

Program Cost-Effectiveness - 2015 ACTUAL

| | Total Resource Benefit/Cost Ratio | Benefits (\$000) | Utility Costs (\$000) | Customer Costs (\$000) | Annual MWh Savings | Lifetime MWh Savings | Winter kW Savings | Summer kW Savings | Annual MMBTU Savings | Lifetime MMBTU Savings | Number of Customers Served |
|---------------------------------------|--|-----------------------------|----------------------------------|-----------------------------------|-------------------------------|---------------------------------|------------------------------|------------------------------|-------------------------------------|---------------------------------------|---|
| Residential Programs | | | | | | | | | | | |
| ENERGY STAR Homes | 1.6 | \$ 432 | \$ 180 | \$ 86 | \$ 159 | \$ 2,758 | \$ 66 | \$ 25 | \$ 503 | \$ 12,206 | \$ 64 |
| Home Performance with Energy Star | 1.7 | \$ 897 | \$ 317 | \$ 212 | \$ 218 | \$ 3,688 | \$ 96 | \$ 7 | \$ 1,758 | \$ 31,678 | \$ 221 |
| ENERGY STAR Lighting ⁽¹⁾ | 3.1 | \$ 991 | \$ 182 | \$ 136 | \$ 808 | \$ 12,762 | \$ 481 | \$ 161 | \$ - | \$ - | \$ 9,327 |
| ENERGY STAR Appliances ⁽¹⁾ | 2.5 | \$ 466 | \$ 152 | \$ 33 | \$ 313 | \$ 3,597 | \$ 61 | \$ 47 | \$ 132 | \$ 1,456 | \$ 1,633 |
| Home Energy Assistance | 1.6 | \$ 634 | \$ 390 | \$ - | \$ 57 | \$ 976 | \$ 30 | \$ 9 | \$ 1,119 | \$ 24,087 | \$ 50 |
| Education | | \$ - | \$ 20 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Forward Capacity Market Expenses | | \$ - | \$ 13 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| | | \$ 3,420 | \$ 1,254 | \$ 466 | \$ 1,554 | \$ 23,781 | \$ 733 | \$ 249 | \$ 3,512 | \$ 69,428 | \$ 11,295 |
| Commercial/Industrial Programs | | | | | | | | | | | |
| Large Business Energy Solutions | 2.7 | \$ 8,173 | \$ 527 | \$ 2,535 | \$ 5,705 | \$ 82,320 | \$ 1,095 | \$ 1,660 | \$ 187 | \$ 1,308 | \$ 12 |
| Small Business Energy Solutions | 1.8 | \$ 1,691 | \$ 472 | \$ 483 | \$ 1,198 | \$ 15,727 | \$ 143 | \$ 380 | \$ - | \$ - | \$ 73 |
| Municipal Program | 1.1 | \$ 313 | \$ 143 | \$ 141 | \$ 299 | \$ 3,798 | \$ 48 | \$ 52 | \$ - | \$ - | \$ 8 |
| Education | | \$ - | \$ 5 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Forward Capacity Market Expenses | | \$ - | \$ 9 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| | | \$ 10,177 | \$ 1,156 | \$ 3,159 | \$ 7,202 | \$ 101,844 | \$ 1,286 | \$ 2,092 | \$ 187 | \$ 1,308 | \$ 93 |
| Total | | \$ 13,597 | \$ 2,410 | \$ 3,626 | \$ 8,756 | \$ 125,625 | \$ 2,019 | \$ 2,341 | \$ 3,699 | \$ 70,735 | \$ 11,388 |

(1) Target number of products purchased.

| | | | | | | | |
|--------------------------------------|------------------|--------------|---------------------|--|--------------------|--------------|---------------------|
| Annual kWh Savings | 8,756,151 | 89.0% | kWh > 55% | Lifetime kWh Savings | 125,625,007 | 85.8% | kWh > 55% |
| Annual MMBTU Savings (in kWh) | <u>1,084,063</u> | <u>11.0%</u> | | Lifetime MMBTU Savings (in kWh) | <u>20,730,421</u> | <u>14.2%</u> | |
| | 9,840,215 | 100.0% | | | 146,355,427 | 100.0% | |

Program Cost-Effectiveness - 2015 PLAN

| | Total Resource Benefit/Cost Ratio | Benefits (\$000) | Utility Costs (\$000) | Customer Costs (\$000) | Annual MWh Savings | Lifetime MWh Savings | Winter kW Savings | Summer kW Savings | Annual MMBTU Savings | Lifetime MMBTU Savings | Number of Customers Served |
|---------------------------------------|--------------------------------------|---------------------|--------------------------|---------------------------|-----------------------|-------------------------|----------------------|----------------------|----------------------------|------------------------------|----------------------------------|
| Residential Programs | | | | | | | | | | | |
| ENERGY STAR Homes | 3.4 | \$ 637 | \$ 175 | \$ 14 | \$ 51 | \$ 1,007 | \$ 20 | \$ 14 | \$ 951 | \$ 23,057 | \$ 28 |
| Home Performance with Energy Star | 1.7 | \$ 829 | \$ 323 | \$ 159 | \$ 39 | \$ 687 | \$ 28 | \$ 7 | \$ 1,760 | \$ 32,027 | \$ 60 |
| ENERGY STAR Lighting ⁽¹⁾ | 2.4 | \$ 629 | \$ 190 | \$ 73 | \$ 678 | \$ 9,519 | \$ 265 | \$ 71 | \$ - | \$ - | \$ 5,666 |
| ENERGY STAR Appliances ⁽¹⁾ | 2.6 | \$ 562 | \$ 175 | \$ 38 | \$ 393 | \$ 4,274 | \$ 65 | \$ 64 | \$ 147 | \$ 1,622 | \$ 1,911 |
| Home Energy Assistance | 1.4 | \$ 642 | \$ 460 | \$ - | \$ 95 | \$ 1,670 | \$ 4 | \$ 2 | \$ 1,262 | \$ 22,432 | \$ 39 |
| Education | | \$ - | \$ 53 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Forward Capacity Market Expenses | | \$ - | \$ 10 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| | | \$ 3,299 | \$ 1,385 | \$ 284 | \$ 1,255 | \$ 17,158 | \$ 383 | \$ 158 | \$ 4,120 | \$ 79,138 | \$ 7,703 |
| Commercial/Industrial Programs | | | | | | | | | | | |
| Large Business Energy Solutions | 1.6 | \$ 3,018 | \$ 792 | \$ 1,079 | \$ 2,734 | \$ 38,158 | \$ 287 | \$ 360 | \$ - | \$ - | \$ 26 |
| Small Business Energy Solutions | 1.6 | \$ 1,264 | \$ 500 | \$ 313 | \$ 1,037 | \$ 13,486 | \$ 132 | \$ 251 | \$ - | \$ - | \$ 65 |
| Municipal Program | 1.2 | \$ 504 | \$ 223 | \$ 188 | \$ 385 | \$ 5,035 | \$ 38 | \$ 68 | \$ 161 | \$ 3,548 | \$ 19 |
| Education | | \$ - | \$ 45 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Forward Capacity Market Expenses | | \$ - | \$ 20 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| | | \$ 4,786 | \$ 1,580 | \$ 1,580 | \$ 4,156 | \$ 56,679 | \$ 456 | \$ 679 | \$ 161 | \$ 3,548 | \$ 110 |
| | | \$ 8,085 | \$ 2,965 | \$ 1,864 | \$ 5,411 | \$ 73,837 | \$ 839 | \$ 836 | \$ 4,281 | \$ 82,686 | \$ 7,813 |

(1) Target number of products purchased.

| | | | | | | | |
|-------------------------------|------------------|--------------|---------------------|---------------------------------|-------------------|--------------|---------------------|
| Annual kWh Savings | 5,411,319 | 81.2% | kWh > 55% | Lifetime kWh Savings | 73,836,957 | 75.3% | kWh > 55% |
| Annual MMBTU Savings (in kWh) | <u>1,254,727</u> | <u>18.8%</u> | | Lifetime MMBTU Savings (in kWh) | <u>24,232,846</u> | <u>24.7%</u> | |
| | 6,666,046 | 100.0% | | | 98,069,804 | 100.0% | |

Present Value Benefits - 2015 ACTUAL

| | <u>Total Benefits</u> | <u>CAPACITY</u> | | | | <u>ENERGY</u> | | | | <u>Non Electric Resource</u> |
|---------------------------------------|-----------------------|--------------------------|--------------------------|---------------------|---------------------|---------------------|------------------------|---------------------|------------------------|------------------------------|
| | | <u>Summer Generation</u> | <u>Winter Generation</u> | <u>Transmission</u> | <u>Distribution</u> | <u>Winter Peak</u> | <u>Winter Off Peak</u> | <u>Summer Peak</u> | <u>Summer Off Peak</u> | |
| Residential Programs | | | | | | | | | | |
| ENERGY STAR Homes | \$ 432,386 | \$ 29,406 | \$ - | \$ 4,499 | \$ 18,180 | \$ 89,481 | \$ 63,135 | \$ 6,395 | \$ 2,712 | \$ 218,577 |
| Home Performance w/Energy Star | \$ 896,843 | \$ 10,759 | \$ - | \$ 301 | \$ 1,215 | \$ 77,454 | \$ 110,119 | \$ 10,492 | \$ 12,162 | \$ 674,342 |
| ENERGY STAR Lighting | \$ 990,533 | \$ 250,745 | \$ - | \$ 3,260 | \$ 13,174 | \$ 210,135 | \$ 281,591 | \$ 101,705 | \$ 129,923 | \$ - |
| ENERGY STAR Appliances | \$ 465,721 | \$ 43,907 | \$ - | \$ 6,488 | \$ 26,217 | \$ 71,910 | \$ 73,015 | \$ 32,811 | \$ 19,871 | \$ 191,501 |
| Home Energy Assistance | \$ 634,291 | \$ 13,812 | \$ - | \$ 1,129 | \$ 4,562 | \$ 19,853 | \$ 25,516 | \$ 4,874 | \$ 5,557 | \$ 558,987 |
| Subtotal Residential | \$ 3,419,773 | \$ 348,629 | \$ - | \$ 15,678 | \$ 63,349 | \$ 468,833 | \$ 553,377 | \$ 156,277 | \$ 170,225 | \$ 1,643,407 |
| Commercial/Industrial Programs | | | | | | | | | | |
| Large Business Energy Solutions | \$ 8,173,476 | \$ 2,105,648 | \$ - | \$ 346,595 | \$ 1,166,324 | \$ 974,386 | \$ 940,779 | \$ 1,335,108 | \$ 1,296,128 | \$ 8,507 |
| Small Business Energy Solutions | \$ 1,691,134 | \$ 473,119 | \$ - | \$ 66,990 | \$ 270,681 | \$ 342,301 | \$ 221,717 | \$ 200,505 | \$ 115,821 | \$ - |
| Municipal Program | \$ 312,734 | \$ 61,332 | \$ - | \$ 8,169 | \$ 33,007 | \$ 76,348 | \$ 67,657 | \$ 37,396 | \$ 28,824 | \$ - |
| Subtotal C&I | \$ 10,177,343 | \$ 2,640,099 | \$ - | \$ 421,754 | \$ 1,470,012 | \$ 1,393,034 | \$ 1,230,153 | \$ 1,573,009 | \$ 1,440,774 | \$ 8,507 |
| Total | \$ 13,597,117 | \$ 2,988,728 | \$ - | \$ 437,432 | \$ 1,533,361 | \$ 1,861,868 | \$ 1,783,530 | \$ 1,729,286 | \$ 1,610,998 | \$ 1,651,914 |

Present Value Benefits - 2015 PLAN

| | <u>Total Benefits</u> | <u>CAPACITY</u> | | | | <u>ENERGY</u> | | | | <u>Non Electric Resource</u> |
|---------------------------------------|-----------------------|--------------------------|--------------------------|---------------------|---------------------|---------------------|------------------------|--------------------|------------------------|------------------------------|
| | | <u>Summer Generation</u> | <u>Winter Generation</u> | <u>Transmission</u> | <u>Distribution</u> | <u>Winter Peak</u> | <u>Winter Off Peak</u> | <u>Summer Peak</u> | <u>Summer Off Peak</u> | |
| Residential Programs | | | | | | | | | | |
| ENERGY STAR Homes | \$ 636,830 | \$ 23,627 | \$ - | \$ 3,236 | \$ 13,075 | \$ 30,643 | \$ 17,105 | \$ 6,915 | \$ 4,966 | \$ 537,264 |
| Home Performance w/Energy Star | \$ 829,035 | \$ 7,243 | \$ - | \$ 1,037 | \$ 4,189 | \$ 13,189 | \$ 18,683 | \$ 3,691 | \$ 3,740 | \$ 777,265 |
| ENERGY STAR Lighting | \$ 629,126 | \$ 87,742 | \$ - | \$ 1,202 | \$ 4,856 | \$ 155,607 | \$ 208,585 | \$ 75,114 | \$ 96,022 | \$ - |
| ENERGY STAR Appliances | \$ 562,047 | \$ 62,375 | \$ - | \$ 10,549 | \$ 42,624 | \$ 78,936 | \$ 71,094 | \$ 50,990 | \$ 32,122 | \$ 213,357 |
| Home Energy Assistance | \$ 642,294 | \$ 2,356 | \$ - | \$ 253 | \$ 1,022 | \$ 34,913 | \$ 48,913 | \$ 5,289 | \$ 6,383 | \$ 543,165 |
| Subtotal Residential | \$ 3,299,333 | \$ 183,342 | \$ - | \$ 16,276 | \$ 65,765 | \$ 313,288 | \$ 364,379 | \$ 141,999 | \$ 143,233 | \$ 2,071,050 |
| Commercial/Industrial Programs | | | | | | | | | | |
| Large Business Energy Solutions | \$ 3,017,835 | \$ 489,258 | \$ - | \$ 84,325 | \$ 324,498 | \$ 688,323 | \$ 740,242 | \$ 347,112 | \$ 344,079 | \$ - |
| Small Business Energy Solutions | \$ 1,263,802 | \$ 297,780 | \$ - | \$ 42,473 | \$ 171,618 | \$ 294,029 | \$ 209,339 | \$ 149,549 | \$ 99,014 | \$ - |
| Municipal Program | \$ 504,329 | \$ 80,951 | \$ - | \$ 11,700 | \$ 47,276 | \$ 107,887 | \$ 78,834 | \$ 57,109 | \$ 37,062 | \$ 83,510 |
| Subtotal C&I | \$ 4,785,967 | \$ 867,989 | \$ - | \$ 138,498 | \$ 543,392 | \$ 1,090,239 | \$ 1,028,415 | \$ 553,769 | \$ 480,155 | \$ 83,510 |
| Total | \$ 8,085,299 | \$ 1,051,331 | \$ - | \$ 154,774 | \$ 609,157 | \$ 1,403,527 | \$ 1,392,794 | \$ 695,768 | \$ 623,388 | \$ 2,154,560 |

**Performance Incentive Calculation
 2015**

| | <u>Planned</u> | <u>Actual</u> |
|---|-------------------|--------------------|
| Commercial/Industrial Incentive | | |
| 1. Benefit/Cost Ratio | 1.46 | 2.30 |
| 2. Threshold Benefit / Cost Ratio ¹ | 1.0 | |
| 3. Lifetime kWh Savings | 56,678,751 | 101,844,495 |
| 4. Threshold Lifetime kWh Savings (65%) ² | 36,841,188 | |
| 5. Implementation Expenses | \$1,579,928 | \$1,156,149 |
| 6. Benefit / Cost Percentage of Budget | 3.75% | 5.00% |
| 7. Lifetime kWh Percentage of Budget | 3.75% | 5.00% |
| | | |
| 8. C&I Performance Incentive | \$118,495 | \$115,615 |
| 9. Max C&I Performance Incentive (110%) | \$157,993 | |
| | | |
| Residential Incentive | | |
| 10. Benefit / Cost Ratio | 1.86 | 1.87 |
| 11. Threshold Benefit / Cost Ratio ¹ | 1.0 | |
| 12. Lifetime kWh Savings | 17,158,206 | 23,780,512 |
| 13. Threshold Lifetime kWh Savings (65%) ² | 11,152,834 | |
| 14. Implementation Expenses | \$1,385,390 | \$1,254,161 |
| 15. Benefit / Cost Percentage of Budget | 3.75% | 3.77% |
| 16. Lifetime kWh Percentage of Budget | 3.75% | 5.00% |
| | | |
| 17. Residential Performance Incentive | \$103,904 | \$109,990 |
| 18. Max Residential Performance Incentive (110%) | \$138,539 | |
| | | |
| 19. TOTAL PLANNED / EARNED INCENTIVE | \$ 222,399 | \$225,605 |

Notes

1. Actual Benefit / Cost Ratio for each sector must be greater than or equal to 1.0.
2. Actual Lifetime kWh Savings for each sector must be greater than or equal to 65% of projected savings. Affirmed by Order 25,569 on Sept 6, 2013.

**Planned Versus Actual Benefit / Cost Ratio by Sector
 2015**

| | <u>Planned</u> | <u>Actual</u> |
|---|-------------------|-------------------|
| Commercial & Industrial: | | |
| 1. Benefits (Value) From Eligible Programs | \$ 4,785,967 | \$ 10,177,343 |
| 2. Implementation Expenses | \$ 1,579,928 | \$ 1,156,149 |
| 3. Customer Contribution | \$ 1,580,086 | \$ 3,159,340 |
| 4. Performance Incentive | <u>\$ 118,495</u> | <u>\$ 115,615</u> |
| 5. Total Costs | \$ 3,278,508 | \$ 4,431,104 |
| 6. Benefit/Cost Ratio - C&I Sector | 1.46 | 2.30 |
| Residential: | | |
| 6. Benefits (Value) From Eligible Programs | \$ 3,299,333 | \$ 3,419,773 |
| 7. Implementation Expenses | \$ 1,385,390 | \$ 1,254,161 |
| 8. Customer Contribution | \$ 284,212 | \$ 466,178 |
| 9. Performance Incentive | <u>\$ 103,904</u> | <u>\$ 109,990</u> |
| 10. Total Costs | \$ 1,773,507 | \$ 1,830,329 |
| 11. Benefit/Cost Ratio - Residential Sector | 1.86 | 1.87 |

**Actual Lifetime Energy Savings by Sector and Program
 2015**

| | Annual kWh Savings | | Lifetime kWh Savings | |
|-------------------------------------|---------------------------|----------------------|-----------------------------|----------------------|
| | <u>Planned</u> | <u>Actual</u> | <u>Planned</u> | <u>Actual</u> |
| Commercial & Industrial: | | | | |
| Large Business Energy Solutions | 2,733,709 | 5,704,791 | 38,157,962 | 82,319,850 |
| Small Business Energy Solutions | 1,037,376 | 1,198,434 | 13,485,894 | 15,726,785 |
| Municipal Program | 385,144 | 298,503 | 5,034,896 | 3,797,859 |
| Total C&I | 4,156,229 | 7,201,728 | 56,678,751 | 101,844,495 |
| Residential: | | | | |
| ENERGY STAR Homes | 51,012 | 159,007 | 1,007,449 | 2,757,745 |
| Home Performance with Energy Star | 39,053 | 218,042 | 687,459 | 3,687,550 |
| ENERGY STAR Lighting | 677,652 | 807,907 | 9,518,765 | 12,762,476 |
| ENERGY STAR Appliances | 392,730 | 312,656 | 4,274,155 | 3,596,735 |
| Home Energy Assistance | 94,642 | 56,811 | 1,670,379 | 976,006 |
| Total Residential | 1,255,089 | 1,554,423 | 17,158,206 | 23,780,512 |

2015 Annual Report Reconciliation
Unitil Electric Energy Efficiency
January 1, 2015 - December 31, 2015

Unitil Electric
2015 Electric Revenue and Expense Reconciliation

| | | <u>2015 Total</u> |
|---|-------------------|-------------------|
| 1. Beginning Balance: 1/1/2015 | (Over)/Under | (\$848,186) |
| Revenues | | |
| 2. System Benefits Charge Revenue | | \$ 2,185,706 |
| 3. FCM Revenue | | \$ 284,289 |
| 4. RGGI Proceeds | | \$ 277,410 |
| 5. Interest | | \$ 32,067 |
| 6. Total Funding | ∑ Lines 2 - 5 | \$ 2,779,472 |
| Expenses | | |
| 7. Program Expenses | | \$ 2,411,322 |
| 8. PI - Current Year Estimate | | \$ 222,399 |
| 9. PI - Prior Year(s) True-Up | | \$ - |
| 10. Total Expenses | ∑ Lines 7 - 9 | \$ 2,633,721 |
| 11. Ending Balance: 12/31/2015 | Lines 1 - 6 + 10 | \$ (993,937) |
| Ending Balance Adjusted for Current Year Actual PI | | |
| 12. Actual Performance Incentive - 2015 | Attachment G | \$ 225,605 |
| 13. Ending Balance w/ Actual PI | Lines 11 - 8 + 12 | \$ (990,731) |

Notes:

Line 6: PI Current Year Estimate = 2015 Estimated Performance Incentives as approved in DE 14-216, initial 2013-2014 Plan.

Line 7: PI Prior Year(s) True-Up: True-up for 2014 Performance Incentive was booked in 2016 and will be included in the 2016 electric annual report.

Line 10: Actual Performance Incentives: 2015 actual PI was calculated as shown in Attachment G.

Line 13: A negative value indicates an over-collection (i.e.: the carryover will increase the following year's available funding.)