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

Residential Rate D 500 kWh Bill

| Rate Components | 9/1/2008 | 11/1/2008 |  |  | As Revised Bill* | Difference | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current Rate | As Revised | Difference | $\underline{\text { Current Bill* }}$ |  |  | 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 S S |  |  |  |  |  |  |  |
| 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 | \$0.01524 | \$0.01524 | \$0.00000 | \$7.62 | \$7.62 | \$0.00 | 0.0\% |
| Stranded Cost Charge | \$0.00882 | \$0.00882 | \$0.00000 | \$4.41 | \$4.41 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00300 | \$0.00300 | \$0.00000 | \$1.50 | \$1.50 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.10291 | \$0.11239 | \$0.00948 | \$51.46 | \$56.20 | \$4.74 | 5.7\% |
| First 250 kWh | \$0.14807 | \$0.15755 | \$0.00948 |  |  |  |  |
| Excess 250 kWh | \$0.15307 | \$0.16255 | \$0.00948 |  |  |  |  |
| Total Bill |  |  |  | \$83.69 | \$88.43 | \$4.74 | 5.7\% |

* Impacts do not include the Electricity Consumption Tax.

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

| Rate Components | $9 / 1 / 2008$ <br> Current Rate | 11/1/2008 |  |  |  |  | \% Difference to Total Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | As Revised | Difference | Current Bill* | As Revised Bill* | Difference |  |
| 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 | \$0.01524 | \$0.01524 | \$0.00000 | \$30.48 | \$30.48 | \$0.00 | 0.0\% |
| Stranded Cost Charge | \$0.00882 | \$0.00882 | \$0.00000 | \$17.64 | \$17.64 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00300 | \$0.00300 | \$0.00000 | \$6.00 | \$6.00 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.10291 | \$0.11239 | \$0.00948 | \$205.82 | \$224.78 | \$18.96 | 6.2\% |
| Total | \$0.15085 | \$0.16033 | \$0.00948 | \$301.70 | \$320.66 | \$18.96 | 6.2\% |
| Total Bill |  |  |  | \$305.45 | \$324.41 | \$18.96 | 6.2\% |


| Rate Components | Reqular General G2 kWh Meter 125 kWh Typical Bill |  |  |  | As Revised Bill* | Difference | \% <br> Difference to Total Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 9/1/2008 | 11/1/2008 |  |  |  |  |  |
|  | 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 | \$0.01524 | \$0.01524 | \$0.00000 | \$1.91 | \$1.91 | \$0.00 | 0.0\% |
| Stranded Cost.Charge | \$0.00882 | \$0.00882 | \$0.00000 | \$1.10 | \$1.10 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00300 | \$0.00300 | \$0.00000 | \$0.38 | \$0.38 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.10291 | \$0.11239 | \$0.00948 | \$12.86 | \$14.05 | \$1.19 | 4.2\% |
| Total | \$0.15972 | \$0.16920 | \$0.00948 | \$19.97 | \$21.15 | \$1.19 | 4.2\% |
| Total Bill |  |  |  | \$28.37 | \$29.55 | \$1.19 | 4.2\% |

* Impacts do not include the Electricity Consumption Tax.

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


| Rate Components | Large General - G1 $550 \mathrm{kVa}, 200,000 \mathrm{kWh}$ Typical Bill |  |  |  | As Revised Bill* | Difference | $\qquad$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 9/1/2008 | 11/1/2008 |  |  |  |  |  |
|  | Current Rate | 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 | \$2.25 | \$2.25 | \$0.00 | \$1,237.50 | \$1,237.50 | \$0.00 | 0.0\% |
| Total | \$7.94 | \$7.94 | \$0.00 | \$4,367.00 | \$4,367.00 | \$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 | \$0.01524 | \$0.01524 | \$0.00000 | \$3,048.00 | \$3,048.00 | \$0.00 | 0.0\% |
| Stranded Cost Charge | \$0.00267 | \$0.00267 | \$0.00000 | \$534.00 | \$534.00 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00300 | \$0.00300 | \$0.00000 | \$600.00 | \$600.00 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.14797 | \$0.10923 | (\$0.03874) | \$29,593.33 | \$21,846,00 | (\$7,747.33) | -20.3\% |
| Total | \$0.16888 | \$0.13014 | (\$0.03874) | \$33,775.33 | \$26,028.00 | (\$7,747.33) | -20.3\% |
| Total Bill |  |  |  | \$38,251.19 | \$30,503.86 | (\$7,747.33) | -20.3\% |

* 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 670 kWh Bill - Mean Use*

| Rate Components | 9/1/2008 | 11/1/2008 |  | $\frac{\text { Current }}{\text { Bill** }}$ | As Revised Bill** | Difference | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current Rate | As Revised | Difference |  |  |  | Difference 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 | \$9.70 | \$9.70 | \$0.00 | 0.0\% |
| External Delivery Charge | \$0.01524 | \$0.01524 | \$0.00000 | \$10.21 | \$10.21 | \$0.00 | 0.0\% |
| Stranded Cost Charge | \$0.00882 | \$0.00882 | \$0.00000 | \$5.91 | \$5.91 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00300 | \$0.00300 | \$0.00000 | \$2.01 | \$2.01 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.10291 | \$0.11239 | \$0.00948 | \$68.95 | \$75.30 | \$6.35 | 5.8\% |
| First 250 kWh | \$0.14807 | \$0.15755 | \$0.00948 |  |  |  |  |
| Excess 250 kWh | \$0.15307 | \$0.16255 | \$0.00948 |  |  |  |  |
| Total Bill |  |  |  | \$109.71 | \$116.06 | \$6.35 | 5.8\% |

Residential Rate D 561 kWh Bill - Median Use*


[^0]
## Unitil Energy Systems, Inc. <br> Average Class Bill Impacts <br> Due to Proposed Rate Changes Effective November 1, 2008

Schedule LSM-5

| (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 | \$4,610,865 | \$79,809,138 | \$84,420,004 | \$4,610,865 | 5.8\% |
| General Service | 125,046 | 354,008,286 | 1,298,686 | \$3,355,999 | \$56,621,300 | \$59,977,299 | \$3,355,999 | 5.9\% |
| Large General Service | 1,822 | 364,679,187 | 996,528 | (\$14,127,672) | \$69,528,666 | \$55,400,994 | (\$14,127,672) | (20.3\%) |
| Outdoor Lighting | 117,884 | 9,206,974 | n/a | \$87,282 | \$2,433,427 | \$2,520,709 | \$87,282 | 3.6\% |
| Total | 983,295 | 1,214,272,664 |  | (\$6,073,526) | \$208,392,531 | \$202,319,005 | $(\$ 6,073,526)$ | (2.9\%) |

(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 - September 1, 2008 versus November 1, 2008 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 | 9/1/2008 | 11/1/2008 | Difference | Difference |
| 15 | \$10.80 | \$10.94 | \$0.14 | 1.3\% |
| 75 | \$20.38 | \$21.09 | \$0.71 | 3.5\% |
| 150 | \$32.36 | \$33.78 | \$1.42 | 4.4\% |
| 250 | \$48.33 | \$50.70 | \$2.37 | 4.9\% |
| 350 | \$64.30 | \$67.62 | \$3.32 | 5.2\% |
| 450 | \$80.27 | \$84.54 | \$4.27 | 5.3\% |
| 550 | \$96.25 | \$101.46 | \$5.21 | 5.4\% |
| 650 | \$112.22 | \$118.38 | \$6.16 | 5.5\% |
| 750 | \$128.19 | \$135.30 | \$7.11 | 5.5\% |
| 900 | \$152.15 | \$160.68 | \$8.53 | 5.6\% |
|  |  |  |  |  |
|  |  |  |  |  |
| kWh Meter Customer Charge |  | Rates - Effective September 1, 2008 | Rates Proposed | Difference |
|  |  | \$8.40 | \$8.40 | \$0.00 |
|  |  | All kWh | All kWh | All kWh |
| Distribution Charge |  | \$0.02975 | \$0.02975 | \$0.00000 |
| External Delivery Charge |  | \$0.01524 | \$0.01524 | \$0.00000 |
| Stranded Cost Charge |  | \$0.00882 | \$0.00882 | \$0.00000 |
| System Benefits Charge |  | \$0.00300 | \$0.00300 | \$0.00000 |
| Default Service Charge |  | \$0.10291 | \$0.11239 | \$0.00948 |
| TOTAL |  | \$0.15972 | \$0.16920 | \$0.00948 |


| Unitil Energy Systems, Inc. <br> Typical Bill Impacts - September 1, 2008 versus November 1, 2008 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 | 9/1/2008 | 11/1/2008 | Difference | Difference |
| 100 | \$18.84 | \$19.78 | \$0.95 | 5.0\% |
| 200 | \$33.92 | \$35.82 | \$1.90 | 5.6\% |
| 300 | \$49.01 | \$51.85 | \$2.84 | 5.8\% |
| 400 | \$64.09 | \$67.88 | \$3.79 | 5.9\% |
| 500 | \$79.18 | \$83.92 | \$4.74 | 6.0\% |
| 750 | \$116.89 | \$124.00 | \$7.11 | 6.1\% |
| 1,000 | \$154.60 | \$164.08 | \$9.48 | 6.1\% |
| 1,500 | \$230.03 | \$244.25 | \$14.22 | 6.2\% |
| 2,000 | \$305.45 | \$324.41 | \$18.96 | 6.2\% |
| 2,500 | \$380.88 | \$404.58 | \$23.70 | 6.2\% |
|  |  |  |  |  |
|  |  | Rates - Effective September 1, 2008 | Rates Proposed | 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 |  | \$0.01524 | \$0.01524 | \$0.00000 |
| Stranded Cost Charge |  | \$0.00882 | \$0.00882 | \$0.00000 |
| System Benefits Charge |  | \$0.00300 | \$0.00300 | \$0.00000 |
| Default Service Charge |  | \$0.10291 | \$0.11239 | \$0.00948 |
| TOTAL |  | \$0.15085 | \$0.16033 | \$0.00948 |



* Default Service Charges shown are based on the average of the DSC for each 3-month period.



[^0]:    * Based on billing period September 2007 through August 2008
    ** Impacts do not include the Electricity Consumption Tax.

