The effective rates listed below include an Electricity Consumption Tax, assessed in accordance with NH Statute RSA Chapter 83-E. This tax, collected on behalf of the State of NH by each electric utility, is based on kWh consumed.
Each bill rendered for electric delivery service shall be calculated through the application of the effective rates as listed below.

(1) Includes low-income portion of $\$ 0.00120$ per kWh and energy efficiency portion of $\$ 0.00180$ per kWh .

[^0]
## SUMMARY OF DELIVERY SERVICE RATES (Includes Electricity Consumption Tax) (continued)


(1) Includes low-income portion of $\$ 0.00120$ per kWh and energy efficiency portion of $\$ 0.00180$ per kWh .

> *Authorized by NHPUC Order No. 24,742 in Case No. DE 05-178, dated April 13, 2007
> ${ }^{* *}$ Authorized by NHPUC Order No. 24,851 in Case No. DE 08-040, dated April 23,2008
> $* * *$ Authorized by NHPUC Order No. in Case No.

Issued: July 9, 2008
Effective: September 1, 2008

Issued By: Mark H. Collin
Treasurer

## SUMMARY OF LOW-INCOME ELECTRIC ASSISTANCE PROGRAM DISCOUNTS

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

| Tier | Percentage of <br> Federal Poverty Guidelines | Rate D |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Discount | Blocks | LI-EAP <br> Discount(1) |
| 1 | 176-185 | 5\% | Customer Charge | (\$0.42) |
|  |  |  | First 250 kWh <br> Excess 250 kWh | $\begin{aligned} & (\$ 0.00740) \\ & (\$ 0.00765) \end{aligned}$ |
| 2 | 151-175 | 7\% | Customer Charge | (\$0.59) |
|  |  |  | First 250 kWh <br> Excess 250 kWh | $\begin{aligned} & (\$ 0.01036) \\ & (\$ 0.01071) \end{aligned}$ |
| 3 | 126-150 | 18\% | Customer Charge | (\$1.51) |
|  |  |  | First 250 kWh <br> Excess 250 kWh | $\begin{array}{r} (\$ 0.02665) \\ (\$ 0.02755) \\ \hline \end{array}$ |
| 4 | 101-125 | $33 \%$ | Customer Charge | (\$2.77) |
|  |  |  | First 250 kWh <br> Excess 250 kWh | $\begin{aligned} & (\$ 0.04886) \\ & (\$ 0.05051) \\ & \hline \end{aligned}$ |
| 5 | 76-100 | 48\% | Customer Charge | (\$4.03) |
|  |  |  | First 250 kWh Excess 250 kWh | $\begin{aligned} & (\$ 0.07107) \\ & (\$ 0.07347) \\ & \hline \end{aligned}$ |
| 6 | 0-75 | 70\% | Customer Charge | (\$5.88) |
|  |  |  | First 250 kWh <br> Excess 250 kWh | $\begin{aligned} & (\$ 0.10365) \\ & (\$ 0.10715) \\ & \hline \end{aligned}$ |

(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.

Authorized by NHPUC Order No. in Case No. , dated

## CALCULATION OF THE EXTERNAL DELIVERY CHARGE

1. (Over)/under Recovery - Beginning Balance May 2008 ..... \$1,066,921
2. Estimated Total Costs (May 2008 - April 2009) ..... $\$ 13,580,032$
3. Estimated Interest (May 2008 - April 2009) ..... $\$ 33,453$
4. Costs to be Recovered (L.1 +L. $2+\mathrm{L} .3$ ) ..... \$14,680,406
5. Estimated Calendar Month Deliveries in kWh (May 2008-April 2009) ..... $1.298,409,798$
6. External Delivery Charge ( $\$ / \mathrm{kWh}$ ) (L.5/L.6) effective May 1,2008 ..... $\$ 0.01131$
7. Incremental Costs (June 2008 - April 2009) ..... $\$ 3,300,019$
8. Estimated Calendar Month Deliveries in kWh (September 2008 - April 2009) ..... 839.198.186
9. Incremental Increase to External Delivery Charge ( $\$ / \mathrm{kWh}$ ) (L. $7 / \mathrm{L} .8$ ) ..... $\$ 0.00393$
10. External Delivery Charge (\$/kWh) (L. $6+$ L. 9) effective September 1, 2008 ..... 0.01524
Authorized by NHPUC Order No. in Case No. , dated

# UNITIL ENERGY SYSTEMS, INC. 

## DIRECT TESTIMONY OF

 FRANCIS X. WELLSJuly 9, 2008

## TABLE OF CONTENTS

I. INTRODUCTION ..... Page 1
II. SUMMARY OF TESTIMONY ..... Page 2
III. EXTERNAL DELIVERY CHARGE ..... Page 2
IV. TARIFF CHANGES AND BILL IMPACTS ..... Page 7
V. CONCLUSION ..... Page 9
LIST OF SCHEDULES

Schedule FXW-1: External Delivery Charge
Schedule FXW-2: Redline Tariffs
Schedule FXW-3: Bill Impact

## I. INTRODUCTION

Q. Please state your name and business address.
A. My name is Francis X. Wells. My business address is 6 Liberty Lane West, Hampton, NH.
Q. For whom do you work and in what capacity?
A. I am employed by Unitil Service Corp. ("USC") as Senior Energy Trader. USC provides management and administrative services to Unitil Energy Systems, Inc. ("UES") and Unitil Power Corp. ("UPC").
Q. Please summarize your educational background and professional qualifications.
A. I received my Bachelor of Arts Degree in both Economics and History from the University of Maine in 1995. I joined USC in September 1996 as an Analyst, assisting in the planning and operation of both electric power and natural gas supply portfolios. Since January 2001 I have worked as a Senior Energy Trader in the Energy Contracts Department. I have responsibilities in the area of energy supply acquisition, including default service purchasing, regulatory reporting, budgeting, and long-term supply planning.
Q. Have you previously testified before the New Hampshire Public Utilities Commission ("Commission")?
A. Yes. I have testified on numerous occasions before the Commission.

## II. SUMMARY OF TESTIMONY

Q. Please summarize your testimony in this proceeding.
A. UES proposes an interim increase in its External Delivery Charge ("EDC") rate from $\$ 0.01131$ per kWh , which was approved by the Commission in Docket No. DE 08-040 and has been effective since May 1,2008 , to $\$ 0.01524$ per kWh , effective September 1, 2008. UES proposes an increase in the EDC rate because its revised estimates of transmission costs are substantially higher than those which UES provided to the Commission in DE 08-040. Under DE 08-040, UES prepared estimates of transmission costs, based on estimated transmission rates beginning June 1, 2008 through April 30, 2009. UES has since been notified of the actual transmission rates effective during this timeframe and has determined that the actual transmission rates are significantly higher than the estimated transmission rates used as a basis for estimating transmission costs under DE 08040. In addition NU has notified UES of a significant 2007 true-up adjustment related to NU Network Integration Transmission Service ("NU Network Service"). UES proposes to recover these additional transmission costs on a current basis, rather than carrying a major under-recovery into the next annual reconciliation filing.

## III. EXTERNAL DELIVERY CHARGE

Q. What is UES' proposed EDC?
A. Schedule FXW-1, Page 1, provides the proposed EDC of $\$ 0.01524 / \mathrm{kWh}$ applicable to all classes. This charge is proposed to become effective September 1,2008.
Q. How is the proposed EDC calculated?
A. The EDC is calculated by adding the incremental increase to the EDC to the currently effective EDC. The incremental increase to the EDC is presented on line 9 of Page 1 of 2 of Schedule FXW-1. The incremental increase to the EDC is calculated by dividing the incremental costs for June 2008 through April 2009 by the estimated calendar month deliveries for September 2008 through April 2009. The currently effective EDC was approved in DE 08-040 and is shown on line 6 of Page 1 of 2 of Schedule FXW-1.
Q. Please provide UES' revised estimates of EDC costs.
A. Please refer to Page 2 of 2 of Schedule FXW-1. Third Party Transmission Providers (NU Network Integration Transmission Service) ("NU Network Service") and Regional and Transmission and Operating Entities ("Regional Transmission") have been updated to reflect actual transmission rates effective June 1, 2008. The actual Regional Transmission rates are substantially higher than the estimated Regional Transmission rates used to calculate estimated Regional Transmission costs used in DE 08-040. The revised estimates for both NU Network Service and Regional Transmission are compared to the original estimates on a monthly and total period basis.
Q. How do the updated estimates compare to the estimates provided to the Commission in DE 08-040?
A. As can be seen in Table 1, below, the updated estimates are approximately $\$ 3.3$ million higher than the estimates used to calculate the EDC in DE 08-040. Table 1 compares the sum of the monthly estimates from June 2008 through April 2009 for each EDC cost item. The increase in estimates is due to an increase in expected Regional Transmission costs of over $\$ 2.3$ million and to the 2007 trueup of NU Network Service of approximately $\$ 1$ million, which is partially offset by modestly lower going forward costs for NU Network Service. Cost estimates for all other items recovered through the EDC remain unchanged in this interim filing.

| Table 1. June 2008 through April 2009 Estimated External Delivery Costs |  |  |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: |
|  | External Delivery Costs: | Filed in DE 08- <br> 040 | Updated <br> Estimates | Variance |  |  |
| (a) | Third Party Transmission <br> Providers (NU Network Integration <br> Transmission Service) | $\$ 1,405,531$ | $\$ 2,365,820$ | $\$ 960,290$ |  |  |
| (b) | Regional Transmission and <br> Operating Entities | $\$ 8,201,226$ | $\$ 10,540,956$ | $\$ 2,339,730$ |  |  |
| (j) | Total Costs (includes all other <br> items recovered in the EDC) | $\$ 12,669,176$ | $\$ 15,969,195$ | $\$ 3,300,019$ |  |  |

Q. Please explain the higher than expected increase in Regional Transmission rates.
A. As discussed previously, the increase in EDC costs is based on the update of estimated transmission rates for the period beginning June 1, 2008 through April

30,2009 with the actual transmission rates for this period. UES was informed of these rate changes mid-June 2008.

The Regional Transmission rate, which is effective as of June 1, 2008, is based on the sum of 2007 revenue requirements of the New England transmission owners plus an estimate by each transmission owner of the revenue requirements for capital additions expected to be put into service during 2008 plus the reconciliation of estimated revenue requirements for expected 2007 capital additions (which were used to calculate the Regional Transmission rate effective June 1, 2007) with revenue requirements for the actual 2007 capital additions.

UES' estimate for the Regional Transmission rate was based on the sum of the Regional Transmission rates, which were in effect at the time, and UES' estimate of the revenue requirements for capital additions expected to be put into service during 2008. The Regional Transmission rates in effect when the estimate was prepared were based upon 2006 revenue requirements of the New England transmission owners plus an estimate of the revenue requirements for capital additions expected to be put into service during 2007. Estimated capital additions for 2008 were based upon ISO New England Inc.'s the October 2007 update of the Regional System Plan Project Listing ("RSP Project List"), which was the latest available at the time.

The reconciliation of the estimated 2007 revenue requirements with the actual revenue requirements for actual 2007 revenue requirements account for about $26 \%$ of the increase from the estimated Regional Transmission rate to the actual Regional Transmission rate. This is because the actual 2007 investment and revenue requirements were higher than had been estimated when the rates for June 1, 2006 were set. UES' underestimation of the New England transmission owners' estimate of revenue requirements for 2008 capital additions accounted for approximately $36 \%$ of the variance between actual and estimated Regional Transmission rates. The remaining $38 \%$ of this variance appears to be attributable to a general increase in 2007 revenue requirements over 2006 revenue requirements for items not directly related to either capital investment or the reconciliation of 2007 revenue requirement estimate.
Q. Please explain the 2007 true-up for NU Network Service.
A. UES' share of the estimated net revenue requirement for NU Network Service, which was prepared by NU in June 2005 for the January through May 2007 billing period and in June 2006 for the June 2007 through December 2007 billing period, was $\$ 1$ million lower than UES' share of actual net revenue requirements for 2007. Through communications with NU, UES has learned that NU attributes the increase to higher than estimated incremental revenue requirements associated with capital additions and lower than estimated transmission revenue credits from the ISO-NE through regional transmission rates and a general increase in transmission costs.

NU estimates incremental revenue requirements by first estimating the level of capital additions to be put into service for the year. To convert this transmission investment figure to a revenue requirement figure, NU multiplies the capital additions by a fixed capacity rate, which is calculated by dividing prior year revenue requirements by total transmission plant. NU has informed UES that the actual fixed capacity rate for 2007 was higher than the estimated fixed capacity rate, based on the 2005 fixed capacity rate for January through May 2007 and 2006 fixed capacity rate for June through December 2007.

NU estimates its transmission revenue credits from the ISO-NE through the regional transmission rate based upon the ISO-NE's load forecast, made publicly available in its annual Capacity, Energy, Loads, and Transmission forecast. Actual 2007 loads were lower than estimated. Since regional transmission rates are a fixed per kW rate, lower loads contribute to lower regional transmission revenue and thereby reduce the transmission revenue credits to the NU Network Service net revenue requirement.

The basis for NU's estimate of the NU Network Service costs is the prior year revenue requirement. General cost increases in 2007 over 2006 and 2005 revenue requirements also contributed to the need for the true-up adjustment.

## VI. TARIFF CHANGES AND BILL IMPACTS

Q. Has UES included tariff changes to reflect the proposed rate changes for effect September 1, 2008?
A. Schedule FXW-2, Page 1 is the redline tariff of the EDC. Note that this page is essentially the same as provided on Page 1 of Schedule FXW-1. Pages 2 and 3 of Schedule FXW-2 provide the redline of UES tariff Pages 4 and 5, Summary of Delivery Service Rates, and Schedule FXW-1, Page 4 provides the redline of tariff Page 6, Summary of Low-Income Electric Assistance Program Discounts. These pages have been revised to incorporate the proposed EDC as well as to eliminate the D - Controlled Off-Peak Water Heating and G2 - Controlled Off-Peak Water Heating classes which were approved for cancellation by Secretarial Letter dated June 11, 2008 in DE 08-080.
Q. Have you included any bill impacts as a result of proposed rate changes effective September 1, 2008?
A. Yes, rate changes and bill impacts as a result of changes to the EDC have been provided in Schedule FXW-3. Pages 1 through 3 provide a table comparing the existing rates to the proposed rates for all the rate classes. These pages also show the impact on a typical bill for each class in order to identify the effect of each rate component on a typical bill.

Page 4 shows bill impacts to the residential class based on the mean and median use. Page 4 is provided in a format similar to Pages 1 through 3 .

9 V. CONCLUSION a range of usage levels.
A. Yes, it does.

Page 5 provides the overall average class bill impacts as a result of changes to the EDC. As shown, for customers who have not chosen an external supplier, the Residential and General Service classes will increase about 2.5\%. Large General Service will increase about $2.1 \%$. Outdoor lighting will increase about $1.5 \%$.

Pages 6 through 11 of Schedule FXW-3 provide typical bill impacts for all classes for
Q. Does that conclude your testimony?

# UNITIL ENERGY SYSTEMS. INC. <br> CALCULATION OF THE EXTERNAL DELIVERY CHARGE Effective September 1, 2008 

1. (Over)/under Recovery - Beginning Balance May 2008
$\$ 1,066,921$
2. Estimated Total Costs (May 2008 - April 2009)
$\$ 13,580,032$
3. Estimated Interest (May 2008-April 2009)
$\$ 33.453$
4. Costs to be Recovered (L.1 +L.2 + L. 3)
\$14,680,406 *
5. Estimated Calendar Month Deliveries in kWh (May 2008 - April 2009)
6. External Delivery Charge (\$/kWh) (L.5/L.6) effective May 1, 2008
$\$ 0.01131$
7. Incremental Costs (June 2008-April 2009) (Page 2 of 2)
$\$ 3,300,019$
8. Estimated Calendar Month Deliveries in kWh (September 2008 - April 2009)
9. Incremental Increase to External Delivery Charge (\$/kWh) (L. $7 / \mathrm{L} .8$ )

839,198,186 *
10. External Delivery Charge ( $\$ / \mathrm{kWh}$ ) (L. $6+$ L. 9) effective September 1, 2008
$\$ 0.00393$

* As filed in DE 08-040 on March 14, 2008

|  | Third Party Transmission Providers (NU Network Integration Transmission Service): <br> Northeast Utilities |  |  |
| :---: | :---: | :---: | :---: |
|  | Re-Estimate | Original Estimate * | Increase/(Decrease) |
| Jun-08 | \$99,943 | \$127,776 | $(\$ 27,833)$ |
| Jul-08 | \$1,123,774 | \$127,776 | \$995,998 |
| Aug-08 | \$99,943 | \$127,776 | $(\$ 27,833)$ |
| Sep-08 | \$99,943 | \$127,776 | $(\$ 27,833)$ |
| Oct-08 | \$99,943 | \$127,776 | $(\$ 27,833)$ |
| Nov-08 | \$99,943 | \$127,776 | $(\$ 27,833)$ |
| Dec-08 | \$99,943 | \$127,776 | $(\$ 27,833)$ |
| Jan-09 | \$160,597 | \$127,776 | \$32,822 |
| Feb-09 | \$160,597 | \$127,776 | \$32,822 |
| Mar-09 | \$160,597 | \$127,776 | \$32,822 |
| Apr-09 | \$160,597 | \$127,776 | \$32,822 |
| Total Jun 2008-Sep 2009 | \$2,365,820 | \$1,405,531 | \$960,290 |

Regional Transmission and Operating Entities: ISO New England Inc., Regional Transmission Operator, Nepool

|  | Re-Estimate | Original Estimate * | Increase/(Decrease) |
| :---: | :---: | :---: | :---: |
| Jun-08 | \$1,084,301 | \$840,948 | \$243,354 |
| Jul-08 | \$1,101,306 | \$853,832 | \$247,474 |
| Aug-08 | \$1,169,976 | \$905,861 | \$264,114 |
| Sep-08 | \$966,755 | \$751,885 | \$214,869 |
| Oct-08 | \$821,560 | \$641,875 | \$179,685 |
| Nov-08 | \$865,888 | \$675,461 | \$190,427 |
| Dec-08 | \$953,802 | \$742,072 | \$211,730 |
| Jan-09 | \$971,234 | \$755,279 | \$215,955 |
| Feb-09 | \$929,566 | \$724,920 | \$204,646 |
| Mar-09 | \$901,118 | \$702,154 | \$198,964 |
| Apr-09 | \$775,450 | \$606,938 | \$168,512 |
| Total Jun 2008-Sep 2009 | \$10,540,956 | \$8,201,226 | \$2,339,730 |

Net Increase/(Decrease) to costs
$\$ 3,300,019$

* As filed in DE 08-040 on March 14, 2008


## CALCULATION OF THE EXTERNAL DELIVERY CHARGE

(I)

1. (Over)/under Recovery - Beginning Balance May 2008
$\$ 1,066,921$
2. Estimated Total Costs (May 2008 - April 2009) $\$ 13,580,032$
3. Estimated Interest (May 2008-April 2009) $\$ 33.453$
4. Costs to be Recovered (L.1 + L. $2+\mathrm{L} .3$ )
$\$ 14,680,406$
5. Estimated Calendar Month Deliveries in kWh (May 2008 - April 2009)
$1,298,409,798$
6. External Delivery Charge (\$/kWh) (L.5/L.6) effective May 1, 2008
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8. Estimated Calendar Month Deliveries in kWh (September 2008 - April 2009)

839,198,186
9. Incremental Increase to External Delivery Charge (\$/kWh) (L. $7 /$ L. 8)
$\$ 0.00393$
10. External Delivery Charge (\$/kWh) (L. $6+$ L. 9) effective September 1, 2008
0.01524

Authorized by NHPUC Order No. 24,854 in Case No. 08040, dated April 23, 2008

The effective rates listed below include an Electricity Consumption Tax, assessed in accordance with NH Statute RSA Chapter 83-E This tax, collected on behalf of the State of NH by each electric utility, is based on kWh consumed
Each bill rendered for electric delivery service shall be calculated through the application of the effective rates as listed below.

| Class |  | Distribution Charge* | Exithat <br> Dolivery <br> Ghafga** | (I) <br> External Delivery Charge*** | Stranded Cost Charge** | System Benefits Charge (1) | Font <br> Delivery <br> 为 | (I) <br> Total Delivery Charges | Electricity Consumption Tax | Effective Delinery Reter (Inc) Eleatrient Eombimption Toriy | $\begin{gathered} \text { (I) } \\ \text { Effective Delivery Rates } \\ \text { (Incl. Electricity } \\ \text { Consumption Tax) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D | Customer Charge | \$8.40 |  |  |  |  | \$8.40 | \$8.40 |  | 88.40 | \$8.40 |
|  | First 250 kWh Excess 250 kWh | $\begin{array}{r} \$ 0.01810 \\ \$ 0.02310 \\ \hline \end{array}$ | $50.143+$ 50.01131 | $\begin{aligned} & \$ 0.01524 \\ & \$ 0.01524 \\ & \hline \end{aligned}$ | $\begin{aligned} & \$ 0.00882 \\ & \$ 0.00882 \end{aligned}$ | $\begin{array}{r} \$ 0.00300 \\ \$ 0.00300 \\ \hline \end{array}$ | 50.04127 50.04627 | $\begin{array}{r} 50.04516 \\ \$ 0.05016 \\ \hline \end{array}$ | 50.00055 <br> \$0.00055 | $\begin{aligned} & 50.04178 \\ & \$ 0.04678 \\ & \hline \end{aligned}$ | $\begin{aligned} & \$ 0.0457! \\ & \$ 0.05071 \\ & \hline \end{aligned}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | Gutome | 53.75 |  |  |  |  | 527 |  |  | \$275 |  |
|  | Qffperthily | 50.00531 | 20.04131 | 20.01534 | smanes | \$00000 | \$0.82834 |  | 50.0005 | 5003889 |  |
| G2 | Customer Charge | \$11.00 |  |  |  |  | \$14.00 | \$11.00 |  | 8140 | \$11.00 |
|  | All kw | \$7.03 |  |  | \$1.55 |  | 58 | \$8.58 |  | 58588 | \$8.58 |
|  | All kWh | \$0.00000 | 0 | \$0.01524 | \$0.00298 | \$0.00300 | 80.01720 | \$0.02122 | 50.00055 | 50.01784 | \$0.02177 |
| G2-kWh meter | Customer Charge | \$8.40 |  |  |  |  | 58 | \$8.40 |  | \$8.40 | \$8.40 |
|  | All kWh | \$0.02975 | 20,047 | \$0.01524 | \$0,00882 | 50.00300 | 80.05288. | \$0.05681 | 50.00055 | 80.05347 | \$0.05736 |
| G2- Quick Recencery Woter Hat andor Spuce Heat | Customer Charge | \$3.75 |  |  |  |  | 53.75 | \$3.75 |  | 83.75 | \$3.75 |
|  | All kWh | \$0.02088 | $80.0113+$ | \$0.01524 | \$0.00882 | \$0.00300 | \$04401 | \$0.04794 | \$0.0005 | 504456 | \$0.04849 |
| (D) ${ }_{\text {G2 }}$ |  |  |  |  |  |  |  |  |  |  |  |
|  | Gurmore | 53.75 |  |  |  |  | 53.75 |  |  | $\$ 3.75$ |  |
|  | Off Pantivilu | \$0,00480 | \$0713) | 504534 | 200887 | 50.00300 | \$90.02793. |  | 5000055. | 80.03848 |  |
| G1 | Customer Charge | \$108.86 | econdary Voltage |  |  |  | SH888 | \$108.86 |  | 5102-36 | \$108.86 |
|  | Customer Charge | \$64.51 | rimary Voltage |  |  |  | 8445 | \$64.51 |  | 84.5 | \$64.51 |
|  | All kVA | \$5.69 |  |  | \$2.25 |  | 87.94 | \$7.94 |  | 87.04 | \$7,94 |
|  | All kWh | \$0.00000 | 80.14 | \$0.01524 | \$0.00267 | \$0.00300 | 50.016 | \$0.02091 | \$0.00055 | 00.0175 | \$0.02146 |
| $\underset{\text { GENERAL }}{\text { ALL }}$ | Transformer Ownership Credit ( $\mathrm{kW} / \mathrm{kVa}$ )Voltage Discount at 4,160 Volts or Over (all $\mathrm{kW} / \mathrm{kVA}$ and kWh ) |  |  |  |  |  |  |  |  | (50.3.9) | (\$0.35) |
|  |  |  |  |  |  |  |  |  |  | $2.00 \%$ | 2.00\% |
|  | Volage Discount at 34, 500 Volts or Over (all $\mathrm{kW} / \mathrm{kVA}$ and kWh ) |  |  |  |  |  |  |  |  | 250\% | 3.50\% |

(1) Includes low-income porion of $\$ 0.00120$ per kWh and energy efficiency portion of $\$ 0.00180$ per kWh .

[^1]SUMMARY OF DELIVERY SERVICE RATES (Includes Electricity Consumption Tax) (continued)

| Class |  | Distribution <br> Charge* | Externat <br> Delivery <br> Charge** | External Stranded <br> Delivery Cost <br> Charge*** Charge** | System <br> Benefits <br> Charge <br> (1) | Fent <br> Dolivery <br> Chater | Total <br> Delivery <br> Charges | Electricity Consumption Tax | Ffferive Delinury Patef <br> (inel-Flectrisity Gonsumption-Tnit | Effective Delivery Rates (Incl. Electricity Consumption Tax) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All kWh | \$0.00000 | 80.0143 | \$0.01524 \$0.00882 | \$0.00300 | 580273 | \$0.02706 | \$0.00055 | 80.03368 | \$0.02761 |
| Luminaire Charges |  |  |  |  |  |  |  |  |  |  |
| Lamp Size |  |  |  |  |  |  |  |  |  |  |
|  | Nominal | Lumens | Monthly | Price Per Luminaire |  |  |  |  |  |  |
|  |  |  | kWh | Description | Per Mo. | Per Year |  |  |  |  |
|  | 100 | 3,500 | 40 | Mercury Vapor Street | \$7.88 | S94.56 |  |  |  |  |
|  | 175 | 7,000 | 67 | Mercury Vapor Street | \$9.54 | $\$ 94.56$$\$ 114.48$ |  |  |  |  |
|  | 250 | 11,000 | 95 | Mercury Vapor Street | S10.95 | $\$ 144.48$$\$ 131.40$ |  |  |  |  |
|  | 400 | 20,000 | 154 | Mercury Vapor Street | \$13.23 | \$158.76 |  |  |  |  |
|  | 1,000 | 60,000 | 388 | Mercury Vapor Street | \$27.29 | S <br> $\$ 387.48$ <br> 18. |  |  |  |  |
|  | 250 | 11,000 | 95 | Mercury Vapor Flood | \$11.73 | \$140.76 |  |  |  |  |
|  | 400 | 20,000 | 154 | Mercury Vapor Flood | \$14.24 | $\begin{aligned} & \$ 140.76 \\ & \$ 170.88 \end{aligned}$ |  |  |  |  |
|  | 1,000 | 60,000 | 388 | Mercury Vapor Flood | \$24.26 | $\begin{aligned} & \$ 170.88 \\ & \$ 291.12 \end{aligned}$ |  |  |  |  |
|  | 100 | 3,500 | 40 | Mercury Vapor Power Bracket | \$24.26 $\$ 7.96$ | $\begin{array}{r} \$ 291.12 \\ \$ 95.52 \end{array}$ |  |  |  |  |
|  | 175 | 7,000 | 67 | Mercury Vapor Power Bracket | \$8.94 | $\begin{array}{r} \$ 95.52 \\ \$ 107.28 \end{array}$ |  |  |  |  |
|  | 50 | 4,000 | 21 | Sodium Vapor Street | \$8.04 | \$ $\$ 106.48$ |  |  |  |  |
|  | 100 | 9,500 | 43 | Sodium Yapor Street | \$9.18 | \$110.16 |  |  |  |  |
|  | 150 | 16,000 | 60 | Sodium Vapor Street | \$9.22 | \$110.64 |  |  |  |  |
|  | 250 | 30,000 | 101 | Sodium Vapor Street | \$11.82 | \$141.84 |  |  |  |  |
|  | 400 | 50,000 | 161 | Sodium Vapor Street | \$15.16 | \$181,84 |  |  |  |  |
|  | 1,000 | 140,000 | 398 | Sodium Vapor Street | \$26.94 | $\$ 181.92$$\$ 323.28$ |  |  |  |  |
|  | 150 | 16,000 | 60 | Sodium Vapor Flood | \$10.79 | \$129.48 |  |  |  |  |
|  | 250 | 30,000 | 101 | Sodium Vapor Flood | \$12.90 | \$154.80 |  |  |  |  |
|  | 400 | 50,000 | 161 | Sodium Vapor Flood | \$14.80 | \$177,60 |  |  |  |  |
|  | 1,000 | 140,000 | 398 | Sodium Vapor Flood | \$27.18 | \$326.16 |  |  |  |  |
|  | 50 | 4,000 | 21 | Sodium Vapor Power Bracket | \$7.37 | \$88.44 |  |  |  |  |
|  | 100 | 9,500 | 43 | Sodium Vapor Power Bracket | \$8.39 | \$100.68 |  |  |  |  |

(1) Includes low-income portion of $\$ 0.00120$ per kWh and energy efficiency portion of 50.00180 per kWh
*Awhorized by NHPUC Order No. 24, 742 in Case No. DE 05-178, dated April /3, 200
** Authorized by NHPUC Order No. 24, 85 in Case No. DE 08-0.40, dated Apmil 23,2008 *** Authorized hy NHPUC Order No. in Case No. dated

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

FifthFomth Revised Page 6
Superseding FourthThird Revised Page 6
(I), (D)

## SUMMARY OF LOW-INCOME ELECTRIC ASSISTANCE PROGRAM DISCOUNTS

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

| Tier | Percentage of Federal Poverty Guidelines | Discount | Blocks |  | (I) | (D) <br> Rate - Controlled Off Peak Water Heating |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | LIEAP <br> Pisem(1) | LI-EAP <br> Discount(1) | Block | LIEAP <br> Piscount(1) |
| 1 | 176-185 | 5\% | Customer Charge | (\$0.42) | (\$0.42) | Eustomercharge | (\$0.19) |
|  |  |  | First 250 kWh Excess 250 kWh | $\begin{aligned} & (\$ 0.00721) \\ & (\$ 0.00746) \\ & \hline \end{aligned}$ | $\begin{aligned} & (\$ 0.00740) \\ & (\$ 0.00765) \\ & \hline \end{aligned}$ | QffPeak kWh | (\$0.00650) |
| 2 | 151-175 | 7\% | Customer Charge | (\$0.59) | (\$0.59) | Custmercharge | (\$0.20) |
|  |  |  | First 250 kWh <br> Excess 250 kWh | $\begin{aligned} & (\$ 0.01009) \\ & (\$ 0.01044) \end{aligned}$ | $\begin{aligned} & (\$ 0.01036) \\ & (\$ 0.01071) \\ & \hline \end{aligned}$ | Offpeak | (50.00919) |
| 3 | 126-150 | 18\% | Customer Charge | (\$1.51) | (\$1.51) | Gutomercharge | (\$0.68) |
|  |  |  | First 250 kWh Excess 250 kWh | $\begin{aligned} & (\$ 0.02595) \\ & (\$ 0.02685) \\ & \hline \end{aligned}$ | $\begin{aligned} & (\$ 0.02665) \\ & (\$ 0.02755) \\ & \hline \end{aligned}$ | QffPeokkWh | (\$0.02363) |
| 4 | 101-125 | 33\% | Customer Charge | (\$2.77) | (\$2.77) | Cumer Charge | (\$1.24) |
|  |  |  | First 250 kWh Excess 250 kWh | $(\$ 0.04757)$ $(\$ 0.04922)$ | $\begin{aligned} & (\$ 0.04886) \\ & (\$ 0.05051) \\ & \hline \end{aligned}$ | Qffpeak kWh | (\$0.04331) |
| 5 | 76-100 | 48\% | Customer Charge | (\$4.03) | (\$4.03) | EustemerChurge | (\$4.80) |
|  |  |  | First 250 kWh Excess 250 kWh | $\begin{aligned} & (\$ 0.06919) \\ & (\$ 0.07159) \\ & \hline \end{aligned}$ | $\begin{aligned} & (\$ 0.07107) \\ & (\$ 0.07347) \\ & \hline \end{aligned}$ | QffPeakk kh | (\$0.06300) |
| 6 | 0-75 | 70\% | Customer Charge | (\$5.88) | (\$5.88) | Eustor Charge | (\$2.63) |
|  |  |  | First 250 kWh <br> Excess 250 kWh | $\begin{aligned} & (\$ 0.10099) \\ & (\$ 0.10440) \\ & \hline \end{aligned}$ | $\begin{array}{r} (\$ 0.10365) \\ (\$ 0.10715) \\ \hline \end{array}$ | QffPeakkWh | (\$0.09188) |

(1) Total utility charges from Page 4 (excluding the Electricity Consumption Tax) plus Non-Gl class Fixed Default Service Rate multiplied by the appropriate discount.

> Authorized by NHPUC Order No. 24,854 in Case No. PE 08 - 040 , dated April 23, 2008 and
> Order No. 24,838 in Case No. DE $08-015$, dat Mareh 21,2008

Issued: July 9April 24, 2008
Effective: SeptemberMay 1,2008
Treasurer

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

Residential Rate D 500 kWh Bill

| Rate Components | 8/1/2008 | 9/1/2008 |  | Current Bill* | As Revised Bill* | Difference | $\%$ <br> Difference <br> to Total Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current Rate | 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 | \$0.01131 | \$0.01524 | \$0.00393 | \$5.66 | \$7.62 | \$1.97 | 2.4\% |
| 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 | \$0.10291 | \$0.00000 | \$51.46 | \$51.46 | \$0.00 | 0.0\% |
| First 250 kWh | \$0.14414 | \$0.14807 | \$0.00393 |  | $\underline{0}$ | $\underline{0}$ | . 0.0 |
| Excess 250 kWh | \$0.14914 | \$0.15307 | \$0.00393 |  |  |  |  |
| Total Bill |  |  |  | \$81.72 | \$83.69 | \$1.97 | 2.4\% |

* Impacts do not include the Electricity Consumption Tax.


## $\stackrel{\odot}{\infty}$

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

| Rate Components | $8 / 1 / 2008$ <br> Current Rate | 9/1/2008 |  |  |  |  | \% <br> 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 | \$0.01131 | \$0.01524 | \$0.00393 | \$22.62 | \$30.48 | \$7.86 | 2.6\% |
| 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 | \$0.10291 | \$0.00000 | \$205.82 | \$205.82 | \$0.00 | 0.0\% |
| Total | \$0.14692 | \$0.15085 | \$0.00393 | \$293.84 | \$301.70 | \$7.86 | 2.6\% |
| Total Bill |  |  |  | \$297.59 | \$305.45 | $\$ 7.86$ | 2.6\% |


| Rate Components | Regular General G2 kWh Meter 125 kWh Typical Bill |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 8/1/2008 | 9/1/2008 |  |  |  |  | \% |
|  | Current Rate | As Revised | Difference | Current Bill* | As Revised Bill* | 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 | \$0.02975 | \$0.02975 | \$0.00000 | \$3.72 | \$3.72 | \$0.00 | 0.0\% |
| External Delivery Charge | \$0.01131 | \$0.01524 | \$0.00393 | \$1.41 | \$1.91 | \$0.49 | 1.8\% |
| 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 | \$0.10291 | \$0.00000 | \$12.86 | \$12.86 | \$0.00 | 0.0\% |
| Total | \$0.15579 | \$0.15972 | \$0.00393 | \$19.47 | $\stackrel{\$ 19.97}{ }$ | \$0.49 | 0.0\% |
| Total Bill |  |  |  | \$27.87 | \$28.37 | \$0.49 | 1.8\% |

* Impacts do not include the Electricity Consumption Tax.

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

| Rate Components | Reqular General G2 Demand, $10 \mathrm{~kW}, 3,000 \mathrm{kWh}$ Typical Bill |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 8/1/2008 | 9/1/2008 |  |  |  |  | \% |
|  | Current Rate | As revised | Difference | Current Bill* | As Revised Bill* | Difference | 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 | \$1.55 | \$1.55 | \$0.00 | \$15.50 | \$15.50 | \$0.00 | 0.0\% |
| Total | \$8.58 | \$8.58 | \$0.00 | \$85.80 | \$85.80 | \$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 | \$0.01131 | \$0.01524 | \$0.00393 | \$33.93 | \$45.72 | \$11.79 | 2.6\% |
| Stranded Cost Charge | \$0.00298 | \$0.00298 | \$0.00000 | \$8.94 | \$8.94 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00300 | \$0.00300 | \$0.00000 | \$9.00 | \$9.00 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.10291 | \$0.10291 | \$0.00000 | \$308.73 | \$308.73 | \$0.00 | 0.0\% |
| Total | \$0.12020 | \$0.12413 | \$0.00393 | \$360.60 | \$372.39 | \$11.79 | 2.6\% |
| Total Bill |  |  |  | \$457.40 | \$469.19 | \$11.79 | 2.6\% |


| Rate Components | Large General - G1 $550 \mathrm{kVa}, 200,000 \mathrm{kWh}$ Typical Bill |  |  |  | As Revised Bill* | Difference | $\%$ <br> Difference to Total Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $8 / 1 / 2008$ <br> Current Rate | 9/1/2008 <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 | \$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 | \$0.01131 | \$0.01524 | \$0.00393 | \$2,262.00 | \$3,048.00 | \$786.00 | 2.4\% |
| 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 | \$0.12126 | \$0.12126 | \$0.00000 | \$24,252.00 | \$24,252.00 | \$0.00 | 0.0\% |
| Total | \$0.13824 | \$0.14217 | \$0.00393 | \$27,648.00 | \$28,434.00 | \$786.00 | 2.4\% |
| Total Bill |  |  |  | \$32,123.86 | \$32,909.86 | \$786.00 | 2.4\% |

* 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 672 kWh Bill - Mean Use*

| Rate Components | 8/1/2008 | 9/1/2008 |  | Current 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 | \$9.75 | \$9.75 | \$0.00 | 0.0\% |
| External Delivery Charge | \$0.01131 | \$0.01524 | \$0.00393 | \$7.60 | \$10.24 | \$2.64 | 2.5\% |
| Stranded Cost Charge | \$0.00882 | \$0.00882 | \$0.00000 | \$5.93 | \$5.93 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00300 | \$0.00300 | \$0.00000 | \$2.02 | \$2.02 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.10291 | \$0.10291 | \$0.00000 | \$69.16 | \$69.16 | \$0.00 | 0.0\% |
| First 250 kWh | \$0.14414 | \$0.14807 | \$0.00393 |  | 960.10 | \$0.00 | . $0.0 \%$ |
| Excess 250 kWh | \$0.14914 | \$0.15307 | \$0.00393 |  |  |  |  |
| Total Bill |  |  |  | \$107.37 | \$110.01 | \$2.64 | 2.5\% |

Residential Rate D 562 kWh Bill - Median Use*

| Rate Components | 8/1/2008 | 9/1/2008 |  | Current Bill** | As Revised Bill** | Difference | \% <br> Difference <br> to Total Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current Rate | 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 | \$7.21 | \$7.21 | \$0.00 | 0.0\% |
| External Delivery Charge | \$0.01131 | \$0.01524 | \$0.00393 | \$6.36 | \$8.56 | \$2.21 | 2.4\% |
| Stranded Cost Charge | \$0.00882 | \$0.00882 | \$0.00000 | \$4.96 | \$4.96 | \$0.00 | 0.0\% |
| System Benefits Charge | \$0.00300 | \$0.00300 | \$0.00000 | \$1.69 | \$1.69 | \$0.00 | 0.0\% |
| Default Service Charge | \$0.10291 | \$0.10291 | \$0.00000 | \$57.84 | \$57.84 | \$0.00 | 0.0\% |
| First 250 kWh | \$0.14414 | \$0.14807 | \$0.00393 |  |  |  |  |
| Excess 250 kWh | \$0.14914 | \$0.15307 | \$0.00393 |  |  |  |  |
| Total Bill |  |  |  | \$90.97 | \$93.18 | \$2.21 | 2.4\% |

[^2]Unitil Energy Systems, Inc.
Average Class Bill Impacts
Due to Proposed Rate Changes Effective September 1, 2008

| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Annual | Annual | Proposed | Estimated Annual | Estimated Annual | Proposed | \% Change |
|  | Number of | kWh | kW/kVA | EDC | Revenue \$ Under | Revenue \$ Under | Net Change | EDC |
| Class of Service | Customers | Sales | Sales | Change \$ | Present Rates | Proposed Rates | Revenue \$ | Revenue |
| Residential | 738,543 | 486,378,217 | n/a | \$1,911,466 | \$77,897,672 | \$79,809,138 | \$1,911,466 | 2.5\% |
| General Service | 125,046 | 354,008,286 | 1,298,686 | \$1,391,253 | \$55,230,048 | \$56,621,300 | \$1,391,253 | 2.5\% |
| Large General Service | 1,822 | 364,679,187 | 996,528 | \$1,433,189 | \$68,095,477 | \$69,528,666 | \$1,433,189 | 2.1\% |
| Outdoor Lighting | 117,884 | 9,206,974 | n/a | \$36,183 | \$2,397,243 | \$2,433,427 | \$36,183 | 1.5\% |
| Total | 983,295 | 1,214,272,664 |  | \$4,772,092 | \$203,620,439 | \$208,392,531 | \$4,772,092 | 2.3\% |

(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).
(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 - August 1, 2008 versus September 1, 2008 Impacts do NOT include the Electricity Consumption Tax Impact on G1 Rate Customers |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average | Average | Total Bill | Total Bill |  | \% |
| Load | Monthly | Monthly | Using Rates | Using Rates | Total | Total |
| Factor | kVa | kWh | 8/1/2008 | 9/1/2008 | Difference | Difference |
| 25.0\% | 200 | 36,500 | \$7,717.41 | \$7,860.86 | \$143.45 | 1.9\% |
| 25.0\% | 400 | 73,000 | \$15,325.97 | \$15,612.86 | \$286.89 | 1.9\% |
| 25.0\% | 600 | 109,500 | \$22,934.52 | \$23,364.86 | \$430.34 | 1.9\% |
| 25.0\% | 800 | 146,000 | \$30,543.07 | \$31,116.85 | \$573.78 | 1.9\% |
| 25.0\% | 1,000 | 182,500 | \$38,151.63 | \$38,868.85 | \$717.23 | 1.9\% |
| 25.0\% | 1.500 | 273,750 | \$57,173.01 | \$58,248.85 | \$1,075.84 | 1.9\% |
| 25.0\% | 2,000 | 365,000 | \$76,194.39 | \$77,628.84 | \$1,434.45 | 1.9\% |
| 25.0\% | 2,500 | 456,250 | \$95,215.78 | \$97,008.84 | \$1,793.06 | 1.9\% |
| 25.0\% | 3,000 | 547,500 | \$114,237.16 | \$116,388.84 | \$2,151.68 | 1.9\% |
| 40.0\% | 200 | 58,400 | \$11,329.75 | \$11,559.26 | \$229.51 | 2.0\% |
| 40.0\% | 400 | 116,800 | \$22,550.63 | \$23,009.65 | \$459.02 | 2.0\% |
| 40.0\% | 600 | 175,200 | \$33,771.52 | \$34,460.05 | \$688.54 | 2.0\% |
| 40.0\% | 800 | 233,600 | \$44,992.40 | \$45,910.45 | \$918.05 | 2.0\% |
| 40.0\% | 1,000 | 292,000 | \$56,213.29 | \$57,360.85 | \$1,147.56 | 2.0\% |
| 40.0\% | 1,500 | 438,000 | \$84,265.50 | \$85,986.84 | \$1,721.34 | 2.0\% |
| 40.0\% | 2,000 | 584,000 | \$112,317.71 | \$114,612.83 | \$2,295.12 | 2.0\% |
| 40.0\% | 2,500 | 730,000 | \$140,369.93 | \$143,238.83 | \$2,868.90 | 2.0\% |
| 40.0\% | 3.000 | 876,000 | \$168,422.14 | \$171,864.82 | \$3,442.68 | 2.0\% |
| 57.0\% | 200 | 83,220 | \$15,423.72 | \$15,750.78 | \$327.05 | 2.1\% |
| 57.0\% | 400 | 166,440 | \$30,738.58 | \$31,392.69 | \$654.11 | 2.1\% |
| 57.0\% | 600 | 249,660 | \$46,053.44 | \$47,034.61 | \$981.16 | 2.1\% |
| 57.0\% | 800 | 332,880 | \$61,368.31 | \$62,676.52 | \$1,308.22 | 2.1\% |
| 57.0\% | 1,000 | 416,100 | \$76,683.17 | \$78,318.44 | \$1,635.27 | 2.1\% |
| 57.0\% | 1,500 | 624,150 | \$114,970.32 | \$117,423.23 | \$2,452.91 | 2.1\% |
| 57.0\% | 2,000 | 832,200 | \$153,257.48 | \$156,528.02 | \$3,270.55 | 2.1\% |
| 57.0\% | 2,500 | 1,040,250 | \$191,544.63 | \$195,632.81 | \$4,088.18 | 2.1\% |
| 57.0\% | 3,000 | 1,248,300 | \$229,831.78 | \$234,737.60 | \$4,905.82 | 2.1\% |
| 71.0\% | 200 | 103,660 | \$18,795.23 | \$19,202.62 | \$407.38 | 2.2\% |
| 71.0\% | 400 | 207,320 | \$37,481.60 | \$38,296.37 | \$814.77 | 2.2\% |
| 71.0\% | 600 | 310,980 | \$56,167.97 | \$57,390.13 | \$1,222.15 | 2.2\% |
| 71.0\% | 800 | 414,640 | \$74,854.35 | \$76,483.88 | \$1,629.54 | 2.2\% |
| 71.0\% | 1,000 | 518,300 | \$93,540.72 | \$95,577.64 | \$2,036.92 | 2.2\% |
| 71.0\% | 1,500 | 777,450 | \$140,256.65 | \$143,312.02 | \$3,055.38 | 2.2\% |
| 71.0\% | 2,000 | 1,036,600 | \$186,972.57 | \$191,046.41 | \$4,073.84 | 2.2\% |
| 71.0\% | 2,500 | 1,295,750 | \$233,688.50 | \$238,780.80 | \$5,092.30 | 2.2\% |
| 71.0\% | 3,000 | 1,554,900 | \$280,404.43 | \$286,515.19 | \$6,110.76 | 2.2\% |
|  |  |  |  |  |  |  |
| Customer Charge $\begin{array}{ccc}\text { Rates - Effective } \\ \text { August 1, 2008 }\end{array}$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Distribution Charge |  |  | All kVA | All kVA | All kVA |  |
| Stranded Cost Charge |  |  | \$5.69 | \$5.69 | \$0.00 |  |
| TOTAL |  |  | \$2.25 | \$2.25 | \$0.00 |  |
|  |  |  | \$7.94 | \$7.94 | \$0.00 |  |
|  |  |  | All kWh | All kWh | All kWh |  |
| Distribution Charge $\quad \$ 0.00000$ l |  |  |  |  |  |  |
| External Delivery Charge $\quad \$ 0.01131$ \$0.00393 |  |  |  |  |  |  |
| Stranded Cost Charge $\quad \$ 0.00267$ \$0.00000 |  |  |  |  |  |  |
| System Benefits Charge |  |  | \$0.00300 | \$0.00300 | \$0.00000 |  |
| Default Service Charge* |  |  | \$0.14797 | \$0.14797 | \$0.00000 |  |
| TOTAL |  |  | \$0.16495 | \$0.16888 | \$0.00393 |  |
| * Default Service Charges shown are based on the average of the DSC for each 3-month period. 02 |  |  |  |  |  |  |




[^0]:    ${ }^{*}$ Authorized by NHPUC Order No. 24,742 in Case No. DE 05-178, dated April 13, 2007
    ** Authorized by NHPUC Order No. 24,851 in Case No. DE 08-040, dated April 23, 2008 *** Authorized by NHPUC Order No. in Case No. , dated

[^1]:    Authorized by NHPUC Order No. 24, 742 in Case No. DE 05-178, dated April 13, 2007

    * Auhorized by NHPUC Order No. 24,S51 in Case No. DE OS-040, dated April 23, 2008
    ***Authorized by NHPUC Order No. in Case No. . dated

[^2]:    * Based on billing period June 2007 through May 2008
    ** Impacts do not include the Electricity Consumption Tax

