recovery Adj.	\$0.00133	\$0.00084	(\$0.00049)	\$2.21	\$1.39	(\$0.81)	(0.3%)
System Benefits Charge	\$0.00456	\$0.00576	\$0.00120	\$7.57	\$9.56	\$1.99	0.7%
Default Service Charge	<u>\$0.10598</u>	<u>\$0.08987</u>	<u>(\$0.01611)</u>	<u>\$175.93</u>	<u>\$149.18</u>	<u>(\$26.74)</u>	<u>(9.3%)</u>
Total kWh Charges	\$0.16660	\$0.15341	(\$0.01319)	\$276.56	\$254.66	(\$21.90)	(7.6%)
Total Bill				\$286.23	\$264.39	(\$21.84)	(7.6%)

<b>Regular General G2 kWh Meter 115 kWh Typical Bill</b>							
	12/1/2018*	12/1/2019					%
<u>Rate Components</u>	<u>Prior Rate</u>	<u>As Revised</u>	<u>Difference</u>	<u>Current Bill</u>	<u>As Revised Bill</u>	<u>Difference</u>	<u>Difference to Total Bill</u>
Customer Charge	\$18.27	\$18.38	\$0.11	\$18.27	\$18.38	\$0.11	0.3%
	<b><u>\$/kWh</u></b>	<b><u>\$/kWh</u></b>					
Distribution Charge	\$0.00878	\$0.00883	\$0.00005	\$1.01	\$1.02	\$0.01	0.0%
External Delivery Charge	\$0.02389	\$0.02502	\$0.00113	\$2.75	\$2.88	\$0.13	0.4%
Stranded Cost Charge	(\$0.00101)	(\$0.00012)	\$0.00089	(\$0.12)	(\$0.01)	\$0.10	0.3%
Storm Recovery Adj.	\$0.00133	\$0.00084	(\$0.00049)	\$0.15	\$0.10	(\$0.06)	(0.2%)
System Benefits Charge	\$0.00456	\$0.00576	\$0.00120	\$0.52	\$0.66	\$0.14	0.4%
Default Service Charge	<u>\$0.10598</u>	<u>\$0.08987</u>	<u>(\$0.01611)</u>	<u>\$12.19</u>	<u>\$10.34</u>	<u>(\$1.85)</u>	<u>(5.3%)</u>
Total kWh Charges	\$0.14353	\$0.13020	(\$0.01333)	\$16.51	\$14.97	(\$1.53)	(4.4%)
Total Bill				\$34.78	\$33.35	(\$1.42)	(4.1%)

\* Impacts do not include the Electricity Consumption Tax.