

Total Resource Benefit Cost Analysis
 Summary of Benefit, Costs Program Year 2016

| | TRC Benefit/ Cost | TRC Net Benefits | Total Benefits (\$000) | Total Costs (\$000) | PA Costs (\$000) | Participant Costs (\$000) | Annual MMBTU Savings | Lifetime MMBTU Savings | Partici- pants |
|--|-------------------------|------------------------|------------------------------|---------------------------|------------------------|---------------------------------|-------------------------|---------------------------|-------------------|
| Residential | | | | | | | | | |
| Home Energy Assistance | 0.71 | (\$67) | \$165.364 | \$232.459 | \$232.459 | \$0.000 | 1,011 | 19,593 | 29 |
| EnergyStar® Homes | 1.42 | \$79 | \$267.940 | \$188.632 | \$90.656 | \$97.975 | 1,141 | 27,939 | 20 |
| HP w/EnergyStar® | 0.93 | (\$14) | \$192.392 | \$206.649 | \$125.903 | \$80.747 | 1,054 | 22,180 | 33 |
| EnergyStar® Products | 1.18 | \$108 | \$697.398 | \$589.593 | \$339.473 | \$250.120 | 4,656 | 84,115 | 486 |
| Res Education | | | | \$9.110 | \$9.110 | \$0.000 | | | |
| Subtotal: Residential | 1.08 | \$106 | \$1,323.095 | \$1,226.442 | \$797.600 | \$428.842 | 7,861 | 153,827 | 568 |
| Commercial & Industrial | | | | | | | | | |
| Large Business Energy Solutions | 1.89 | \$724 | \$1,532.850 | \$809.185 | \$318.458 | \$490.727 | 11,252 | 218,056 | 44 |
| Small Business Energy Solutions | 2.47 | \$483 | \$811.899 | \$328.492 | \$210.949 | \$117.543 | 5,483 | 107,298 | 85 |
| C&I Education | | | | \$6.929 | \$6.929 | \$0.000 | | | |
| Subtotal: Commercial & Industrial | 2.05 | \$1,207 | \$2,344.749 | \$1,144.605 | \$536.335 | \$608.270 | 16,735 | 325,354 | 129 |
| Grand Total | 1.55 | \$1,313 | \$3,667.844 | \$2,371.048 | \$1,333.935 | \$1,037.112 | 24,596 | 479,181 | 697 |

Performance Incentive Calculation 2016

| | <u>Actual</u> | <u>Plan</u> |
|--|------------------|------------------|
| Commercial/Industrial | | |
| 1. Benefit/Cost Ratio | 1.97 | 1.71 |
| 2. Threshold Benefit/Cost Ratio | 1.00 | |
| 3. Lifetime MMBTU savings | 325,354 | 375,786 |
| 4. Threshold MMBTU savings (65%) | | 244,261 |
| 5. Implementation Expenses | \$536,335 | \$570,030 |
| 6. Benefit / Cost Percentage of Budget | 4.60% | 4.00% |
| 7. Lifetime MMBTU Percentage | 3.48% | 4.00% |
| 8. C/I Performance Incentive | \$43,336 | \$45,602 |
| 9. C&I Cap (12%) | | \$68,404 |
| Residential | | |
| 10. Benefit/Cost Ratio | 1.03 | 1.16 |
| 11. Threshold Benefit/Cost Ratio | 1.00 | 1.00 |
| 12. Lifetime MMBTU savings | 153,827 | 166,018 |
| 13. Threshold MMBTU savings (65%) | | 107,912 |
| 14. Implementation Expenses | \$797,600 | \$777,617 |
| 15. Benefit / Cost Percentage of Budget | 3.56% | 4.00% |
| 16. Lifetime MMBTU Percentage | 3.72% | 4.00% |
| 17. Residential Performance Incentive | \$58,065 | \$62,209 |
| 18. C&I Cap (12%) | | \$93,314 |
| 19. Total Performance Incentive | \$101,401 | \$107,811 |

Note that in the Plan filing, the B/C ratio on Attachment GG Page 2 of 3 was mis-stated as 1.76 for the C&I Sector and 1.22 for the Residential Sector due to an error in the calculation. The B/C ratio in the Plan on Attachment GG page 3 of 3 is correctly stated at 1.71 for the C&I Sector and 1.16 for the Residential Sector.

Planned Versus Actual Benefit / Cost Ratio by Sector
 2016

| | | <u>Actual</u> | | <u>Planned</u> |
|---|----|------------------|----|------------------|
| Commercial & Industrial: | | | | |
| 1. Benefits (Value) From Eligible Programs | \$ | 2,344,749 | \$ | 2,642,271 |
| 2. Implementation Expenses | \$ | 536,335 | \$ | 570,030 |
| 3. Customer Contribution | \$ | 608,270 | \$ | 927,063 |
| 4. Performance Incentive | \$ | 43,336 | \$ | 45,602 |
| 5. Total Costs (Including PI) | \$ | 1,187,941 | \$ | 1,542,695 |
| 6. Benefit/Cost Ratio - C&I Sector | | 1.97 | | 1.71 |
| Residential: | | | | |
| 7. Benefits (Value) From Eligible Programs | \$ | 1,323,095 | \$ | 1,421,489 |
| 8. Implementation Expenses | \$ | 797,600 | \$ | 777,617 |
| 9. Customer Contribution | \$ | 428,842 | \$ | 389,318 |
| 10. Performance Incentive | \$ | 58,065 | \$ | 62,209 |
| 11. Total Costs (Including PI) | \$ | 1,284,508 | \$ | 1,229,144 |
| 12. Benefit/Cost Ratio - Residential Sector | | 1.03 | | 1.16 |

Unitil Gas
2016 Energy Efficiency Charge Fund Reconciliation

| | | | <u>Total 2016</u> |
|---|-------------------|----|--------------------------|
| 1. Beginning Balance: 1/1/2016 | (Over)/Under | \$ | (176,315) |
| Revenues | | | |
| 2. Energy Efficiency Charge Revenue | | \$ | 1,230,230 |
| 3. Interest | | \$ | 13,400 |
| 4. Total Funding | Σ Lines 2 - 3 | \$ | <u>1,243,630</u> |
| Expenses | | | |
| 5. Program Expenses | | \$ | 1,333,936 |
| 6. PI - Current Year Estimate | | \$ | 107,812 |
| 7. PI - Prior Year(s) True-Up | | \$ | 3,969 |
| 8. Total Expenses | Σ Lines 5 + 6 + 7 | \$ | <u>1,445,717</u> |
| 9. Ending Balance: 12/31/2016 | Lines 1 - 4 + 8 | \$ | <u>25,771</u> |
| Ending Balance Adjusted for Current Year Actual PI | | | |
| ## Actual Performance Incentive - 2016 | Attachment G-G | \$ | 94,809 |
| ## Ending Balance w/ Actual PI | Lines 9 - 6 + 10 | \$ | <u>12,769</u> |

Notes:

Line 5: Reflects removal of \$12,500 overpayment.
 Line 6: PI Current Year Estimate is budgeted performance incentive
 Line 7: PI Prior Year(s) True-Up includes adjustment for 2015 earned performance incentive.
 Line 10: Actual Performance Incentives is the actual earend PI as shown in Attachment G-G.