



0000160426

P.O. Box 711
Tucson, Arizona 85702-0711

UniSourceEnergy
SERVICES

RECEIVED

2015 FEB 27 P 4:34

AZ CORP COMMISSION
DOCKET CONTROL

February 27, 2015

ORIGINAL

Docket Control
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Re: Notice of Filing – UNS Electric, Inc.’s Annual Demand-Side Management Progress Report, Docket No. E- 00000U-15-0053

The Electric Energy Efficiency Standards set forth in the Arizona Administrative Code, Section R14-2-2409.A, require UNS Electric, Inc. (“UNS Electric”) to submit an annual DSM progress report for each of its Commission-approved DSM programs by March 1st. UNS Electric hereby files its DSM Progress Report for 2014. The Measurement, Evaluation and Research Report listed in Appendix 1 of the DSM Progress Report is being provided directly with Commission Staff.

If you have any questions, please contact me at (520) 884-3680.

Sincerely,

Melissa Morales
Regulatory Services

cc: Barbara Keene, Utilities Division, ACC
Compliance Section, ACC

Arizona Corporation Commission
DOCKETED

FEB 27 2015

DOCKETED BY

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

UNS Electric, Inc. ("UNS Electric" or "Company"), in accordance with Arizona Corporation Commission ("Commission") Decision No. 71819 (August 10, 2010), and Arizona Administrative Code R14-2-2409 (effective January 1, 2011), submits the following Demand-Side Management ("DSM") progress report. This report includes the following information for all DSM programs that were in place during this reporting period, including programs for residential, non-residential, and low-income customers:

- An analysis of the Company's progress toward meeting the annual energy efficiency standard;
- A list of Commission approved DSM programs and measures, organized by customer segment;
- A description of the findings from any research projects completed;
- A brief description of the programs;
- Program goals, objectives, and savings targets;
- Levels of customer participation in the programs;
- Costs incurred during the reporting period;
- Description of evaluation and monitoring activities and results;
- Savings realized in kW, kWh, and therms;
- Environmental benefits from the programs;
- Incremental and net benefits, in dollars, of the programs;
- Problems encountered and proposed solutions;
- Proposed program modifications; and
- Termination of programs or measures.

A summary list of tables includes:

| | |
|---------|--|
| Table 1 | DSM expenses by program |
| Table 2 | DSM energy savings by program |
| Table 3 | Cumulative energy savings as a comparison to the Electric Energy Efficiency Standards ("EEES" or "Standard") |
| Table 4 | Societal benefits and performance incentive: January – June 2014 |
| Table 5 | Lifetime environmental savings by program |

Commission approved DSM programs and measures, including Commission Staff's benefit/cost calculation per measure, and the actual benefit/cost calculation per measure based upon 2014 results, are attached in Appendix 2.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

Table of Contents

| | |
|--|----|
| Definitions..... | 3 |
| DSM Program Expenses: January - December 2014..... | 4 |
| DSM Energy Savings (Planned & Actual): January – December 2014 | 5 |
| Cumulative DSM Savings: January – December 2014..... | 6 |
| DSM Societal Benefits & Performance Incentive: January – December 2014 | 7 |
| DSM Lifetime Environmental Savings: January – December 2014..... | 8 |
| Efficient Products Program..... | 9 |
| Appliance Recycling Program | 11 |
| Residential New Construction Program..... | 13 |
| Existing Homes Retrofit and Residential Energy Assessment Program | 15 |
| Shade Tree Program..... | 17 |
| Low-Income Weatherization Program..... | 19 |
| Multi-Family Housing Efficiency Program | 21 |
| C&I Facilities/Schools Program | 23 |
| Bid for Efficiency Program..... | 25 |
| Retro-Commissioning Program | 27 |
| C&I Demand Response Program..... | 29 |
| Schools Facilities Program | 31 |
| Behavioral Comprehensive Program | 32 |
| Home Energy Reports Program | 34 |
| Consumer Education and Outreach Program..... | 35 |
| Residential Energy Efficiency Financing Pilot Program | 37 |
| Energy Codes & Standards Enhancement Program..... | 38 |
| Miscellaneous DSM Information..... | 40 |
| Appendix 1 – Measurement, Evaluation, And Research Reports..... | 41 |
| Appendix 2 – Commission Approved DSM Programs and Measures for 2014..... | 42 |

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

DEFINITIONS

Rebates & Incentives – costs for customer rebates, incentives, and payments made to agencies for installation of low-income weatherization (“LIW”) measures.

Training and Technical Assistance – costs for energy-efficiency training and technical assistance; for either utility employees or contractors.

Consumer Education – costs to support general consumer education about energy-efficiency improvements.

Program Implementation – costs associated with implementing programs including implementation contractor (“IC”) labor and overhead costs, as well as other direct program delivery costs.

Program Marketing – costs related to marketing programs and increasing DSM consumer awareness (direct program marketing costs as opposed to general consumer education).

Planning and Administration – costs to plan, develop, and administer programs including management of program budgets, oversight of the request for proposal (“RFP”) process, oversight of ICs, program development, program coordination, and general overhead expenses.

Measurement, Evaluation, and Research (“MER”) – identification of current baseline efficiency levels and the market potential of DSM measures; process evaluations; verification of installed energy efficient measures; tracking of savings; and identification of additional energy efficiency research.

Program Development, Analysis, and Reporting – costs to research and develop new DSM program opportunities, provide analysis of new programs and measures, and to track and report participation, savings, and benefits. These costs are essential to comply with reporting and rules requirements.

Performance Incentive – 8% of DSM net economic benefit, capped at \$0.0125 per kWh whichever is less. The performance incentive was approved in Commission Decision No. 74235 (December 31, 2013).

UNS Electric, Inc.

DSM PROGRAM PROGRESS REPORT FOR THE PERIOD: January through December 2014

Table 1

DSM PROGRAM EXPENSES: JANUARY - DECEMBER 2014

| DSM Program | Rebates & Incentives | Training & Technical Assistance | Consumer Education | Program Implementation | Program Marketing | Planning & Admin | Measurement, Evaluation & Research | Program Total Cost |
|---------------------------------------|----------------------|---------------------------------|--------------------|------------------------|-------------------|------------------|------------------------------------|--------------------|
| Residential Programs | | | | | | | | |
| Appliance Recycling | \$9,200 | \$8 | \$0 | \$21,478 | \$14,046 | \$1,112 | \$4,451 | \$50,294 |
| Low-Income Weatherization | \$200,099 | \$2,623 | \$0 | -\$153 | \$1,702 | \$4,888 | \$12,034 | \$221,194 |
| Residential New Construction | \$76,700 | \$10,249 | \$0 | \$60,365 | \$20 | \$3,546 | \$9,587 | \$160,468 |
| Shade Tree Program | \$16,150 | \$4 | \$387 | \$2,126 | \$4,134 | \$523 | \$355 | \$23,678 |
| Efficient Products | \$611,118 | \$385 | \$3,240 | \$276,554 | \$58,542 | \$22,818 | \$59,818 | \$1,032,476 |
| Existing Home Program | \$438,427 | \$96 | \$0 | \$169,562 | \$61 | \$13,834 | \$3,984 | \$625,964 |
| Multi-Family Housing Efficiency | \$9,857 | \$2 | \$0 | \$2,139 | \$0 | \$285 | \$613 | \$12,895 |
| Total for Residential Programs | \$1,361,552 | \$13,367 | \$3,626 | \$532,072 | \$78,504 | \$47,006 | \$90,841 | \$2,126,968 |
| Commercial Programs | | | | | | | | |
| C&I Facilities Efficiency | \$127,698 | \$1,407 | \$100 | \$238,043 | \$6,102 | \$9,240 | \$35,516 | \$418,107 |
| Bid For Efficiency (Pilot Program) | \$0 | \$855 | \$29 | \$49,508 | \$0 | \$1,139 | \$0 | \$51,530 |
| Retro-Commissioning | \$0 | \$847 | \$100 | \$32,971 | \$0 | \$767 | \$0 | \$34,684 |
| C&I Demand Response | \$0 | \$1,112 | \$0 | \$184,015 | \$0 | \$4,184 | \$0 | \$189,311 |
| Schools Facilities | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total for Commercial Programs | \$127,698 | \$4,220 | \$229 | \$504,537 | \$6,102 | \$15,329 | \$35,516 | \$693,632 |
| Behavioral Programs | | | | | | | | |
| Behavioral Comprehensive | \$131,355 | \$3,229 | \$2,015 | \$93,942 | \$1,743 | \$5,274 | \$1,097 | \$238,654 |
| Home Energy Reports | \$0 | \$5 | \$0 | \$30,000 | \$0 | \$725 | \$2,081 | \$32,811 |
| Total for Behavioral Programs | \$131,355 | \$3,234 | \$2,015 | \$123,942 | \$1,743 | \$5,999 | \$3,178 | \$271,465 |
| Support Programs | | | | | | | | |
| Consumer Education & Outreach | \$0 | \$9 | \$43,907 | \$11,800 | \$0 | \$1,260 | \$32 | \$57,007 |
| Residential EE Financing | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Energy Codes & Standards Enhancement | \$0 | \$0 | \$0 | \$0 | \$0 | \$60 | \$2,657 | \$2,718 |
| Total for Support Programs | \$0 | \$9 | \$43,907 | \$11,800 | \$0 | \$1,320 | \$2,689 | \$59,725 |
| Portfolio Totals | \$1,620,605 | \$20,831 | \$49,776 | \$1,172,350 | \$86,349 | \$69,655 | \$132,224 | \$3,151,790 |

| | |
|---|--------------------|
| Program Costs | \$3,151,790 |
| Program Development, Analysis & Reporting | \$36,616 |
| TOTAL | \$3,188,406 |

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

Table 2

DSM ENERGY SAVINGS (PLANNED & ACTUAL): JANUARY – DECEMBER 2014¹

| Program | Planned Capacity Savings MW | Actual Capacity Savings MW | Planned Annual MWh Savings | Actual Annual MWh Savings | Planned Annual Therm Savings | Actual Annual Therm Savings | Planned Lifetime MWh Savings | Actual Lifetime MWh Savings | Planned Lifetime Therm Savings | Actual Lifetime Therm Savings |
|--------------------------------------|-----------------------------|----------------------------|----------------------------|---------------------------|------------------------------|-----------------------------|------------------------------|-----------------------------|--------------------------------|-------------------------------|
| Appliance Recycling | 0.13 | 0.04 | 839.89 | 330 | NA | NA | 5,039 | 2,641 | NA | 0 |
| Low-Income Weatherization | 0.00 | 0.10 | 425.54 | 206 | NA | 1,848 | 7,447 | 3,606 | NA | 32,340 |
| Residential New Construction | 0.04 | 0.13 | 204.18 | 237 | NA | 89 | 6,126 | 7,096 | NA | 2,661 |
| Shade Tree Program | 0.04 | 0.04 | 85.27 | 103 | NA | NA | 2,558 | 3,091 | NA | 0 |
| Efficient Products | 0.81 | 1.67 | 11,711.42 | 23,619 | NA | NA | 90,626 | 166,074 | NA | 0 |
| Existing Home Program | 0.99 | 1.66 | 1,024.18 | 2,507 | NA | NA | 20,183 | 47,851 | NA | 0 |
| Multi-Family Housing Efficiency | 0.02 | 0.01 | 345.52 | 185 | NA | NA | 2,877 | 1,640 | NA | 0 |
| C&I Facilities | 0.87 | 0.29 | 5,165.99 | 1,715 | NA | NA | 77,334 | 22,630 | NA | 0 |
| Bid For Efficiency | 0.99 | 0.00 | 1,771.04 | 0 | NA | NA | 17,710 | 0 | NA | 0 |
| Retro-Commissioning | 0.25 | 0.00 | 442.76 | 0 | NA | NA | 4,428 | 0 | NA | 0 |
| C&I Demand Response | 5.00 | 5.86 | 3,571.00 | 3,542 | NA | NA | 3,571 | NA | NA | 0 |
| Behavioral Comprehensive | 0.09 | 0.09 | 2,119.37 | 2,455 | NA | 57,493 | 14,804 | 17,799 | NA | 517,438 |
| Home Energy Reports | 0.92 | 0.00 | 4,981.05 | 0 | NA | NA | 4,981 | 0 | NA | 0 |
| Consumer Education & Outreach | 0.00 | NA | 0.00 | NA | NA | NA | N/A | NA | NA | NA |
| Residential EE Financing | 0.00 | NA | 0.00 | NA | NA | NA | N/A | NA | NA | NA |
| Energy Codes & Standards Enhancement | 0.30 | 0.31 | 2,784.82 | 4,328 | NA | NA | 2,785 | 4,328 | NA | 0 |
| Portfolio Totals | 10.44 | 10.21 | 35,472.03 | 39,227 | 0 | 59,430 | 260,468 | 276,756 | 0 | 552,439 |

¹ This table is provided to comply with A.A.C. R-14-2-2409 and Commission Decision No. 74262. Planned savings for annual and lifetime are included in each program description. Capacity savings for C&I Demand Response reflect the capacity available for reduction events. Annual MWh savings for C&I Demand Response reflect the credit available toward the EE Standard per A.A.C. R14-2-2404 (C). UNS Electric does not do planning for therm savings but does show them when appropriate.

UNS Electric, Inc.

**DSM PROGRESS REPORT FOR THE PERIOD:
January through December 2014**

Table 3

CUMULATIVE DSM SAVINGS: JANUARY – DECEMBER 2014

| UNSE Year | Retail Energy Sales (MWh) | Incremental Annual Energy Savings (MWh) | Cumulative Annual Energy Savings (MWh) | Cumulative Annual Savings as a % of previous year Retail Sales | Cumulative EE Standard |
|------------------|----------------------------------|--|---|---|-------------------------------|
| 2010 | 1,857,160 | | | | |
| 2011 | 1,852,904 | 15,005 | 15,005 | 0.81% | 1.25% |
| 2012 | 1,755,541 | 35,032 | 50,037 | 2.70% | 3.00% |
| 2013 | 1,699,307 | 34,764 | 84,801 | 4.83% | 5.00% |
| 2014 | 1,677,445 | 35,004 | 119,806 | 7.05% | 7.25% |

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

Table 4

DSM SOCIETAL BENEFITS & PERFORMANCE INCENTIVE: JANUARY – DECEMBER 2014²

| DSM Program | Program Cost | Planned Societal Benefits | Actual Societal Benefits | Planned Societal Costs | Actual Societal Costs | Planned Net Benefits | Actual Net Benefits |
|---|--------------------|---------------------------|--------------------------|------------------------|-----------------------|----------------------|---------------------|
| Residential | | | | | | | |
| Appliance Recycling | \$50,294 | \$240,173 | \$ 126,545 | \$185,463 | \$41,094 | \$54,710 | \$85,451 |
| Low-Income Weatherization | \$221,194 | \$393,143 | \$ 249,236 | \$381,429 | \$92,245 | \$11,714 | \$156,991 |
| Residential New Construction | \$160,468 | \$435,292 | \$ 475,891 | \$370,009 | \$355,405 | \$65,283 | \$120,486 |
| Shade Tree Program | \$23,678 | \$154,156 | \$ 155,118 | \$133,531 | \$82,405 | \$20,625 | \$72,713 |
| Efficient Products | \$1,032,476 | \$4,333,081 | \$ 6,044,593 | \$1,610,703 | \$1,020,900 | \$2,722,378 | \$5,023,693 |
| Existing Home Program | \$625,964 | \$1,657,255 | \$ 4,616,369 | \$1,262,841 | \$1,096,983 | \$394,414 | \$3,519,386 |
| Multi-Family Housing Efficiency | \$12,895 | \$133,948 | \$ 76,383 | \$108,412 | \$9,970 | \$25,537 | \$66,413 |
| Total for Residential | \$2,126,968 | \$7,347,048 | \$11,744,135 | \$4,052,387 | \$2,699,002 | \$3,294,661 | \$9,045,133 |
| Non-Residential | | | | | | | |
| C&I Facilities | \$418,107 | \$3,556,187 | \$ 1,110,280 | \$1,133,289 | \$539,100 | \$2,422,898 | \$571,180 |
| Bid For Efficiency | \$51,530 | \$1,150,115 | \$ - | \$413,448 | \$51,530 | \$736,667 | (\$51,530) |
| Retro-Commissioning | \$34,684 | \$287,529 | \$ - | \$136,882 | \$34,684 | \$150,647 | (\$34,684) |
| C&I Demand Response | \$189,311 | \$56,281 | NA | \$0 | NA | \$56,281 | NA |
| Total for Non-Residential | \$693,632 | \$5,050,111 | \$ 1,110,280 | \$1,683,619 | \$625,313 | \$3,366,492 | \$484,967 |
| Behavioral Programs | | | | | | | |
| Behavioral Comprehensive | \$238,654 | \$924,908 | \$ 1,097,075 | \$315,026 | \$248,026 | \$609,882 | \$849,049 |
| Home Energy Reports | \$32,811 | \$234,473 | \$ - | \$15,563 | \$32,811 | \$218,910 | (\$32,811) |
| Total for Behavioral Programs | \$271,465 | \$1,159,381 | \$1,097,075 | \$330,588 | \$280,837 | \$828,792 | \$816,238 |
| Support Programs | | | | | | | |
| Consumer Education & Outreach | \$57,007 | NA | \$ - | NA | \$57,007 | NA | (\$57,007) |
| Residential EE Financing | \$0 | NA | \$ - | NA | \$0 | NA | \$0 |
| Energy Codes & Standards Enhancement | \$2,718 | \$127,992 | \$ - | \$62,890 | \$2,718 | \$65,102 | (\$2,718) |
| Total for Support Programs | \$59,725 | \$127,992 | \$0 | \$62,890 | \$59,725 | \$65,102 | (\$59,725) |
| Program Totals | \$3,151,790 | \$13,684,532 | \$13,951,489 | \$6,129,484 | \$3,664,878 | \$7,555,048 | \$10,286,612 |
| Program Development, Analysis & Reporting | \$36,616 | \$0 | \$0 | \$0 | \$36,616 | \$0 | (\$36,616) |
| Portfolio Total | \$3,188,406 | \$13,684,532 | \$13,951,489 | \$6,129,484 | \$3,701,493 | \$7,555,048 | \$10,249,996 |

| Performance Incentive Calculation: | |
|---------------------------------------|------------------|
| Total kWh Savings | \$39,226,730 |
| Total Net Benefits | \$10,249,996 |
| 8% Net Benefits | \$820,000 |
| Total kWh savings * \$0.0125 | \$490,334 |
| Performance Incentive for 2014 | \$490,334 |

The UNSE DSM Societal Cost Test yields a 3.4 ratio, including total program costs and labor.

² The UNS Electric performance incentive was established in Commission Decision No. 72747 (January 20, 2012). Societal costs, societal benefits, and net benefits are not calculated on an annual basis for Demand Response Programs. Total spending and net benefits for the performance incentive calculation does not include Low-income Weatherization, Education & Outreach, or Demand Response/Direct Load Control Programs. The performance incentive calculated at 8% of net benefits but capped at \$0.0125 per kWh, whichever is less.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD:
January through December 2014

Table 5

DSM LIFETIME ENVIRONMENTAL SAVINGS: JANUARY – DECEMBER 2014

| Program | Lifetime SO _x Reduction (lbs) | Lifetime NO _x Reduction (lbs) | Lifetime CO ₂ Reduction (lbs) | Lifetime Water Reduction (gallons) |
|--------------------------------------|---|---|---|--|
| Appliance Recycling | 15 | 314 | 3,142,738 | 684,008 |
| Low-Income Weatherization | 20 | 429 | 4,672,361 | 933,869 |
| Residential New Construction | 39 | 844 | 8,475,517 | 1,837,839 |
| Shade Tree Program | 17 | 368 | 3,678,280 | 800,567 |
| Efficient Products | 913 | 19,763 | 197,627,766 | 43,013,102 |
| Existing Home Program | 263 | 5,694 | 56,942,788 | 12,393,430 |
| Multi-Family Housing Efficiency | 9 | 195 | 1,952,090 | 424,867 |
| C&I Facilities | 45 | 984 | 9,840,059 | 2,141,660 |
| Bid For Efficiency (Pilot) | 0 | 0 | 0 | 0 |
| Retro-Commissioning | 0 | 0 | 0 | 0 |
| C&I Demand Response | 19 | 422 | 4,215,301 | 917,448 |
| Behavioral Comprehensive | 98 | 2,118 | 27,286,935 | 4,610,017 |
| Home Energy Reports | 0 | 0 | 0 | 0 |
| Consumer Education & Outreach | 0 | 0 | 0 | 0 |
| Residential EE Financing | 0 | 0 | 0 | 0 |
| Energy Codes & Standards Enhancement | 24 | 515 | 5,149,928 | 1,120,867 |
| Portfolio Totals | 1,463 | 31,646 | 322,983,765 | 68,877,673 |

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD:
January through December 2014

EFFICIENT PRODUCTS PROGRAM

Description

The UNS Electric Efficient Products Program promotes the purchase of energy efficient retail products through in-store buy-down promotions or other delivery methods. The Program promotes the installation of energy efficient lighting products and other energy saving appliances by residential and commercial customers in the UNS Electric service territory.

Program Goals, Objectives, and Savings Targets

The objectives of this Program are to:

- Reduce peak demand and overall energy consumption in homes and small businesses;
- Increase the purchase of Compact Florescent Lights (“CFLs”);
- Increase the purchase of other energy efficient appliances;
- Promote market transformation through retail partnerships; and
- Increase stocking and selection of energy efficient retail products.

Sales, demand, and energy savings goals for 2014:

| | |
|----------------------------------|---------|
| CFL Sales | 240,000 |
| Variable Speed Pool Pumps | 400 |
| Pool Pump Timers | 0 |
| Advanced Power Strips | 2,000 |
| Peak Demand Savings (MW) | 0.58 |
| Energy Savings (MWh) | 10,865 |

Levels of Participation

A total of 449,481 new CFLs and 110 variable speed pool pumps were sold in 2014. An “in storage adder” has also been included in the 2014 total to account for bulbs coming out of storage and being reintroduced since program inception in 2008. Further detail is provided in Program Modifications section below.

Costs Incurred

Costs incurred for this Program during the reporting period are listed below.

| DSM Program | Rebates & Incentives | Training & Technical Assistance | Consumer Education | Program Implementation* | Program Marketing | Planning & Admin | Measurement, Evaluation & Research | Program Total Cost |
|--------------------|----------------------|---------------------------------|--------------------|-------------------------|-------------------|------------------|------------------------------------|--------------------|
| Efficient Products | \$ 611,118 | \$ 385 | \$ 3,240 | \$ 276,554 | \$ 58,542 | \$ 22,818 | \$ 59,818 | \$ 1,032,476 |

Evaluation and Monitoring Activities and Results

Navigant Consulting performed an evaluation of this Program for 2014. The evaluation resulted in a realization rate of 100% for coincident demand and energy savings. The report is attached in **Appendix 1**.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

kW, kWh, and Therm Savings

| Measure | No. Installed | kW savings | kWh savings |
|------------------|----------------|--------------|-------------------|
| CFL Lighting | 449,481 | 1,641 | 23,372,928 |
| Pool Pump Motors | 110 | 25 | 246,325 |
| Totals | 449,591 | 1,666 | 23,619,254 |

CFL Lighting kW Savings has been adjusted to include 827 kW and kWh savings has been adjusted 4,881,135 kWh for the 2015 In Storage Adder. Savings are adjusted for line losses of 10.69% for both demand and energy.

Problems Encountered and Proposed Solutions

UNS Electric continues to use an online rebate process for customers to apply for rebates on variable speed pool pumps. Rebate participants showed a steady increase throughout the year. However, UNS Electric was not able to cost-effectively use the online rebate process for load controlled power strips. UNS Electric will continue to monitor this measure in 2015. Finally, UNS Electric did not discover an available pool pump timer that meets the Commission-approved product specifications but will continue to research new products.

Program Modifications

Many program bulbs are sold in multipacks, with up to ten bulbs in one pack. Some of these bulbs are installed immediately, and some are placed into storage. These bulbs are accounted for in the In-Storage Rate (ISR) of 10%, which has been used since the program began in 2008. The 2014 field lighting logger study, in conjunction with the general population survey, found that the ISR is actually 18%, which is the new ISR to be used for the program starting in 2015. As bulbs come out of storage, the savings are realized, but they are delayed.

Until now, the savings from the reintroduction of these bulbs at UNS has not been recognized. In order to recognize these delayed savings, Navigant employed the methodology presented in the Uniform Methods Protocols ("UMP"). The UMP's methodology was developed in 2012. It is currently being updated. Navigant recommends the use of the old methodology for all bulbs being placed and coming out of storage until the end of 2014, then switch to the new methodology for 2015 and on.

- Pre-2015 values are based on old UMP methodology with 1/3 of bulbs in storage are installed for the next 3 years, which is shown in Table 12.
- For 2015 and on, the new UMP methodology is used.
- For 2014, credit was given for all bulbs coming out of storage since program inception in 2008. The methodology is clearly laid out. For 2015, 2016, and 2017, summary in-storage values should be added up from the old and new methodologies.
- Savings used for the calculation are at meter and were submitted to ACC each year. They are also after the ISR reduction.

Programs or Measures Terminated

No program measures were discontinued in 2014, however, variable speed pool pumps and advanced power strips-load sensors will be eliminated from the program in 2015, per Decision No. 74599. UNS Electric does not plan to terminate this Program or any Program measures in 2015.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

APPLIANCE RECYCLING PROGRAM

Description

The Appliance Recycling Program is designed to remove and recycle inefficient, yet, functioning refrigerators and freezers. National studies indicate that approximately 20% of customers have at least one secondary inefficient refrigerator or freezer in their home, suggesting a significant potential for energy savings. This Program permanently removes inefficient appliances that may otherwise remain in service either at the customer's home or elsewhere, through donation or resale. In addition to providing the customer with an incentive, the Program removes the usual barriers of taking these appliances offline by eliminating both the cost and inconvenience associated with the disposal of the appliance.

Program Goals, Objectives, and Savings Targets

The objectives of the Program are to:

- Remove old and inefficient refrigerators and freezers from customer's homes;
- Permanently remove the inefficient refrigerators and freezers from the grid, which eliminates the possibility of any re-introduction either through donations or resale; and
- Recycle the refrigerators and freezers in an environmentally responsible way.

The 2014 goal was to remove and recycle 400 refrigerators or freezers.

Levels of Participation

A total of 225 units – 193 Refrigerators and 32 freezers - were recycled during this reporting period.

Costs Incurred

Costs incurred for this Program during the reporting period are listed below.

| DSM Program | Rebates & Incentives | Training & Technical Assistance | Consumer Education | Program Implementation ^a | Program Marketing | Planning & Admin | Measurement, Evaluation & Research | Program Total Cost |
|---------------------|----------------------|---------------------------------|--------------------|-------------------------------------|-------------------|------------------|------------------------------------|--------------------|
| Appliance Recycling | \$ 9,200 | \$ 8 | \$ - | \$ 21,478 | \$ 14,046 | \$ 1,112 | \$ 4,451 | \$ 50,294 |

Evaluation and Monitoring Activities and Results

Navigant Consulting performed an evaluation of this Program for 2014. The evaluation resulted in a realization rate of 100% for coincident demand and energy savings. The report is attached in **Appendix 1**.

kW, kWh, and Therm Savings

| Units Recycled | kW savings | kWh savings | Therm savings |
|----------------|------------|-------------|---------------|
| 225 | 44 | 330,120 | 0 |

Savings are adjusted for line losses of 10.69% for both demand and energy.

Problems Encountered and Proposed Solutions

UNS Electric did not achieve its participation goal in 2014, due to limited advertising venues available within the territory, and the cost to attain additional support would be too great of an expense for the Program to endure. The Program was promoted in local newspapers, on radio, in one bill stuffer, and the UNS Electric website. Due to the approval of a Recycling Program for Tucson Electric Power Company

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

("TEP"), UNS will leverage on the economics of scale in 2015 and prepare for an increase in the participation levels.

Program Modifications

No Program modifications were made during this reporting period.

Programs or Measures Terminated

No measures were terminated during this reporting period. UNS Electric does not plan to terminate this Program or any Program measures in 2015.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD:
January through December 2014

RESIDENTIAL NEW CONSTRUCTION PROGRAM

Description

The Residential New Construction Program for UNS Electric is marketed as the Energy Smart Homes (“ESH”) Program. The ESH Program emphasizes the whole-house approach to improving health, safety, comfort, durability, and energy efficiency. The Program promotes homes that meet the Environmental Protection Agency (“EPA”)/Department Of Energy (“DOE”) Energy Star® Home performance requirements. To encourage participation, the Program provides incentives to homebuilders for each qualifying home. On-site inspections and field testing of a random sample of homes is required to ensure that homes meet the Energy Star® Home performance requirements; these will be conducted by third-party Residential Energy Services Network (“RESNET”) certified energy raters selected by each builder. Components of the ESH Program include development of branding, builder training curriculum, and marketing material.

Program Goals, Objectives, and Savings Targets

The objectives of the Program are to:

- Stimulate the installation of solar photovoltaic systems and solar water heaters in new homes;
- Stimulate energy efficiency standards that are higher than EPA/DOE, Energy Star® performance standards;
- Stimulate the installation of high-efficiency heating and cooling systems, envelope, lighting, and fixed appliances (Energy Star® products);
- Work with local builders to construct energy-efficient homes;
- Train builder construction staff and subcontractors in advanced building science concepts to increase energy efficiency through improved design and installation practices;
- Transform the market and improve construction practices in the UNS Electric service territory;
- Assist builder sales agents with promoting and selling energy-efficient homes; and
- Increase homebuyer awareness and understanding of energy-efficient building practices and the benefits of purchasing an energy-efficient home.

The goal for 2014 was 154 homes at ≤ 73 HERS

Actual Levels of Participation

68 homes were completed in 2014 @ ≤ 73 HERS, a 130 % increase over 2013.

Costs Incurred

Costs incurred during the reporting period are listed below.

| DSM Program | Rebates & Incentives | Training & Technical Assistance | Consumer Education | Program Implementation ^a | Program Marketing | Planning & Admin | Measurement, Evaluation & Research | Program Total Cost |
|------------------------------|----------------------|---------------------------------|--------------------|-------------------------------------|-------------------|------------------|------------------------------------|--------------------|
| Residential New Construction | \$ 78,700 | \$ 10,249 | \$ - | \$ 60,365 | \$ 20 | \$ 3,546 | \$ 9,587 | \$ 160,468 |

Evaluation and Monitoring Activities and Results

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

Navigant Consulting performed an evaluation of this Program for 2014. The evaluation resulted in a realization rate of 100% coincident demand and electric energy savings, and 100% for therm savings. The report is attached in **Appendix 1**.

kW, kWh, and Therm Savings

| No. of Homes | kW savings | kWh savings | Therm savings |
|--------------|------------|-------------|---------------|
| 68 | 135 | 236,530 | 89 |

Savings are adjusted for line losses of 10.69% for both demand and energy (excluding therms).

Problems Encountered and Proposed Solutions

UNS Electric serves a large geographic territory making builder interaction difficult. In 2014, the IC changed program management to California to support this Program. This has resulted in a lack of resources available to properly engage and educate the builders. Solutions are being evaluated for 2015.

Program Modifications

Beginning January 2014, UNS Electric discontinued the tiered incentive structure and offers only one incentive level of \$800 per qualifying home, as approved in Commission Decision No. 74262.

Programs or Measures Terminated

UNS Electric eliminated the tiered incentive structure and will offer only one incentive level per qualifying home.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD:
January through December 2014

EXISTING HOMES RETROFIT AND RESIDENTIAL ENERGY ASSESSMENT PROGRAM

Description

The UNS Electric Existing Homes Retrofit Program is designed to encourage homeowners to increase the energy efficiency of their homes. The Program provides incentives for high-efficiency heating, ventilation and air conditioning ("HVAC") equipment and for home performance services such as sealing leaky duct work, installing insulation, air sealing, and other thermal envelope improvements in existing homes. The Program provides direct incentives to participating contractors with the requirement that the incentives are passed on to utility customers as a line item credit toward approved Program measures. Along with the direct incentives, UNS Electric provides Building Performance Institute ("BPI") and Program administrative training and mentoring to the contractors to help them meet the Program requirements.

The Existing Home Retrofit Program received Commission approval in Decision No. 72028. This Program is marketed as the BrightSave Home Program.

Program Goals, Objectives and Savings Targets

The objectives of the Existing Homes Retrofit component of the Program are as follows:

- The proper sizing and quality installation of high efficiency HVAC equipment, sealing leaky ductwork, and installation of thermal envelope measures including air sealing and insulation;
- Advance the building science skills of participating contractors leading to BPI certification; and
- Cultivate customer demand for and a contractor base to deliver comprehensive energy efficiency retrofits in alignment with the Home Performance with Energy Star model.

The 2014 Program goals were:

| Retrofit Measure | Goal |
|----------------------------------|-------------|
| HVAC Replacements | 1,060 |
| Duct Sealing | 90 |
| Air Sealing | 75 |
| Air Sealing and Attic Insulation | 50 |
| Solar Shade Screens/Window Film | 25 |

| | |
|---------------------------------|-------|
| Peak Demand Savings (MW) | 0.99 |
| Energy Savings (MWh) | 1,024 |

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

Levels of Participation

| Participation levels during this reporting period | Actual 2014 |
|---|-------------|
| HVAC Replacements | 392 |
| Duct Sealing | 150 |
| Air Sealing | 107 |
| Solar Shade Screens/Window Film | 13 |

Costs Incurred

Costs incurred for this Program during the reporting period are listed below.

| DSM Program | Rebates & Incentives | Training & Technical Assistance | Consumer Education | Program Implementation* | Program Marketing | Planning & Admin | Measurement, Evaluation & Research | Program Total Cost |
|-----------------------|----------------------|---------------------------------|--------------------|-------------------------|-------------------|------------------|------------------------------------|--------------------|
| Existing Home Program | \$ 438,427 | \$ 96 | \$ - | \$ 169,562 | \$ 61 | \$ 13,834 | \$ 3,984 | \$ 625,964 |

Evaluation and Monitoring Activities and Results

Navigant Consulting performed an evaluation of this Program for 2014. The evaluation resulted in a realization rate of 100% for coincident demand and energy savings. The report is attached in **Appendix 1**.

kW, kWh, and Therm Savings

| Measure | No. Installed | kW savings | kWh savings |
|--------------------|---------------|--------------|------------------|
| Air Sealing | 107 | 65 | 97,645 |
| Duct Test & Repair | 150 | 119 | 188,324 |
| HVAC | 392 | 1,472 | 2,213,988 |
| Shade Screens | 13 | 5 | 6,594 |
| Totals | 662 | 1,662 | 2,506,551 |

Savings are adjusted for line losses of 10.69% for both demand and energy.

Problems Encountered and Proposed Solutions

Midway through 2014, the program manager for the implementation contractor relocated from Flagstaff, AZ to California. UNS Electric is considering new staffing options for 2015.

Program Modifications

No program modifications were made in 2014.

Programs or Measures Terminated

No Program measures were discontinued in 2014, however, air sealing and shade screens will be eliminated in 2015 per Decision No. 74599.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

SHADE TREE PROGRAM

Description

The UNS Electric Shade Tree Program is marketed under the name of "Trees for You" ("TFY") and is primarily targeted to residential customers, including low-income families. Community organizations, commercial customers, and schools can participate if they meet Program requirements. UNS Electric customers are allowed to purchase two desert adapted, five-gallon trees per year (four trees are allotted for homes built before 1980) which must be planted on the south, west, or east side of the home. Customers purchase the tree(s) from the nursery of their choice. However, customers must complete an application provided by UNS Electric, provide a copy of their paid invoice, and submit all information to UNS Electric to receive a \$15.00 (per tree) credit on their electric bill.

Program Goals, Objectives, and Savings Targets

The objective of the Program is to promote energy conservation and the environmental benefits associated with planting trees that have low water usage. Along with the energy savings trees provide to the homes, trees also provide habitat for wildlife, absorb air and water pollutants, control storm water runoff and soil erosion, and provide an aesthetic beauty to neighborhoods and the community.

Program goals for 2014:

| | |
|------------------------------|-------|
| No. Trees Distributed | 1,700 |
| Energy Savings (MWh) | 110 |

Levels of Participation

| | |
|--|-------|
| Customer Applications Processed | 855 |
| No. Trees Distributed in 2014 | 1,595 |

Costs Incurred

Costs incurred for this Program during the reporting period are listed below:

| DSM Program | Rebates & Incentives | Training & Technical Assistance | Consumer Education | Program Implementation | Program Marketing | Planning & Admin | Measurement, Evaluation & Research | Program Total Cost |
|--------------------|----------------------|---------------------------------|--------------------|------------------------|-------------------|------------------|------------------------------------|--------------------|
| Shade Tree Program | \$ 16,150 | \$ 4 | \$ 387 | \$ 2,126 | \$ 4,134 | \$ 523 | \$ 355 | \$ 23,678 |

Evaluation and Monitoring Activities and Results

Navigant Consulting performed an evaluation of this program for 2014. The evaluation resulted in a realization rate of 100% for coincident demand and energy savings. The report is attached in **Appendix 1**.

kW, kWh, and Therm Savings

| No. of Trees | kW savings | kWh savings | Therm savings |
|--------------|------------|-------------|---------------|
| 1,595 | 43 | 103,033 | 0 |

Savings are adjusted for line losses of 10.69% for both demand and energy.

Problems Encountered and Proposed Solutions

UNS Electric did not achieve its participation goal in 2014; however, there was an increase in the number of trees distributed by 62% over 2013. Due to a limited marketing budget, the ability to adequately

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

promote the Program is a challenge. UNS Electric plans to partner with local Home Depots and other retailers to cross-promote the Program through their outreach events in 2015.

Program information is included in materials distributed through the Direct Canvassing Program, a subprogram of the Behavioral Comprehensive Program.

Program Modifications

There were no program modifications during this reporting period.

Programs or Measures Terminated

No measures were terminated during this reporting period. UNS Electric does not plan to terminate this Program in 2015.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

LOW-INCOME WEATHERIZATION PROGRAM

Description

The UNS Electric Low-Income Weatherization (“LIW”) Program is designed to improve the energy efficiency of homes for customers whose income falls within the defined federal poverty guidelines. Through the LIW Program, UNS Electric enables these customers to reduce their electric bills. Savings from these measures help the customers utilize their limited income for other items such as rent, food, or medical expenses.

Program Goals, Objectives, and Savings Targets

The objectives of the Program are to:

- Increase the number of homes weatherized each year;
- Reduce average participating household utility bills of low income customers by utilizing energy conservation measures as defined in the Weatherization Assistance Program Rules; and
- Improve the quality of life for customers by providing them with a safer and healthier home.

The 2014 goal was to weatherize 140 homes.

Levels of Participation

A total of 82 households received weatherization assistance during this reporting period.

Costs Incurred

Costs incurred during this reporting period are listed below:

| | Rebates & Incentives ^a | Training & Technical Assistance | Consumer Education | Program Implementation | Program Marketing | Planning & Admin | Measurement, Evaluation & Research | Program Total Cost |
|---------------------------|-----------------------------------|---------------------------------|--------------------|------------------------|-------------------|------------------|------------------------------------|--------------------|
| Low Income Weatherization | \$ 200,099 | \$ 2,623 | \$ - | \$ (153) | \$ 1,702 | \$ 4,888 | \$ 12,034 | \$ 221,194 |

a. Includes \$13,344 for health and safety related repairs and \$ 20,837 for Weatherization Agencies administrative expenses.

Evaluation and Monitoring Activities and Results

The Governor’s Office of Energy Policy (“GOEP”), with billing data from UNS Electric and other Arizona gas and electric utilities, is analyzing and tracking the energy use in weatherized homes statewide. As their database grows, a more accurate analysis of the impact of weatherization activities will emerge. UNS Electric will report energy savings from weatherization activities based upon the most recent GOEP report. The GOEP does not report any kW demand savings. The report is attached in **Appendix 1**.

The January 2014, the GOEP report is summarized below:

- The report includes jobs completed across Arizona on homes utilizing Arizona Public Service Company (“APS”), TEP, UNS Gas, Inc. (“UNS Gas”), UNS Electric and Southwest Gas Corporation utility data. This analysis is ongoing, and new data will be updated to these values on a quarterly basis.
- Savings to Investment Ratios (“SIR”) are provided for total investment from all funding spent (diagnostics, energy measures, health and safety measures) and for energy related measures only (diagnostics and energy measures).

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

- Present value is based on 17.5 years measure life, discount rate of 3% and a utility cost escalation rate of 3%.
- The combined SIR of all jobs reviewed to date for funds spent on diagnostics, energy measures and health and safety measures was 1.0. Health and saving represented 19% of expenditures.
- The combined SIR of all jobs reviewed to date for funds spent on energy measures and diagnostics was 1.22.
- The average saving per home reviewed was 2,270 kWh and 33 therms of natural gas (gas therms average includes all electric homes).

kW, kWh, and Therm Savings

| No. of Homes | kW savings | kWh savings | Therm savings |
|--------------|------------|-------------|---------------|
| 82 | 99 | 206,038 | 1,848 |

Savings are adjusted for line losses of 10.69% for both demand and energy (excluding therms).

Problems Encountered and Proposed Solutions

UNS Electric, along with other major utilities in Arizona, continues to experience low participation from some low income agencies. Several meetings held in 2014 with all of the state's Weatherization agencies, Arizona Community Action Association ("ACAA") and the GOEP have included discussions on this issue. Some agencies are having difficulty adjusting to the loss of ARRA funding, requiring them to operate on reduced budgets and less staff. The GOEP continues to advise the agencies on best practices to maximize funds.

Program Modifications

There were no Program modifications during this reporting period.

Programs or Measures Terminated

No measures were terminated during this reporting period. UNS Electric does not plan to terminate this Program or any Program measures in 2015.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

MULTI-FAMILY HOUSING EFFICIENCY PROGRAM

Description

The UNS Electric Multi-family Housing Efficiency Program is designed to promote energy efficiency in the residential multi-family sector, on properties with five or more units, to overcome barriers typical to the multi-family housing market, which has limited past participation in energy efficiency programs.

Program Goals, Objectives, and Savings Targets

The objectives of the Program are to:

- Reduce peak demand and overall energy consumption in the multi-family housing market segment;
- Promote energy efficient retrofits of both dwelling units and common areas; and
- Increase overall awareness about the importance and benefits of energy efficiency improvements to the landlord and property ownership community;

The 2014 goal was to provide direct-install measures consisting of CFLs, low-flow kitchen and bathroom faucet aerators, and low-flow water-sensing showerheads to 300 complex units.

Levels of Participation

Through year end 2014, measures were installed in 132 apartment homes located in one major apartment complex. The participating units in 2014 consisted of lower-income subsidized housing or senior living complexes.

Costs Incurred

Costs incurred for this Program during the reporting period are listed below:

| DSM Program | Rebates & Incentives | Training & Technical Assistance | Consumer Education | Program Implementation | Program Marketing | Planning & Admin | Measurement, Evaluation & Research | Program Total Cost |
|---------------------------------|----------------------|---------------------------------|--------------------|------------------------|-------------------|------------------|------------------------------------|--------------------|
| Multi-Family Housing Efficiency | \$ 9,857 | \$ 2 | \$ - | \$ 2,139 | \$ - | \$ 285 | \$ 613 | \$ 12,895 |

Evaluation and Monitoring Activities and Results

Navigant Consulting performed an evaluation of this program for 2014. The evaluation resulted in a realization rate of 100% for coincident demand and energy savings. The report is attached in **Appendix 1**.

kW, kWh, and Therm Savings

| No. of Multi-Family Facilities | Measures | kW savings | kWh savings |
|--------------------------------|----------|------------|-------------|
| 1 | 2,479 | 10 | 184,967 |

Savings are adjusted for line losses of 10.69% for both demand and energy (excluding therms).

Problems Encountered and Proposed Solutions

Due to saturation of the qualifying large scale multi-family housing facilities in 2013, participation was limited in the UNS Electric service territory, in addition to internal staffing constraints. In 2015 Program staff will allocate additional time for outreach and evaluate potential Program modifications.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD:
January through December 2014

Program Modifications

UNS Electric was able to obtain similar pricing for 0.5 gpm bathroom faucet aerators as the 1.5 gpm that had been utilized in prior program years and began using the lower 0.5 gpm in 2014.

Programs or Measures Terminated

No measures were terminated during this reporting period. UNS Electric does not plan to terminate this Program or any Program measures in 2015.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD:
January through December 2014

C&I FACILITIES/SCHOOLS PROGRAM

Description

The UNS Electric C&I Facilities/Schools Program is designed to minimize barriers to implementing energy-efficiency improvements in the commercial market, such as lack of capital, information search costs, transaction costs, performance uncertainty, and the so-called "hassle factor." The purpose of the program is to assist Commercial firms, whose main focus is generally on their core business, with analyzing their energy use to improve efficiency.

The Program provides incentives directly to contractors for the installation of selected high-efficiency lighting; heating, ventilation and air conditioning ("HVAC"); motors; and refrigeration measures. The incentives are set at a higher level for this market in order to encourage contractors to market and deliver the program thus offsetting the need for UNS Electric marketing and overhead expenses. The Program also employs an internet-based measure analysis and customer proposal processing system which makes the process easier for both contractors and customers. The Program provides customers with the opportunity to propose innovative energy-efficiency solutions through custom energy-efficient measures.

Program Goals, Objectives, and Savings Targets

The objectives of the Program are to:

- Encourage commercial customers to install high-efficiency lighting equipment and controls, HVAC equipment, and energy-efficient refrigeration system retrofits in their facilities;
- Encourage contractors to promote the Program and provide turn-key installation services to small business customers;
- Overcome the unique market barriers of the small business market including:
 - First costs and lack of access to capital for energy-efficiency improvements;
 - Lack of awareness and knowledge about the benefits and cost of energy-efficiency improvements;
 - Hassle and transactions costs; and
 - Performance uncertainty associated with energy-efficiency projects;
- Assure that the participation process is clear, easy to understand and simple; and
- Increase the awareness and knowledge of business owners, building owners and managers, and other decision-makers on the benefits of high-efficiency equipment and systems.

The savings goals for 2014:

| | |
|---------------------------------|-------|
| Peak Demand Savings (MW) | 1.41 |
| Energy Savings (MWh) | 4,500 |

Levels of Participation

54 business customers participated during this reporting period.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

Costs Incurred

Costs incurred for this Program during the reporting period are listed below.

| DSM Program | Rebates & Incentives | Training & Technical Assistance | Consumer Education | Program Implementation* | Program Marketing | Planning & Admin | Measurement, Evaluation & Research | Program Total Cost |
|----------------|----------------------|---------------------------------|--------------------|-------------------------|-------------------|------------------|------------------------------------|--------------------|
| C&I Facilities | \$ 127,698 | \$ 1,407 | \$ 100 | \$ 238,043 | \$ 6,102 | \$ 9,240 | \$ 35,516 | \$ 418,107 |

Evaluation and Monitoring Activities and Results

Navigant Consulting performed an evaluation of this Program for 2014. The evaluation resulted in a realization rate of 100% for coincident demand savings and 100% for energy savings. The report is attached in **Appendix 1**.

kW, kWh, and Therm Savings

| Measure | No. Installed | kW savings | kWh savings |
|----------------|---------------|------------|----------------|
| Custom | 76 | 68 | 467,247 |
| HVAC | 17 | 3 | 51,283 |
| Lighting | 740 | 0 | 0 |
| Plug Load | 1 | 0 | 1,782 |
| Refridgeration | 7 | 25 | 182,159 |
| Totals | 841 | 97 | 702,471 |

Savings are adjusted for line losses of 10.69% for both demand and energy.

Problems Encountered and Proposed Solutions

Program participation was less than expected in 2014. In 2015, UNS Electric plans to initiate an expanded outreach model designed to educate its business customers on the availability of this program and encourage their participation. A Customer Relationship Manager, located in Mohave County, will be engaged to solicit further enrollment and participation.

Program Modifications

There were no modifications during this reporting period.

Programs or Measures Terminated

No program measures were discontinued in 2014, however, advanced power strips-occupancy sensors, refrigerated display gaskets and LED channel signs will be eliminated from the program in 2015 per Decision No. 74599. UNS Electric does not plan to terminate this Program or any additional Program measures in 2015.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

BID FOR EFFICIENCY PROGRAM

Description

UNS Electric's Bid for Efficiency Pilot Program is designed so customers or project sponsors can propose their own energy efficiency projects and then bid competitively for incentives within Program guidelines. UNS Electric will select winning applicants based upon specified criteria.

Program participants and project sponsors may include commercial or industrial customers, Energy Service Companies ("ESCOs") or other aggregators who submit proposals for multiple sites.

After two years of implementation, this Program was approved for continuance in Commission Decision No. 74262. The Program has proven to be cost-effective. Thus, UNS Electric will no longer consider this a "Pilot" Program and will refer to it as the Bid for Efficiency Program in future filings.

Program Goals, Objectives, and Savings Targets

The Program objectives are to encourage customers and project sponsors to think holistically regarding energy systems and to develop energy efficiency projects designed to optimize energy use by encouraging a systems approach to energy efficiency. Program goals include:

- Ensure projects are submitted, approved, implemented, and verified in a timely manner;
- Allow projects to be customer-driven; the customer or project sponsor will select appropriate trade and professional allies to design and implement projects;
- Encourage implementation of multiple measures; and
- Encourage applications that aggregate measures at multiple sites.

The savings goal for 2014:

| | |
|---------------------------------|-------|
| Peak Demand Savings (MW) | 2.22 |
| Energy Savings (MWh) | 4,000 |

Levels of Participation

No customers participated during this reporting period.

Costs Incurred

Costs incurred for this Program during the reporting period are listed below.

| DSM Program | Rebates & Incentives | Training & Technical Assistance | Consumer Education | Program Implementation | Program Marketing | Planning & Admin | Measurement, Evaluation & Research | Program Total Cost |
|--------------------|----------------------|---------------------------------|--------------------|------------------------|-------------------|------------------|------------------------------------|--------------------|
| Bid For Efficiency | \$ - | \$ 855 | \$ 29 | \$ 49,508 | \$ - | \$ 1,139 | \$ - | \$ 51,530 |

Evaluation and Monitoring Activities and Results

Because there was no participation in the program, Navigant Consulting did not perform an evaluation of this Program for 2014. The report is attached in **Appendix 1**.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD:
January through December 2014

kW, kWh, and Therm Savings

There were no energy savings in 2014.

| No. of Projects | Measures Installed | kW savings | kWh savings |
|-----------------|--------------------|------------|-------------|
| 0 | 0 | 0 | 0 |

Problems Encountered and Proposed Solutions

There was no Program participation in 2014. In 2015, UNS Electric plans to initiate an expanded outreach model designed to educate its business customers on the availability of this program and encourage their participation. A Customer Relationship Manager, located in Mohave County, will be engaged to solicit further enrollment and participation.

Program Modifications

There were no modifications during this reporting period.

Programs or Measures Terminated

No measures were terminated during this reporting period. UNS Electric does not plan to terminate this Program in 2015.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

RETRO-COMMISSIONING PROGRAM

Description

UNS Electric's Retro-commissioning ("RCx") Program is designed to identify deficiencies in existing facilities and make necessary adjustments to produce energy savings and other benefits, such as improved occupant comfort. The Program assists owners of large existing commercial and industrial facilities in identifying methods and processes to improve energy performance. The targeted improvements are relatively inexpensive to implement and may offer simple paybacks in less than two years.

Program Goals, Objectives, and Savings Targets

The objectives of the Program are to:

- Target large facilities that have lighting, cooling, and ventilation as their primary end uses of energy;
- Improve building performance, reduce maintenance, and lower energy bills for participants;
- Facilitate development of an RCx contractor pool; and
- Develop relationships with commercial and industrial customers leading to other areas of participation in UNS Electric's portfolio of DSM programs.

The savings goal for 2014:

| | |
|---------------------------------|-------|
| Peak Demand Savings (MW) | 1.14 |
| Energy Savings (MWh) | 2,038 |

Levels of Participation

There was no participation in 2014.

Costs Incurred

Costs incurred for this Program during the reporting period are listed below.

| DSM Program | Rebates & Incentives | Training & Technical Assistance | Consumer Education | Program Implementation | Program Marketing | Planning & Admin | Measurement, Evaluation & Research | Program Total Cost |
|---------------------|----------------------|---------------------------------|--------------------|------------------------|-------------------|------------------|------------------------------------|--------------------|
| Retro-Commissioning | \$ - | \$ 847 | \$ 100 | \$ 32,971 | \$ - | \$ 767 | \$ - | \$ 34,684 |

Evaluation and Monitoring Activities and Results

Because there was no participation in the program Navigant Consulting did not perform an evaluation of this Program for 2014. The report is attached in **Appendix 1**.

kW, kWh, and Therm Savings

There were no energy savings in 2014.

Problems Encountered and Proposed Solutions

There were no Program participants in 2014. UNS Electric's initial model for delivery was dependent upon the same program receiving approval in the 2011-2012 TEP EE Plan. TEP received Commission approval for a Retro-commissioning Program in Decision No. 74885. UNS Electric will attempt to partner the UNS Electric program with the TEP program in 2015 in order to encourage participation. UNS Electric will also expand its outreach efforts for the entire commercial EE portfolio.

Program Modifications

No Program modifications were made during this reporting period.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD:
January through December 2014

Programs or Measures Terminated

No measures were terminated during this reporting period. UNS Electric does not plan to terminate this Program in 2015.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

C&I DEMAND RESPONSE PROGRAM

Description

The UNS Electric Commercial and Industrial ("C&I") Demand Response Program is designed to manage peak demand and mitigate system emergencies through a commercial and industrial load curtailment program. The Program is delivered in-house by engaging with commercial and industrial customers, and encouraging those customers to participate in a proactive demand response program. For those customers who choose to participate, UNS Electric will install equipment that provides Company control of either selected loads or the entire electric load in a facility.

The Company will install metering equipment for all participants to enable proper tracking of interval load data to ensure customer participation in any control event and also to provide data for post event analysis. In addition, participants must agree to be placed on UNS Electric's Interruptible Power Service tariff in lieu of any cash incentive for participation.

Program Goals, Objectives, and Savings Targets

The primary goal of the Program is to provide up to 10 MW of summer peak demand reduction, available for up to 80 hours per year, in order to mitigate system emergencies.

Levels of Participation

Two participants enrolled in 2014, for a total of nine sites under contract with an estimated reduction potential of 3.35 MW.

Costs Incurred

Costs incurred for this Program during the reporting period are listed below:

| DSM Program | Rebates & Incentives | Training & Technical Assistance | Consumer Education | Program Implementation | Program Marketing | Planning & Admin | Measurement, Evaluation & Research | Program Total Cost |
|---------------------|----------------------|---------------------------------|--------------------|------------------------|-------------------|------------------|------------------------------------|--------------------|
| C&I Demand Response | \$ - | \$ 1,112 | \$ - | \$ 184,015 | \$ - | \$ 4,184 | \$ - | \$ 189,311 |

Evaluation and Monitoring Activities and Results

Navigant Consulting performed an evaluation of this Program for 2014. The evaluation confirmed that the Company's calculation of the demand response energy credit allowed per the Standard is correct. The report is attached in **Appendix 1**.

kW, kWh, and Therm Savings

The Energy Efficiency Standard allows a credit for demand response and load management programs per A.A.C. R14-2-2404 (C). Peak reduction capability may be converted to an annual energy savings equivalent based on an assumed 50% load factor. The credit shall not exceed 10% of the annual standard. The following table shows the allowable credit for this Program based on the available capacity reduction and the 10% cap. See the Program Modifications section below for more information.

| Participants | Sites | MW Available | MWh Savings Credit |
|--------------|-------|--------------|--------------------|
| 2 | 9 | 3.35 | 3,542 |

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD:
January through December 2014

Problems Encountered and Proposed Solutions

No problems were encountered during this reporting period.

Program Modifications

No Program modifications were made during this reporting period.

Programs or Measures Terminated

UNS Electric does not plan to terminate this Program in 2015.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD:
January through December 2014

SCHOOLS FACILITIES PROGRAM

Description

Commission Decision No. 74262 combined the budget and EE measures of the former Schools Facilities Program into the C&I Facilities Program. The Schools Facilities Program ceased operation in January 2014. There are no separate expenses or energy savings to report.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

BEHAVIORAL COMPREHENSIVE PROGRAM

Description

The Behavioral Comprehensive Program consists of four subprograms. The focus of the Program is to educate residential customer on how changes in behavior, including purchasing decisions, can improve energy efficiency. The subprograms include low-cost measures – such as: CFLs, faucet aerators, LED nightlights and refrigerator thermometers, and educational components.

The four subprograms consist of:

- Direct Canvassing
 - o The Direct Canvassing initiative is a grass-root, door to door approach to promote energy efficiency, and is designed to reach neighborhoods difficult to reach through traditional messaging. Four CFLs will be left with each customer, along with program materials for appropriate UNS Electric DSM programs.
- K-12 Education
 - o In addition to energy based class room curriculum, students would be instructed in energy saving approaches for their homes. Students in grades 4-8 are given a take home kit which includes CFLs, LED nightlights, and educational material on how to reduce energy use.
- Community Education
 - o The Community Education program engages community groups and works with public entities to conduct - hands-on energy efficiency workshops. Attendees receive an Energy Efficiency Kit with a wide sample of materials including weather-stripping, low flow showerheads, caulk, and CFLs.
- CFL Community Outreach
 - o The CFL Community Outreach Program is designed to complement UNS Electric's presence at community events, and its overall education and outreach efforts and efficiency messaging. Complimentary CFLs are made available both at community events and organizations, including those involved in our Community Education Program.

Program Goals, Objectives, and Savings Targets

The Program objectives are to influence energy related behaviors including the following:

- Habitual behaviors
 - o Adjust thermostat setting
 - o Turn off unnecessary lights
- Small purchasing and maintenance behaviors
 - o Purchase and install faucet aerators and low flow shower heads
 - o Purchase and install compact fluorescent light bulbs
 - o HVAC maintenance
- Larger purchasing decisions
 - o Purchase an ENERGY STAR® appliance
 - o Purchase higher energy efficient heating and cooling equipment

The savings goal for 2014 was 2,420 MWh.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

Levels of Participation

Direct Canvassing distributed 2403 kits. Each kit consists of four CFLs.

The K-12 Education Program conducted 100 classroom presentations and distributed 2,544 Energy Saving Kits.

Ten Home Energizer Workshops (HEW) were conducted in 2014 and 555 Energy Saving Kits were distributed.

40,100 CFLs were distributed to UES customers in all three service areas. Methods of delivery included Home Shows, County Fairs, service organizations, food banks and builder associations.

Costs Incurred

Costs incurred for this Program during the reporting period are listed below.

| DSM Program | Rebates & Incentives | Training & Technical Assistance | Consumer Education | Program Implementation* | Program Marketing | Planning & Admin | Measurement, Evaluation & Research | Program Total Cost |
|--------------------------|----------------------|---------------------------------|--------------------|-------------------------|-------------------|------------------|------------------------------------|--------------------|
| Behavioral Comprehensive | \$ 131,355 | \$ 3,229 | \$ 2,015 | \$ 93,942 | \$ 1,743 | \$ 5,274 | \$ 1,097 | \$ 238,654 |

Evaluation and Monitoring Activities and Results

Navigant Consulting performed an evaluation of this Program for 2014. The evaluation resulted in a realization rate of 100% for coincident demand and electric energy savings, and 100% for therm savings. This report is attached in **Appendix 1**. 2014 savings have been updated as a result of the 2014 evaluation.

kW, kWh, and Therm Savings

| Measure | No. of Units | kW savings | kWh savings | Therms savings |
|---------------------------------|---------------|------------|------------------|----------------|
| Community/K-12 Educational Kits | 3,099 | 39 | 1,022,866 | 57493.16657 |
| CFL Promotion | 40,100 | 40 | 1,155,319 | 0 |
| Direct Canvassing | 2,403 | 10 | 276,931 | 0 |
| Totals | 45,602 | 89 | 2,455,116 | 57,493 |

Savings are adjusted for line losses of 10.69% for both demand and energy.

Problems Encountered and Proposed Solutions

No additional problems were encountered during this reporting period.

Program Modifications

UNS Electric partnered with our call center to gain customer permission to have our Customer Service Technicians deliver a Direct Canvas kit to a customer's premise with their scheduled service order. Four CFLs were left with each Direct Canvas kit, along with program materials for appropriate UNS Electric DSM and various assistance programs. An increase in the number of bulbs provided in 2014 to four, increasing from two CFLs in the kits in 2013.

Programs or Measures Terminated

No measures were terminated during this reporting period. UNS Electric does not plan to terminate this Program or any Program measures in 2015.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

HOME ENERGY REPORTS PROGRAM

Description

Decision No. 74599 discontinued the Home Energy Reports Program but allowed a 2014 budget of \$50,000 for the cost of program termination.

Levels of Participation

There was no participation in 2014.

Costs Incurred

Costs incurred for this Program during the reporting period are listed below.

| DSM Program | Rebates & Incentives | Training & Technical Assistance | Consumer Education | Program Implementation* | Program Marketing | Planning & Admin | Measurement, Evaluation & Research | Program Total Cost |
|---------------------|----------------------|---------------------------------|--------------------|-------------------------|-------------------|------------------|------------------------------------|--------------------|
| Home Energy Reports | \$ - | \$ 5 | \$ - | \$ 30,000 | \$ - | \$ 725 | \$ 2,081 | \$ 32,811 |

Evaluation and Monitoring Activities and Results

Because there was no participation, Navigant Consulting did not perform an evaluation of this Program for 2014. This report is attached in **Appendix 1**.

kW, kWh, and Therm Savings

There were no savings for 2014.

| Participants | kW savings | kWh savings | Therm savings |
|--------------|------------|-------------|---------------|
| 0 | 0 | 0 | 0 |

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

CONSUMER EDUCATION AND OUTREACH PROGRAM

The Consumer Education and Outreach Program is responsible for the marketing of the UNS Electric portfolio as a whole, as well as general consumer education. The focuses of activities are as follows:

- Develop brochures and communications materials that showcase all available EE programs;
- Develop and maintain communication material related to general energy savings information;
- Provide labor and materials to staff trade shows and community events;
- Develop and maintain web content to educate consumers on energy use and TOU rate choices; and
- Cross communication of Energy Efficiency Programs and general energy savings information.

UNS Electric representatives spoke at many civic and other organizational meetings promoting DSM Programs and energy education. These organizations and civic bodies include:

- Kingman Home and Garden Expo, Kingman
- Lake Havasu City Homebuilders Show, Lake Havasu
- Kingman Regional Medical Center, Kingman;
- Mohave County Fair, Kingman
- Rotary Club, Kingman
- Boys & Girls Club, Kingman
- Lee Williams High School, Kingman
- Colorado River Builder's Association, Lake Havasu City
- Kingman Cancer Care Unit, Kingman
- Mohave County Community Services Department, Kingman
- Northwest Arizona Builder's Association, Kingman
- North Country HealthCare, Inc., Kingman
- Kingman High School, Kingman
- Kingman Middle School, Kingman
- Kingman Master Gardeners, Kingman
- Lake Havasu Master Gardeners, Lake Havasu
- Kingman Academy of Learning High School, Kingman
- Chicanos Por La Causa, Inc, Nogales
- Kingman Aid to Abused People, Kingman
- Kingman Motor Cross, Kingman
- London Bridge Yacht Club, Lake Havasu City

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

- Emmanuel Christian Academy, Kingman
- Venture Club of Kingman, Kingman
- Lake Havasu Chamber of Commerce, Lake Havasu

These 24 organizations/events represent an increase in engagement in our communities of 240% over 2013 which reached 10 organizations/events.

UNS Electric continues to educate its employees about the Company's DSM programs, with an emphasis on the importance of UNS Electric employees helping to ensure the success of the programs.

Program Goals, Objectives, and Savings Targets

The Program is designed to educate commercial and residential customers on ways to save energy through conservation measures, energy efficiency measures, or utilizing Time-of-Use ("TOU") rates.

Levels of Participation

333 customers were enrolled in the PowerShift™ TOU Program. This represents an increase of 197% over 2013.

Costs Incurred

Costs incurred for this Program during the reporting period are listed below:

| DSM Program | Rebates & Incentives | Training & Technical Assistance | Consumer Education | Program Implementation ^a | Program Marketing | Planning & Admin | Measurement, Evaluation & Research | Program Total Cost |
|-------------------------------|----------------------|---------------------------------|--------------------|-------------------------------------|-------------------|------------------|------------------------------------|--------------------|
| Consumer Education & Outreach | \$ - | \$ 9 | \$ 43,907 | \$ 11,800 | \$ - | \$ 1,260 | \$ 32 | \$ 57,007 |

Evaluation and Monitoring Activities and Results

There is no third-party evaluation for this program.

kW, kWh, and Therm Savings

There are no energy savings to report for this program.

Programs or Measures Terminated

UNS Electric does not plan to terminate this Program in 2015.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD:
January through December 2014

RESIDENTIAL ENERGY EFFICIENCY FINANCING PILOT PROGRAM

Description

UNS Electric notified the ACC that the Residential Energy Financing Pilot program would be terminated in 2014 due to lack of participation. ACC Decision No. 54599, allowed UNS Electric to discontinue the program with no budget for 2014.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

ENERGY CODES & STANDARDS ENHANCEMENT PROGRAM

Description

The Energy Codes and Standards Enhancement Program (“ECSEP”) will strive to maximize energy savings through adherence to local building energy codes and enhanced energy efficient appliance standards. The Program will employ a variety of tactics aimed at improving levels of compliance with existing building energy codes and appliance standards, and supporting periodic updates to energy codes and appliance standards as warranted by market conditions.

Program Goals, Objectives, and Savings Targets

The Program is designed to increase energy savings in new construction and renovated buildings, in both the residential and commercial sectors through improving levels of compliance with existing building energy codes, supporting periodic energy code updates as warranted by market conditions, and advocating for higher efficiency electric appliances.

Levels of Participation

In 2014, UNS Electric Program staff met with building officials from Kingman, Lake Havasu City, Mohave County, and Santa Cruz County to educate and encourage them to consider adopting energy building codes within their jurisdiction.

Costs Incurred

Costs incurred for 2014 are listed below:

| DSM Program | Rebates & Incentives | Training & Technical Assistance | Consumer Education | Program Implementation | Program Marketing | Planning & Admin | Measurement, Evaluation & Research | Program Total Cost |
|--------------------------------------|----------------------|---------------------------------|--------------------|------------------------|-------------------|------------------|------------------------------------|--------------------|
| Energy Codes & Standards Enhancement | \$ - | \$ 0 | \$ - | \$ - | \$ - | \$ 60 | \$ 2,657 | \$ 2,718 |

Evaluation and Monitoring Activities and Results

Navigant Consulting performed an evaluation of this Program for 2014. The evaluation resulted in a realization rate of 100% for coincident demand and energy savings. The report is attached in **Appendix 1**.

kW, kWh, and Therm Savings

An analysis performed by UNS Electric identified energy savings through improved appliance standards. The following table shows the incremental energy savings credit allowed by Commission Decision No. 72747 for 2014.³

| Year | 2014 |
|----------------------|-----------|
| Energy Savings (kWh) | 4,328,000 |

Problems Encountered and Proposed Solutions

Arizona is one of nine states in the country that allow “home rule” adoption of residential building codes, and counties and municipalities may adopt some or all of the residential building codes available (some minimum code standards are enforced for non-residential structures such as municipal buildings, schools, and health care facilities). Historically, the jurisdictions within UNS Electric service territory have not adopted energy conservation building codes. UNS Electric has been proactively educating code officials

³ Decision No. 72747, p. 56, lines 17-19 states “...allow the Company to also count toward meeting the Energy Efficiency Standard in A.A.C. R14-2-2404, for 2012 – 2020, up to one third of the energy savings resulting from energy efficiency appliance standards...”

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

and contractors on the advantages of energy conservation codes, and will continue its efforts to overcome some of the barriers and misconceptions of Code adoption

Program Modifications

There were no Program modifications during this reporting period.

Programs or Measures Terminated

UNS Electric does not plan to terminate this Program 2015.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

MISCELLANEOUS DSM INFORMATION

Some of the DSM programs approved by the Commission in January 2012 were dependent upon the same or similar programs or measures receiving approval in TEP's 2011-2012 EE Plan, especially programs designed for commercial customers. In June 2013, the Commission closed Docket No. E01933A-11-0055 (the docket for the 2011-2012 EE Plan) and did not approve any new programs. The result is UNS Electric cannot take advantage of economies of scale in implementing certain EE programs. This hindered UNS Electric's ability to meet the Standard for 2014 and will continue to hinder it in subsequent years.

On June 3, 2013, UNS Electric filed for a request to extend its 2013 EE Plan to cover 2014. UNS Electric's 2013-2014 EE Plan was approved in December 2013, but no new measures or programs were approved. Without Commission approval of new EE measures or programs in subsequent years it will be difficult for UNS Electric to meet the Standard.

UNS Electric filed its 2015 EE Plan on June 2, 2014 and is still awaiting ACC approval. UNS Electric will file a 2016 EE Plan by June 1, 2015.

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD:
January through December 2014

APPENDIX 1 – MEASUREMENT, EVALUATION, AND RESEARCH REPORTS

- GOEP Training, Monitoring, and Evaluation Report – January 2014
- Navigant Consulting - UNSE 2014 Year-end Measurement, Evaluation, and Research Report⁴

⁴ This report is being provided directly to Commission Staff.

UNS Electric, Inc.

**DSM PROGRAM PROGRESS REPORT FOR THE PERIOD:
January through December 2014**

APPENDIX 2 – COMMISSION APPROVED DSM PROGRAMS AND MEASURES FOR 2014⁵

| DSM Program | Commission Approved 2014 Program Budget | Actual 2014 Program Expenditures | Approved EE Measures | Benefit/Cost Ratio per Staff Analysis Decision No. 74599 | Actual Benefit/Cost Ratio for 2014 |
|------------------------------|---|----------------------------------|--|--|------------------------------------|
| Residential Programs | | | | | |
| Efficient Products | \$834,727 | \$1,032,476 | Integral CFL | 2.23 | 3.6 |
| | | | Pool Pump Timers | 1.95 | NA ⁶ |
| | | | Variable Speed Pool Pump | 0.9 | 1.4 |
| | | | Advanced Power Strip – Load Sensor | 0.8 | NA ⁷ |
| Appliance Recycling | \$133,513 | \$50,294 | Refrigerator Recycling | 1.66 | 1.4 |
| | | | Freezer Recycling | 1.66 | 1.3 |
| Residential New Construction | \$98,342 | \$160,468 | Energy Star ≤ 73 HERS | 1.70 | 3.9 |
| Existing Home Program | \$872,989 | \$625,964 | Air Sealing | 0.86 | 1.8 |
| | | | Air Sealing & Attic Insulation | 0.95 | 1.5 |
| | | | Duct Sealing (Performance) | 1.13 | 1.32 |
| | | | Early Retirement HVAC with QI and Duct Sealing (Performance) | 1.10 | 1.3 |
| | | | | | 1.3 |

⁵ This table is provided to comply with A.A.C. R-14-2-2409 and Commission Decision No. 74262. Staff's benefit/cost ratios taken from Commission Decision No. 74599, Appendix A, unless otherwise noted. Actual benefit/cost ratio calculations for 2014 use the Staff-approved method with all criteria updated with the most recent data available, per Commission Decision No. 74262.

⁶ No prescriptive participation during this reporting period

UNS Electric, Inc.

DSM PROGRAM PROGRESS REPORT FOR THE PERIOD: January through December 2014

| | | | | | |
|---------------------------------|-----------|-----------|--|------|------|
| | | | ROB HVAC with QI and Duct Sealing (Prescriptive) ⁹ | 1.13 | 1.55 |
| | | | Shade Screens | 0.57 | 0.90 |
| Shade Tree Program | \$34,100 | \$23,678 | Shade Tree | 1.05 | 1.2 |
| Low-Income Weatherization | \$351,817 | \$221,194 | Whole House Low Income Weatherization | 1.02 | 1.03 |
| Multi-Family Housing Efficiency | \$41,946 | \$12,895 | Integral CFL | 1.80 | 1.16 |
| | | | Low Flow Showerheads | 2.04 | 1.24 |
| | | | Faucet Aerators | 2.42 | 1.32 |
| Commercial Programs | | | | | |
| C&I Facilities/Schools | \$894,696 | \$418,107 | Programmable Thermostats | 1.64 | 5.5 |
| | | | 14 SEER Packaged and Split AC's | 1.19 | 1.2 |
| | | | 14 SEER Packaged and Split HP's | 2.03 | 1.6 |
| | | | 15 SEER Packaged and Split AC's | 1.12 | 1.1 |
| | | | 15 SEER Packaged and Split HP's | 2.00 | 1.6 |
| | | | 16 SEER Packaged and Split AC's | 1.06 | 1.1 |
| | | | 16 SEER Packaged and Split HP's | 1.89 | 1.5 |
| | | | Advanced Power Strips - Load Sensor | | |
| | | | Advanced Power Strips - Occupancy Sensors | 1.22 | 1.8 |
| | | | Advanced Power Strips - Timer Plug Strip | 0.80 | 1.2 |
| | | | Anti sweat heater controls | 2.78 | 4.0 |
| | | | Custom Measures | 1.96 | 3.0 |
| | | | Daylighting controls | 1.91 | 2.9 |
| | | | | 1.00 | 1.6 |

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

| | | |
|---|------|-----|
| Delamping | 6.91 | 6.9 |
| Energy efficient exit signs | 1.26 | 2.1 |
| Evaporator Fan Controls | 1.35 | 1.6 |
| Exterior HIDs to T8/T5 | 2.63 | 4.5 |
| Hard Wire CFL | 1.15 | 1.1 |
| High Efficiency Evaporator Fan Motors (ECM) | 1.69 | 2.7 |
| High Efficiency Evaporator Fan Motors (PSC) | 2.06 | 3.3 |
| Induction Lighting | 1.02 | 1.7 |
| Integral Screw In CFL | 1.38 | 1.8 |
| Interior HIDs to T8/T5 | 3.45 | 5.4 |
| LED Channel Signs | 0.74 | 1.2 |
| Occupancy sensors | 1.33 | 2.0 |
| Outdoor CFL | 3.58 | 5.1 |
| Premium T8 Lighting | 1.49 | 2.3 |
| Programmable Thermostats | 3.64 | 5.5 |
| Reduced LPD | 1.34 | 1.6 |
| Refrigerated Display Automatic Door Closers | 2.76 | 4.0 |
| Refrigerated Display Gaskets | 0.83 | 1.2 |
| Screw in cold cathode CFL | 2.31 | 3.2 |
| Shade Screens | 1.00 | 1.5 |
| Standard T8 Lighting | 1.04 | 1.6 |
| Variable Speed Drives | 2.70 | 3.2 |
| Vending Miser - Beverage Case Controls | 2.19 | 3.4 |
| Vending Miser - Reach-in Cooler Controls | 2.41 | 2.7 |

UNS Electric, Inc.

DSM PROGRESS REPORT FOR THE PERIOD: January through December 2014

| | | | | | |
|--|-----------|-----------|---|-------------------|-----------------|
| | | | Vending Miser - Snack Machine Controls | 1.41 | 1.6 |
| | | | Window Films | 1.43 | 2.4 |
| Bid for Efficiency | \$323,582 | \$51,530 | Bid for Efficiency Project | 1.79 | 2.8 |
| Retro-Commissioning | \$122,116 | \$34,684 | Retro-Commissioning Project | 1.37 | NA ⁷ |
| C&I Demand Response | \$388,544 | \$189,311 | Demand Response / Direct Load Control | 2.66 ⁷ | NA |
| Behavioral Programs | | | | | |
| Home Energy Reports Behavioral Comprehensive | \$50,000 | \$32,811 | Home Energy Reports | N/A | 0.43 |
| | \$283,809 | \$238,654 | K-12 Education Kit | 3.65 | 4.4 |
| | | | Community Education Kit | 1.86 | 2.3 |
| | | | Direct Canvassing | 1.78 | 2.5 |
| | | | CFL Outreach Promotion | 1.70 | 2.4 |
| Support Programs⁸ | | | | | |
| Consumer Education & Outreach | \$141,884 | \$57,007 | General Consumer Education | NA | NA |
| Energy Codes & Standards Enhancement | \$18,447 | \$2,718 | Credit for increased energy codes and appliance standards | NA | NA |
| Program Development, Analysis, and Reporting | \$167,072 | \$36,616 | NA | NA | NA |

⁷ Staff's benefit/cost ratio from Commission Decision No. 74599

⁸ These programs do not provide direct energy savings, but promote participation in other energy efficiency programs. They do not require a stand-alone benefit/cost analysis

ARIZONA GOVERNOR'S OFFICE of ENERGY POLICY
TRAINING, MONITORING AND EVALUATION REPORT
FISCAL YEAR 2014 ANNUAL REPORT

January 2015
UNS ENERGY CORPORATION

Subsidiary – UNS Electric

Re: Governor's Office of Energy Policy

Training and Monitoring for Weatherization

Training for the Weatherization Assistance Program (WAP) is done through a variety of methods; the two biggest ones are one-on-one field training when an issue is noted in the field and class room/lab training. The one-on-one field training is done by the state monitors when they are out in the field looking at work in progress and monitoring jobs that are completed. When a monitor sees something that is not to WAP standards it is noted and brought to the agencies' attention. If training is required it is done right then, in the field where it is best, as it is hands-on training.

The class room/lab training is provided by the Southwest Building Science Training Center (Training Center), operated by the Foundation for Senior Living Home Improvement (FSL). The state's weatherization program has a long history working with the training center in developing training curriculum and training weatherization workers. The main stay of WAP training from the training center is WAP boot camp and Success with Weatherization (Critical Details), which is required by all WAP field workers. The Boot Camp is a five-day training that covers the basics of building science, pressure diagnostics, health and safety and residential energy auditing.

The Success with Weatherization training was developed through a two-year grant for quality control in weatherization by the Training Center and Advance Energy. The course focuses on critical details of the work being performed and teaches the steps necessary to complete the work, correctly every time. The training material and detail sheets that are taught in the class are available online to the students once they completed the course. This is the first year that Success with Weatherization has been incorporated into the program. The state mandated that at least one field personnel and one member of management must attend the course from each agency.

The training center also offers courses in Lead RRP, OSHA 10 and OSHA 30 Certifications, WAP administration and many more, which some are required by the weatherization program but other facilities can provide the training. The two previously mentioned courses above can only be taken at the Training Center. A complete list of training courses they offer can be found at:
<http://www.swbstc.org/trainings/>

The Training Center, in partnership with the Building Performance Institute, Inc. (BPI), provides nationally recognized building science certifications to Arizona's weatherization agencies. All agencies have BPI Certified staff members or contractors that are BPI certified.

Details on BPI
<http://www.bpi.org/>

Peer-to-Peer Fiscal and Technical Procedures

The Arizona WAP has a peer-to-peer working group that allows the fiscal and technical staff from the agencies and the Governor's Office of Energy Policy (OEP) to meet and discuss issues that arise in the program. Agencies are able to share solutions to common problems and other information. These peer-to-peer meetings occur every few months and have been a great arena to discuss any changes or improvement to the program.

Agency Personnel Performance Reviews

A review and monitoring process to evaluate the competency of agency personnel performing the various requirements of the weatherization program was developed for the statewide weatherization assistance program. Based on this process, additional one-on-one training and technical assistance is provided on an as-needed basis.

Monitoring

The Arizona WAP has implemented a monitoring program that focuses on determining areas that need improvement and utilizes the monitoring process to implement needed changes. The areas covered include: auditing, diagnostics, testing and measures completed and program operations. This process begins with the review of 100% of the technical reports for auditing, diagnostics, testing and work completed each month. These reports can highlight instances where opportunities were missed or program requirements were not followed. When there are concerns with some element of the report, a site visit is conducted to address the concerns. At the job site, the diagnostic, testing and work are reviewed to determine if any improvements can be made. A minimum of 5% of the job sites will be visited, with each agency being monitored at least once during the twelve-month period. Based on the site visit results, follow-up training and technical assistance is provided to the local agency. For agencies where the technical reports do not show concerns, the site visit consists of monitoring a number of randomly selected homes and reviewing the diagnostics, testing and work completed. These efforts, combined with the training and competence programs, have a goal of ensuring that the program is providing the clients with a high return on Utility's investments, while maintaining or improving the customers' health and safety.

Utility Bill Analysis

This report includes jobs completed across Arizona using data provided by APS, TEP, Unisource Gas and Electric and Southwest Gas utility data. This analysis is ongoing, new data will be updated to these values on a quarterly basis.

Provided are Savings to Investment Ratios (SIR) for total investment from all funding spent (diagnostics, energy measures and health and safety measures) and for energy related measure only (diagnostics and energy measures).

Assumptions

Present value is based on 17.5 years measured life, discount rate of 3% and utility cost escalation rate of 3%.

Results Summary

The combined SIR of all jobs reviewed to date for funds (LIHEAP, DOE, Utilities, CDBG, URRD, SERC) spent on diagnostics, energy measures and health and safety measures is currently at a 1 to 1. Health and safety represented 19% of expenditures.

The combined SIR of all jobs reviewed to date for funds spent on energy measures and diagnostics was 1.22

The average saving per home reviewed was 2270 kWh and 33 therms of natural gas (gas therms average includes all electric homes).