## SCHEDULE LSM-1

## STRANDED COST CHARGE

## UNITIL ENERGY SYSTEMS. INC. CALCULATION OF THE STRANDED COST CHARGE Effective August 1, 2011

| Uniform per kWh Charge |  |
| :---: | :---: |
| 1. (Over)/under Recovery - Beginning Balance August 1, 2011 | $(\$ 259,508)$ |
| 2. Estimated Total Costs (August 2011 - July 2012) | \$207,967 |
| 3. Estimated Interest (August 2011 - July 2012) | (\$4,393) |
| 4. Costs to be Recovered (L. $1+\mathrm{L} .2+\mathrm{L} .3$ ) | $(\$ 55,934)$ |
| 5. Estimated Calendar Month Deliveries in kWh (August 2011 - July 2012) (1) | 1,253,284,906 |
| 6. Stranded Cost Charge (\$/kWh) (L. 4 / L.5) | (\$0.00004) |
| Development of Class Stranded Cost Charge |  |
| Class D, D - Controlled Off Peak Water Heating, G2 - kWh meter, G2 - Quick Recovery Water Heating, G2 - Space Heating, G2 Controlled Off Peak Water Heating, OL |  |
| 7. Stranded Cost Charge (\$/kWh) (L.6) | (\$0.00004) |
| Class G2 (2) |  |
| 8. Estimated G2 Demand Revenue (August 2011 - July 2012) | $(\$ 9,433)$ |
| 9. Estimated G2 Deliveries in kW (August 2011 - July 2012) | 1,385,727 |
| 10. Stranded Cost Charge (\$/kW) (L. $8 / \mathrm{L} .9)$ | (\$0.01) |
| 11. G2 Energy Revenue (August 2011 - July 2012) | $(\$ 4,567)$ |
| 12. Estimated G2 Calendar Month Deliveries in kWh (August 2011 - July 2012) (1) | 349,998,601 |
| 13. Stranded Cost Charge (\$/kWh) (L. $11 / \mathrm{L} .12$ ) | (\$0.00001) |
| Class G1 (2) |  |
| 14. Estimated G1 Demand Revenue (August 2011 - July 2012) | (\$10,386) |
| 15. Estimated G1 Deliveries in kVA (August 2011 - July 2012) | 1,039,814 |
| 16. Stranded Cost Charge (\$/kVA) (L. $14 / \mathrm{L} .15$ ) | (\$0.01) |
| 17. G1 Energy Revenue (August 2011 - July 2012) | $(\$ 4,475)$ |
| 18. Estimated G1 Calendar Month Deliveries in kWh (August 2011 - July 2012) (1) | 371,512,494 |
| 19. Stranded Cost Charge (\$/kWh) (L. $17 / \mathrm{L} .18$ ) | (\$0.00001) |

(1) Schedule LSM-2, page 5. Total Company
Aug 2011-Jul 2012 Billed kWh 1,251,798,925 - July 2011 Unbilled kWh $\quad(56,638,393)$

+ July 2012 Unbilled kWh 58,124,374 Calendar Month Deliveries 1,253,284,906

Schedule LSM-1, page 4. G2 Demand Aug 2011-Jul 2012 Billed kWh 349,638,816 - July 2011 Unbilled kWh $\quad(15,665,231)$ + July 2012 Unbilled kWh $\quad$ 16,025,015

Schedule LSM-1, page 4.
G1 Demand
Aug 2011-Jul 2012 Billed kWh 371,098,224

- July 2011 Unbilled kWh $(17,226,540)$
+ July 2012 Unbilled kWh 17,640,810
Calendar Month Deliveries 371,512,494
(2) Demand and energy calculated based on ratio of demand and energy revenue under current rates.

Calculation of Class G2 and G1 Demand and Energy Components

|  | Units <br> (Aug 11-Jul 12) | Current <br> Rates | Revenue under current rates | \% of Total |
| :---: | :---: | :---: | :---: | :---: |
| G2 kW | 1,385,727 | \$0.24 | \$332,574 | 67\% |
| G2 kWh | 349,998,601 | \$0.00046 | \$160,999 | 33\% |
| Total |  |  | \$493,574 | 100\% |
| G1 kVA | 1,039,814 | \$0.34 | \$353,537 | 70\% |
| G1 kWh | 371,512,494 | \$0.00041 | \$152,320 | 30\% |
| Total |  |  | \$505,857 | 100\% |

Revenue at Proposed Rates $(\$ 9,433)$
$(\$ 4,567)$
$(\$ 14,000)$
$(\$ 10,386)$
$(\$ 4,475)$
$(\$ 14,860)$



Unitil Energy Systems, Inc
Reconciliation of Stranded Costs and Revenues

Schedule LSM-1
Page 3 of 5

|  |  | (a) <br> Beginning Balance | (b) Total Costs | (c) Total Revenue | (d) <br> Ending Balance <br> Before Interest $(a+b-c)$ | (e) Average Monthly Balance $((a+d) /$ $2)$ | (f) Interest Rate | (g) <br> Number of Days / Month | (h) <br> Computed Interest | (i) <br> Ending Balance with Interest (d + h) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aug-11 | Estimate | $(\$ 259,508)$ | \$16,693 | $(\$ 4,927)$ | $(\$ 237,889)$ | $(\$ 248,699)$ | 3.25\% | 31 | (\$686) | $(\$ 238,575)$ |
| Sep-11 | Estimate | $(\$ 238,575)$ | \$16,693 | $(\$ 4,410)$ | (\$217,472) | $(\$ 228,024)$ | 3.25\% | 30 | (\$609) | $(\$ 218,082)$ |
| Oct-11 | Estimate | $(\$ 218,082)$ | \$16,693 | $(\$ 4,280)$ | $(\$ 197,109)$ | $(\$ 207,595)$ | 3.25\% | 31 | (\$573) | (\$197,682) |
| Nov-11 | Estimate | (\$197,682) | \$16,693 | $(\$ 4,082)$ | $(\$ 176,907)$ | $(\$ 187,295)$ | 3.25\% | 30 | (\$500) | $(\$ 177,408)$ |
| Dec-11 | Estimate | $(\$ 177,408)$ | \$16,693 | $(\$ 4,466)$ | $(\$ 156,249)$ | $(\$ 166,828)$ | 3.25\% | 31 | (\$460) | $(\$ 156,709)$ |
| Jan-12 | Estimate | $(\$ 156,709)$ | \$16,693 | $(\$ 4,667)$ | $(\$ 135,349)$ | $(\$ 146,029)$ | 3.25\% | 31 | (\$402) | (\$135,751) |
| Feb-12 | Estimate | (\$135,751) | \$16,693 | (\$4,290) | (\$114,768) | $(\$ 125,260)$ | 3.25\% | 29 | (\$323) | $(\$ 115,091)$ |
| Mar-12 | Estimate | $(\$ 115,091)$ | \$16,693 | $(\$ 4,284)$ | $(\$ 94,114)$ | (\$104,602) | 3.25\% | 31 | (\$288) | $(\$ 94,402)$ |
| Apr-12 | Estimate | $(\$ 94,402)$ | \$16,693 | $(\$ 4,002)$ | $(\$ 73,707)$ | $(\$ 84,054)$ | 3.25\% | 30 | (\$224) | $(\$ 73,930)$ |
| May-12 | Estimate | $(\$ 73,930)$ | \$16,693 | $(\$ 3,962)$ | $(\$ 53,275)$ | $(\$ 63,603)$ | 3.25\% | 31 | (\$175) | $(\$ 53,450)$ |
| Jun-12 | Estimate | $(\$ 53,450)$ | \$20,520 | $(\$ 4,616)$ | $(\$ 28,315)$ | $(\$ 40,883)$ | 3.25\% | 30 | (\$109) | $(\$ 28,424)$ |
| Jul-12 | Estimate | $(\$ 28,424)$ | \$20,520 | (\$4,755) | $(\$ 3,149)$ | $(\$ 15,787)$ | 3.25\% | 31 | (\$43) | $(\$ 3,193)$ |
| Total Aug-11 to Jul-12 |  |  | \$207,967 | (\$52,741) |  |  |  |  | (\$4,393) |  |



|  |  | (a) <br> Total Billed kWh <br> - all classes <br> except G2 <br> demand and G 1 <br> (1) | (b) <br> Unbilled <br> Factor (2) | (c) <br> Unbilled kWh $(\mathrm{a} * \mathrm{~b})$ | (d) Proposed SCC | (e) <br>  <br> Unbilled SCC <br> Revenue <br> (c* $)^{*}$ | (f) Total Billed $\mathrm{kWh}-\mathrm{G} 2$ demand (1) | (g) Unbilled Factor (2) | (h) <br> Unbilled kWh (f * g) | (i) <br> Proposed SCC | (j) <br> Unbilled SCC <br> Revenue (h * i) | (k) $\begin{array}{\|c\|} \hline \text { Total Billed } \\ \text { kWh - G1 (1) } \\ \hline \end{array}$ | (1) Unbilled Factor (2) | (m) <br> Unbilled kWh $(\mathrm{k} * \mathrm{l})$ | (n) <br> Proposed SCC | (o) <br> Unbilled SCC <br> Revenue (m * n) | (p) <br> Reversal of prior month unbilled (prior month, $\mathrm{e}+\mathrm{j}+$ <br> o) | (q)  <br> Total Billed SCC <br> Revenue  | $(\mathrm{r})$ <br> Total Revenue <br> $(\mathrm{e}+\mathrm{j}+\mathrm{o}+\mathrm{p}+$ <br> $\mathrm{q})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aug-10 | Actual | 51,561,676 | 48.81\% | 25,166,823 | \$0.00138 | \$34,730 | 33,232,354 | 50.96\% | 16,935,720 | \$0.00046 | \$7,790 | 33,538,536 | 56.57\% | 18,971,293 | \$0.00041 | \$7,778 | $(\$ 176,439)$ | \$392,035 | \$265,895 |
| Sep-10 | Actual | 47,102,474 | 46.35\% | 21,831,619 | \$0.00138 | \$30,128 | 32,714,257 | 48.06\% | 15,723,926 | \$0.00046 | \$7,233 | 33,898,250 | 52.58\% | 17,824,432 | \$0.00041 | \$7,308 | (\$50,299) | \$155,053 | \$149,423 |
| Oct-10 | Actual | 36,187,527 | 56.77\% | 20,544,090 | \$0.00138 | \$28,351 | 26,869,092 | 54.13\% | 14,543,075 | \$0.00046 | \$6,690 | 29,555,750 | 54.67\% | 16,159,263 | \$0.00041 | \$6,625 | ( $\$ 44,669)$ | \$131,823 | \$128,820 |
| Nov-10 | Actual | 38,287,749 | 52.55\% | 20,120,389 | \$0.00138 | \$27,766 | 25,990,114 | 50.12\% | 13,025,940 | \$0.00046 | \$5,992 | 29,344,940 | 49.07\% | 14,398,891 | \$0.00041 | \$5,904 | (\$41,666) | \$131,178 | \$129,174 |
| Dec-10 | Actual | 44,533,521 | 66.64\% | 29,677,175 | \$0.00138 | \$40,955 | 27,325,111 | 64.28\% | 17,564,336 | \$0.00046 | \$8,080 | 28,878,544 | 63.12\% | 18,228,301 | \$0.00041 | \$7,474 | (\$39,662) | \$138,798 | \$155,645 |
| Jan-11 | Actual | 51,883,638 | 52.46\% | 27,216,340 | \$0.00138 | \$37,559 | 28,859,035 | 50.52\% | 14,578,551 | \$0.00046 | \$6,706 | 28,565,271 | 49.28\% | 14,078,274 | \$0.00041 | \$5,772 | (\$56,508) | \$149,163 | \$142,692 |
| Feb-11 | Actual | 48,482,901 | 44.47\% | 21,561,851 | \$0.00138 | \$29,755 | 28,520,374 | 46.43\% | 13,243,152 | \$0.00046 | \$6,092 | 28,178,986 | 47.56\% | 13,401,268 | \$0.00041 | \$5,495 | (\$50,037) | \$143,950 | \$135,255 |
| Mar-11 | Actual | 43,761,024 | 68.44\% | 29,951,143 | \$0.00138 | \$41,333 | 27,247,015 | 70.40\% | 19,180,730 | \$0.00046 | \$8,823 | 27,940,275 | 71.43\% | 19,957,339 | \$0.00041 | \$8,183 | ( $\$ 41,342)$ | \$138,120 | \$155,116 |
| Apr-11 | Actual | 40,993,312 | 58.59\% | 24,016,326 | \$0.00138 | \$33,143 | 27,394,597 | 61.89\% | 16,955,046 | \$0.00046 | \$7,799 | 28,887,771 | 63.08\% | 18,223,110 | \$0.00041 | \$7,471 | (\$58,338) | \$134,162 | \$124,237 |
| May-11 | Estimate | 35,430,620 | 49.60\% | 17,574,734 | \$0.00138 | \$24,253 | 26,348,820 | 51.32\% | 13,523,424 | \$0.00046 | \$6,221 | 29,308,608 | 50.82\% | 14,894,539 | \$0.00041 | \$6,107 | (\$48,413) | \$126,665 | \$114,832 |
| Jun-11 | Estimate | 39,438,615 | 55.33\% | 21,822,028 | \$0.00138 | \$30,114 | 28,781,672 | 53.47\% | 15,388,718 | \$0.00046 | \$7,079 | 30,465,284 | 49.18\% | 14,982,927 | \$0.00041 | \$6,143 | (\$36,581) | \$140,052 | \$146,808 |
| Jul-11 | Estimate | 42,590,832 | 55.78\% | 23,756,966 | \$0.00138 | \$32,785 | 28,992,936 | 54.03\% | 15,665,231 | \$0.00046 | \$7,206 | 33,897,386 | 50.82\% | 17,226,540 | \$0.00041 | \$7,063 | ( $\$ 43,336)$ | \$147,678 | \$151,395 |
| Total | 0 to Jul-11 | 520,253,890 |  | 283,239,484 |  | \$390,870 | 342,275,376 |  | 186,327,849 |  | \$85,711 | 362,459,602 |  | 198,346,177 |  | \$81,322 | $(\$ 687,288)$ | \$1,928,676 | \$1,799,291 |


|  |  | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (1) | (m) | (n) | (0) | (p) | (q) | (r) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total Billed kWh - all classes except G2 demand and G1 | Unbilled Factor | $\begin{gathered} \text { Unbilled kWh } \\ (\mathrm{a} * \mathrm{~b}) \end{gathered}$ | Proposed SCC | Unbilled SCC <br> Revenue <br> (c*d) | Total Billed <br> kWh - G2 demand | Unbilled | $\begin{gathered} \text { Unbilled kWh } \\ (\mathrm{f} * \mathrm{~g}) \end{gathered}$ | $\begin{gathered} \text { Proposed } \\ \text { SCC } \\ \hline \end{gathered}$ | Unbilled SCC <br> Revenue (h * i) | Total Billed kWh-G1 | Unbilled Factor | $\begin{gathered} \text { Unbilled kWh } \\ (\mathrm{k} * \text { l) }) \end{gathered}$ | $\begin{aligned} & \text { Proposed } \\ & \text { SCC } \end{aligned}$ | Unbilled SCC <br> Revenue (m*n) | Reversal of prior month unbilled (prior month, $\mathrm{e}+\mathrm{j}+$ <br> o) | Total Billed SCC Revenue | $\begin{gathered} \text { Total Revenue } \\ (\mathrm{e}+\mathrm{j}+\mathrm{o}+\mathrm{p}+ \\ \mathrm{q}) \end{gathered}$ |
| Aug-11 | Estimate | 52,569,599 | 44.31\% | 23,296,060 | (\$0.00004) | (\$932) | 34,052,368 | 46.11\% | 15,703,138 | (\$0.00001) | (\$157) | 33,887,556 | 50.00\% | 16,943,778 | (\$0.00001) | (\$169) | (\$47,054) | \$43,385 | (\$4,927) |
| Sep-11 | Estimate | 43,251,231 | 44.64\% | 19,306,113 | (\$0.00004) | (\$772) | 30,370,420 | 45.65\% | 13,864,566 | (\$0.00001) | (\$139) | 34,310,596 | 49.18\% | 16,874,064 | (\$0.00001) | (\$169) | \$1,258 | $(\$ 4,589)$ | (\$4,410) |
| Oct-11 | Estimate | 39,357,717 | 53.48\% | 21,050,198 | (\$0.00004) | (\$842) | 28,103,342 | 51.09\% | 14,357,485 | (\$0.00001) | (\$144) | 30,208,235 | 50.82\% | 15,351,726 | (\$0.00001) | (\$154) | \$1,080 | $(\$ 4,220)$ | $(\$ 4,280)$ |
| Nov-11 | Estimate | 39,778,289 | 52.75\% | 20,983,769 | (\$0.00004) | (\$839) | 26,527,046 | 50.17\% | 13,309,319 | (\$0.00001) | (\$133) | 29,994,773 | 49.18\% | 14,751,528 | (\$0.00001) | (\$148) | \$1,139 | $(\$ 4,101)$ | (\$4,082) |
| Dec-11 | Estimate | 45,861,923 | 53.70\% | 24,626,828 | (\$0.00004) | (\$985) | 28,201,502 | 51.69\% | 14,577,645 | (\$0.00001) | (\$146) | 29,476,655 | 50.82\% | 14,979,940 | (\$0.00001) | (\$150) | \$1,120 | $(\$ 4,306)$ | $(\$ 4,466)$ |
| Jan-12 | Estimate | 52,452,046 | 51.27\% | 26,892,584 | (\$0.00004) | $(\$ 1,076)$ | 29,600,011 | 50.42\% | 14,924,224 | (\$0.00001) | (\$149) | 29,421,538 | 50.00\% | 14,710,769 | (\$0.00001) | (\$147) | \$1,281 | (\$4,575) | $(\$ 4,667)$ |
| Feb-12 | Estimate | 48,742,963 | 47.20\% | 23,004,461 | (\$0.00004) | (\$920) | 29,953,504 | 47.99\% | 14,374,514 | (\$0.00001) | (\$144) | 29,664,471 | 48.33\% | 14,337,828 | (\$0.00001) | (\$143) | \$1,372 | $(\$ 4,455)$ | $(\$ 4,290)$ |
| Mar-12 | Estimate | 45,878,968 | 48.56\% | 22,277,036 | (\$0.00004) | (\$891) | 28,951,860 | 50.77\% | 14,697,660 | (\$0.00001) | (\$147) | 28,151,372 | 51.67\% | 14,544,875 | (\$0.00001) | (\$145) | \$1,207 | $(\$ 4,308)$ | $(\$ 4,284)$ |
| Apr-12 | Estimate | 41,664,688 | 45.60\% | 18,997,162 | (\$0.00004) | (\$760) | 27,775,625 | 48.26\% | 13,405,208 | (\$0.00001) | (\$134) | 29,690,010 | 49.18\% | 14,601,644 | (\$0.00001) | (\$146) | \$1,184 | $(\$ 4,146)$ | $(\$ 4,002)$ |
| May-12 | Estimate | 36,752,005 | 49.64\% | 18,243,400 | (\$0.00004) | (\$730) | 26,979,506 | 51.32\% | 13,846,242 | (\$0.00001) | (\$138) | 30,157,529 | 50.82\% | 15,325,957 | (\$0.00001) | (\$153) | \$1,040 | $(\$ 3,981)$ | (\$3,962) |
| Jun-12 | Estimate | 40,789,336 | 55.17\% | 22,502,479 | (\$0.00004) | (\$900) | 29,454,460 | 53.44\% | 15,740,975 | (\$0.00001) | (\$157) | 31,422,926 | 49.18\% | 15,453,898 | (\$0.00001) | (\$155) | \$1,021 | (\$4,426) | $(\$ 4,616)$ |
| Jul-12 | Estimate | 43,963,119 | 55.66\% | 24,468,506 | (\$0.00004) | (\$979) | 29,669,173 | 54.01\% | 16,025,015 | (\$0.00001) | (\$160) | 34,712,562 | 50.82\% | 17,640,810 | (\$0.00001) | (\$176) | \$1,212 | $(\$ 4,651)$ | $(\$ 4,755)$ |
| Total | 11 to Jul-12 | 531,061,885 |  | 265,648,592 |  | $(\$ 10,626)$ | 349,638,816 |  | 174,825,991 |  | (\$1,748) | 371,098,224 |  | 185,516,817 |  | $(\$ 1,855)$ | (\$34,140) | (\$4,373) | (\$52,741) |

(1) Actual Per billing system
(2) Detail of Unbilled Factors shown on page 5.

Unitil Energy Systems, Inc.
Detail of Class Unbilled Factors
Schedule LSM-1
Page 5 of 5

Detail of Unbilled Factors for Residential and Outdoor Lighting Classes for use in all classes except G2 demand and G1 (column b, Page 4)

|  | Billed <br> kWh |  | Direct <br> Estimate of <br> Unbilled kWh | Unbilled <br> $\mathrm{kWh} /$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Billed kWh |  |  |  |  |

## Detail of Unbilled Factors for Regular General Class for

 use in G2 demand class (column g, Page 4)|  | Billed kWh | Direct Estimate of Unbilled kWh | Unbilled kWh / Billed kWh |  | Billed kWh | Direct <br> Estimate of Unbilled kWh | Unbilled <br> kWh / <br> Billed kWh |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aug-09 | 32,412,156 | 16,590,965 | 51.19\% | Aug-09 | 32,371,261 | 15,999,826 | 49.43\% |
| Sep-09 | 31,253,101 | 15,793,579 | 50.53\% | Sep-09 | 31,169,381 | 17,801,850 | 57.11\% |
| Oct-09 | 26,863,110 | 13,875,659 | 51.65\% | Oct-09 | 28,729,567 | 14,671,421 | 51.07\% |
| Nov-09 | 25,482,064 | 13,595,112 | 53.35\% | Nov-09 | 28,037,649 | 14,872,308 | 53.04\% |
| Dec-09 | 27,214,356 | 15,593,651 | 57.30\% | Dec-09 | 28,372,560 | 15,586,273 | 54.93\% |
| Jan-10 | 31,417,267 | 14,759,960 | 46.98\% | Jan-10 | 28,962,938 | 13,753,846 | 47.49\% |
| Feb-10 | 27,335,060 | 14,762,025 | 54.00\% | Feb-10 | 27,583,716 | 15,238,969 | 55.25\% |
| Mar-10 | 25,613,525 | 16,234,631 | 63.38\% | Mar-10 | 26,369,617 | 17,017,321 | 64.53\% |
| Apr-10 | 27,901,591 | 13,100,137 | 46.95\% | Apr-10 | 29,469,447 | 13,728,003 | 46.58\% |
| May-10 | 26,346,840 | 13,923,328 | 52.85\% | May-10 | 29,216,054 | 14,992,449 | 51.32\% |
| Jun-10 | 28,358,117 | 17,056,184 | 60.15\% | Jun-10 | 30,409,910 | 15,773,365 | 51.87\% |
| Jul-10 | 34,412,565 | 16,580,811 | 48.18\% | Jul-10 | 34,122,624 | 16,616,421 | 48.70\% |
| Aug-10 | 33,729,960 | 17,189,307 | 50.96\% | Aug-10 | 33,538,536 | 18,971,293 | 56.57\% |
| Sep-10 | 33,166,237 | 15,941,168 | 48.06\% | Sep-10 | 33,898,250 | 17,824,432 | 52.58\% |
| Oct-10 | 27,180,826 | 14,711,804 | 54.13\% | Oct-10 | 29,555,750 | 16,159,263 | 54.67\% |
| Nov-10 | 26,437,582 | 13,250,206 | 50.12\% | Nov-10 | 29,344,940 | 14,398,891 | 49.07\% |
| Dec-10 | 28,052,864 | 18,032,129 | 64.28\% | Dec-10 | 28,878,544 | 18,228,301 | 63.12\% |
| Jan-11 | 29,884,545 | 15,096,602 | 50.52\% | Jan-11 | 28,565,271 | 14,078,274 | 49.28\% |
| Feb-11 | 29,615,268 | 13,751,555 | 46.43\% | Feb-11 | 28,178,986 | 13,401,268 | 47.56\% |
| Mar-11 | 28,138,023 | 19,807,961 | 70.40\% | Mar-11 | 27,940,275 | 19,957,339 | 71.43\% |
| Apr-11 | 28,047,799 | 17,359,326 | 61.89\% | Apr-11 | 28,887,771 | 18,223,110 | 63.08\% |

SCHEDULE LSM-2

## EXTERNAL DELIVERY CHARGE

## UNITIL ENERGY SYSTEMS. INC. <br> CALCULATION OF THE EXTERNAL DELIVERY CHARGE <br> Effective August 1, 2011



Unitil Energy Systems, Inc.
Reconciliation of External Delivery Costs and Revenues

|  |  | (a) <br> Beginning Balance | (b) Total Costs | (c) Total Revenut | (d) <br> Ending <br> Balance Before Interest ( $a+b-c$ ) | (e) <br> Average <br> Monthly <br> Balance $((a+d) / 2)$ | (f) <br> Interest Rate | (g) <br> Number of Days / Month | (h) <br> Computed Interest | (i) <br> Ending Balance with Interest $(d+h)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aug-09 | Actual | \$66,054 | \$1,575,336 | \$1,595,564 | \$45,826 | \$55,940 | 3.25\% | 31 | \$154 | \$45,981 |
| Sep-09 | Actual | \$45,981 | \$1,292,761 | \$1,491,228 | $(\$ 152,486)$ | $(\$ 53,253)$ | 3.25\% | 30 | (\$142) | (\$152,628) |
| Oct-09 | Actual | (\$152,628) | \$1,188,621 | \$1,200,591 | (\$164,598) | (\$158,613) | 3.25\% | 31 | (\$438) | (\$165,036) |
| Nov-09 | Actual | (\$165,036) | \$1,193,975 | \$1,289,128 | (\$260,189) | (\$212,612) | 3.25\% | 30 | (\$568) | (\$260,757) |
| Dec-09 | Actual | (\$260,757) | \$1,408,796 | \$1,526,026 | (\$377,987) | (\$319,372) | 3.25\% | 31 | (\$882) | $(\$ 378,869)$ |
| Jan-10 | Actual | $(\$ 378,869)$ | \$1,333,997 | \$1,548,497 | (\$593,369) | $(\$ 486,119)$ | 3.25\% | 31 | $(\$ 1,342)$ | (\$594,710) |
| Feb-10 | Actual | (\$594,710) | \$1,344,864 | \$1,372,428 | (\$622,274) | $(\$ 608,492)$ | 3.25\% | 28 | $(\$ 1,517)$ | (\$623,791) |
| Mar-10 | Actual | (\$623,791) | \$1,252,152 | \$1,340,869 | (\$712,508) | $(\$ 668,150)$ | 3.25\% | 31 | $(\$ 1,844)$ | (\$714,352) |
| Apr-10 | Actual | (\$714,352) | \$1,124,739 | \$1,230,846 | $(\$ 820,459)$ | $(\$ 767,406)$ | 3.25\% | 30 | $(\$ 2,050)$ | $(\$ 822,509)$ |
| May-10 | Actual | $(\$ 822,509)$ | \$1,663,543 | \$1,285,581 | (\$444,547) | $(\$ 633,528)$ | 3.25\% | 31 | $(\$ 1,749)$ | $(\$ 446,296)$ |
| Jun-10 | Actual | $(\$ 446,296)$ | \$1,708,434 | \$1,529,642 | $(\$ 267,504)$ | (\$356,900) | 3.25\% | 30 | (\$953) | $(\$ 268,458)$ |
| Jul-10 | Actual | (\$268,458) | \$3,468,239 | \$1,736,193 | \$1,463,589 | \$597,565 | 3.25\% | 31 | \$1,649 | \$1,465,238 |
| Total Aug-09 to |  |  | \$18,555,458 | \$17,146,593 |  |  |  |  | $(\$ 9,681)$ |  |
|  |  | (a) <br> Beginning Balance | (b) Total Costs | (c) Total Revenut | (d) <br> Ending <br> Balance <br> Before <br> Interest $(a+b-c)$ | (e) <br> Average <br> Monthly Balance $((a+d) / 2)$ | (f) <br> Interest Rate | (g) <br> Number of Days / Month | (h) <br> Computed Interest | $\begin{gathered} \text { (i) } \\ \text { Ending Balance } \\ \text { with Interest } \\ (\mathrm{d}+\mathrm{h}) \\ \hline \end{gathered}$ |
| Aug-10 | Actual | \$1,465,238 | \$1,979,051 | \$2,026,132 | \$1,418,157 | \$1,441,697 | 3.25\% | 31 | \$3,979 | \$1,422,136 |
| Sep-10 | Actual | \$1,422,136 | \$2,085,160 | \$1,823,191 | \$1,684,105 | \$1,553,120 | 3.25\% | 30 | \$4,149 | \$1,688,253 |
| Oct-10 | Actual | \$1,688,253 | \$1,491,633 | \$1,493,259 | \$1,686,628 | \$1,687,440 | 3.25\% | 31 | \$4,658 | \$1,691,285 |
| Nov-10 | Actual | \$1,691,285 | \$1,438,951 | \$1,517,820 | \$1,612,416 | \$1,651,851 | 3.25\% | 30 | \$4,412 | \$1,616,829 |
| Dec-10 | Actual | \$1,616,829 | \$1,484,345 | \$2,002,904 | \$1,098,270 | \$1,357,550 | 3.25\% | 31 | \$3,747 | \$1,102,017 |
| Jan-11 | Actual | \$1,102,017 | \$1,570,200 | \$1,683,116 | \$989,102 | \$1,045,560 | 3.25\% | 31 | \$2,886 | \$991,988 |
| Feb-11 | Actual | \$991,987.8 | \$1,566,816 | \$1,646,633 | \$912,170 | \$952,079 | 3.25\% | 28 | \$2,374 | \$914,544 |
| Mar-11 | Actual | \$914,543.8 | \$1,470,794 | \$2,022,554 | \$362,784 | \$638,664 | 3.25\% | 31 | \$1,763 | \$364,547 |
| Apr-11 | Actual | \$364,546.7 | \$1,333,211 | \$1,475,097 | \$222,661 | \$293,604 | 3.25\% | 30 | \$784 | \$223,445 |
| May-11 | Estimate | \$223,445 | \$1,506,618 | \$1,314,512 | \$415,551 | \$319,498 | 3.25\% | 31 | \$882 | \$416,433 |
| Jun-11 | Estimate | \$416,433 | \$455,539 | \$1,770,144 | $(\$ 898,172)$ | (\$240,869) | 3.25\% | 30 | (\$643) | $(\$ 898,815)$ |
| Jul-11 | Estimate | $(\$ 898,815)$ | \$1,829,235 | \$1,855,734 | $(\$ 925,313)$ | $(\$ 912,064)$ | 3.25\% | 31 | $(\$ 2,518)$ | $(\$ 927,831)$ |
| Total Aug-10 to Jul-11 |  |  | \$18,211,553 | \$20,631,096 |  |  |  |  | \$26,474 |  |

Unitil Energy Systems, Inc.
Reconciliation of External Delivery Costs and Revenues

|  |  | (a) <br> Beginning Balance | (b) Total Costs | (c) Total Revenue | (d) <br> Ending <br> Balance Before Interest $(a+b-c)$ | (e) <br> Average Monthly Balance ((a+d)/2) | (f) <br> Interest Rate | (g) <br> Number of Days / Month | (h) <br> Computed Interest | (i) <br> Ending Balance with Interest (d + h) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aug-11 | Estimate | (\$927,831) | \$2,033,223 | \$1,798,597 | $(\$ 693,205)$ | $(\$ 810,518)$ | 3.25\% | 31 | $(\$ 2,237)$ | $(\$ 695,443)$ |
| Sep-11 | Estimate | $(\$ 695,443)$ | \$1,552,523 | \$1,531,437 | (\$674,357) | (\$684,900) | 3.25\% | 30 | $(\$ 1,830)$ | $(\$ 676,187)$ |
| Oct-11 | Estimate | $(\$ 676,187)$ | \$1,436,512 | \$1,476,443 | $(\$ 716,118)$ | $(\$ 696,152)$ | 3.25\% | 31 | $(\$ 1,922)$ | $(\$ 718,039)$ |
| Nov-11 | Estimate | $(\$ 718,039)$ | \$1,518,166 | \$1,419,722 | $(\$ 619,596)$ | $(\$ 668,817)$ | 3.25\% | 30 | $(\$ 1,787)$ | $(\$ 621,382)$ |
| Dec-11 | Estimate | $(\$ 621,382)$ | \$1,716,508 | \$1,631,321 | $(\$ 536,196)$ | $(\$ 578,789)$ | 3.25\% | 31 | $(\$ 1,598)$ | $(\$ 537,793)$ |
| Jan-12 | Estimate | $(\$ 537,793)$ | \$1,643,699 | \$1,708,486 | $(\$ 602,580)$ | $(\$ 570,186)$ | 3.25\% | 31 | $(\$ 1,570)$ | $(\$ 604,149)$ |
| Feb-12 | Estimate | $(\$ 604,149)$ | \$1,569,720 | \$1,554,438 | $(\$ 588,867)$ | $(\$ 596,508)$ | 3.25\% | 29 | $(\$ 1,536)$ | $(\$ 590,403)$ |
| Mar-12 | Estimate | $(\$ 590,403)$ | \$1,558,096 | \$1,542,925 | (\$575,233) | $(\$ 582,818)$ | 3.25\% | 31 | $(\$ 1,604)$ | $(\$ 576,837)$ |
| Apr-12 | Estimate | $(\$ 576,837)$ | \$1,374,086 | \$1,420,199 | $(\$ 622,949)$ | (\$599,893) | 3.25\% | 30 | $(\$ 1,598)$ | $(\$ 624,548)$ |
| May-12 | Estimate | $(\$ 624,548)$ | \$1,574,523 | \$1,415,364 | (\$465,389) | (\$544,968) | 3.25\% | 31 | $(\$ 1,500)$ | (\$466,890) |
| Jun-12 | Estimate | (\$466,890) | \$1,907,652 | \$1,620,012 | (\$179,249) | $(\$ 323,069)$ | 3.25\% | 30 | (\$861) | $(\$ 180,110)$ |
| Jul-12 | Estimate | (\$180,110) | \$1,872,361 | \$1,692,862 | (\$610) | $(\$ 90,360)$ | 3.25\% | 31 | (\$249) | (\$859) |
| Total Aug-11 to Jul-12 |  |  | \$19,757,068 | \$18,811,806 |  |  |  |  | $(\$ 18,290)$ |  |


|  |  | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total Billed kWh | Unbilled Factor (2) | $\begin{aligned} & \text { Unbilled kWh } \\ & (\mathrm{a} * \mathrm{~b}) \end{aligned}$ | $\begin{gathered} \text { Proposed } \\ \text { EDC } \\ \hline \end{gathered}$ | Unbilled EDC Revenue (c * d) | Reversal of prior month unbilled | Total Billed EDC Revenue (1) | Total Revenue (e $+f+g)$ |
| Aug-09 | Actual | 111,232,486 | 51.09\% | 56,826,485 | \$0.01425 | \$809,777 | (\$854,566) | \$1,640,352 | \$1,595,564 |
| Sep-09 | Actual | 106,362,335 | 51.82\% | 55,116,717 | \$0.01425 | \$785,413 | $(\$ 809,777)$ | \$1,515,592 | \$1,491,228 |
| Oct-09 | Actual | 91,526,196 | 52.28\% | 47,850,126 | \$0.01425 | \$681,864 | $(\$ 785,413)$ | \$1,304,140 | \$1,200,591 |
| Nov-09 | Actual | 90,101,775 | 53.52\% | 48,225,808 | \$0.01425 | \$687,218 | $(\$ 681,864)$ | \$1,283,775 | \$1,289,128 |
| Dec-09 | Actual | 97,961,623 | 58.55\% | 57,360,928 | \$0.01425 | \$817,393 | $(\$ 687,218)$ | \$1,395,851 | \$1,526,026 |
| Jan-10 | Actual | 113,196,093 | 46.68\% | 52,839,635 | \$0.01425 | \$752,965 | $(\$ 817,393)$ | \$1,612,926 | \$1,548,497 |
| Feb-10 | Actual | 97,332,957 | 53.24\% | 51,823,470 | \$0.01425 | \$738,484 | $(\$ 752,965)$ | \$1,386,908 | \$1,372,428 |
| Mar-10 | Actual | 89,719,429 | 62.65\% | 56,207,801 | \$0.01425 | \$800,961 | $(\$ 738,484)$ | \$1,278,393 | \$1,340,869 |
| Apr-10 | Actual | 96,874,237 | 47.19\% | 45,716,411 | \$0.01425 | \$651,459 | $(\$ 800,961)$ | \$1,380,349 | \$1,230,846 |
| May-10 | Actual | 89,949,972 | 51.13\% | 45,990,234 | \$0.01425 | \$655,361 | $(\$ 651,459)$ | \$1,281,679 | \$1,285,581 |
| Jun-10 | Actual | 96,317,314 | 59.20\% | 57,023,913 | \$0.01425 | \$812,591 | $(\$ 655,361)$ | \$1,372,412 | \$1,529,642 |
| Jul-10 | Actual | 120,690,023 | 48.20\% | 58,177,230 | \$0.01425 | \$829,026 | $(\$ 812,591)$ | \$1,719,759 | \$1,736,193 |
| Total Aug-09 to Jul-10 |  | 1,201,264,441 |  | 633,158,759 |  | \$9,022,512 | (\$9,048,052) | \$17,172,134 | \$17,146,593 |


|  |  | (a) <br> Total Billed kWh | (b) Unbilled Factor | (c) <br> Unbilled kWh $(a * b)$ | $\begin{gathered} \text { (d) } \\ \text { Proposed } \\ \text { EDC } \\ \hline \end{gathered}$ | $(e)$ Unbilled EDC Revenue $(c * d)$ | (f) Reversal of prior month unbilled | (g) <br> Total Billed EDC <br> Revenue (1) | (h) <br> Total Revenue (e $+f+g)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aug-10 | Actual | 118,332,566 | 51.62\% | 61,084,546 | \$0.01688 | \$1,031,107 | (\$829,026) | \$1,824,050 | \$2,026,132 |
| Sep-10 | Actual | 113,714,982 | 48.71\% | 55,387,730 | \$0.01688 | \$934,945 | $(\$ 1,031,107)$ | \$1,919,354 | \$1,823,191 |
| Oct-10 | Actual | 92,612,369 | 55.33\% | 51,238,182 | \$0.01688 | \$864,901 | $(\$ 934,945)$ | \$1,563,303 | \$1,493,259 |
| Nov-10 | Actual | 93,622,804 | 50.77\% | 47,534,339 | \$0.01688 | \$802,380 | (\$864,901) | \$1,580,341 | \$1,517,820 |
| Dec-10 | Actual | 100,737,176 | 64.97\% | 65,452,629 | \$0.01688 | \$1,104,840 | $(\$ 802,380)$ | \$1,700,443 | \$2,002,904 |
| Jan-11 | Actual | 109,307,944 | 51.10\% | 55,853,270 | \$0.01688 | \$942,803 | (\$1,104,840) | \$1,845,153 | \$1,683,116 |
| Feb-11 | Actual | 105,182,261 | 45.85\% | 48,227,741 | \$0.01688 | \$814,084 | $(\$ 942,803)$ | \$1,775,352 | \$1,646,633 |
| Mar-11 | Actual | 98,948,313 | 69.84\% | 69,106,615 | \$0.01688 | \$1,166,520 | $(\$ 814,084)$ | \$1,670,119 | \$2,022,554 |
| Apr-11 | Actual | 97,275,679 | 60.87\% | 59,216,076 | \$0.01688 | \$999,567 | (\$1,166,520) | \$1,642,049 | \$1,475,097 |
| May-11 | Estimate | 91,088,048 | 50.50\% | 46,001,953 | \$0.01688 | \$776,513 | $(\$ 999,567)$ | \$1,537,566 | \$1,314,512 |
| Jun-11 | Estimate | 98,685,571 | 52.88\% | 52,182,721 | \$0.01688 | \$880,844 | $(\$ 776,513)$ | \$1,665,812 | \$1,770,144 |
| Jul-11 | Estimate | 105,481,154 | 53.70\% | 56,638,393 | \$0.01688 | \$956,056 | $(\$ 880,844)$ | \$1,780,522 | \$1,855,734 |
| Tota | 0 to Jul-11 | 1,224,988,868 |  | 667,924,194 |  | \$11,274,560 | (\$11,147,530) | \$20,504,065 | \$20,631,096 |

(1) Actual per billing system
(2) Detail of Unbilled Factors for all classes shown on page 6.

Unitil Energy Systems, Inc. External Delivery Revenues
$\begin{array}{lll}\text { (a) } & \text { (b) } & \text { (c) }\end{array}$
(b)

Unbilled kWh
Unbilled kW
Total Billed kWh Unbilled Factor

| Aug-11 | Estimate |
| :--- | :--- |
| Sep-11 | Estimate |
| Oct-11 | Estimate |
| Nov-11 | Estimate |
| Dec-11 | Estimate |
| Jan-12 | Estimate |
| Feb-12 | Estimate |
| Mar-12 | Estimate |
| Apr-12 | Estimat |
| May-12 | Estimat |
| Jun-12 | Estimat |
| Jul-12 | Estimat |

Total Aug-11 to Jul-12 1,251,798,925
(a*b)

50,051,029
50,745,666
49,030,652
54,172,863
56,522,435
51,721,657
51,532,628
47,019,133
47,424,861
53,686,977 58,124,374
$625,987,759$

Proposed
55,955,484 \$0.01501 \$839,892

Schedule LSM-2
Page 5 of 6
(h) ${ }^{\text {Pa }}$
(g) Revenue (e Reversal of $\begin{array}{lc}\text { Total Billed EDC Total Revenue } \\ \text { Revenue } & +\mathrm{f}+\mathrm{g})\end{array}$ \$0.01501 \$751,266 $\$ 0.01501$ \$0.01501 \$0.01501 \$0.01501 \$0.01501 \$0.01501 $\$ 0.01501$ \$0.01501 \$0.01501
(e) Unbilled EDC Revenue (c*d)
\$735,950 \$813,135 \$848,402 \$776,342 \$776,342 \$773,505 \$705,757 \$711,847 \$805,842 \$872,447
\$1,798,597 \$1,531,437 \$1,476,443 \$1,419,722 \$1,631,321 \$1,708,486 \$1,554,438 \$1,542,925 \$1,420,199 \$1,415,364 \$1,620,012 \$1,692,862
\$9,396,076 (\$9,479,685) \$18,895,416 \$18,811,806

|  | Direct <br> Billed <br> kWh |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Estimate of <br> Unbilled kWh | Unbilled kWh / <br> $c$ |

## SCHEDULE LSM-3

## REDLINE TARIFFS

## CALCULATION OF THE STRANDED COST CHARGE

## Uniform per kWh Charge

1. (Over)/under Recovery - Beginning Balance August 1, 20110 (\$259,508)
2. Estimated Total Costs (August 20110 - July 20124) \$1,310,796 \$207,967
3. Estimated Interest (August 20110 - July 20121)
\$19,777 (\$4,393)
4. Costs to be Recovered (L. $1+$ L. $2+$ L.3)
5. Estimated Calendar Month Deliveries in kWh (August 20110 - July 20124)
6. Stranded Cost Charge ( $\$ / \mathrm{kWh}$ ) (L. $4 / \mathrm{L} .5$ )
\$1,647,684 (\$55,934)

1,195,829,394 1,253,284,906

Class D, D - Controlled Off Peak Water Heating, G2-kWh meter, G2 - Quick Recovery Water Heating, G2 - Space Heating, G2 Controlled Off Peak Water Heating, OL
7. Stranded Cost Charge (\$/kWh) (L.6) $\$ 0.00138 \quad(\$ 0.00004)$

## Class G2 (1)

8. Estimated G2 Demand Revenue (August 20110 - July 20121 )
9. Estimated G2 Deliveries in kW (August $2011 \theta$ - July 20124) $1,306,46$ 1,306,463 1,385,727
10. Stranded Cost Charge ( $\$ / \mathrm{kW}$ ) (L. $8 / \mathrm{L} .9$ )
11. G2 Energy Revenue (August 20110 - July 20124)
\$155,909
$(\$ 4,567)$
12. Estimated G2 Calendar Month Deliveries in kWh (August 20110 - July 20124)

339,481,700
13. Stranded Cost Charge ( $\$ / \mathrm{kWh}$ ) (L. $11 /$ L.12)
$\$ 0.00046$
349,998,601

Class G1 (1)
$\begin{array}{lrr}\text { 14. Estimated G1 Demand Revenue (August 20110 - July 20124) } & \$ 337,323 & (\$ 10,386) \\ \text { 15. Estimated G1 Deliveries in kVA (August 2011 - July 20124) } & \underline{986,371} \\ \text { 16. Stranded Cost Charge (\$/kVA) (L. 14 / L. 15) } & \mathbf{\$ 0 . 3 4} & \mathbf{( \$ 0 . 0 1 9}) \\ \text { 17. G1 Energy Revenue (August 20110 - July 20121) } & \$ 140,323 & (\$ 4,475) \\ \text { 18. Estimated G1 Calendar Month Deliveries in kWh (August 20110 - July 20124) } & \underline{346,119,813} & \underline{371,512,494} \\ \text { 19. Stranded Cost Charge ( } \$ / \mathrm{kWh}) \text { (L. } 17 \text { / L.18) } & \mathbf{\$ 0 . 0 0 0 4 1} & \mathbf{( \$ 0 . 0 0 0 0 1 )}\end{array}$
(1) Demand and energy calculated based on ratio of demand and energy revenue under current rates.

Authorized by NHPUC Order No. 25,133 in Case No. DE 10-172, dated July 30, 2010

## CALCULATION OF THE EXTERNAL DELIVERY CHARGE

(R)

| 1. (Over)/under Recovery - Beginning Balance August 1, 2010 | \$1,003,161 |
| :---: | :---: |
| 2. Estimated Total Costs (August 2010-July 2011) | \$19,170,146 |
| 3. Estimated Interest (August 2010 - July 2011) | \$12,322 |
| 4. Costs to be Recovered (L. $1+\mathrm{L} .2+\mathrm{L} .3)$ | \$20,185,628 |
| 5. Estimated Galendar Month Deliveries in kWh (August 2010-July 2011) | 1,195,829,394 |
| 6. External Delivery Charge (\$/kWh) (L.5/L.6) | \$0.01688 |
| 1. (Over)/under Recovery - Beginning Balance August 1, 2011 | (\$927,831) |
| 2. Estimated Total Costs (August 2011 - July 2012) | \$19,757,068 |
| 3. Estimated Interest (August 2011 - July 2012) | (\$18,290) |
| 4. Costs to be Recovered (L. $1+\mathrm{L} .2+\mathrm{L} .3$ ) | \$18,810,947 |
| 5. Estimated Calendar Month Deliveries in kWh (August 2011 - July 2012) | 1,253,284,906 |
| 6. External Delivery Charge (\$/kWh) (L.5/L.6) | \$0.01501 |

Authorized by NHPUC Order No. 25,133 in Case No. DE 10-172, dated July 30, 2010

Issued: June 17, 2011July 2, 2010
Effective: August 1, $2011 \theta$

Issued By: Mark H. Collin
Treasurer

## SCHEDULE LSM-4

## BILL IMPACTS

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

Residential Rate D 500 kWh Bill

| Rate Components | $5 / 1 / 2011$ <br> Current Rate | 8/1/2011 |  |  |  |  | $\%$ <br> Difference <br> to Total Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | As Revised | Difference | Current Bill* | As Revised Bill* | Difference |  |
| Customer Charge | \$10.27 | \$10.27 | \$0.00 | \$10.27 | \$10.27 | \$0.00 | 0.0\% |
|  | \$/kWh | \$/kWh |  |  |  |  |  |
| Distribution Charge |  |  |  |  |  |  |  |
| First 250 kWh | \$0.02750 | \$0.02750 | \$0.00000 | \$6.88 | \$6.88 | \$0.00 | 0.0\% |
| Excess 250 kWh | \$0.03250 | \$0.03250 | \$0.00000 | \$8.13 | \$8.13 | \$0.00 | 0.0\% |
| External Delivery Charge | \$0.01688 | \$0.01501 | (\$0.00187) | \$8.44 | \$7.51 | (\$0.93) | (1.3\%) |
| Stranded Cost Charge | \$0.00138 | (\$0.00004) | (\$0.00142) | \$0.69 | (\$0.02) | (\$0.71) | (1.0\%) |
| Storm Recovery Adj. | \$0.00096 | \$0.00096 | \$0.00000 | \$0.48 | \$0.48 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00330 | \$0.00330 | \$0.00000 | \$1.65 | \$1.65 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.07274 | \$0.07274 | \$0.00000 | \$36.37 | \$36.37 | \$0.00 | 0.0\% |
| First 250 kWh | \$0.12276 | \$0.11947 | (\$0.00329) |  |  |  |  |
| Excess 250 kWh | \$0.12776 | \$0.12447 | (\$0.00329) |  |  |  |  |
| Total Bill |  |  |  | \$72.90 | \$71.26 | (\$1.65) | (2.3\%) |

[^0]Unitil Energy Systems, Inc.
Typical Bill Impacts by Rate Component


| Rate Components | Regular General G2 kWh Meter 125 kWh Typical Bill |  |  |  | As Revised Bill* | Difference | \% <br> Difference to Total Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5/1/2011 <br> Current Rate | 8/1/2011 <br> As Revised | Difference | Current Bill* |  |  |  |
| Customer Charge | \$12.50 | \$12.50 | \$0.00 | \$12.50 | \$12.50 | \$0.00 | 0.0\% |
|  | \$/kWh | \$/kWh |  |  |  |  |  |
| Distribution Charge | \$0.02910 | \$0.02910 | \$0.00000 | \$3.64 | \$3.64 | \$0.00 | 0.0\% |
| External Delivery Charge | \$0.01688 | \$0.01501 | (\$0.00187) | \$2.11 | \$1.88 | (\$0.23) | (0.8\%) |
| Stranded Cost Charge | \$0.00138 | (\$0.00004) | (\$0.00142) | \$0.17 | (\$0.01) | (\$0.18) | (0.6\%) |
| Storm Recovery Adj. | \$0.00096 | \$0.00096 | \$0.00000 | \$0.12 | \$0.12 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00330 | \$0.00330 | \$0.00000 | \$0.41 | \$0.41 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.07274 | \$0.07274 | \$0.00000 | \$9.09 | \$9.09 | \$0.00 | 0.0\% |
| Total | \$0.12436 | \$0.12107 | (\$0.00329) | \$15.55 | \$15.13 | (\$0.41) | (1.5\%) |
| Total Bill |  |  |  | \$28.05 | \$27.63 | (\$0.41) | (1.5\%) |

* Impacts do not include the Electricity Consumption Tax.

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

| Rate Components | Regular General G2 Demand, $10 \mathrm{~kW}, 3,000 \mathrm{kWh}$ Typical Bill |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5/1/2011 <br> Current Rate | 8/1/2011 <br> As Revised | Difference | $\underline{\text { Current Bill* }}$ | As Revised Bill* | Difference | $\qquad$ |
| Customer Charge | \$16.50 | \$16.50 | \$0.00 | \$16.50 | \$16.50 | \$0.00 | 0.0\% |
|  | All kW | All kW |  |  |  |  |  |
| Distribution Charge | \$9.24 | \$9.24 | \$0.00 | \$92.40 | \$92.40 | \$0.00 | 0.0\% |
| Stranded Cost Charge | \$0.24 | (\$0.01) | (\$0.25) | \$2.40 | (\$0.10) | (\$2.50) | (0.6\%) |
| Total | \$9.48 | \$9.23 | (\$0.25) | \$94.80 | \$92.30 | (\$2.50) | (0.6\%) |
|  | \$/kWh | \$/kWh |  |  |  |  |  |
| Distribution Charge | \$0.00034 | \$0.00034 | \$0.00000 | \$1.02 | \$1.02 | \$0.00 | 0.0\% |
| External Delivery Charge | \$0.01688 | \$0.01501 | (\$0.00187) | \$50.64 | \$45.03 | (\$5.61) | (1.4\%) |
| Stranded Cost Charge | \$0.00046 | (\$0.00001) | (\$0.00047) | \$1.38 | (\$0.03) | (\$1.41) | (0.4\%) |
| Storm Recovery Adj. | \$0.00096 | \$0.00096 | \$0.00000 | \$2.88 | \$2.88 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00330 | \$0.00330 | \$0.00000 | \$9.90 | \$9.90 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.07274 | \$0.07274 | \$0.00000 | \$218.22 | \$218.22 | \$0.00 | 0.0\% |
| Total | \$0.09468 | \$0.09234 | (\$0.00234) | \$284.04 | \$277.02 | (\$7.02) | (1.8\%) |
| Total Bill |  |  |  | \$395.34 | \$385.82 | (\$9.52) | (2.4\%) |


| Large General - G1 $550 \mathrm{kVa}, 200,000 \mathrm{kWh}$ Typical Bill |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rate Components | 5/1/2011 <br> Current Rate | 8/1/2011 <br> As Revised | Difference | Current Bill* | As Revised Bill* | Difference | $\qquad$ |
| Customer Charge | \$87.09 | \$87.09 | \$0.00 | \$87.09 | \$87.09 | \$0.00 | 0.0\% |
|  | All kVa | All kVa |  |  |  |  |  |
| Distribution Charge | \$6.25 | \$6.25 | \$0.00 | \$3,437.50 | \$3,437.50 | \$0.00 | 0.0\% |
| Stranded Cost Charge | \$0.34 | (\$0.01) | (\$0.35) | \$187.00 | (\$5.50) | (\$192.50) | (0.9\%) |
| Total | \$6.59 | \$6.24 | (\$0.35) | \$3,624.50 | \$3,432.00 | (\$192.50) | (0.9\%) |
|  | \$/kWh | \$/kWh |  |  |  |  |  |
| Distribution Charge | \$0.00034 | \$0.00034 | \$0.00000 | \$68.00 | \$68.00 | \$0.00 | 0.0\% |
| External Delivery Charge | \$0.01688 | \$0.01501 | (\$0.00187) | \$3,376.00 | \$3,002.00 | (\$374.00) | (1.7\%) |
| Stranded Cost Charge | \$0.00041 | (\$0.00001) | (\$0.00042) | \$82.00 | (\$2.00) | (\$84.00) | (0.4\%) |
| Storm Recovery Adj. | \$0.00096 | \$0.00096 | \$0.00000 | \$192.00 | \$192.00 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00330 | \$0.00330 | \$0.00000 | \$660.00 | \$660.00 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.06757 | \$0.07169 | \$0.00412 | \$13,514.00 | \$14,338.00 | \$824.00 | 3.8\% |
| Total | \$0.08946 | \$0.09129 | \$0.00183 | \$17,892.00 | \$18,258.00 | \$366.00 | 1.7\% |
| Total Bill |  |  |  | \$21,603.59 | \$21,777.09 | \$173.50 | 0.8\% |

* Impacts do not include the Electricity Consumption Tax.

Unitil Energy Systems, Inc.
Typical Bill Impacts for Residential Rate Class based on Mean and Median Usage
Residential Rate D 671 kWh Bill - Mean Use*

| Rate Components | 5/1/2011 | 8/1/2011 |  | $\frac{\text { Current }}{\underline{B i l l}{ }^{\star \star}}$ | As Revised Bill** | Difference | $\%$Differenceto Total Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | As Revised | Difference |  |  |  |  |
| Customer Charge | \$10.27 | \$10.27 | \$0.00 | \$10.27 | \$10.27 | \$0.00 | 0.0\% |
|  | \$/kWh | \$/kWh |  |  |  |  |  |
| Distribution Charge |  |  |  |  |  |  |  |
| First 250 kWh | \$0.02750 | \$0.02750 | \$0.00000 | \$6.88 | \$6.88 | \$0.00 | 0.0\% |
| Excess 250 kWh | \$0.03250 | \$0.03250 | \$0.00000 | \$13.68 | \$13.68 | \$0.00 | 0.0\% |
| External Delivery Charge | \$0.01688 | \$0.01501 | (\$0.00187) | \$11.33 | \$10.07 | (\$1.25) | (1.3\%) |
| Stranded Cost Charge | \$0.00138 | (\$0.00004) | (\$0.00142) | \$0.93 | (\$0.03) | (\$0.95) | (1.0\%) |
| Storm Recovery Adj. | \$0.00096 | \$0.00096 | \$0.00000 | \$0.64 | \$0.64 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00330 | \$0.00330 | \$0.00000 | \$2.21 | \$2.21 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.07274 | \$0.07274 | \$0.00000 | \$48.81 | \$48.81 | \$0.00 | 0.0\% |
| First 250 kWh | \$0.12276 | \$0.11947 | (\$0.00329) |  |  |  |  |
| Excess 250 kWh | \$0.12776 | \$0.12447 | (\$0.00329) |  |  |  |  |
| Total Bill |  |  |  | \$94.75 | \$92.54 | (\$2.21) | (2.3\%) |

Residential Rate D 560 kWh Bill - Median Use*


[^1]Unitil Energy Systems, Inc.
Average Class Bill Impacts
Due to Proposed Rate Changes Effective August 1, 2011

| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (1) | (J) | (K) | (L) | (M) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Annual | Annual |  | Proposed | Proposed | Estimated Annual | Estimated Annual | Proposed | \% Change | \% Change | \% Change |
|  | Number of | kWh | kW / kVA | DSC | SCC | EDC | Revenue \$ Under | Revenue \$ Under | Net Change | DSC | Net SCC \& | Net |
| Class of Service | Customers | Sales | Sales | Change \$ | Change \$ | Change \$ | Present Rates | Proposed Rates | Revenue \$ | Revenue | EDC Revenue | Revenue |
| Residential | 763,694 | 480,638,599 | n/a | \$0 | $(\$ 682,507)$ | (\$898,794) | \$68,385,480 | \$66,804,179 | (\$1,581,301) | 0.0\% | (2.3\%) | (2.3\%) |
| General Service | 129,249 | 340,275,469 | 1,301,458 | \$0 | $(\$ 483,191)$ | $(\$ 636,315)$ | \$46,799,056 | \$45,679,550 | (\$1,119,506) | 0.0\% | (2.4\%) | (2.4\%) |
| Large General Service | 1,814 | 347,650,754 | 989,158 | \$1,432,321 | $(\$ 493,664)$ | $(\$ 650,107)$ | \$37,601,076 | \$37,889,626 | \$288,550 | 3.8\% | (3.0\%) | 0.8\% |
| Outdoor Lighting | 115,819 | 8,988,739 | n/a | \$0 | (\$12,764) | $(\$ 16,809)$ | \$2,417,811 | \$2,388,238 | (\$29,573) | 0.0\% | (1.2\%) | (1.2\%) |
| Total | 1,010,576 | 1,177,553,561 |  | \$1,432,321 | (\$1,672,126) | (\$2,202,025) | \$155,203,423 | \$152,761,593 | (\$2,441,830) | 0.9\% | (2.5\%) | (1.6\%) |

(B), (C), (D) Test year billing determinants in DE 10-055
(E), (F), (G) Difference in proposed rate and current rate, times the billing determinants shown in Column (C). The DSC for the G1 class used in this analysis are based on the average of the DSC for each 3-month period, August-October 2011 versus May-July 2011.
(H) Based on current rates times billing determinants shown in Columns (B), (C) and (D)
(I) Sum of Columns (E) through (H)
(J) Column (I) minus Column (H)
(K) Column (E) divided by Column (H)
(L) Column (F) + Column (G) divided by Column (H)
(M) Column (J) divided by Column (H)


| Unitil Energy Systems, Inc. <br> Typical Bill Impacts - May 1, 2011 versus August 1, 2011 Impacts do NOT include the Electricity Consumption Tax Impact on G2 Rate Customers |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Average | Average | Total Bill | Total Bill |  | \% |
| Load Monthly <br> Factor $\underline{k W}$ | Monthly kWh | Using Rates 5/1/2011 | Using Rates 8/1/2011 | Total Difference | Total Difference |
| 20\% 5 | 730 | \$133.02 | \$130.06 | (\$2.96) | (2.2\%) |
| 20\% 10 | 1,460 | \$249.53 | \$243.62 | (\$5.92) | (2.4\%) |
| 20\% 15 | 2,190 | \$366.05 | \$357.17 | (\$8.87) | (2.4\%) |
| 20\% 25 | 3,650 | \$599.08 | \$584.29 | (\$14.79) | (2.5\%) |
| 20\% 50 | 7,300 | \$1,181.66 | \$1,152.08 | (\$29.58) | (2.5\%) |
| 20\% 75 | 10,950 | \$1,764.25 | \$1,719.87 | (\$44.37) | (2.5\%) |
| 20\% 100 | 14,600 | \$2,346.83 | \$2,287.66 | (\$59.16) | (2.5\%) |
| 20\% 150 | 21,900 | \$3,511.99 | \$3,423.25 | (\$88.75) | (2.5\%) |
| 36\% 5 | 1,314 | \$188.31 | \$183.98 | (\$4.32) | (2.3\%) |
| 36\% 10 | 2,628 | \$360.12 | \$351.47 | (\$8.65) | (2.4\%) |
| 36\% 15 | 3,942 | \$531.93 | \$518.95 | (\$12.97) | (2.4\%) |
| 36\% 25 | 6,570 | \$875.55 | \$853.92 | (\$21.62) | (2.5\%) |
| 36\% 50 | 13,140 | \$1,734.60 | \$1,691.35 | (\$43.25) | (2.5\%) |
| 36\% 75 | 19,710 | \$2,593.64 | \$2,528.77 | (\$64.87) | (2.5\%) |
| 36\% 100 | 26,280 | \$3,452.69 | \$3,366.20 | (\$86.50) | (2.5\%) |
| 36\% 150 | 39,420 | \$5,170.79 | \$5,041.04 | (\$129.74) | (2.5\%) |
| 50\% 5 | 1,825 | \$236.69 | \$231.17 | (\$5.52) | (2.3\%) |
| 50\% 10 | 3,650 | \$456.88 | \$445.84 | (\$11.04) | (2.4\%) |
| 50\% 15 | 5,475 | \$677.07 | \$660.51 | (\$16.56) | (2.4\%) |
| 50\% 25 | 9,125 | \$1,117.46 | \$1,089.85 | (\$27.60) | (2.5\%) |
| 50\% 50 | 18,250 | \$2,218.41 | \$2,163.21 | (\$55.20) | (2.5\%) |
| 50\% 75 | 27,375 | \$3,319.37 | \$3,236.56 | (\$82.81) | (2.5\%) |
| 50\% 100 | 36,500 | \$4,420.32 | \$4,309.91 | (\$110.41) | (2.5\%) |
| 50\% 150 | 54,750 | \$6,622.23 | \$6,456.62 | (\$165.61) | (2.5\%) |
|  | Rates - Effective <br> May 1, 2011 | Rates - Proposed August 1, 2011 | Difference |  |  |
| Customer Charge | \$16.50 | \$16.50 | \$0.00 |  |  |
|  | All kW | All kW | All kW |  |  |
| Distribution Charge | \$9.24 | \$9.24 | \$0.00 |  |  |
| Stranded Cost Charge | \$0.24 | (\$0.01) | (\$0.25) |  |  |
| TOTAL | \$9.48 | \$9.23 | (\$0.25) |  |  |
|  | kWh | kWh | kWh |  |  |
| Distribution Charge | \$0.00034 | \$0.00034 | \$0.00000 |  |  |
| External Delivery Charge | \$0.01688 | \$0.01501 | (\$0.00187) |  |  |
| Stranded Cost Charge | \$0.00046 | (\$0.00001) | (\$0.00047) |  |  |
| Storm Recovery Adj. Factor | \$0.00096 | \$0.00096 | \$0.00000 |  |  |
| System Benefits Charge | \$0.00330 | \$0.00330 | \$0.00000 |  |  |
| Default Service Charge | \$0.07274 | \$0.07274 | \$0.00000 |  |  |
| TOTAL | \$0.09468 | \$0.09234 | (\$0.00234) |  |  |


| Unitil Energy Systems, Inc. <br> Typical Bill Impacts - May 1, 2011 versus August 1, 2011 Impacts do NOT include the Electricity Consumption Tax Impact on G2 kWh Meter Rate Customers |  |  |  |
| :---: | :---: | :---: | :---: |
| Average Total Bill | Total Bill |  | \% |
| Monthly Using Rates | Using Rates | Total | Total |
| kWh 5/1/2011 | 8/1/2011 | Difference | Difference |
| 15 \$14.37 | \$14.32 | (\$0.05) | (0.3\%) |
| 75 \$21.83 | \$21.58 | (\$0.25) | (1.1\%) |
| 150 \$31.15 | \$30.66 | (\$0.49) | (1.6\%) |
| 250 \$43.59 | \$42.77 | (\$0.82) | (1.9\%) |
| 350 \$56.03 | \$54.87 | (\$1.15) | (2.1\%) |
| 450 \$68.46 | \$66.98 | (\$1.48) | (2.2\%) |
| 550 \$80.90 | \$79.09 | (\$1.81) | (2.2\%) |
| 650 \$93.33 | \$91.20 | (\$2.14) | (2.3\%) |
| 750 \$105.77 | \$103.30 | (\$2.47) | (2.3\%) |
| $900 \quad \$ 124.42$ | \$121.46 | (\$2.96) | (2.4\%) |
|  |  |  |  |
|  |  |  |  |
|  | $\begin{gathered} \text { Rates - Effective } \\ \text { May 1, } 2011 \\ \hline \end{gathered}$ | Rates - Proposed August 1, 2011 | Difference |
| kWh Meter Customer Charge | \$12.50 | \$12.50 | \$0.00 |
|  | All kWh | All kWh | All kWh |
| Distribution Charge | \$0.02910 | \$0.02910 | \$0.00000 |
| External Delivery Charge | \$0.01688 | \$0.01501 | (\$0.00187) |
| Stranded Cost Charge | \$0.00138 | (\$0.00004) | (\$0.00142) |
| Storm Recovery Adjustment Factor | \$0.00096 | \$0.00096 | \$0.00000 |
| System Benefits Charge | \$0.00330 | \$0.00330 | \$0.00000 |
| Default Service Charge | \$0.07274 | \$0.07274 | \$0.00000 |
| TOTAL | \$0.12436 | \$0.12107 | (\$0.00329) |


| Unitil Energy Systems, Inc. <br> Typical Bill Impacts - May 1, 2011 versus August 1, 2011 Impacts do NOT include the Electricity Consumption Tax Impact on G2 QRWH and SH Rate Customers |  |  |  |
| :---: | :---: | :---: | :---: |
| Total Bill | Total Bill |  | \% |
| Average Using Rates | Using Rates | Total | Total |
| kWh 5/1/2011 | 8/1/2011 | Difference | Difference |
| 100 \$17.92 | \$17.59 | (\$0.33) | (1.8\%) |
| 200 \$30.23 | \$29.57 | (\$0.66) | (2.2\%) |
| 300 \$42.55 | \$41.56 | (\$0.99) | (2.3\%) |
| 400 \$54.86 | \$53.54 | (\$1.32) | (2.4\%) |
| 500 \$67.18 | \$65.53 | (\$1.65) | (2.4\%) |
| 750 \$97.96 | \$95.50 | (\$2.47) | (2.5\%) |
| 1,000 \$128.75 | \$125.46 | (\$3.29) | (2.6\%) |
| 1,500 \$190.33 | \$185.39 | (\$4.94) | (2.6\%) |
| 2,000 \$251.90 | \$245.32 | (\$6.58) | (2.6\%) |
| 2,500 \$313.48 | \$305.25 | (\$8.23) | (2.6\%) |
|  |  |  |  |
|  | Rates - Effective May $\text { 1, } 2011$ | Rates - Proposed August 1, 2011 | Difference |
| Customer Charge | \$5.60 | \$5.60 | \$0.00 |
|  | All kWh | All kWh | All kWh |
| Distribution Charge | \$0.02789 | \$0.02789 | \$0.00000 |
| External Delivery Charge | \$0.01688 | \$0.01501 | (\$0.00187) |
| Stranded Cost Charge | \$0.00138 | (\$0.00004) | (\$0.00142) |
| Storm Recovery Adjustment Factor | \$0.00096 | \$0.00096 | \$0.00000 |
| System Benefits Charge | \$0.00330 | \$0.00330 | \$0.00000 |
| Default Service Charge | \$0.07274 | \$0.07274 | \$0.00000 |
| TOTAL | \$0.12315 | \$0.11986 | (\$0.00329) |





[^0]:    * Impacts do not include the Electricity Consumption Tax

[^1]:    * Based on billing period February 2010 through January 2011.
    ** Impacts do not include the Electricity Consumption Tax.

