

## CALCULATION OF THE DEFAULT SERVICE CHARGE

## Non-G1 Class Default Service:

	<u>Dec-18</u>	<u>Jan-19</u>	<u>Feb-19</u>	<u>Mar-19</u>	<u>Apr-19</u>	<u>May-19</u>	<u>Total</u>
<b>Power Supply Charge</b>							
As shown on Schedule LSM-2							
<b>Residential Class</b>							
1 Reconciliation	(\$31,890)	(\$37,903)	(\$33,564)	(\$29,800)	(\$27,344)	(\$24,822)	(\$185,323)
2 Total Costs	\$5,222,880	\$5,962,587	\$4,836,675	\$4,309,997	\$2,610,072	\$2,974,149	\$25,916,359
3 Reconciliation plus Total Costs (L.1 + L.2)	\$5,190,990	\$5,924,684	\$4,803,111	\$4,280,197	\$2,582,728	\$2,949,327	\$25,731,037
4 kWh Purchases	<u>40,588,549</u>	<u>48,242,083</u>	<u>42,718,930</u>	<u>37,928,196</u>	<u>34,802,731</u>	<u>31,593,044</u>	<u>235,873,533</u>
5 Total, Before Losses (L.3 / L.4)	\$0.12789	\$0.12281	\$0.11244	\$0.11285	\$0.07421	\$0.09335	\$0.10909
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>
Total Retail Rate - Residential Variable Power Supply Charge (L.5 * (1+L.6))	\$0.13608	\$0.13067	\$0.11963	\$0.12007	\$0.07896	\$0.09933	
7 Total Retail Rate - Residential Fixed Power Supply Charge (L.5 * (1+L.6))							\$0.11607
8							
<b>G2 and OL Class</b>							
9 Reconciliation	(\$12,812)	(\$14,509)	(\$13,402)	(\$12,601)	(\$12,541)	(\$12,092)	(\$77,957)
10 Total Costs	\$1,660,574	\$2,362,678	\$2,194,672	\$1,438,979	\$1,177,171	\$1,051,800	\$9,885,875
11 Reconciliation plus Total Costs (L.9 + L.10)	\$1,647,762	\$2,348,169	\$2,181,270	\$1,426,378	\$1,164,630	\$1,039,708	\$9,807,917
12 kWh Purchases	<u>16,309,132</u>	<u>18,470,369</u>	<u>17,060,456</u>	<u>16,041,115</u>	<u>15,964,633</u>	<u>15,393,091</u>	<u>99,238,796</u>
13 Total, Before Losses (L.11 / L.12)	\$0.10103	\$0.12713	\$0.12786	\$0.08892	\$0.07295	\$0.06754	\$0.09883
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>
Total Retail Rate - G2 and OL Variable Power Supply Charge (L.13 * (1+L.14))	\$0.10750	\$0.13527	\$0.13604	\$0.09461	\$0.07762	\$0.07187	
15 Total Retail Rate - G2 and OL Fixed Power Supply Charge (L.13 * (1+L.14))							\$0.10516
16							

	As shown on Schedule LSM-3						
<b>Renewable Portfolio Standard (RPS) Charge</b>							
17 Reconciliation	(\$139,400)	(\$163,446)	(\$146,460)	(\$132,225)	(\$124,380)	(\$115,116)	(\$821,028)
18 Total Costs	<u>\$164,629</u>	<u>\$219,531</u>	<u>\$196,717</u>	<u>\$177,599</u>	<u>\$167,064</u>	<u>\$154,623</u>	<u>\$1,080,163</u>
19 Reconciliation plus Total Costs (L.17 + L.18)	\$25,229	\$56,085	\$50,257	\$45,374	\$42,684	\$39,506	\$259,135
20 kWh Purchases	<u>56,897,681</u>	<u>66,712,453</u>	<u>59,779,387</u>	<u>53,969,311</u>	<u>50,767,363</u>	<u>46,986,135</u>	<u>335,112,329</u>
21 Total, Before Losses (L.19 / L.20)	\$0.00044	\$0.00084	\$0.00084	\$0.00084	\$0.00084	\$0.00084	\$0.00077
22 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>
23 Total Retail Rate - Variable RPS Charge (L.21 * (1+L.22))	\$0.00047	\$0.00089	\$0.00089	\$0.00089	\$0.00089	\$0.00089	
24 Total Retail Rate - Fixed RPS Charge (L.21 * (1+L.22))							\$0.00082

<b>TOTAL DEFAULT SERVICE CHARGE</b>							
25 Total Retail Rate - Residential Variable Default Service Charge (L.7 + L.23)	\$0.13655	\$0.13156	\$0.12052	\$0.12096	\$0.07985	\$0.10022	
26 Total Retail Rate - Residential Fixed Default Service Charge (L.8+L.24)							\$0.11689
27 Total Retail Rate - G2 and OL Variable Default Service Charge (L.15 + L.23)	\$0.10797	\$0.13616	\$0.13693	\$0.09550	\$0.07851	\$0.07276	
28 Total Retail Rate - G2 and OL Fixed Default Service Charge (L.16+L.24)							\$0.10598

Authorized by NHPUC Order No.

in Case No. DE 18-035, dated

## CALCULATION OF THE DEFAULT SERVICE CHARGE

## Non-G1 Class Default Service:

	<u>Jun-18</u>	<u>Jul-18</u>	<u>Aug-18</u>	<u>Sep-18</u>	<u>Oct-18</u>	<u>Nov-18</u>	<u>Total</u>
<b>Power Supply Charge</b>							
<b>Residential Class</b>							
1 Reconciliation	(\$27,118)	(\$34,706)	(\$35,325)	(\$29,033)	(\$26,244)	(\$27,777)	(\$180,203)
2 Total Costs	\$2,385,668	\$3,028,540	\$3,076,592	\$2,669,742	\$2,533,258	\$2,719,343	\$16,413,144
3 Reconciliation plus Total Costs (L.1 + L.2)	\$2,358,550	\$2,993,834	\$3,041,267	\$2,640,709	\$2,507,015	\$2,691,566	\$16,232,941
4 kWh Purchases	<u>32,218,085</u>	<u>41,233,060</u>	<u>41,968,751</u>	<u>34,492,761</u>	<u>31,179,154</u>	<u>33,000,228</u>	<u>214,092,039</u>
5 Total, Before Losses (L.3 / L.4)	\$0.07321	\$0.07261	\$0.07247	\$0.07656	\$0.08041	\$0.08156	\$0.07582
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>
Total Retail Rate – Residential Variable Power Supply Charge (L.5 * (1+L.6))	\$0.07789	\$0.07725	\$0.07710	\$0.08146	\$0.08555	\$0.08678	
7 Total Retail Rate – Residential Fixed Power Supply Charge (L.5 * (1+L.6))							\$0.08067
<b>G2 and OL Class</b>							
9 Reconciliation	(\$12,445)	(\$14,062)	(\$14,063)	(\$12,906)	(\$11,808)	(\$11,651)	(\$76,936)
10 Total Costs	\$943,237	\$1,126,629	\$1,102,469	\$1,062,722	\$983,081	\$1,048,928	\$6,267,065
11 Reconciliation plus Total Costs (L.9 + L.10)	\$930,792	\$1,112,567	\$1,088,406	\$1,049,815	\$971,272	\$1,037,277	\$6,190,130
12 kWh Purchases	<u>14,784,855</u>	<u>16,705,826</u>	<u>16,707,435</u>	<u>15,332,861</u>	<u>14,028,284</u>	<u>13,841,066</u>	<u>91,400,327</u>
13 Total, Before Losses (L.11 / L.12)	\$0.06296	\$0.06660	\$0.06514	\$0.06847	\$0.06924	\$0.07494	\$0.06773
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>
Total Retail Rate – G2 and OL Variable Power Supply Charge (L.13 * (1+L.14))	\$0.06698	\$0.07086	\$0.06931	\$0.07285	\$0.07367	\$0.07974	
15 Total Retail Rate – G2 and OL Fixed Power Supply Charge (L.13 * (1+L.14))							\$0.07206

## Renewable Portfolio Standard (RPS) Charge

17 Reconciliation	(\$123,377)	(\$152,082)	(\$154,017)	(\$130,786)	(\$118,664)	(\$122,952)	(\$801,878)
18 Total Costs	<u>\$199,003</u>	<u>\$245,299</u>	<u>\$248,420</u>	<u>\$210,952</u>	<u>\$191,400</u>	<u>\$198,316</u>	<u>\$1,293,390</u>
19 Reconciliation plus Total Costs (L.17 + L.18)	\$75,626	\$93,217	\$94,403	\$80,167	\$72,737	\$75,363	\$491,513
20 kWh Purchases	<u>47,002,940</u>	<u>57,938,886</u>	<u>58,676,186</u>	<u>49,825,623</u>	<u>45,207,438</u>	<u>46,841,294</u>	<u>305,492,367</u>
21 Total, Before Losses (L.19 / L.20)	\$0.00161	\$0.00161	\$0.00161	\$0.00161	\$0.00161	\$0.00161	\$0.00161
22 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>
23 Total Retail Rate – Variable RPS Charge (L.21 * (1+L.22))	\$0.00171	\$0.00171	\$0.00171	\$0.00171	\$0.00171	\$0.00171	
24 Total Retail Rate – Fixed RPS Charge (L.21 * (1+L.22))							\$0.00171

## TOTAL DEFAULT SERVICE CHARGE

25 Total Retail Rate – Residential Variable Default Service Charge (L.7 + L.23)	\$0.07960	\$0.07896	\$0.07881	\$0.08317	\$0.08726	\$0.08849	
26 Total Retail Rate – Residential Fixed Default Service Charge (L.8 + L.24)							\$0.08238
27 Total Retail Rate – G2 and OL Variable Default Service Charge (L.15 + L.23)	\$0.06869	\$0.07257	\$0.07102	\$0.07456	\$0.07538	\$0.08145	
28 Total Retail Rate – G2 and OL Fixed Default Service Charge (L.16 + L.24)							\$0.07377

Authorized by NHPUC Order No. 26,119 in Case No. DE 18-035, dated April 13, 2018

## CALCULATION OF THE DEFAULT SERVICE CHARGE

**G1 Class Default Service:**

	<u>Dec-18</u>	<u>Jan-19</u>	<u>Feb-19</u>	<u>Mar-19</u>	<u>Apr-19</u>	<u>May-19</u>	<u>Total</u>
<b>Power Supply Charge</b>	As shown on Schedule LSM-4						
1 Reconciliation							\$18,084
2 Total Costs excl. wholesale supplier charge							<u>\$30,930</u>
3 Reconciliation plus Total Costs excl. wholesale supplier charge (L.1 + L.2)							\$49,015
4 kWh Purchases							<u>20,692,676</u>
5 Total, Before Losses (L.3 / L.4)							\$0.00237
6 Losses							<u>4.591%</u>
7 Power Supply Charge excl. wholesale supplier charge (L.5 * (1+L.6)) (2)	\$0.00248	\$0.00248	\$0.00248	\$0.00248	\$0.00248	\$0.00248	\$0.00248
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						
10 Reconciliation	(\$7,175)	(\$7,101)	(\$6,763)	(\$6,786)	(\$6,543)	(\$6,626)	(\$40,995)
11 Total Costs	<u>\$10,653</u>	<u>\$11,990</u>	<u>\$11,420</u>	<u>\$11,459</u>	<u>\$11,048</u>	<u>\$11,188</u>	<u>\$67,757</u>
12 Reconciliation plus Total Costs (L.10+ L.11)	\$3,477	\$4,889	\$4,656	\$4,672	\$4,505	\$4,562	\$26,762
13 kWh Purchases	<u>3,621,892</u>	<u>3,584,257</u>	<u>3,413,843</u>	<u>3,425,473</u>	<u>3,302,634</u>	<u>3,344,576</u>	20,692,676
14 Total, Before Losses (L.12 / L.13)	\$0.00096	\$0.00136	\$0.00136	\$0.00136	\$0.00136	\$0.00136	
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))	\$0.00100	\$0.00143	\$0.00143	\$0.00143	\$0.00143	\$0.00143	
<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. in Case No. DE 18-035, dated

**CALCULATION OF THE DEFAULT SERVICE CHARGE****G1-Class Default Service:**

	<u>Jun 18</u>	<u>Jul 18</u>	<u>Aug 18</u>	<u>Sep 18</u>	<u>Oct 18</u>	<u>Nov 18</u>	<u>Total</u>
<b>Power Supply Charge</b>							
1 Reconciliation							\$20,731
2 Total Costs excl. wholesale supplier charge							<u>\$27,840</u>
3 Reconciliation plus Total Costs excl. wholesale supplier charge (L.1 + L.2)							\$48,571
4 kWh Purchases							<u>18,484,947</u>
5 Total, Before Losses (L.3 / L.4)							\$0.00263
6 Losses							<u>4.591%</u>
7 Power Supply Charge excl. wholesale supplier charge (L.5 * (1+L.6)) (2)	\$0.00275	\$0.00275	\$0.00275	\$0.00275	\$0.00275	\$0.00275	\$0.00275
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>							
10 Reconciliation	(\$7,803)	(\$8,221)	(\$9,060)	(\$8,022)	(\$7,134)	(\$6,755)	(\$46,996)
11 Total Costs	<u>\$13,211</u>	<u>\$13,919</u>	<u>\$15,339</u>	<u>\$13,581</u>	<u>\$12,079</u>	<u>\$11,436</u>	<u>\$79,564</u>
12 Reconciliation plus Total Costs (L.10 + L.11)	\$5,407	\$5,697	\$6,279	\$5,559	\$4,944	\$4,681	\$32,568
13 kWh Purchases	<u>3,069,181</u>	<u>3,233,715</u>	<u>3,563,580</u>	<u>3,155,278</u>	<u>2,806,208</u>	<u>2,656,985</u>	<u>18,484,947</u>
14 Total, Before Losses (L.12 / L.13)	\$0.00176	\$0.00176	\$0.00176	\$0.00176	\$0.00176	\$0.00176	
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))	\$0.00184	\$0.00184	\$0.00184	\$0.00184	\$0.00184	\$0.00184	
<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. 26,119 in Case No. DE 18-035, dated April 13, 2018

	<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><u>Residential Class</u></b>							
1 Reconciliation (1)	(\$31,890)	(\$37,903)	(\$33,564)	(\$29,800)	(\$27,344)	(\$24,822)	(\$185,323)
2 Total Costs (Page 2)	<u>\$5,222,880</u>	<u>\$5,962,587</u>	<u>\$4,836,675</u>	<u>\$4,309,997</u>	<u>\$2,610,072</u>	<u>\$2,974,149</u>	<u>\$25,916,359</u>
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4 kWh Purchases	<u>40,588,549</u>	<u>48,242,083</u>	<u>42,718,930</u>	<u>37,928,196</u>	<u>34,802,731</u>	<u>31,593,044</u>	<u>235,873,533</u>
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7 Total Retail Rate - Residential Variable Power Supply Charge (L.5 * (1+L.6))	\$0.13608	\$0.13067	\$0.11963	\$0.12007	\$0.07896	\$0.09933	
8 Total Retail Rate - Residential Fixed Power Supply Charge (L.5 * (1+L.6))							\$0.11607
<b><u>G2 and OL Class</u></b>							
9 Reconciliation (1)	(\$12,812)	(\$14,509)	(\$13,402)	(\$12,601)	(\$12,541)	(\$12,092)	(\$77,957)
10 Total Costs (Page 2)	<u>\$1,660,574</u>	<u>\$2,362,678</u>	<u>\$2,194,672</u>	<u>\$1,438,979</u>	<u>\$1,177,171</u>	<u>\$1,051,800</u>	<u>\$9,885,875</u>
11 Reconciliation plus Total Costs (L.9 + L.10)	\$1,647,762	\$2,348,169	\$2,181,270	\$1,426,378	\$1,164,630	\$1,039,708	\$9,807,917
12 kWh Purchases	<u>16,309,132</u>	<u>18,470,369</u>	<u>17,060,456</u>	<u>16,041,115</u>	<u>15,964,633</u>	<u>15,393,091</u>	<u>99,238,796</u>
13 Total, Before Losses (L.11 / L.12)	\$0.10103	\$0.12713	\$0.12786	\$0.08892	\$0.07295	\$0.06754	\$0.09883
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))	\$0.10750	\$0.13527	\$0.13604	\$0.09461	\$0.07762	\$0.07187	
16 Total Retail Rate - G2 and OL Fixed Power Supply Charge (L.13 * (1+L.14))							\$0.10516

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(1) As filed in DE 18-035 (April 6, 2018). Power Supply Charge balance as of February 28, 2018, as adjusted, allocated between rate periods (June-November 2018 and December 2018-May 2019) and rate classes (Residential and G2/OL), and then to each month, December 2018 through May 2019, on equal per kWh basis.

Rate period: June-November 2018	Reconciliation per period (\$257,139)
Rate period: December 2018-May 2019	<u>(\$263,280)</u>
Total	(\$520,418)

	December 2018-May 2019		Reconciliation
	<u>kWh purchases</u>	<u>% by class</u>	<u>by class</u>
Residential class	235,873,533	70.39%	(\$185,323)
G2 and OL class	<u>99,238,796</u>	29.61%	<u>(\$77,957)</u>
Total	335,112,329		(\$263,280)

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-18		\$448	7.18%		5.25%			\$2,961	\$0	\$0	\$784				\$6,883,454
Jan-19		\$515	7.18%		5.25%			\$2,961	\$0	\$0	\$784				\$8,325,265
Feb-19		\$604	7.18%		5.25%			\$2,961	\$0	\$0	\$784				\$7,031,347
Mar-19		\$542	7.18%		5.25%			\$2,961	\$0	\$0	\$784				\$5,748,976
Apr-19		\$489	7.18%		5.25%			\$2,961	\$0	\$0	\$784				\$3,787,243
May-19		\$460	7.18%		5.25%			\$2,961	\$0	\$0	\$784				\$4,025,949
Total		\$3,058						\$17,767	\$0	\$0	\$4,704				\$35,802,234

00174

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) = (i) + (ii)	(iv)	(v)	(vi) = (iv) + (v)
Dec-18		\$5,222,880			\$1,660,574
Jan-19		\$5,962,587			\$2,362,678
Feb-19		\$4,836,675			\$2,194,672
Mar-19		\$4,309,997			\$1,438,979
Apr-19		\$2,610,072			\$1,177,171
May-19		\$2,974,149			\$1,051,800
Total		\$25,916,359			\$9,885,875

- (1) Estimates based on monthly average wholesale rate times estimated monthly purchases.
- (2) Number of days lag equals 26.21. Calculated using revenue lag of 64.11 days less cost lead of 37.90 days. Revenue lag per Schedule DTN-1, Page 4 of 23 and cost lead per Schedule DTN-1, Page 22 of 23, DE 18-035 filed April 6, 2018.
- (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-18	40,588,549	16,309,132	56,897,681	71.3%	28.7%
Jan-19	48,242,083	18,470,369	66,712,453	72.3%	27.7%
Feb-19	42,718,930	17,060,456	59,779,387	71.5%	28.5%
Mar-19	37,928,196	16,041,115	53,969,311	70.3%	29.7%
Apr-19	34,802,731	15,964,633	50,767,363	68.6%	31.4%
May-19	31,593,044	15,393,091	46,986,135	67.2%	32.8%
Total	235,873,533	99,238,796	335,112,329		

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

	<b><u>Dec-18</u></b>	<b><u>Jan-19</u></b>	<b><u>Feb-19</u></b>	<b><u>Mar-19</u></b>	<b><u>Apr-19</u></b>	<b><u>May-19</u></b>	<b><u>Total</u></b>
1 Reconciliation (1)	(\$139,400)	(\$163,446)	(\$146,460)	(\$132,225)	(\$124,380)	(\$115,116)	(\$821,028)
2 Total Costs (Page 2)	\$164,629	\$219,531	\$196,717	\$177,599	\$167,064	\$154,623	\$1,080,163
3 Reconciliation plus Total Costs (L.1 + L.2)	\$25,229	\$56,085	\$50,257	\$45,374	\$42,684	\$39,506	\$259,135
4 kWh Purchases	56,897,681	66,712,453	59,779,387	53,969,311	50,767,363	46,986,135	335,112,329
5 Total, Before Losses (L.3 / L.4)	\$0.00044	\$0.00084	\$0.00084	\$0.00084	\$0.00084	\$0.00084	\$0.00077
6 Losses	6.40%	6.40%	6.40%	6.40%	6.40%	6.40%	6.40%
7 Total Retail Rate - Variable RPS Charge (L.5 * (1+L.6))	\$0.00047	\$0.00089	\$0.00089	\$0.00089	\$0.00089	\$0.00089	
8 Total Retail Rate - Fixed RPS Charge (L.5 * (1+L.6))							\$0.00082

(1) As filed in DE 18-035 (April 6, 2018). Renewable Portfolio Standard Charge balance as of February 28, 2018, as adjusted, allocated between rate periods (June-November 2018 and December 2018-May 2019) and then to each month on equal per kWh basis.

Reconciliation amount for June-November 2018	(\$801,878)
Reconciliation amount for December 2018-May 2019	(\$821,028)
Total	(\$1,622,906)

00176

	(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-18	\$170,441	(64.96%)	(\$110,712)	5.25%	(\$5,812)	\$164,629
Jan-19	\$227,281	(64.96%)	(\$147,633)	5.25%	(\$7,751)	\$219,531
Feb-19	\$203,662	(64.96%)	(\$132,291)	5.25%	(\$6,945)	\$196,717
Mar-19	\$183,870	(64.96%)	(\$119,435)	5.25%	(\$6,270)	\$177,599
Apr-19	\$172,963	(64.96%)	(\$112,350)	5.25%	(\$5,898)	\$167,064
May-19	<u>\$160,082</u>	(64.96%)	<u>(\$103,983)</u>	5.25%	<u>(\$5,459)</u>	<u>\$154,623</u>
Total	\$1,118,299		(\$726,404)		(\$38,136)	\$1,080,163

(1) Schedule LSG-4.

(2) Number of days lag equals (237.09). Calculated using revenue lag of 64.11 days less cost lead of 301.20 days. Revenue lag per Schedule DTN-1, Page 4 of 23 and cost lead per Schedule DTN-1, Page 22 of 23, DE 18-035 filed April 6, 2018.



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

00177

	<b>Total December 2018-May 2019</b>
1 Reconciliation (1)	\$18,084
2 Total Costs excl. wholesale supplier charge (Page 2)	<u>\$30,930</u>
3 Reconciliation plus Total Costs excl. wholesale supplier charge (L.1 + L.2)	\$49,015
4 kWh Purchases	<u>20,692,676</u>
5 Total, Before Losses (L.3 / L.4)	\$0.00237
6 Losses	<u>4.591%</u>
7 Power Supply Charge excl. wholesale supplier charge (L.5 * (1+L.6)) (2)	\$0.00248

(1) As filed in DE 18-035 (April 6, 2018). Power Supply Charge balance as of February 28, 2018, as adjusted, allocated between rate periods (June-November 2018 and December 2018-May 2019) on equal per kWh basis.

Reconciliation amount for June-November 2018	\$20,731
Reconciliation amount for December 2018-May 2019	<u>\$18,084</u>
Total	\$38,815

(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.

*Calculation of Working Capital  
Supplier Charges and GIS Support Payments*

(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-18	\$31	3.47%	\$10,761	5.25%	\$565	\$0	\$4,590	\$0	\$0	\$49	\$5,235
Jan-19	\$33	3.47%	\$11,636	5.25%	\$611	\$0	\$4,590	\$0	\$0	\$49	\$5,283
Feb-19	\$32	3.47%	\$10,654	5.25%	\$559	\$0	\$4,590	\$0	\$0	\$49	\$5,231
Mar-19	\$31	3.47%	\$8,990	5.25%	\$472	\$0	\$4,590	\$0	\$0	\$49	\$5,143
Apr-19	\$31	3.47%	\$6,318	5.25%	\$332	\$0	\$4,590	\$0	\$0	\$49	\$5,002
May-19	<u>\$30</u>	3.47%	\$6,966	5.25%	<u>\$366</u>	<u>\$0</u>	<u>\$4,590</u>	<u>\$0</u>	<u>\$0</u>	<u>\$49</u>	<u>\$5,035</u>
Total	\$188				\$2,905	\$0	\$27,543	\$0	\$0	\$296	\$30,930

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

(2) Number of days lag equals 12.67. Calculated using revenue lag of 46.32 days less cost lead of 33.65 days. Revenue lag per Schedule DTN-1, Page 4 of 23 and cost lead per Schedule DTN-1, Page 20 of 23, DE 18-035 filed April 6, 2018.

(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.

00178

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

	<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>
1 Reconciliation (1)	(\$7,175)	(\$7,101)	(\$6,763)	(\$6,786)	(\$6,543)	(\$6,626)	(\$40,995)
2 Total Costs (Page 2)	\$10,653	\$11,990	\$11,420	\$11,459	\$11,048	\$11,188	\$67,757
3 Reconciliation plus Total Costs (L.1 + L.2)	\$3,477	\$4,889	\$4,656	\$4,672	\$4,505	\$4,562	\$26,762
4 kWh Purchases	3,621,892	3,584,257	3,413,843	3,425,473	3,302,634	3,344,576	20,692,676
5 Total, Before Losses (L.3 / L.4)	\$0.00096	\$0.00136	\$0.00136	\$0.00136	\$0.00136	\$0.00136	
6 Losses	4.591%	4.591%	4.591%	4.591%	4.591%	4.591%	
7 Total Retail Rate - Variable RPS Charge (L.5 * (1+L.6))	\$0.00100	\$0.00143	\$0.00143	\$0.00143	\$0.00143	\$0.00143	

(1) As filed in DE 18-035 (April 6, 2018). Renewable Portfolio Standard Charge balance as of February 28, 2018, as adjusted, allocated between rate periods (June-November 2018 and December 2018-May 2019) and then to each month on equal per kWh basis.

Reconciliation amount for June-November 2018	(\$46,996)
Reconciliation amount for December 2018-May 2019	<u>(\$40,995)</u>
Total	(\$87,991)

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

	(a)	<i>Calculation of Working Capital</i>				(f)
	Renewable Energy Credits (1)	(b) Number of Days of Lag / 365 (2)	(c) Working Capital Requirement (a*b)	(d) Prime Rate	(e) Supply Related Working Capital (c * d)	Total Costs (sum a + e)
Dec-18	\$11,042	(67.15%)	(\$7,414)	5.25%	(\$389)	\$10,653
Jan-19	\$12,428	(67.15%)	(\$8,345)	5.25%	(\$438)	\$11,990
Feb-19	\$11,837	(67.15%)	(\$7,948)	5.25%	(\$417)	\$11,420
Mar-19	\$11,877	(67.15%)	(\$7,975)	5.25%	(\$419)	\$11,459
Apr-19	\$11,451	(67.15%)	(\$7,689)	5.25%	(\$404)	\$11,048
May-19	<u>\$11,597</u>	(67.15%)	(\$7,787)	5.25%	<u>(\$409)</u>	<u>\$11,188</u>
Total	\$70,233				(\$2,476)	\$67,757

(1) Schedule LSG-4.

(2) Number of days lag equals (245.08). Calculated using revenue lag of 46.32 days less cost lead of 291.40 days. Revenue lag per Schedule DTN-1, Page 4 of 23 and cost lead per Schedule DTN-1, Page 20 of 23, DE 18-035 filed April 6, 2018.

00180

**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	\$49.83	\$49.83	\$49.83	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	\$12,428	\$7,504	\$19,932	
4	Overhead (Line 3 * Overhead rate)	<u>\$15,659</u>	<u>\$9,456</u>	<u>\$25,114</u>	2
5	<b>Total Labor and Overhead Cost</b>	<u>\$28,086</u>	<u>\$16,960</u>	<u>\$45,046</u>	
<b>Regulatory Services Department:</b>					
1	Average Cost of Labor per Hour	\$61.27	\$61.27	\$61.27	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	\$5,392	\$2,144	\$7,536	
4	Overhead (Line 3 * Overhead rate)	<u>\$6,794</u>	<u>\$2,702</u>	<u>\$9,496</u>	2
5	<b>Total Labor and Overhead Cost</b>	<u>\$12,185</u>	<u>\$4,846</u>	<u>\$17,032</u>	
<b>Accounts Payable Department:</b>					
1	Average Cost of Labor per Hour	\$26.78	\$26.78	\$26.78	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	\$161	\$161	\$321	
4	Overhead (Line 3 * Overhead rate)	<u>\$202</u>	<u>\$202</u>	<u>\$405</u>	2
5	<b>Total Labor and Overhead Cost</b>	<u>\$363</u>	<u>\$363</u>	<u>\$726</u>	
<b>General Accounting Department:</b>					
1	Average Cost of Labor per Hour	\$47.07	\$47.07	\$47.07	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	\$282	\$282	\$565	
4	Overhead (Line 3 * Overhead rate)	<u>\$356</u>	<u>\$356</u>	<u>\$712</u>	2
5	<b>Total Labor and Overhead Cost</b>	<u>\$638</u>	<u>\$638</u>	<u>\$1,277</u>	
<b>Finance Department:</b>					
1	Average Cost of Labor per Hour	\$52.38	\$52.38	\$52.38	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	\$1,362	\$1,362	\$2,724	
4	Overhead (Line 3 * Overhead rate)	<u>\$1,716</u>	<u>\$1,716</u>	<u>\$3,432</u>	2
5	<b>Total Labor and Overhead Cost</b>	<u>\$3,078</u>	<u>\$3,078</u>	<u>\$6,156</u>	
<b>Communications Department:</b>					
1	Average Cost of Labor per Hour	\$48.20	\$48.20	\$48.20	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	\$2,892	\$2,892	\$5,784	
4	Overhead (Line 3 * Overhead rate)	<u>\$3,644</u>	<u>\$3,644</u>	<u>\$7,288</u>	2
5	<b>Total Labor and Overhead Cost</b>	<u>\$6,536</u>	<u>\$6,536</u>	<u>\$13,072</u>	
<b>Business Development Department:</b>					
1	Average Cost of Labor per Hour	\$47.45	\$47.45	\$47.45	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	\$380	\$0	\$380	
4	Overhead (Line 3 * Overhead rate)	<u>\$478</u>	<u>\$0</u>	<u>\$478</u>	2
5	<b>Total Labor and Overhead Cost</b>	<u>\$858</u>	<u>\$0</u>	<u>\$858</u>	
<b>Information Systems Department:</b>					
1	Average Cost of Labor per Hour	\$45.75	\$45.75	\$45.75	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	\$165	\$64	\$229	
4	Overhead (Line 3 * Overhead rate)	<u>\$208</u>	<u>\$81</u>	<u>\$288</u>	2
5	<b>Total Labor and Overhead Cost</b>	<u>\$372</u>	<u>\$145</u>	<u>\$517</u>	
<b>Customer Service Department:</b>					
1	Average Cost of Labor per Hour	\$27.36	\$27.36	\$27.36	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	\$1,313	\$1,313	\$2,627	
4	Overhead (Line 3 * Overhead rate)	<u>\$1,655</u>	<u>\$1,655</u>	<u>\$3,309</u>	2
5	<b>Total Labor and Overhead Cost</b>	<u>\$2,968</u>	<u>\$2,968</u>	<u>\$5,936</u>	
<b>TOTAL ANNUAL COST</b>		<u>\$55,085</u>	<u>\$35,534</u>	<u>\$90,619</u>	

Notes:

- 1) See Schedule LSM-6, Page 2 of 2.
- 2) Based on Unitil Service Corp. overhead rate of 126% (2017 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	8.00	\$829,128			8.00	\$829,128	\$49.83
Regulatory / Legal	9.00	\$1,147,027			9.00	\$1,147,027	\$61.27
Accounts Payable	5.00	\$278,556			5.00	\$278,556	\$26.78
General Accounting	19.30 (4)	\$1,928,027	1.0	\$59,369	20.30	\$1,987,396	\$47.07
Finance	6.00	\$653,763			6.00	\$653,763	\$52.38
Communications	9.00	\$902,320			9.00	\$902,320	\$48.20
Customer Energy Solutions (formerly Business Services)	25.00	\$2,482,771	1.0	\$83,551	26.00	\$2,566,322	\$47.45
Information Technology	24.00	\$2,325,586	4.0	\$338,642	28.00	\$2,664,228	\$45.75
Customer Service	68.00	\$3,870,796	4.0	\$226,347	72.00	\$4,097,143	\$27.36

(1) Annualized salaries of active employees as of September 1, 2018.

(2) Salary range midpoint of open positions as of September 1, 2018.

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

(4) Includes two part-time employees.

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

**Residential Rate D 650 kWh Bill**

Rate Components	9/1/2018	12/1/2018	Difference	Current Bill*	As Revised Bill*	Difference	%
	Current Rate	As Revised					Difference to Total Bill
Customer Charge	\$16.12	\$16.12	\$0.00	\$16.12	\$16.12	\$0.00	0.0%
	<b><u>\$/kWh</u></b>	<b><u>\$/kWh</u></b>					
Distribution Charge	\$0.03537	\$0.03537	\$0.00000	\$22.99	\$22.99	\$0.00	0.0%
External Delivery Charge	\$0.02389	\$0.02389	\$0.00000	\$15.53	\$15.53	\$0.00	0.0%
Stranded Cost Charge	(\$0.00101)	(\$0.00101)	\$0.00000	(\$0.66)	(\$0.66)	\$0.00	0.0%
Storm Recovery Adj.	\$0.00133	\$0.00133	\$0.00000	\$0.86	\$0.86	\$0.00	0.0%
System Benefits Charge	\$0.00456	\$0.00456	\$0.00000	\$2.96	\$2.96	\$0.00	0.0%
Default Service Charge	<u>\$0.08238</u>	<u>\$0.11689</u>	<u>\$0.03451</u>	<u>\$53.55</u>	<u>\$75.98</u>	<u>\$22.43</u>	<u>20.1%</u>
Total kWh Charges	\$0.14652	\$0.18103	\$0.03451				
<b>Total Bill</b>				\$111.36	\$133.79	\$22.43	20.1%

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

Rate Components	9/1/2018	12/1/2018	Difference	Current Bill*	As Revised Bill*	Difference	%
	Current Rate	As Revised					Difference to Total Bill
Customer Charge	\$29.02	\$29.02	\$0.00	\$29.02	\$29.02	\$0.00	0.0%
	<b><u>All kW</u></b>	<b><u>All kW</u></b>					
Distribution Charge	\$10.45	\$10.45	\$0.00	\$114.95	\$114.95	\$0.00	0.0%
Stranded Cost Charge	<u>(\$0.21)</u>	<u>(\$0.21)</u>	<u>\$0.00</u>	<u>(\$2.31)</u>	<u>(\$2.31)</u>	<u>\$0.00</u>	<u>0.0%</u>
Total kW Charges	\$10.24	\$10.24	\$0.00	\$112.64	\$112.64	\$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	\$0.02389	\$0.02389	\$0.00000	\$66.89	\$66.89	\$0.00	0.0%
Stranded Cost Charge	(\$0.00021)	(\$0.00021)	\$0.00000	(\$0.59)	(\$0.59)	\$0.00	0.0%
Storm Recovery Adj.	\$0.00133	\$0.00133	\$0.00000	\$3.72	\$3.72	\$0.00	0.0%
System Benefits Charge	\$0.00456	\$0.00456	\$0.00000	\$12.77	\$12.77	\$0.00	0.0%
Default Service Charge	<u>\$0.07377</u>	<u>\$0.10598</u>	<u>\$0.03221</u>	<u>\$206.56</u>	<u>\$296.74</u>	<u>\$90.19</u>	<u>20.9%</u>
Total kWh Charges	\$0.10334	\$0.13555	\$0.03221	\$289.35	\$379.54	\$90.19	20.9%
<b>Total Bill</b>				\$431.01	\$521.20	\$90.19	20.9%

\* Impacts do not include the Electricity Consumption Tax.

**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>							
<u>Rate Components</u>	<u>9/1/2018</u>	<u>12/1/2018</u>	<u>Difference</u>	<u>Current Bill*</u>	<u>As Revised Bill*</u>	<u>Difference</u>	<u>%</u>
	<u>Current Rate</u>	<u>As Revised</u>					<u>Difference to Total Bill</u>
Customer Charge	\$9.67	\$9.67	\$0.00	\$9.67	\$9.67	\$0.00	0.0%
	<u>\$/kWh</u>	<u>\$/kWh</u>					
Distribution Charge	\$0.03185	\$0.03185	\$0.00000	\$52.87	\$52.87	\$0.00	0.0%
External Delivery Charge	\$0.02389	\$0.02389	\$0.00000	\$39.66	\$39.66	\$0.00	0.0%
Stranded Cost Charge	(\$0.00101)	(\$0.00101)	\$0.00000	(\$1.68)	(\$1.68)	\$0.00	0.0%
Storm Recovery Adj.	\$0.00133	\$0.00133	\$0.00000	\$2.21	\$2.21	\$0.00	0.0%
System Benefits Charge	\$0.00456	\$0.00456	\$0.00000	\$7.57	\$7.57	\$0.00	0.0%
Default Service Charge	<u>\$0.07377</u>	<u>\$0.10598</u>	<u>\$0.03221</u>	<u>\$122.46</u>	<u>\$175.93</u>	<u>\$53.47</u>	<u>23.0%</u>
Total kWh Charges	\$0.13439	\$0.16660	\$0.03221	\$223.09	\$276.56	\$53.47	23.0%
<b>Total Bill</b>				<b>\$232.76</b>	<b>\$286.23</b>	<b>\$53.47</b>	<b>23.0%</b>

<b><u>Regular General G2 kWh Meter 115 kWh Typical Bill</u></b>							
<u>Rate Components</u>	<u>9/1/2018</u>	<u>12/1/2018</u>	<u>Difference</u>	<u>Current Bill*</u>	<u>As Revised Bill*</u>	<u>Difference</u>	<u>%</u>
	<u>Current Rate</u>	<u>As Revised</u>					<u>Difference to Total Bill</u>
Customer Charge	\$18.27	\$18.27	\$0.00	\$18.27	\$18.27	\$0.00	0.0%
	<u>\$/kWh</u>	<u>\$/kWh</u>					
Distribution Charge	\$0.00878	\$0.00878	\$0.00000	\$1.01	\$1.01	\$0.00	0.0%
External Delivery Charge	\$0.02389	\$0.02389	\$0.00000	\$2.75	\$2.75	\$0.00	0.0%
Stranded Cost Charge	(\$0.00101)	(\$0.00101)	\$0.00000	(\$0.12)	(\$0.12)	\$0.00	0.0%
Storm Recovery Adj.	\$0.00133	\$0.00133	\$0.00000	\$0.15	\$0.15	\$0.00	0.0%
System Benefits Charge	\$0.00456	\$0.00456	\$0.00000	\$0.52	\$0.52	\$0.00	0.0%
Default Service Charge	<u>\$0.07377</u>	<u>\$0.10598</u>	<u>\$0.03221</u>	<u>\$8.48</u>	<u>\$12.19</u>	<u>\$3.70</u>	<u>11.9%</u>
Total kWh Charges	\$0.11132	\$0.14353	\$0.03221	\$12.80	\$16.51	\$3.70	11.9%
<b>Total Bill</b>				<b>\$31.07</b>	<b>\$34.78</b>	<b>\$3.70</b>	<b>11.9%</b>

\* Impacts do not include the Electricity Consumption Tax.



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

**Residential Rate D 655 kWh Bill - Mean Use\***

	9/1/2018	12/1/2018					%
<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	\$16.12	\$16.12	\$0.00	\$16.12	\$16.12	\$0.00	0.0%
	<b><u>\$/kWh</u></b>	<b><u>\$/kWh</u></b>					
Distribution Charge	\$0.03537	\$0.03537	\$0.00000	\$23.17	\$23.17	\$0.00	0.0%
External Delivery Charge	\$0.02389	\$0.02389	\$0.00000	\$15.65	\$15.65	\$0.00	0.0%
Stranded Cost Charge	(\$0.00101)	(\$0.00101)	\$0.00000	(\$0.66)	(\$0.66)	\$0.00	0.0%
Storm Recovery Adj.	\$0.00133	\$0.00133	\$0.00000	\$0.87	\$0.87	\$0.00	0.0%
System Benefits Charge	\$0.00456	\$0.00456	\$0.00000	\$2.99	\$2.99	\$0.00	0.0%
Default Service Charge	<u>\$0.08238</u>	<u>\$0.11689</u>	<u>\$0.03451</u>	<u>\$53.96</u>	<u>\$76.56</u>	<u>\$22.60</u>	<u>20.2%</u>
Total kWh Charges	\$0.14652	\$0.18103	\$0.03451				
Total Bill				\$112.09	\$134.69	\$22.60	20.2%

**Residential Rate D 533 kWh Bill - Median Use\***

	9/1/2018	12/1/2018					%
<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	\$16.12	\$16.12	\$0.00	\$16.12	\$16.12	\$0.00	0.0%
	<b><u>\$/kWh</u></b>	<b><u>\$/kWh</u></b>					
Distribution Charge	\$0.03537	\$0.03537	\$0.00000	\$18.85	\$18.85	\$0.00	0.0%
External Delivery Charge	\$0.02389	\$0.02389	\$0.00000	\$12.73	\$12.73	\$0.00	0.0%
Stranded Cost Charge	(\$0.00101)	(\$0.00101)	\$0.00000	(\$0.54)	(\$0.54)	\$0.00	0.0%
Storm Recovery Adj.	\$0.00133	\$0.00133	\$0.00000	\$0.71	\$0.71	\$0.00	0.0%
System Benefits Charge	\$0.00456	\$0.00456	\$0.00000	\$2.43	\$2.43	\$0.00	0.0%
Default Service Charge	<u>\$0.08238</u>	<u>\$0.11689</u>	<u>\$0.03451</u>	<u>\$43.91</u>	<u>\$62.30</u>	<u>\$18.39</u>	<u>19.5%</u>
Total kWh Charges	\$0.14652	\$0.18103	\$0.03451				
Total Bill				\$94.22	\$112.61	\$18.39	19.5%

\* Based on billing period July 2017 through March 2018.

\*\* Impacts do not include the Electricity Consumption Tax.

Unitil Energy Systems, Inc.  
Average Class Bill Impacts  
Due to Proposed Default Service Rate Changes Effective December 1, 2018

(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	\$17,181,695	\$85,607,903	\$102,789,598	\$17,181,695	20.1%
General Service	131,872	354,161,409	1,348,556	\$11,407,539	\$54,270,048	\$65,677,587	\$11,407,539	21.0%
Outdoor Lighting	110,850	8,241,454	n/a	\$265,457	\$2,708,559	\$2,974,016	\$265,457	9.8%
Total	1,028,028	860,278,690		\$28,854,691	\$142,586,511	\$171,441,202	\$28,854,691	20.2%

(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, 2018 vs. December 1, 2018**  
**Impacts do NOT include the Electricity Consumption Tax**  
**Impact on D Rate Customers**

<u>Average kWh</u>	<u>Total Bill Using Rates 9/1/2018</u>	<u>Total Bill Using Rates 12/1/2018</u>	<u>Total Difference</u>	<u>% Total Difference</u>
125	\$34.44	\$38.75	\$4.31	12.5%
150	\$38.10	\$43.27	\$5.18	13.6%
200	\$45.42	\$52.33	\$6.90	15.2%
250	\$52.75	\$61.38	\$8.63	16.4%
300	\$60.08	\$70.43	\$10.35	17.2%
350	\$67.40	\$79.48	\$12.08	17.9%
400	\$74.73	\$88.53	\$13.80	18.5%
450	\$82.05	\$97.58	\$15.53	18.9%
500	\$89.38	\$106.64	\$17.26	19.3%
525	\$93.04	\$111.16	\$18.12	19.5%
550	\$96.71	\$115.69	\$18.98	19.6%
575	\$100.37	\$120.21	\$19.84	19.8%
600	\$104.03	\$124.74	\$20.71	19.9%
625	\$107.70	\$129.26	\$21.57	20.0%
650	\$111.36	\$133.79	\$22.43	20.1%
675	\$115.02	\$138.32	\$23.29	20.3%
700	\$118.68	\$142.84	\$24.16	20.4%
725	\$122.35	\$147.37	\$25.02	20.4%
750	\$126.01	\$151.89	\$25.88	20.5%
775	\$129.67	\$156.42	\$26.75	20.6%
825	\$137.00	\$165.47	\$28.47	20.8%
925	\$151.65	\$183.57	\$31.92	21.0%
1,000	\$162.64	\$197.15	\$34.51	21.2%
1,250	\$199.27	\$242.41	\$43.14	21.6%
1,500	\$235.90	\$287.67	\$51.77	21.9%
2,000	\$309.16	\$378.18	\$69.02	22.3%
3,500	\$528.94	\$649.73	\$120.79	22.8%
5,000	\$748.72	\$921.27	\$172.55	23.0%

	<u>Rates - Effective September 1, 2018</u>	<u>Rates - Proposed December 1, 2018</u>	<u>Difference</u>
Customer Charge	\$16.12	\$16.12	\$0.00
	<u>kWh</u>	<u>kWh</u>	<u>kWh</u>
Distribution Charge:	\$0.03537	\$0.03537	\$0.00000
External Delivery Charge	\$0.02389	\$0.02389	\$0.00000
Stranded Cost Charge	(\$0.00101)	(\$0.00101)	\$0.00000
Storm Recovery Adjustment Factor	\$0.00133	\$0.00133	\$0.00000
System Benefits Charge	\$0.00456	\$0.00456	\$0.00000
Default Service Charge	<u>\$0.08238</u>	<u>\$0.11689</u>	<u>\$0.03451</u>
<b>TOTAL</b>	<b>\$0.14652</b>	<b>\$0.18103</b>	<b>\$0.03451</b>

**Unitil Energy Systems, Inc.**  
**Typical Bill Impacts - September 1, 2018 vs. December 1, 2018**  
**Impacts do NOT include the Electricity Consumption Tax**  
**Impact on G2 Rate Customers**

<u>Load Factor</u>	<u>Average Monthly kW</u>	<u>Average Monthly kWh</u>	<u>Total Bill Using Rates 9/1/2018</u>	<u>Total Bill Using Rates 12/1/2018</u>	<u>Total Difference</u>	<u>% Total Difference</u>
20%	5	730	\$155.66	\$179.17	\$23.51	15.1%
20%	10	1,460	\$282.30	\$329.32	\$47.03	16.7%
20%	15	2,190	\$408.93	\$479.47	\$70.54	17.2%
20%	25	3,650	\$662.21	\$779.78	\$117.57	17.8%
20%	50	7,300	\$1,295.40	\$1,530.54	\$235.13	18.2%
20%	75	10,950	\$1,928.59	\$2,281.29	\$352.70	18.3%
20%	100	14,600	\$2,561.78	\$3,032.05	\$470.27	18.4%
20%	150	21,900	\$3,828.17	\$4,533.57	\$705.40	18.4%
36%	5	1,314	\$216.01	\$258.33	\$42.32	19.6%
36%	10	2,628	\$403.00	\$487.65	\$84.65	21.0%
36%	15	3,942	\$589.99	\$716.96	\$126.97	21.5%
36%	25	6,570	\$963.96	\$1,175.58	\$211.62	22.0%
36%	50	13,140	\$1,898.91	\$2,322.15	\$423.24	22.3%
36%	75	19,710	\$2,833.85	\$3,468.71	\$634.86	22.4%
36%	100	26,280	\$3,768.80	\$4,615.27	\$846.48	22.5%
36%	150	39,420	\$5,638.68	\$6,908.40	\$1,269.72	22.5%
50%	5	1,825	\$268.82	\$327.60	\$58.78	21.9%
50%	10	3,650	\$508.61	\$626.18	\$117.57	23.1%
50%	15	5,475	\$748.41	\$924.76	\$176.35	23.6%
50%	25	9,125	\$1,228.00	\$1,521.91	\$293.92	23.9%
50%	50	18,250	\$2,426.98	\$3,014.81	\$587.83	24.2%
50%	75	27,375	\$3,625.95	\$4,507.70	\$881.75	24.3%
50%	100	36,500	\$4,824.93	\$6,000.60	\$1,175.67	24.4%
50%	150	54,750	\$7,222.89	\$8,986.38	\$1,763.50	24.4%
		<u>Rates - Effective September 1,</u>	<u>Rates - Proposed December 1, 2018</u>	<u>Difference</u>		
Customer Charge		\$29.02	\$29.02	\$0.00		
		<u>All kW</u>	<u>All kW</u>	<u>All kW</u>		
Distribution Charge		\$10.45	\$10.45	\$0.00		
Stranded Cost Charge		(\$0.21)	(\$0.21)	\$0.00		
<b>TOTAL</b>		<b>\$10.24</b>	<b>\$10.24</b>	<b>\$0.00</b>		
		<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	\$0.00133	\$0.00000		
System Benefits Charge		\$0.00456	\$0.00456	\$0.00000		
Default Service Charge		\$0.07377	\$0.10598	\$0.03221		
<b>TOTAL</b>		<b>\$0.10334</b>	<b>\$0.13555</b>	<b>\$0.03221</b>		

<b>Unitil Energy Systems, Inc.</b> <b>Typical Bill Impacts - September 1, 2018 vs. December 1, 2018</b> <b>Impacts do NOT include the Electricity Consumption Tax</b> <b>Impact on G2 kWh Meter Rate Customers</b>																																												
<b>Average Monthly kWh</b>	<b>Total Bill Using Rates 9/1/2018</b>	<b>Total Bill Using Rates 12/1/2018</b>	<b>Total Difference</b>	<b>% Total Difference</b>																																								
15	\$19.94	\$20.42	\$0.48	2.4%																																								
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Unitil Energy Systems, Inc. Typical Bill Impacts - September 1, 2018 vs. December 1, 2018 Impacts do NOT include the Electricity Consumption Tax Impact on G2 QRWH and SH Rate Customers				
<u>Average kWh</u>	<u>Total Bill Using Rates 9/1/2018</u>	<u>Total Bill Using Rates 12/1/2018</u>	<u>Total Difference</u>	<u>% Total Difference</u>
100	\$23.11	\$26.33	\$3.22	13.9%
200	\$36.55	\$42.99	\$6.44	17.6%
300	\$49.99	\$59.65	\$9.66	19.3%
400	\$63.43	\$76.31	\$12.88	20.3%
500	\$76.87	\$92.97	\$16.11	21.0%
750	\$110.46	\$134.62	\$24.16	21.9%
1,000	\$144.06	\$176.27	\$32.21	22.4%
1,500	\$211.26	\$259.57	\$48.32	22.9%
2,000	\$278.45	\$342.87	\$64.42	23.1%
2,500	\$345.65	\$426.17	\$80.53	23.3%
		<u>Rates - Effective September 1, 2018</u>	<u>Rates - Proposed December 1, 2018</u>	<u>Difference</u>
Customer Charge		<b>\$9.67</b>	<b>\$9.67</b>	<b>\$0.00</b>
		<u>All kWh</u>	<u>All kWh</u>	<u>All kWh</u>
Distribution Charge		\$0.03185	\$0.03185	\$0.00000
External Delivery Charge		\$0.02389	\$0.02389	\$0.00000
Stranded Cost Charge		(\$0.00101)	(\$0.00101)	\$0.00000
Storm Recovery Adjustment Factor		\$0.00133	\$0.00133	\$0.00000
System Benefits Charge		\$0.00456	\$0.00456	\$0.00000
Default Service Charge		<u>\$0.07377</u>	<u>\$0.10598</u>	<u>\$0.03221</u>
<b>TOTAL</b>		<b>\$0.13439</b>	<b>\$0.16660</b>	<b>\$0.03221</b>

Unitil Energy Systems, Inc. Typical Bill Impacts - September 1, 2018 vs. December 1, 2018 Impacts do NOT include the Electricity Consumption Tax Impact on OL Rate Customers *								
	Nominal Watts	Lumens	Type	Average Monthly kWh	Total Bill Using Rates 9/1/2018	Total Bill Using Rates 12/1/2018	Total Difference	% Total Difference
<u>Mercury Vapor:</u>								
1	100	3,500	ST	40	\$17.30	\$18.59	\$1.29	7.4%
2	175	7,000	ST	67	\$22.53	\$24.69	\$2.16	9.6%
3	250	11,000	ST	95	\$27.49	\$30.55	\$3.06	11.1%
4	400	20,000	ST	154	\$36.92	\$41.88	\$4.96	13.4%
5	1,000	60,000	ST	388	\$81.74	\$94.23	\$12.50	15.3%
6	250	11,000	FL	95	\$28.64	\$31.70	\$3.06	10.7%
7	400	20,000	FL	154	\$38.41	\$43.37	\$4.96	12.9%
8	1,000	60,000	FL	388	\$77.27	\$89.76	\$12.50	16.2%
9	100	3,500	PB	40	\$17.43	\$18.72	\$1.29	7.4%
10	175	7,000	PB	67	\$21.66	\$23.82	\$2.16	10.0%
<u>High Pressure Sodium:</u>								
11	50	4,000	ST	21	\$15.59	\$16.27	\$0.68	4.3%
12	100	9,500	ST	43	\$19.54	\$20.92	\$1.39	7.1%
13	150	16,000	ST	60	\$21.34	\$23.28	\$1.93	9.1%
14	250	30,000	ST	101	\$29.39	\$32.64	\$3.25	11.1%
15	400	50,000	ST	161	\$40.49	\$45.67	\$5.19	12.8%
16	1,000	140,000	ST	398	\$82.23	\$95.05	\$12.82	15.6%
17	150	16,000	FL	60	\$23.66	\$25.60	\$1.93	8.2%
18	250	30,000	FL	101	\$31.00	\$34.25	\$3.25	10.5%
19	400	50,000	FL	161	\$39.96	\$45.14	\$5.19	13.0%
20	1,000	140,000	FL	398	\$82.59	\$95.41	\$12.82	15.5%
21	50	4,000	PB	21	\$14.59	\$15.27	\$0.68	4.6%
22	100	95,000	PB	43	\$18.37	\$19.75	\$1.39	7.5%
<u>Metal Halide:</u>								
23	175	8,800	ST	74	\$27.38	\$29.76	\$2.38	8.7%
24	250	13,500	ST	102	\$31.98	\$35.26	\$3.29	10.3%
25	400	23,500	ST	158	\$38.52	\$43.61	\$5.09	13.2%
26	175	8,800	FL	74	\$30.46	\$32.84	\$2.38	7.8%
27	250	13,500	FL	102	\$35.15	\$38.43	\$3.29	9.3%
28	400	23,500	FL	158	\$40.93	\$46.02	\$5.09	12.4%
29	1,000	86,000	FL	374	\$70.38	\$82.43	\$12.05	17.1%
30	175	8,800	PB	74	\$26.11	\$28.49	\$2.38	9.1%
31	250	13,500	PB	102	\$30.15	\$33.43	\$3.29	10.9%
32	400	23,500	PB	158				
Luminaire Charges For Year Round Service:								
Rates - Effective September 1, 2018								
		Mercury Vapor Rate/Mo.		Sodium Vapor Rate/Mo.		Metal Halide Rate/Mo.		
Customer Charge	\$0.00	1	\$13.20	11	\$13.44	23	\$19.79	
		2	\$15.66	12	\$15.13	24	\$21.52	
	<u>All kWh</u>	3	\$17.75	13	\$15.19	25	\$22.32	
Distribution Charge	\$0.00000	4	\$21.13	14	\$19.03	26	\$22.87	
External Delivery Charge	\$0.02389	5	\$41.95	15	\$23.98	27	\$24.69	
Stranded Cost Charge	(\$0.00101)	6	\$18.90	16	\$41.42	28	\$24.73	
Storm Recovery Adj. Factor	\$0.00133	7	\$22.62	17	\$17.51	29	\$32.03	
System Benefits Charge	\$0.00456	8	\$37.48	18	\$20.64	30	\$18.52	
Default Service Charge	<u>\$0.07377</u>	9	\$13.33	19	\$23.45	31	\$19.69	
		10	\$14.79	20	\$41.78	32	\$21.05	
<b>TOTAL</b>	<b>\$0.10254</b>			21	\$12.44			
				22	\$13.96			
Rates - Proposed December 1, 2018								
		Mercury Vapor Rate/Mo.		Sodium Vapor Rate/Mo.		Metal Halide Rate/Mo.		
Customer Charge	\$0.00	1	\$13.20	11	\$13.44	23	\$19.79	
		2	\$15.66	12	\$15.13	24	\$21.52	
	<u>All kWh</u>	3	\$17.75	13	\$15.19	25	\$22.32	
Distribution Charge	\$0.00000	4	\$21.13	14	\$19.03	26	\$22.87	
External Delivery Charge	\$0.02389	5	\$41.95	15	\$23.98	27	\$24.69	
Stranded Cost Charge	(\$0.00101)	6	\$18.90	16	\$41.42	28	\$24.73	
Storm Recovery Adj. Factor	\$0.00133	7	\$22.62	17	\$17.51	29	\$32.03	
System Benefits Charge	\$0.00456	8	\$37.48	18	\$20.64	30	\$18.52	
Default Service Charge	<u>\$0.10598</u>	9	\$13.33	19	\$23.45	31	\$19.69	
		10	\$14.79	20	\$41.78	32	\$21.05	
<b>TOTAL</b>	<b>\$0.13475</b>			21	\$12.44			
				22	\$13.96			
	Difference	Mercury Vapor-Difference		Sodium Vapor-Difference		Metal Halide-Difference		
Customer Charge	\$0.00	1	\$0.00	11	\$0.00	23	\$0.00	
		2	\$0.00	12	\$0.00	24	\$0.00	
	<u>All kWh</u>	3	\$0.00	13	\$0.00	25	\$0.00	
Distribution Charge	\$0.00000	4	\$0.00	14	\$0.00	26	\$0.00	
External Delivery Charge	\$0.00000	5	\$0.00	15	\$0.00	27	\$0.00	
Stranded Cost Charge	\$0.00000	6	\$0.00	16	\$0.00	28	\$0.00	
Storm Recovery Adj. Factor	\$0.00000	7	\$0.00	17	\$0.00	29	\$0.00	
System Benefits Charge	\$0.00000	8	\$0.00	18	\$0.00	30	\$0.00	
Default Service Charge	<u>\$0.03221</u>	9	\$0.00	19	\$0.00	31	\$0.00	
		10	\$0.00	20	\$0.00	32	\$0.00	
<b>TOTAL</b>	<b>\$0.03221</b>			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	12/1/2017	12/1/2018					%
	<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	\$15.24	\$16.12	\$0.88	\$15.24	\$16.12	\$0.88	0.7%
	<b><u>\$/kWh</u></b>	<b><u>\$/kWh</u></b>					
Distribution Charge	\$0.03682	\$0.03537	(\$0.00145)	\$23.93	\$22.99	(\$0.94)	(0.8%)
External Delivery Charge	\$0.02637	\$0.02389	(\$0.00248)	\$17.14	\$15.53	(\$1.61)	(1.3%)
Stranded Cost Charge	(\$0.00057)	(\$0.00101)	(\$0.00044)	(\$0.37)	(\$0.66)	(\$0.29)	(0.2%)
Storm Recovery Adj.	\$0.00139	\$0.00133	(\$0.00006)	\$0.90	\$0.86	(\$0.04)	(0.0%)
System Benefits Charge	\$0.00357	\$0.00456	\$0.00099	\$2.32	\$2.96	\$0.64	0.5%
Default Service Charge	<u>\$0.10034</u>	<u>\$0.11689</u>	<u>\$0.01655</u>	<u>\$65.22</u>	<u>\$75.98</u>	<u>\$10.76</u>	<u>8.6%</u>
Total kWh Charges	\$0.16792	\$0.18103	\$0.01311				
Total Bill				\$124.39	\$133.79	\$9.40	7.6%

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

Rate Components	12/1/2017	12/1/2018					%
	<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	\$27.43	\$29.02	\$1.59	\$27.43	\$29.02	\$1.59	0.3%
	<b><u>All kW</u></b>	<b><u>All kW</u></b>					
Distribution Charge	\$10.35	\$10.45	\$0.10	\$113.85	\$114.95	\$1.10	0.2%
Stranded Cost Charge	<u>(\$0.11)</u>	<u>(\$0.21)</u>	<u>(\$0.10)</u>	<u>(\$1.21)</u>	<u>(\$2.31)</u>	<u>(\$1.10)</u>	<u>(0.2%)</u>
Total kW Charges	\$10.24	\$10.24	(\$0.00)	\$112.64	\$112.64	(\$0.00)	(0.0%)
	<b><u>\$/kWh</u></b>	<b><u>\$/kWh</u></b>					
Distribution Charge	\$0.00116	\$0.00000	(\$0.00116)	\$3.25	\$0.00	(\$3.25)	(0.7%)
External Delivery Charge	\$0.02637	\$0.02389	(\$0.00248)	\$73.84	\$66.89	(\$6.94)	(1.4%)
Stranded Cost Charge	(\$0.00011)	(\$0.00021)	(\$0.00010)	(\$0.31)	(\$0.59)	(\$0.28)	(0.1%)
Storm Recovery Adj.	\$0.00139	\$0.00133	(\$0.00006)	\$3.89	\$3.72	(\$0.17)	(0.0%)
System Benefits Charge	\$0.00357	\$0.00456	\$0.00099	\$10.00	\$12.77	\$2.77	0.6%
Default Service Charge	<u>\$0.09381</u>	<u>\$0.10598</u>	<u>\$0.01217</u>	<u>\$262.67</u>	<u>\$296.74</u>	<u>\$34.08</u>	<u>6.9%</u>
Total kWh Charges	\$0.12619	\$0.13555	\$0.00936	\$353.33	\$379.54	\$26.21	5.3%
Total Bill				\$493.40	\$521.20	\$27.80	5.6%

\* 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>							
	12/1/2017	12/1/2018					%
<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	\$9.14	\$9.67	\$0.53	\$9.14	\$9.67	\$0.53	0.2%
	<u>\$/kWh</u>	<u>\$/kWh</u>					
Distribution Charge	\$0.03265	\$0.03185	(\$0.00080)	\$54.20	\$52.87	(\$1.33)	(0.5%)
External Delivery Charge	\$0.02637	\$0.02389	(\$0.00248)	\$43.77	\$39.66	(\$4.12)	(1.5%)
Stranded Cost Charge	(\$0.00057)	(\$0.00101)	(\$0.00044)	(\$0.95)	(\$1.68)	(\$0.73)	(0.3%)
Storm Recovery Adj.	\$0.00139	\$0.00133	(\$0.00006)	\$2.31	\$2.21	(\$0.10)	(0.0%)
System Benefits Charge	\$0.00357	\$0.00456	\$0.00099	\$5.93	\$7.57	\$1.64	0.6%
Default Service Charge	<u>\$0.09381</u>	<u>\$0.10598</u>	<u>\$0.01217</u>	<u>\$155.72</u>	<u>\$175.93</u>	<u>\$20.20</u>	<u>7.5%</u>
Total kWh Charges	\$0.15722	\$0.16660	\$0.00938	\$260.99	\$276.56	\$15.57	5.8%
<b>Total Bill</b>				<b>\$270.13</b>	<b>\$286.23</b>	<b>\$16.10</b>	<b>6.0%</b>

<b>Regular General G2 kWh Meter 115 kWh Typical Bill</b>							
	12/1/2017	12/1/2018					%
<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	\$17.27	\$18.27	\$1.00	\$17.27	\$18.27	\$1.00	3.0%
	<u>\$/kWh</u>	<u>\$/kWh</u>					
Distribution Charge	\$0.01556	\$0.00878	(\$0.00678)	\$1.79	\$1.01	(\$0.78)	(2.3%)
External Delivery Charge	\$0.02637	\$0.02389	(\$0.00248)	\$3.03	\$2.75	(\$0.29)	(0.9%)
Stranded Cost Charge	(\$0.00057)	(\$0.00101)	(\$0.00044)	(\$0.07)	(\$0.12)	(\$0.05)	(0.2%)
Storm Recovery Adj.	\$0.00139	\$0.00133	(\$0.00006)	\$0.16	\$0.15	(\$0.01)	(0.0%)
System Benefits Charge	\$0.00357	\$0.00456	\$0.00099	\$0.41	\$0.52	\$0.11	0.3%
Default Service Charge	<u>\$0.09381</u>	<u>\$0.10598</u>	<u>\$0.01217</u>	<u>\$10.79</u>	<u>\$12.19</u>	<u>\$1.40</u>	<u>4.2%</u>
Total kWh Charges	\$0.14013	\$0.14353	\$0.00340	\$16.11	\$16.51	\$0.39	1.2%
<b>Total Bill</b>				<b>\$33.38</b>	<b>\$34.78</b>	<b>\$1.39</b>	<b>4.2%</b>

\* Impacts do not include the Electricity Consumption Tax.

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