CALCULATION OF THE DEFAULT SERVICE CHARGE


Authorized by NHPUC Order No. 25,014 in Case No. DE 10-028 DE 09-009, dated September 4, 2009
(R)

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

Schedule LSM-1
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FourteenthThirteenth Revised Page 75 Superseding ThirteenthTwelfth Page 75

## CALCULATION OF THE DEFAULT SERVICE CHARGE

| G1 Class Default Service: |  | Feb-10 | Mar-10 | Apr-10 | Total | As shown on Schedule LSM-4, Page 1 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | May-10 |  |  |  | Jun-10 | Jul-10 | Total |
| Power Supply Charge |  |  |  |  |  |  |  |  |  |
| 1 | Reconciliation |  | \$34,513 | \$34,833 | \$34,881 | \$104,227 | $(\$ 2,830)$ | $(\$ 2,543)$ | $(\$ 3,178)$ | $(\$ 8,550)$ |
| 2 | Total Costs | \$849,132 | \$764,212 | \$747,891 | \$2,361,235 | \$752,196 | \$652,785 | \$843,245 | \$2,248,225 |
| 3 | Reconciliation plus Total Costs (L. $1+$ L. 2 ) | \$883,645 | \$799,044 | \$782,772 | \$2,465,462 | \$749,366 | \$650,242 | \$840,067 | \$2,239,675 |
| 4 | kWh Purchases | 9,941,440 | 10,033,425 | $\underline{10,047,273}$ | 30,022,138 | 11,344,763 | $\underline{10,194,853}$ | 12,739,542 | 34,279,157 |
| 5 | Total, Before Losses (L. 3 / L.4) | \$0.08889 | \$0.07964 | \$0.07791 |  | \$0.06605 | \$0.06378 | \$0.06594 |  |
| 6 | Losses | 4.591\% | 4.591\% | 4.591\% |  | 4.591\% | 4.591\% | 4.591\% |  |
| 7 | Total Retail Rate - Variable Power Supply Charge (L. 5 * (1+L.6)) | \$0.09297 | \$0.08329 | \$0.08149 |  | \$0.06909 | \$0.06671 | \$0.06897 |  |
|  | Renewable Portfolio Standard (RPS) Charge |  |  |  |  | As shown on Schedule LSM-5, Page 1 |  |  |  |
| 8 | Reconciliation | \$0 | \$0 | \$0 | \$0 | \$4,315 | \$3,877 | \$4,845 | \$13,038 |
| 9 | Total Costs | \$20,925 | \$21,118 | \$21,147 | \$63,190 | \$21,720 | \$19,519 | \$24,391 | \$65,630 |
| 10 | Reconciliation plus Total Costs (L. $8+\mathrm{L} .9$ ) | \$20,925 | \$21,118 | \$21,147 | \$63,190 | \$26,035 | \$23,396 | \$29,236 | \$78,668 |
| 11 | kWh Purchases | 9,941,440 | 10,033,425 | 10,047,273 | 30,022,138 | 11,344,763 | 10,194,853 | 12,739,542 | 34,279,157 |
| 12 | Total, Before Losses (L. 10 / L.11) | \$0.00210 | \$0.00210 | \$0.00210 |  | \$0.00229 | \$0.00229 | \$0.00229 |  |
| 13 | Losses | 4.591\% | 4.591\% | 4.591\% |  | 4.591\% | 4.591\% | 4.591\% |  |
| 14 | Total Retail Rate - Variable RPS Charge (L.12 * (1+L.13)) | \$0.00220 | \$0.00220 | \$0.00220 |  | \$0.00240 | \$0.00240 | \$0.00240 |  |
| 15 | Total Retail Rate - Variable Default Service Charge (L. 7 + L.14) | \$0.09517 | \$0.08549 | \$0.08369 |  | \$0.07149 | \$0.06911 | \$0.07137 |  |

Authorized by NHPUC Order No. 25,054 in Case No. DE 10-028 DE 09-009, dated December 18, 2009

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Eleventh干entl Revised Page 6
Unitil Energy Systems, Inc.
Superseding TenthNinth Revised Page 6

## SUMMARY OF LOW-INCOME <br> ELECTRIC ASSISTANCE PROGRAM DISCOUNTS

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

| $\underline{\text { Tier }}$ | Percentage of Federal Poverty Guidelines | Rate D |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Discount | Blocks | НЕАР <br> Discount(1) | LI-EAP <br> Discount(1) |
| 1 | 176-185 | 5\% | Customer Charge | (\$0.42) | (\$0.42) |
|  |  |  | First 250 kWh <br> Excess 250 kWh | $\begin{aligned} & (\$ 0.00655) \\ & (\$ 0.00680) \\ & \hline \end{aligned}$ | $\begin{array}{r} (\$ 0.00627) \\ (\$ 0.00652) \\ \hline \end{array}$ |
| 2 | 151-175 | 7\% | Customer Charge | (\$0.59) | (\$0.59) |
|  |  |  | First 250 kWh <br> Excess 250 kWh | $\begin{aligned} & (\$ 0.00917) \\ & (\$ 0.00952) \\ & \hline \end{aligned}$ | $\begin{aligned} & (\$ 0.00878) \\ & (\$ 0.00913) \\ & \hline \end{aligned}$ |
| 3 | 126-150 | 18\% | Customer Charge | (\$1.51) | (\$1.51) |
|  |  |  | First 250 kWh <br> Excess 250 kWh | $\begin{aligned} & (\$ 0.02357) \\ & (\$ 0.02447) \end{aligned}$ | $\begin{aligned} & (\$ 0.02259) \\ & (\$ 0.02349) \end{aligned}$ |
| 4 | 101-125 | 33\% | Customer Charge | (\$2.77) | (\$2.77) |
|  |  |  | First 250 kWh <br> Excess 250 kWh | $\begin{aligned} & (\$ 0.04322) \\ & (\$ 0.04487) \\ & \hline \end{aligned}$ | $\begin{array}{r} (\$ 0.04141) \\ (\$ 0.04306) \\ \hline \end{array}$ |
| 5 | 76-100 | 48\% | Customer Charge | (\$4.03) | (\$4.03) |
|  |  |  | First 250 kWh <br> Excess 250 kWh | $\begin{aligned} & (\$ 0.06287) \\ & (\$ 0.06527) \\ & \hline \end{aligned}$ | $\begin{aligned} & (\$ 0.06024) \\ & (\$ 0.06264) \\ & \hline \end{aligned}$ |
| 6 | 0-75 | 70\% | Customer Charge | (\$5.88) | (\$5.88) |
|  |  |  | First 250 kWh <br> Excess 250 kWh | $\begin{aligned} & (\$ 0.09168) \\ & (\$ 0.09518) \end{aligned}$ | $\begin{array}{r} (\$ 0.08784) \\ (\$ 0.09134) \end{array}$ |

[^0]Authorized by NHPUC Order No. 25,014 in Case No. DE 10-028 DE 09-009, dated September 4, 2009

Unitil Energy Systems, Inc
Calculation of Non-G1 Class Default Service Power Suppply Charge

## 1 Reconciliation (1)

2 Total Costs (Page 2)
3 Reconciliation plus Total Costs (L. $1+$ L.2)

4 kWh Purchase
5 Total, Before Losses (L. 3 / L.4)

6 Losses
7 Total Retail Rate - Variable Power Supply Charge (L.5 * (1+L.6))
8 Total Retail Rate - Fixed Power Supply Charge (L. $5^{*}$ (1+L.6))

(1) Balance as of January 31, 2010 modified, as detailed below, to reflect that current rates (through April 30, 2010) include a credit for the overcollection as of January 31,2009 and to reflect accruals for RPS. Figure is then allocated between rate periods (May-October 2010 and November 2010-April 2011) and then to each month, May through October 2010, on equal per kWh basis

January 31, 2010 actual balance - Schedule LSM-2, Page 2
less: Estimated remaining credit for January 31, 2009 reconciliation - Feb, Mar, Apr 2010
Estimated kWh Sales Feb-Apr 2010
Amount of reconciliation in current rate
Estimated amount of reconciliation to be credited Feb-Apr 2010
plus: Non-G1 Class RPS amounts included in rate filings, Jan - Jul 2009

Total reconciliation for May 1, 2010-April 30, 2011
kWh purchases forecast May-October 2010
kWh purchases forecast November 2010-April 2011 Total

Reconciliation amount for May-October 2010
Reconciliation amount for November 2010-April 2011
Total
(\$1,143,483)

222,602,247
(\$0.00002)
$(\$ 4,452)$
Note: effective August 1, 2009, RPS moved to a separate reconciliation \$914,358 model
(\$224,673)

| $443,568,800$ | $50.45 \%$ |
| :--- | :--- |
| $435,727,296$ | $49.55 \%$ |

$(\$ 113,347)$
(\$111,325)
(\$224,673)

Unitil Energy Systems, Inc.
Reconciliation of Non-G1 Class Power Supply Charge Costs and Revenues

Schedule LSM-2
Page 2 of 5

|  | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Beginning Balance | Total Costs (Page 3) | Total Revenue (Page 4) | Ending Balance Before Interest ( $\mathrm{a}+\mathrm{b}-\mathrm{c}$ ) | Average Monthly <br> Balance ((a+d) / 2) | Interest Rate | Number of Days / Month | Computed Interest | Ending Balance with Interest (d + h) |
| Feb-09 | (\$1,259,276) | \$8,010,638 | \$7,536,393 | (\$785,031) | (\$1,022,153) | 4.00\% | 28 | $(\$ 3,136)$ | $(\$ 788,168)$ |
| Mar-09 | $(\$ 788,168)$ | \$7,205,121 | \$7,379,748 | $(\$ 962,794)$ | $(\$ 875,481)$ | 4.00\% | 31 | $(\$ 2,974)$ | $(\$ 965,769)$ |
| Apr-09 | $(\$ 965,769)$ | \$5,861,733 | \$6,460,062 | (\$1,564,098) | (\$1,264,933) | 3.25\% | 30 | $(\$ 3,379)$ | (\$1,567,477) |
| May-09 | (\$1,567,477) | \$4,776,088 | \$5,044,696 | (\$1,836,084) | (\$1,701,780) | 3.25\% | 31 | $(\$ 4,697)$ | (\$1,840,782) |
| Jun-09 | (\$1,840,782) | \$4,306,047 | \$5,070,023 | (\$2,604,758) | (\$2,222,770) | 3.25\% | 30 | $(\$ 5,938)$ | (\$2,610,696) |
| Jul-09 | (\$2,610,696) | \$7,667,120 | \$6,570,701 | (\$1,514,277) | (\$2,062,486) | 3.25\% | 31 | $(\$ 5,693)$ | (\$1,519,970) |
| Aug-09 | (\$1,519,970) | \$7,315,689 | \$6,242,669 | $(\$ 446,950)$ | $(\$ 983,460)$ | 3.25\% | 31 | $(\$ 2,715)$ | $(\$ 449,664)$ |
| Sep-09 | $(\$ 449,664)$ | \$4,764,103 | \$5,619,865 | (\$1,305,426) | $(\$ 877,545)$ | 3.25\% | 30 | $(\$ 2,344)$ | (\$1,307,770) |
| Oct-09 | (\$1,307,770) | \$4,823,903 | \$4,564,453 | (\$1,048,320) | (\$1,178,045) | 3.25\% | 31 | $(\$ 3,252)$ | (\$1,051,572) |
| Nov-09 | (\$1,051,572) | \$3,785,214 | \$5,093,032 | (\$2,359,390) | (\$1,705,481) | 3.25\% | 30 | $(\$ 4,311)(1)$ | (\$2,363,701) |
| Dec-09 | (\$2,363,701) | \$7,206,908 | \$6,389,248 | (\$1,546,040) | (\$1,954,870) | 3.25\% | 31 | $(\$ 5,723)(2)$ | (\$1,551,763) |
| Jan-10 | (\$1,551,763) | \$7,080,371 | \$6,668,377 | (\$1,139,768) | (\$1,345,765) | 3.25\% | 31 | $(\$ 3,715)$ | (\$1,143,483) |
| Total |  | \$72,802,935 | \$72,639,267 |  |  |  |  | $(\$ 47,876)$ |  |

(1) Includes $\$ 245.02$ to adjust interest related to adjustment made to working capital (see page 3).
(2) Includes (\$326.56) to adjust interest related to adjustment made to working capital (see page 3).

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

|  |  |  | Calculation of Working Capital Supplier Charges and GIS Support Payments |  |  |  |  | Calculation of Working Capital Renewable Energy Credits |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) Total Non-G1 Class DS Supplier Charges | (b) <br> GIS Support Payments | (c) <br> Number of <br> Days of Lag / <br> 365 | (d) Working Capital Requirement $((a+b) * c)$ | (e) Prime Rate | $(f)$ Supply Related Working Capital ( $\mathrm{d}^{\star} \mathrm{e}$ ) | (g) <br> Renewable Energy Credits | (h) <br> Number of <br> Days of Lead / <br> 365 | (i) Working Capital Requirement $\left(g^{*}-h\right)$ | (j) Prime Rate | (k) <br> Supply Related Working Capital ( $\mathrm{i} * \mathrm{j}$ ) | (I) <br> Provision for Uncollected Accounts | (m) Internal Company Administrative Costs | (n) <br> Legal Charges | (o) <br> Consulting <br> Outside <br> Service <br> Charges | (p) <br> Total Costs $\begin{gathered} (\text { sum } a+b+f+ \\ g+k+1+m+ \\ n+o) \\ \hline \end{gathered}$ |
| Feb-09 | \$7,970,952 | \$659 | 2.81\% | \$223,860 | 4.00\% | \$8,954 | \$11,640 | 99.31\% | (\$11,559) | 4.00\% | (\$462) | \$15,603 | \$2,366 | \$0 | \$927 | \$8,010,638 |
| Mar-09 | \$7,148,430 | \$740 | 2.81\% | \$200,764 | 4.00\% | \$8,031 | \$0 | 99.31\% | \$0 | 4.00\% | \$0 | \$45,065 | \$2,366 | \$0 | \$490 | \$7,205,121 |
| Apr-09 | \$5,718,491 | \$609 | 2.81\% | \$160,605 | 3.25\% | \$5,220 | \$108,021 | 99.31\% | (\$107,275) | 3.25\% | $(\$ 3,486)$ | \$30,512 | \$2,366 | \$0 | \$0 | \$5,861,733 |
| May-09 | \$4,635,395 | \$596 | 2.81\% | \$130,189 | 3.25\% | \$4,231 | \$53,111 | 99.31\% | (\$52,744) | 3.25\% | $(\$ 1,714)$ | \$41,175 | \$2,366 | \$0 | \$40,929 | \$4,776,088 |
| Jun-09 | \$4,037,195 | \$535 | 2.81\% | \$113,388 | 3.25\% | \$3,685 | \$243,929 | 99.31\% | (\$242,245) | 3.25\% | $(\$ 7,873)$ | \$26,210 | \$2,366 | \$0 | \$0 | \$4,306,047 |
| Jul-09 | \$7,175,952 | \$535 | 2.81\% | \$201,531 | 3.25\% | \$6,550 | \$468,635 | 99.31\% | $(\$ 465,400)$ | 3.25\% | $(\$ 15,125)$ | \$28,208 | \$2,366 | \$0 | \$0 | \$7,667,120 |
| Aug-09 | \$7,267,263 | \$682 | 2.81\% | \$204,100 | 3.25\% | \$6,633 |  |  |  |  |  | \$38,746 | \$2,366 | \$0 | \$0 | \$7,315,689 |
| Sep-09 | \$4,732,898 | \$656 | 2.81\% | \$132,929 | 3.25\% | \$4,320 |  |  |  |  |  | \$23,863 | \$2,366 | \$0 | \$0 | \$4,764,103 |
| Oct-09 | \$4,780,252 | \$698 | 2.81\% | \$134,260 | 3.25\% | \$4,363 |  |  |  |  |  | \$36,224 | \$2,366 | \$0 | \$0 | \$4,823,903 |
| Nov-09 | \$3,728,391 | \$536 | 4.61\% | \$171,735 | 3.25\% | \$29,213 (1) |  |  |  |  |  | \$24,956 | \$2,118 | \$0 | \$0 | \$3,785,214 |
| Dec-09 | \$7,175,280 | \$542 | 4.61\% | \$330,481 | 3.25\% | \$816 (2) |  |  |  |  |  | \$28,152 | \$2,118 | \$0 | \$0 | \$7,206,908 |
| Jan-10 | \$7,050,326 | \$553 | 4.61\% | \$324,727 | 3.25\% | \$10,554 |  |  |  |  |  | \$16,821 | \$2,118 | \$0 | \$0 | \$7,080,371 |
| Total | \$71,420,825 | \$7,341 |  | \$2,328,569 |  | \$92,570 | \$885,337 |  | (\$879,224) |  | (\$28,661) | \$355,535 | \$27,644 | \$0 | \$42,346 | \$72,802,935 |

(1) Includes $\$ 23,631.46$ to adjust working capital for the period May-October 2009 to use 16.81 days lag from the 2008 Lead/Lag Study
 order No. 25,028

Unitil Energy Systems, Inc
Non-G1 Class Default Service Power Supply Charge Revenue

|  | (a) <br> Total Non-G1 Class Billed Default Service kWh (1) | (b) <br> Unbilled Factor <br> (2) | (c) <br> Non-G1 Class Unbilled kWh ( a * b) | (d) Effective Fixed DSC (3) | (e) <br> Non-G1 Class Unbilled Default Service Revenue (c * d) | (f) <br> Reversal of prior month unbilled | (g) <br> Total Billed NonG1 Class Default Service Revenue <br> (1) | (h) <br> Total Revenue $(e+f+g)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Feb-09 | 71,687,177 | 48.36\% | 34,667,967 | \$0.11239 | \$3,896,333 | (\$4,439,885) | \$8,079,946 | \$7,536,393 |
| Mar-09 | 65,398,487 | 53.29\% | 34,851,079 | \$0.11239 | \$3,916,913 | (\$3,896,333) | \$7,359,168 | \$7,379,748 |
| Apr-09 | 63,320,789 | 46.03\% | 29,143,948 | \$0.11239 | \$3,275,488 | (\$3,916,913) | \$7,101,486 | \$6,460,062 |
| May-09 | 56,687,087 | 53.95\% | 30,580,273 | \$0.08618 | \$2,635,408 | (\$3,275,488) | \$5,684,776 | \$5,044,696 |
| Jun-09 | 58,973,191 | 51.68\% | 30,476,083 | \$0.08618 | \$2,626,429 | (\$2,635,408) | \$5,079,002 | \$5,070,023 |
| Jul-09 | 67,392,122 | 58.32\% | 39,306,023 | \$0.08618 | \$3,387,393 | (\$2,626,429) | \$5,809,737 | \$6,570,701 |
| Aug-09 | 74,608,777 | 51.77\% | 38,625,156 | \$0.08439 | \$3,259,577 | (\$3,387,393) | \$6,370,485 | \$6,242,669 |
| Sep-09 | 70,310,571 | 49.63\% | 34,891,961 | \$0.08439 | \$2,944,533 | (\$3,259,577) | \$5,934,909 | \$5,619,865 |
| Oct-09 | 58,228,492 | 52.84\% | 30,765,122 | \$0.08439 | \$2,596,269 | (\$2,944,533) | \$4,912,717 | \$4,564,453 |
| Nov-09 | 57,631,318 | 53.74\% | 30,971,292 | \$0.08825 | \$2,733,217 | (\$2,596,269) | \$4,956,084 | \$5,093,032 |
| Dec-09 | 64,628,025 | 60.03\% | 38,796,520 | \$0.08825 | \$3,423,793 | (\$2,733,217) | \$5,698,671 | \$6,389,248 |
| Jan-10 | 78,092,243 | 46.40\% | 36,236,288 | \$0.08825 | \$3,197,852 | (\$3,423,793) | \$6,894,317 | \$6,668,377 |
| Total | 786,958,279 |  |  |  | \$37,893,204 | (\$39,135,237) | \$73,881,300 | \$72,639,267 |

(1) Per billing system
(2) Detail of Unbilled Factors for the Residential, Regular General, and Outdoor Lighting Classes:
(3) Beginning in August 2009, rate shown is "Fixed Power Supply Charge".

|  | Billed kWh | Direct Estimate of Unbilled kWh | Unbilled kWh / Billed kWh |
| :---: | :---: | :---: | :---: |
| Feb-09 | 74,129,599 | 35,849,124 | 48.36\% |
| Mar-09 | 67,763,862 | 36,111,595 | 53.29\% |
| Apr-09 | 65,825,524 | 30,296,774 | 46.03\% |
| May-09 | 59,199,422 | 31,935,571 | 53.95\% |
| Jun-09 | 61,853,147 | 31,964,383 | 51.68\% |
| Jul-09 | 70,532,225 | 41,137,468 | 58.32\% |
| Aug-09 | 78,861,225 | 40,826,659 | 51.77\% |
| Sep-09 | 75,192,954 | 37,314,868 | 49.63\% |
| Oct-09 | 62,796,629 | 33,178,705 | 52.84\% |
| Nov-09 | 62,064,126 | 33,353,500 | 53.74\% |
| Dec-09 | 69,589,063 | 41,774,655 | 60.03\% |
| Jan-10 | 84,233,155 | 39,085,788 | 46.40\% |

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

Calculation of Working Capital

|  | Supplier Charges and GIS Support Payments |  |  |  |  |  | (g) | (h) | (i) | (j) | (k) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) | (d) | (e) | (f) |  |  |  |  |  |
|  | Total Non-G1 |  |  | Working |  | Supply | Provision | Internal | Legal Charges |  |  |
|  | Class DS | GIS | Number of | Capital |  | Related | for | Company |  | Consulting | Total Costs |
|  | Supplier | Support | Days of Lag / | Requirement |  | Working | Uncollected | Administrative |  | Outside Service | (sum a + b + f + |
|  | Charges (1) | Payments | 365 | $((a+b) * c)$ | Prime Rate | Capital ( $\mathrm{d}^{*} \mathrm{e}$ ) | Accounts | Costs |  | Charges | $\mathrm{g}+\mathrm{h}+\mathrm{i}+\mathrm{j})$ |
| May-10 | \$4,669,000 | \$553 | 4.36\% | \$203,413 | 3.25\% | \$6,611 | \$43,200 | \$2,118 | \$0 | \$0 | \$4,721,482 |
| Jun-10 | \$5,472,500 | \$632 | 4.36\% | \$238,419 | 3.25\% | \$7,749 | \$47,520 | \$2,118 | \$0 | \$0 | \$5,530,518 |
| Jul-10 | \$6,770,401 | \$748 | 4.36\% | \$294,962 | 3.25\% | \$9,586 | \$47,520 | \$2,118 | \$0 | \$0 | \$6,830,374 |
| Aug-10 | \$6,928,211 | \$744 | 4.36\% | \$301,837 | 3.25\% | \$9,810 | \$47,520 | \$2,118 | \$0 | \$0 | \$6,988,403 |
| Sep-10 | \$5,250,425 | \$611 | 4.36\% | \$228,744 | 3.25\% | \$7,434 | \$38,880 | \$2,118 | \$0 | \$0 | \$5,299,468 |
| Oct-10 | \$5,245,390 | \$601 | 4.36\% | \$228,524 | 3.25\% | \$7,427 | \$30,240 | \$2,118 | \$0 | \$0 | \$5,285,776 |
| Total | \$34,335,927 | \$3,889 |  | \$1,495,899 |  | \$48,617 | \$254,880 | \$12,708 | \$0 | \$0 | \$34,656,022 |

(1) Estimates based on monthly average wholesale rate times estimated monthly purchases

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

```
1 Reconciliation
2 Total Costs (Page 2)
3 Reconciliation plus Total Costs (L. \(1+\) L.2)
4 kWh Purchase
5 Total, Before Losses (L. 3 / L. 4 )
6 Losses
7 Total Retail Rate - Variable RPS Charge (L. 5 * (1+L.6))
8 Total Retail Rate - Fixed RPS Charge (L. \(5^{*}\) (1+L.6))
```

| May-10 <br> Estimated | Jun-10 <br> Estimated | Jul-10 <br> Estimated | Aug-10 <br> Estimated | Sep-10 <br> Estimated | Oct-10 <br> Estimated | Total <br> $\$ 1,551$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 1,775$ | $\$ 2,101$ | $\$ 2,090$ | $\$ 1,715$ | $\$ 1,688$ | $\$ 10,921$ |  |
| $\$ 118,486$ | $\underline{\$ 135,627}$ | $\underline{\$ 160,474}$ | $\underline{\$ 159,619}$ | $\underline{\$ 131,029}$ | $\underline{\$ 128,975}$ | $\underline{\$ 834,210}$ |
| $\$ 120,037$ | $\$ 137,402$ | $\$ 162,575$ | $\$ 161,709$ | $\$ 132,744$ | $\$ 130,663$ | $\$ 845,131$ |
| $\underline{63,001,518}$ | $\underline{72,116,000}$ | $\underline{85,328,322}$ | $\underline{84,873,727}$ | $\underline{69,670,112}$ | $\underline{68,579,121}$ | $\underline{443,568,800}$ |
| $\$ 0.00191$ | $\$ 0.00191$ | $\$ 0.00191$ | $\$ 0.00191$ | $\$ 0.00191$ | $\$ 0.00191$ | $\$ 0.00191$ |
| $\underline{6.40 \%}$ | $\underline{6.40 \%}$ | $\underline{6.40 \%}$ | $\underline{6.40 \%}$ | $\underline{6.40 \%}$ | $\underline{6.40 \%}$ | $\underline{6.40 \%}$ |
| $\$ 0.00203$ | $\$ 0.00203$ | $\$ 0.00203$ | $\$ 0.00203$ | $\$ 0.00203$ | $\$ 0.00203$ |  |
|  |  |  |  |  |  | $\$ 0.00203$ |

(1) Balance as of January 31, 2010 modified, as detailed below, to reflect accruals for RPS. Figure is then allocated between rate periods (May-October 2010 and November 2010 April 2011) and then to each month, May through October 2010, on equal per kWh basis.

January 31, 2010 actual balance - Schedule LSM-3, Page 2
plus: Non-G1 Class RPS amounts included in rate filings, Aug 2009-Jan 2010 less: Non-G1 Class RPS amounts, CY 2009 requirement, purchased Net Non-G1 Class RPS amounts included in rate filings, Aug 2009-Jan 2010

Total reconciliation for May 1, 2010-April 30, 2011
kWh purchases forecast May-October 2010
kWh purchases forecast November 2010-April 2011 Total

Reconciliation amount for May-October 2010
Reconciliation amount for November 2010-April 2011
Total
$(\$ 636,659)$
\$801,297
\$142,992
\$658,305
\$21,646

| $443,568,800$ | $50.45 \%$ |
| :--- | :--- |
| $435,727,296$ | $49.55 \%$ |
| $879,296,096$ |  |

\$10,921
\$10,726
\$21,646

Unitil Energy Systems, Inc.
Reconciliation of Non-G1 Class RPS Costs and Revenues
Schedule LSM-3
Page 2 of 5

|  | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Beginning Balance | Total Costs (Page 3) | Total Revenue (Page 4) | Ending Balance Before Interest $(a+b-c)$ | Average Monthly <br> Balance ((a+d) / 2) | Interest Rate | Number of Days / Month | Computed Interest | Ending Balance with Interest (d + h) |
| Aug-09 | \$0 | \$6,830 | \$131,974 | (\$125,144) | $(\$ 62,572)$ | 3.25\% | 31 | (\$173) | (\$125,316) |
| Sep-09 | $(\$ 125,316)$ | \$0 | \$119,103 | (\$244,419) | $(\$ 184,868)$ | 3.25\% | 30 | (\$494) | (\$244,913) |
| Oct-09 | (\$244,913) | \$0 | \$96,847 | $(\$ 341,760)$ | $(\$ 293,337)$ | 3.25\% | 31 | (\$810) | $(\$ 342,570)$ |
| Nov-09 | $(\$ 342,570)$ | \$6,173 | \$121,851 | $(\$ 458,248)$ | $(\$ 400,409)$ | 3.25\% | 30 | $(\$ 1,070)$ | $(\$ 459,317)$ |
| Dec-09 | $(\$ 459,317)$ | \$80,464 | \$153,338 | $(\$ 532,191)$ | $(\$ 495,754)$ | 3.25\% | 31 | $(\$ 1,368)$ | $(\$ 533,560)$ |
| Jan-10 | $(\$ 533,560)$ | \$58,554 | \$160,040 | $(\$ 635,046)$ | $(\$ 584,303)$ | 3.25\% | 31 | $(\$ 1,613)$ | $(\$ 636,659)$ |
| Total |  | \$152,020 | \$783,152 |  |  |  |  | $(\$ 5,527)$ |  |


|  | (a) | Calculation of Working Capital |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (b) | (c) | (d) | (e) | (f) |
|  |  |  | Working |  |  |  |
|  |  | Number of | Capital |  |  |  |
|  |  | Days of Lag / | Requirement |  | Supply Related Working |  |
|  | Renewable Energy Credits | 365 | (a*b) | Prime Rate | Capital (c * d) | Total Costs (sum a + e) |
| Aug-09 | \$7,025 | (85.52\%) | $(\$ 6,008)$ | 3.25\% | (\$195) | \$6,830 |
| Sep-09 | \$0 | (85.52\%) | \$0 | 3.25\% | \$0 | \$0 |
| Oct-09 | \$0 | (85.52\%) | \$0 | 3.25\% | \$0 | \$0 |
| Nov-09 | \$6,349 | (85.52\%) | $(\$ 5,430)$ | 3.25\% | (\$176) | \$6,173 |
| Dec-09 | \$82,764 | (85.52\%) | $(\$ 70,778)$ | 3.25\% | $(\$ 2,300)$ | \$80,464 |
| Jan-10 | \$60,227 | (85.52\%) | $(\$ 51,505)$ | 3.25\% | $(\$ 1,674)$ | \$58,554 |
| Total | \$156,366 |  | (\$133,721) |  | $(\$ 4,346)$ | \$152,020 |

Unitil Energy Systems, Inc.
Non-G1 Class Default Service Renewable Portfolio Standard Charge Revenue

Page 4 of 5

|  | (a) Total Non-G1 Class Billed Default Service kWh (1) | (b) <br> Unbilled Factor <br> (2) | (c) <br> Non-G1 Class Unbilled kWh $(a * b)$ | (d) <br> Effective Fixed RPS Charge | (e) <br> Non-G1 Class Unbilled RPS Charge Revenue (c * d) | (f) <br> Reversal of prior month unbilled | (g) Total Billed NonG1 Class RPS Charge Revenue (1) | (h) <br> Total Revenue $(e+f+g)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aug-09 | 74,608,777 | 51.77\% | 38,625,156 | \$0.00179 | \$69,139 | \$0 | \$62,835 | \$131,974 |
| Sep-09 | 70,310,571 | 49.63\% | 34,891,961 | \$0.00179 | \$62,457 | $(\$ 69,139)$ | \$125,785 | \$119,103 |
| Oct-09 | 58,228,492 | 52.84\% | 30,765,122 | \$0.00179 | \$55,070 | $(\$ 62,457)$ | \$104,234 | \$96,847 |
| Nov-09 | 57,631,318 | 53.74\% | 30,971,292 | \$0.00212 | \$65,659 | $(\$ 55,070)$ | \$111,261 | \$121,851 |
| Dec-09 | 64,628,025 | 60.03\% | 38,796,520 | \$0.00212 | \$82,249 | $(\$ 65,659)$ | \$136,748 | \$153,338 |
| Jan-10 | 78,092,243 | 46.40\% | 36,236,288 | \$0.00212 | \$76,821 | (\$82,249) | \$165,468 | \$160,040 |
| Total | 403,499,426 |  |  |  | \$411,394 | $(\$ 334,573)$ | \$706,331 | \$783,152 |

(1) Per billing system
(2) Detail of Unbilled Factors for the Residential, Regular General, and Outdoor Lighting Classes:

|  | Billed kWh | Direct Estimate of Unbilled kWh | Unbilled kWh / Billed kWh |
| :---: | :---: | :---: | :---: |
| Aug-09 | 78,861,225 | 40,826,659 | 51.77\% |
| Sep-09 | 75,192,954 | 37,314,868 | 49.63\% |
| Oct-09 | 62,796,629 | 33,178,705 | 52.84\% |
| Nov-09 | 62,064,126 | 33,353,500 | 53.74\% |
| Dec-09 | 69,589,063 | 41,774,655 | 60.03\% |
| Jan-10 | 84,233,155 | 39,085,788 | 46.40\% |


|  |  | Calculation of Working Capital |  |  |  | Total Costs (sum a + e) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) | (d) | (e) |  |
|  | Renewable Energy Credits <br> (1) | Number of Days of Lag / 365 | Working Capital Requirement (a*b) | Prime Rate | Supply Related Working Capital (c * d) |  |
| May-10 | \$121,757 | (82.65\%) | (\$100,631) | 3.25\% | $(\$ 3,271)$ | \$118,486 |
| Jun-10 | \$139,370 | (82.65\%) | $(\$ 115,189)$ | 3.25\% | $(\$ 3,744)$ | \$135,627 |
| Jul-10 | \$164,904 | (82.65\%) | $(\$ 136,292)$ | 3.25\% | $(\$ 4,429)$ | \$160,474 |
| Aug-10 | \$164,025 | (82.65\%) | $(\$ 135,566)$ | 3.25\% | $(\$ 4,406)$ | \$159,619 |
| Sep-10 | \$134,645 | (82.65\%) | (\$111,283) | 3.25\% | $(\$ 3,617)$ | \$131,029 |
| Oct-10 | \$132,535 | (82.65\%) | (\$109,539) | 3.25\% | (\$3,560) | \$128,975 |
| Total | \$857,236 |  | $(\$ 708,500)$ |  | $(\$ 23,026)$ | \$834,210 |

(1) Schedule RSF-4.

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

|  | May-10 <br> Estimated | Jun-10 <br> Estimated | Jul-10 <br> Estimated | Total |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 1 | Reconciliation (1) | $\underline{(\$ 2,830)}$ | $(\$ 2,543)$ | $(\$ 3,178)$ | $(\$ 8,550)$ |

(1) Balance as of January 31, 2010 modified, as detailed below, to reflect that current rates (through April 30, 2010) include a charge for the undercollection as of January 31, 2009 and to reflect accruals for RPS. Figure is then allocated between rate periods (May-July 2010, August-October 2010, November 2010-January 2011, and February-April 2011) and then to each month, May through July 2010, on equal per kWh basis.

January 31, 2010 actual balance - Schedule LSM-4, Page 2
$(\$ 28,632)$

28,703,892
$\frac{\$ 0.00363}{\$ 104.195}$

Note: effective August 1, 2009, RPS moved to a separate reconciliation
$\$ 100,577$ model
$(\$ 32,250)$

| $34,279,157$ | $26.51 \%$ |
| ---: | ---: |
| $34,094,607$ | $26.37 \%$ |
| $30,519,380$ | $23.60 \%$ |
| $30,401,228$ | $23.51 \%$ |
| $129,294,371$ |  |

$(\$ 8,550)$
$(\$ 8,504)$
$(\$ 7,612)$
(\$7,583)
(\$32,250)

Unitil Energy Systems, Inc.
Reconciliation of G1 Class Power Supply Charge Costs and Revenues

Schedule LSM-4
Page 2 of 5

(1) Includes (\$12.60) to adjust interest related to adjustment made to working capital (see page 3).
(2) Includes (\$63.16) to adjust interest related to adjustment made to working capital (see page 3).

## Redacted

Unitil Energy Systems, Inc.
Itemized Costs for G1 Class Default Service Power Supply Charge

|  | (a) | (b) | Calculation of Working Capital Supplier Charges and GIS Support Payments |  |  |  | (g) | Calculation of Working Capital Renewable Energy Credits |  |  |  | (1) | (m) | ( ${ }^{\text {) }}$ | (0) | (p) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (c) | (d) | (e) | (f) |  | (h) | (i) | (j) | (k) |  |  |  |  |  |
|  | $\begin{aligned} & \text { Total G1 Class } \\ & \text { DS Supplier } \\ & \text { Charges } \\ & \hline \end{aligned}$ | GIS <br> Support <br> Payments | $\begin{aligned} & \text { Number of } \\ & \text { Days of } \\ & \text { Lag / } 365 \end{aligned}$ | Working Capital Requirement $((a+b) * c)$ | Prime Rate | Supply Related Working Capital ( $\mathrm{d}^{*}$ e) | Renewable Energy $\qquad$ | $\begin{gathered} \text { Number of } \\ \text { Days of Lead / } \\ 365 \\ \hline \end{gathered}$ | Working Capital Requirement $\left(g^{*}-h\right)$ | Prime Rate | Supply <br> Related <br> Working <br> Capital ( $\mathrm{i} * \mathrm{j}$ ) | Provision for Uncollected Accounts | Internal Company Administrative Costs | $\begin{gathered} \text { Legal } \\ \text { Charges } \\ \hline \end{gathered}$ | Consulting <br> Outside <br> Service <br> Charges | $\begin{gathered} \text { Total Costs } \\ \begin{array}{c} \text { (sum } a+b+ \\ f+g+k+1+ \\ m+n+o) \end{array} \end{gathered}$ |
| Feb-09 | \$1,053,681 | \$81 | 3.70\% | \$38,946 | 4.00\% | \$1,558 | \$1,560 | \$1 | (\$1,564) | \$0 | (\$63) | \$1,924 | \$3,537 | \$0 | \$114 | \$1,062,393 |
| Mar-09 | \$844,040 | \$99 | 3.70\% | \$31,198 | 4.00\% | \$1,248 | \$0 | \$1 | \$0 | \$0 | \$0 | \$6,031 | \$3,537 | \$0 | \$66 | \$855,020 |
| Apr-09 | \$786,486 | \$89 | 3.70\% | \$29,071 | 3.25\% | \$945 | \$14,479 | \$1 | $(\$ 14,512)$ | \$0 | (\$472) | \$4,463 | \$3,537 | \$0 | \$0 | \$809,528 |
| May-09 | \$525,253 | \$94 | 3.70\% | \$19,416 | 3.25\% | \$631 | \$7,119 | \$1 | $(\$ 7,135)$ | \$0 | (\$232) | \$6,520 | \$3,537 | \$0 | \$6,481 | \$549,403 |
| Jun-09 | \$402,988 | \$90 | 3.70\% | \$14,897 | 3.25\% | \$484 | \$32,696 | \$1 | (\$32,770) | \$0 | $(\$ 1,065)$ | \$4,387 | \$3,537 | \$0 | \$0 | \$443,117 |
| Jul-09 | \$703,170 | \$83 | 3.70\% | \$25,991 | 3.25\% | \$845 | \$62,815 | \$1 | $(\$ 62,958)$ | \$0 | $(\$ 2,046)$ | \$4,382 | \$3,537 | \$0 | \$0 | \$772,785 |
| Aug-09 | \$413,724 | \$62 | 3.70\% | \$15,293 | 3.25\% | \$497 |  |  |  |  |  | \$3,511 | \$3,537 | \$0 | \$0 | \$421,332 |
| Sep-09 | \$360,451 | \$60 | 3.70\% | \$13,324 | 3.25\% | \$433 |  |  |  |  |  | \$2,176 | \$3,537 | \$0 | \$0 | \$366,657 |
| Oct-09 | \$385,861 | \$69 | 3.70\% | \$14,264 | 3.25\% | \$464 |  |  |  |  |  | \$3,575 | \$3,537 | \$0 | \$0 | \$393,506 |
| Nov-09 | \$352,209 | \$50 | 1.93\% | \$6,814 | 3.25\% | (\$1,040)(1) |  |  |  |  |  | \$2,349 | \$3,177 | \$0 | \$0 | \$356,745 |
| Dec-09 | \$386,719 | \$43 | 1.93\% | \$7,481 | 3.25\% | (\$1,642)(2) |  |  |  |  |  | \$2,242 | \$3,177 | \$0 | \$0 | \$390,538 |
| Jan-10 | Redacted | \$40 | 1.93\% | Redacted | 3.25\% | Redacted |  |  |  |  |  | Redacted | \$3,177 | \$0 | \$0 | \$421,732 |
| Total | Redacted | \$861 |  | Redacted |  | Redacted | \$118,668 | \$0 | (\$118,938) | \$0 | (\$3,877) | Redacted | \$41,365 | \$0 | \$6,661 | \$6,842,757 |

(1) Includes $(\$ 1,261.36$ ) to adjust working capital for the period May-October 2009 to use 7.06 days lag from the 2008 Lead/Lag Study.
 Order No. 25,028.

Unitil Energy Systems, Inc
G1 Class Default Service Power Supply Charge Revenue

|  | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total G1 Class <br> Billed Default <br> Service kWh (1) | Unbilled Factor <br> (2) | $\begin{aligned} & \text { G1 Class } \\ & \text { Unbilled kWh } \\ & (a * b) \\ & \hline \end{aligned}$ | Effective DSC <br> (3) | G1 Class Unbilled Default Service Revenue (c * d) | Reversal of prior month unbilled | Total Billed G1 Class Default Service Revenue <br> (1) | Total Revenue $(e+f+g)$ |
| Feb-09 | 8,840,988 | 50.36\% | 4,452,582 | \$0.10811 | \$481,369 | (\$553,967) | \$1,009,146 | \$936,548 |
| Mar-09 | 8,751,605 | 56.25\% | 4,922,778 | \$0.09527 | \$468,993 | $(\$ 481,369)$ | \$880,339 | \$867,964 |
| Apr-09 | 9,262,873 | 48.64\% | 4,505,288 | \$0.09431 | \$424,894 | $(\$ 468,993)$ | \$877,327 | \$833,228 |
| May-09 | 8,976,128 | 53.44\% | 4,796,450 | \$0.06988 | \$335,176 | (\$424,894) | \$718,403 | \$628,686 |
| Jun-09 | 9,871,227 | 50.66\% | 5,000,986 | \$0.07213 | \$360,721 | $(\$ 335,176)$ | \$701,581 | \$727,126 |
| Jul-09 | 10,469,114 | 48.11\% | 5,036,352 | \$0.07982 | \$402,002 | $(\$ 360,721)$ | \$802,281 | \$843,562 |
| Aug-09 | 6,761,726 | 49.43\% | 3,342,052 | \$0.06987 | \$233,509 | $(\$ 402,002)$ | \$505,412 | \$336,919 |
| Sep-09 | 6,410,972 | 57.11\% | 3,661,515 | \$0.06821 | \$249,752 | $(\$ 233,509)$ | \$442,845 | \$459,088 |
| Oct-09 | 5,747,300 | 51.07\% | 2,934,992 | \$0.07227 | \$212,112 | $(\$ 249,752)$ | \$403,506 | \$365,866 |
| Nov-09 | 5,424,048 | 53.04\% | 2,877,136 | \$0.07035 | \$202,406 | $(\$ 212,112)$ | \$387,232 | \$377,526 |
| Dec-09 | 5,147,961 | 54.93\% | 2,827,998 | \$0.08077 | \$228,417 | $(\$ 202,406)$ | \$385,840 | \$411,851 |
| Jan-10 | 5,680,442 | 47.49\% | 2,697,514 | \$0.09073 | \$244,745 | $(\$ 228,417)$ | \$484,666 | \$500,994 |
| Total | 91,344,383 |  |  |  | \$3,844,096 | $(\$ 4,153,318)$ | \$7,598,579 | \$7,289,357 |

(1) Per billing system
(2) Detail of Unbilled Factors for the Large General Class:
(3) Beginning in August 2009, rate shown is "Variable Power Supply Charge".

|  | Billed kWh | Direct Estimate of Unbilled kWh | Unbilled kWh / Billed kWh |
| :---: | :---: | :---: | :---: |
| Feb-09 | 28,080,876 | 14,142,356 | 50.36\% |
| Mar-09 | 26,951,031 | 15,159,955 | 56.25\% |
| Apr-09 | 27,926,042 | 13,582,705 | 48.64\% |
| May-09 | 27,738,173 | 14,822,066 | 53.44\% |
| Jun-09 | 28,584,069 | 14,481,333 | 50.66\% |
| Jul-09 | 31,048,428 | 14,936,395 | 48.11\% |
| Aug-09 | 32,371,261 | 15,999,826 | 49.43\% |
| Sep-09 | 31,169,381 | 17,801,850 | 57.11\% |
| Oct-09 | 28,729,567 | 14,671,421 | 51.07\% |
| Nov-09 | 28,037,649 | 14,872,308 | 53.04\% |
| Dec-09 | 28,372,560 | 15,586,273 | 54.93\% |
| Jan-10 | 28,962,938 | 13,753,846 | 47.49\% |

## Redacted

Unitil Energy Systems, Inc.
Itemized Costs for G1 Class Default Service Power Supply Charge

|  | Calculation of Working Capital Supplier Charges and GIS Support Payments |  |  |  |  |  | (g) | (h) | (i) | (j) | (k) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) | (d) | (e) | (f) |  |  |  |  |  |
|  | Total G1 Class DS Supplier Charges (1) | GIS <br> Support Payments | Number of Days of Lag / 365 | Working Capital Requirement $((a+b) * c)$ | Prime Rate | Supply Related Working Capital ( ${ }^{*}$ *) | Provision for Uncollected Accounts | Internal Company Administrative Costs | Legal Charges | Consulting Outside Service Charges | $\begin{gathered} \text { Total Costs } \\ (\text { sum } a+b+f \\ +g+h+i+j) \end{gathered}$ |
| May-10 | Redacted | \$99 | 3.76\% | Redacted | 3.25\% | Redacted | Redacted | \$3,177 | \$0 | \$0 | \$752,196 |
| Jun-10 | Redacted | \$89 | 3.76\% | Redacted | 3.25\% | Redacted | Redacted | \$3,177 | \$0 | \$0 | \$652,785 |
| Jul-10 | Redacted | \$112 | 3.76\% | Redacted | 3.25\% | Redacted | Redacted | \$3,177 | \$0 | \$0 | \$843,245 |
| Total | Redacted | \$301 |  | Redacted |  | Redacted | Redacted | \$9,530 | \$0 | \$0 | \$2,248,225 |

(1) Estimates based on monthly average wholesale rate times estimated monthly purchases.

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

1 Reconciliation

2 Total Costs (Page 2)
3 Reconciliation plus Total Costs (L. $1+$ L.2)
4 kWh Purchases
5 Total, Before Losses (L. 3 / L.4)
6 Losses

7 Total Retail Rate - Variable RPS Charge (L. 5 * (1+L.6))

| May-10 <br> Estimated <br> $\$ 4,315$ | Jun-10 <br> Estimated | Jul-10 <br> Estimated | $\underline{\text { Total }}$ |
| :---: | :---: | :---: | :---: |
| $\underline{\$ 21,720}$ | $\underline{\$ 19,519}$ | $\underline{\$ 24,391}$ | $\underline{\$ 65,630}$ |
| $\$ 26,035$ | $\$ 23,396$ | $\$ 29,236$ | $\$ 78,668$ |
| $\underline{11,344,763}$ | $\underline{10,194,853}$ | $\underline{12,739,542}$ | $34,279,157$ |
| $\$ 0.00229$ | $\$ 0.00229$ | $\$ 0.00229$ |  |
| $\underline{4.591 \%}$ | $\underline{4.591 \%}$ | $\underline{4.591 \%}$ |  |
| $\$ 0.00240$ | $\$ 0.00240$ | $\$ 0.00240$ |  |

(1) Balance as of January 31, 2010 modified, as detailed below, to reflect accruals for RPS. Figure is then allocated between rate periods (May-July 2010, August-October 2010, November 2010-January 2011, and February-April 2011) and then to each month, May through July 2010, on equal per kWh basis

January 31, 2010 actual balance - Schedule LSM-5, Page 2
$(\$ 46,999)$
plus: G1 Class RPS amounts included in rate filings, August 2009-Jan 2010 \$96,175
less: G1 Class RPS amounts, CY 2009 requirement, purchased \$18,366
Net G1 Class RPS amounts included in rate filings, Aug 2009-Jan $2010 \quad \$ 77,809$
Total reconciliation for May 1, 2009-April 30, 2010 \$49,175

| kWh purchases forecast May-July 2010 | $34,279,157$ | $26.51 \%$ |
| :--- | ---: | :--- |
| kWh purchases forecast August-October 2010 | $34,094,607$ | $26.37 \%$ |
| kWh purchases forecast November 2010-January 2011 | $30,519,380$ | $23.60 \%$ |
| kWh purchases forecast February-April 2011 | $\underline{30,401,228}$ | $23.51 \%$ |
| Total | $129,294,371$ |  |

Reconciliation amount for May-July 2010 \$13,038
Reconciliation amount for August-October $2010 \quad$ \$12,967
Reconciliation amount for November 2010-January 2011 \$11,608
Reconciliation amount for February-April 2011
\$11,563
Total
\$49,175

Unitil Energy Systems, Inc.
Reconciliation of G1 Class RPS Costs and Revenues

## Schedule LSM-5

Page 2 of 5

|  | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Beginning Balance | Total Costs (Page 3) | Total Revenue (Page 4) | Ending Balance Before Interest $(a+b-c)$ | Average Monthly <br> Balance ((a+d) / 2) | Interest Rate | Number of Days / Month | Computed Interest | Ending Balance with Interest (d + h) |
| Aug-09 | \$0 | \$915 | \$13,105 | $(\$ 12,191)$ | $(\$ 6,095)$ | 3.25\% | 31 | (\$17) | $(\$ 12,207)$ |
| Sep-09 | $(\$ 12,207)$ | \$0 | \$12,990 | $(\$ 25,197)$ | $(\$ 18,702)$ | 3.25\% | 30 | (\$50) | $(\$ 25,247)$ |
| Oct-09 | $(\$ 25,247)$ | \$0 | \$9,690 | $(\$ 34,937)$ | $(\$ 30,092)$ | 3.25\% | 31 | (\$83) | $(\$ 35,020)$ |
| Nov-09 | $(\$ 35,020)$ | \$827 | \$9,231 | $(\$ 43,425)$ | $(\$ 39,223)$ | 3.25\% | 30 | (\$105) | $(\$ 43,530)$ |
| Dec-09 | $(\$ 43,530)$ | \$10,775 | \$8,770 | $(\$ 41,525)$ | $(\$ 42,527)$ | 3.25\% | 31 | (\$117) | $(\$ 41,642)$ |
| Jan-10 | $(\$ 41,642)$ | \$7,064 | \$12,299 | $(\$ 46,877)$ | $(\$ 44,260)$ | 3.25\% | 31 | (\$122) | $(\$ 46,999)$ |
| Total |  | \$19,580 | \$66,085 |  |  |  |  | (\$494) |  |



Unitil Energy Systems, Inc
G1 Class Default Service Renewable Portfolio Standard Charge Revenue

|  | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total G1 Class Billed Default Service kWh (1) | Unbilled Factor (2) | G1 Class Unbilled kWh ( a * b ) | Effective Variable RPS Charge | G1 Class Unbilled RPS Charge Revenue (c * d) | Reversal of prior month unbilled | Total Billed G1 Class RPS Charge Revenue (1) | Total Revenue $(e+f+g)$ |
| Aug-09 | 6,761,726 | 49.43\% | 3,342,052 | \$0.00193 | \$6,450 | \$0 | \$6,655 | \$13,105 |
| Sep-09 | 6,410,972 | 57.11\% | 3,661,515 | \$0.00193 | \$7,067 | $(\$ 6,450)$ | \$12,373 | \$12,990 |
| Oct-09 | 5,747,300 | 51.07\% | 2,934,992 | \$0.00193 | \$5,665 | $(\$ 7,067)$ | \$11,092 | \$9,690 |
| Nov-09 | 5,424,048 | 53.04\% | 2,877,136 | \$0.00172 | \$4,949 | $(\$ 5,665)$ | \$9,947 | \$9,231 |
| Dec-09 | 5,147,961 | 54.93\% | 2,827,998 | \$0.00172 | \$4,864 | $(\$ 4,949)$ | \$8,855 | \$8,770 |
| Jan-10 | 5,680,442 | 47.49\% | 2,697,514 | \$0.00224 | \$6,042 | (\$4,864) | \$11,120 | \$12,299 |
| Total | 35,172,449 |  |  |  | \$35,037 | $(\$ 28,994)$ | \$60,043 | \$66,085 |

(1) Per billing system
(2) Detail of Unbilled Factors for the Large General Class:

|  | Billed kWh | Direct Estimate of Unbilled kWh | Unbilled kWh / Billed kWh |
| :---: | :---: | :---: | :---: |
| Aug-09 | 32,371,261 | 15,999,826 | 49.43\% |
| Sep-09 | 31,169,381 | 17,801,850 | 57.11\% |
| Oct-09 | 28,729,567 | 14,671,421 | 51.07\% |
| Nov-09 | 28,037,649 | 14,872,308 | 53.04\% |
| Dec-09 | 28,372,560 | 15,586,273 | 54.93\% |
| Jan-10 | 28,962,938 | 13,753,846 | 47.49\% |

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

|  | (a) | Calculation of Working Capital |  |  |  | (f) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (b) | (c) | (d) | (e) |  |
|  |  | Number of Days of Lag / 365 | Working Capital Requirement (a*b) | Prime Rate | Supply Related Working Capital (c *d) |  |
| May-10 | \$22,312 | (81.55\%) | $(\$ 18,195)$ | 3.25\% | (\$591) | \$21,720 |
| Jun-10 | \$20,050 | (81.55\%) | $(\$ 16,351)$ | 3.25\% | (\$531) | \$19,519 |
| Jul-10 | \$25,055 | (81.55\%) | (\$20,432) | 3.25\% | (\$664) | \$24,391 |
| Total | \$67,417 |  | $(\$ 54,979)$ |  | $(\$ 1,787)$ | \$65,630 |

(1) Schedule RSF-4.

## Unitil Energy Systems, Inc.

 Typical Bill Impacts by Rate ComponentResidential Rate D 500 kWh Bill

| Rate Components | 2/1/2010 | 5/1/2010 |  | Current Bill* | As Revised Bill* | Difference | $\%$ <br> Difference <br> to Total Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | As Revised | Difference |  |  |  |  |
| Customer Charge | \$8.40 | \$8.40 | \$0.00 | \$8.40 | \$8.40 | \$0.00 | 0.0\% |
|  | \$/kWh | \$/kWh |  |  |  |  |  |
| Distribution Charge |  |  |  |  |  |  |  |
| First 250 kWh | \$0.01810 | \$0.01810 | \$0.00000 | \$4.53 | \$4.53 | \$0.00 | 0.0\% |
| Excess 250 kWh | \$0.02310 | \$0.02310 | \$0.00000 | \$5.78 | \$5.78 | \$0.00 | 0.0\% |
| External Delivery Charge | \$0.01425 | \$0.01425 | \$0.00000 | \$7.13 | \$7.13 | \$0.00 | 0.0\% |
| Stranded Cost Charge | \$0.00495 | \$0.00495 | \$0.00000 | \$2.48 | \$2.48 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00330 | \$0.00330 | \$0.00000 | \$1.65 | \$1.65 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.09037 | \$0.08489 | (\$0.00548) | \$45.19 | \$42.45 | (\$2.74) | -3.6\% |
| First 250 kWh | \$0.13097 | \$0.12549 | (\$0.00548) |  |  |  |  |
| Excess 250 kWh | \$0.13597 | \$0.13049 | (\$0.00548) |  |  |  |  |
| Total Bill |  |  |  | \$75.14 | \$72.40 | (\$2.74) | -3.6\% |

[^1]Unitil Energy Systems, Inc.
Typical Bill Impacts by Rate Component

| Rate Components | $2 / 1 / 2010$ <br> Current Rate | 5/1/2010 |  |  | As Revised Bill* | Difference | \% <br> Difference to Total Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | As Revised | Difference | Current Bill* |  |  |  |
| Customer Charge | \$3.75 | \$3.75 | \$0.00 | \$3.75 | \$3.75 | \$0.00 | 0.0\% |
|  | \$/kWh | \$/kWh |  |  |  |  |  |
| Distribution Charge | \$0.02088 | \$0.02088 | \$0.00000 | \$41.76 | \$41.76 | \$0.00 | 0.0\% |
| External Delivery Charge | \$0.01425 | \$0.01425 | \$0.00000 | \$28.50 | \$28.50 | \$0.00 | 0.0\% |
| Stranded Cost Charge | \$0.00495 | \$0.00495 | \$0.00000 | \$9.90 | \$9.90 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00330 | \$0.00330 | \$0.00000 | \$6.60 | \$6.60 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.09037 | \$0.08489 | (\$0.00548) | \$180.74 | \$169.78 | (\$10.96) | -4.0\% |
| Total | \$0.13375 | \$0.12827 | (\$0.00548) | \$267.50 | \$256.54 | (\$10.96) | -4.0\% |
| Total Bill |  |  |  | \$271.25 | \$260.29 | (\$10.96) | -4.0\% |


| Rate Components | Reqular General G2 kWh Meter 125 kWh Typical Bill |  |  |  | As Revised Bill* | Difference | \% <br> Difference to Total Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2/1/2010 | 5/1/2010 |  |  |  |  |  |
|  | Current Rate | As Revised | Difference | Current Bill* |  |  |  |
| Customer Charge | \$8.40 | \$8.40 | \$0.00 | \$8.40 | \$8.40 | \$0.00 | 0.0\% |
|  | \$/kWh | \$/kWh |  |  |  |  |  |
| Distribution Charge | \$0.02975 | \$0.02975 | \$0.00000 | \$3.72 | \$3.72 | \$0.00 | 0.0\% |
| External Delivery Charge | \$0.01425 | \$0.01425 | \$0.00000 | \$1.78 | \$1.78 | \$0.00 | 0.0\% |
| Stranded Cost Charge | \$0.00495 | \$0.00495 | \$0.00000 | \$0.62 | \$0.62 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00330 | \$0.00330 | \$0.00000 | \$0.41 | \$0.41 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.09037 | \$0.08489 | (\$0.00548) | \$11.30 | \$10.61 | (\$0.69) | -2.6\% |
| Total | \$0.14262 | \$0.13714 | (\$0.00548) | \$17.83 | \$17.14 | (\$0.69) | -2.6\% |
| Total Bill |  |  |  | \$26.23 | \$25.54 | (\$0.69) | -2.6\% |

* Impacts do not include the Electricity Consumption Tax.

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

| Rate Components | Regular General G2 Demand, $10 \mathrm{kW}, \mathrm{3,000} \mathrm{kWh} \mathrm{Typical} \mathrm{Bill}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2/1/2010 <br> Current Rate | $\begin{array}{r}5 / 1 / 2010 \\ \text { As revised } \\ \hline\end{array}$ | Difference | Current Bill* | As Revised Bill* | Difference | $\%$ <br> Difference to Total Bill |
| Customer Charge | \$11.00 | \$11.00 | \$0.00 | \$11.00 | \$11.00 | \$0.00 | 0.0\% |
|  | All kW | All kW |  |  |  |  |  |
| Distribution Charge | \$7.03 | \$7.03 | \$0.00 | \$70.30 | \$70.30 | \$0.00 | 0.0\% |
| Stranded Cost Charge | \$0.87 | \$0.87 | \$0.00 | \$8.70 | \$8.70 | \$0.00 | 0.0\% |
| Total | \$7.90 | \$7.90 | \$0.00 | \$79.00 | \$79.00 | \$0.00 | 0.0\% |
|  | \$/kWh | \$/kWh |  |  |  |  |  |
| Distribution Charge | \$0.00000 | \$0.00000 | \$0.00000 | \$0.00 | \$0.00 | \$0.00 | 0.0\% |
| External Delivery Charge | \$0.01425 | \$0.01425 | \$0.00000 | \$42.75 | \$42.75 | \$0.00 | 0.0\% |
| Stranded Cost Charge | \$0.00167 | \$0.00167 | \$0.00000 | \$5.01 | \$5.01 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00330 | \$0.00330 | \$0.00000 | \$9.90 | \$9.90 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.09037 | \$0.08489 | (\$0.00548) | \$271.11 | \$254.67 | (\$16.44) | -3.9\% |
| Total | \$0.10959 | \$0.10411 | (\$0.00548) | \$328.77 | \$312.33 | (\$16.44) | -3.9\% |
| Total Bill |  |  |  | \$418.77 | \$402.33 | (\$16.44) | -3.9\% |


| Rate Components | Large General - G1 550 kVa , 200,000 kWh Typical Bill |  |  |  | As Revised Bill* | Difference | \% <br> Difference to Total Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2/1/2010 <br> Current Rate | $5 / 1 / 2010$ <br> As Revised | Difference | Current Bill* |  |  |  |
| Customer Charge | \$108.86 | \$108.86 | \$0.00 | \$108.86 | \$108.86 | \$0.00 | 0.0\% |
|  | All kVa | All kVa |  |  |  |  |  |
| Distribution Charge | \$5.69 | \$5.69 | \$0.00 | \$3,129.50 | \$3,129.50 | \$0.00 | 0.0\% |
| Stranded Cost Charge | \$1.24 | \$1.24 | \$0.00 | \$682.00 | \$682.00 | \$0.00 | 0.0\% |
| Total | \$6.93 | \$6.93 | \$0.00 | \$3,811.50 | \$3,811.50 | \$0.00 | 0.0\% |
|  | \$/kWh | \$/kWh |  |  |  |  |  |
| Distribution Charge | \$0.00000 | \$0.00000 | \$0.00000 | \$0.00 | \$0.00 | \$0.00 | 0.0\% |
| External Delivery Charge | \$0.01425 | \$0.01425 | \$0.00000 | \$2,850.00 | \$2,850.00 | \$0.00 | 0.0\% |
| Stranded Cost Charge | \$0.00147 | \$0.00147 | \$0.00000 | \$294.00 | \$294.00 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00330 | \$0.00330 | \$0.00000 | \$660.00 | \$660.00 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.08812 | \$0.07066 | (\$0.01746) | \$17,624.00 | \$14,132.00 | (\$3,492.00) | -13.8\% |
| Total | \$0.10714 | \$0.08968 | (\$0.01746) | \$21,428.00 | \$17,936.00 | $(\$ 3,492.00)$ | -13.8\% |
| Total Bill |  |  |  | \$25,348.36 | \$21,856.36 | (\$3,492.00) | -13.8\% |

* 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 645 kWh Bill - Mean Use*

| Rate Components | 2/1/2010 | 5/1/2010 |  | $\frac{\text { Current }}{\underline{\text { Bill }} \text { ** }}$ | $\underline{\text { As Revised Bill** }}$ | Difference | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | As Revised | Difference |  |  |  | Difference <br> to Total Bill |
| Customer Charge | \$8.40 | \$8.40 | \$0.00 | \$8.40 | \$8.40 | \$0.00 | 0.0\% |
|  | \$/kWh | \$/kWh |  |  |  |  |  |
| Distribution Charge |  |  |  |  |  |  |  |
| First 250 kWh | \$0.01810 | \$0.01810 | \$0.00000 | \$4.53 | \$4.53 | \$0.00 | 0.0\% |
| Excess 250 kWh | \$0.02310 | \$0.02310 | \$0.00000 | \$9.12 | \$9.12 | \$0.00 | 0.0\% |
| External Delivery Charge | \$0.01425 | \$0.01425 | \$0.00000 | \$9.19 | \$9.19 | \$0.00 | 0.0\% |
| Stranded Cost Charge | \$0.00495 | \$0.00495 | \$0.00000 | \$3.19 | \$3.19 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00330 | \$0.00330 | \$0.00000 | \$2.13 | \$2.13 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.09037 | \$0.08489 | (\$0.00548) | \$58.29 | \$54.75 | (\$3.53) | -3.7\% |
| First 250 kWh | \$0.13097 | \$0.12549 | (\$0.00548) |  |  |  |  |
| Excess 250 kWh | \$0.13597 | \$0.13049 | (\$0.00548) |  |  |  |  |
| Total Bill |  |  |  | \$94.85 | \$91.32 | (\$3.53) | -3.7\% |

Residential Rate D 540 kWh Bill - Median Use*

|  | $2 / 1 / 2010$ | $5 / 1 / 2010$ |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rate Components |  |  |  |  |  |  |

[^2]Unitil Energy Systems, Inc.
Average Class Bill Impacts
Due to Proposed Rate Changes Effective May 1, 2010

| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Annual | Annual | Proposed | Estimated Annual | Estimated Annual | Proposed | \% Change |
|  | Number of | kWh | kW / kVA | DSC | Revenue \$ Under | Revenue \$ Under | Net Change | DSC |
| Class of Service | Customers | Sales | Sales | Change \$ | Present Rates | Proposed Rates | Revenue \$ | Revenue |
| Residential | 738,543 | 486,378,217 | n/a | $(\$ 2,665,353)$ | \$71,492,071 | \$68,826,718 | $(\$ 2,665,353)$ | (3.7\%) |
| General Service | 125,046 | 354,008,286 | 1,298,686 | $(\$ 1,939,965)$ | \$50,569,602 | \$48,629,637 | $(\$ 1,939,965)$ | (3.8\%) |
| Large General Service | 1,822 | 364,679,187 | 996,528 | $(\$ 6,367,299)$ | \$46,006,880 | \$39,639,581 | $(\$ 6,367,299)$ | (13.8\%) |
| Outdoor Lighting | 117,884 | 9,206,974 | n/a | $(\$ 50,454)$ | \$2,275,987 | \$2,225,533 | $(\$ 50,454)$ | (2.2\%) |
| Total | 983,295 | 1,214,272,664 |  | (\$11,023,071) | \$170,344,540 | \$159,321,469 | (\$11,023,071) | (6.5\%) |

(B), (C), (D) Test year billing determinants in DE 05-178
(E) Difference in proposed rate and current rate, times the billing determinants shown in Column (C). The proposed and current DSC for the G1 class used in this analysis are based on the average of the DSC for each 3-month period.
(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. <br> Typical Bill Impacts - February 1, 2010 versus May 1, 2010 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 $\quad$ 2/1/2010 | 5/1/2010 | Difference | Difference |
| 100 \$17.13 | \$16.58 | (\$0.55) | (3.2\%) |
| 200 \$30.50 | \$29.40 | (\$1.10) | (3.6\%) |
| 300 \$43.88 | \$42.23 | (\$1.64) | (3.7\%) |
| 400 \$57.25 | \$55.06 | (\$2.19) | (3.8\%) |
| 500 \$70.63 | \$67.89 | (\$2.74) | (3.9\%) |
| 750 \$104.06 | \$99.95 | (\$4.11) | (3.9\%) |
| 1,000 \$137.50 | \$132.02 | (\$5.48) | (4.0\%) |
| 1,500 \$204.38 | \$196.16 | (\$8.22) | (4.0\%) |
| 2,000 \$271.25 | \$260.29 | (\$10.96) | (4.0\%) |
| 2,500 \$338.13 | \$324.43 | (\$13.70) | (4.1\%) |
|  |  |  |  |
|  | Rates - Effective February 1, 2010 | Rates - Propos May 1, 2010 | Difference |
| Customer Charge | \$3.75 | \$3.75 | \$0.00 |
| Distribution Charge | All kWh | All kWh | All kWh |
|  | \$0.02088 | \$0.02088 | \$0.00000 |
| External Delivery Charge | \$0.01425 | \$0.01425 | \$0.00000 |
| Stranded Cost Charge | \$0.00495 | \$0.00495 | \$0.00000 |
| System Benefits Charge | \$0.00330 | \$0.00330 | \$0.00000 |
| Default Service Charge | \$0.09037 | \$0.08489 | (\$0.00548) |
| TOTAL | \$0.13375 | \$0.12827 | (\$0.00548) |





[^0]:    (1) Total utility charges from Page 4 (excluding the Electricity Consumption Tax) plus Non-G1 class Fixed Default Service Rate multiplied by the appropriate discount.

[^1]:    * Impacts do not include the Electricity Consumption Tax.

[^2]:    * Based on billing period January through December 2009
    ** Impacts do not include the Electricity Consumption Tax.

