

OPEN MEETING
MEMORANDUM



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ARIZONA CORPORATION COMMISSION
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TO: Docket Control Center

FROM: Steven M. Olea
Director
Utilities Division

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DATE: July 14, 2014

RE: IN THE MATTER OF THE COST-EFFECTIVENESS REVIEW OF
MEASURES PROPOSED IN UNS ELECTRIC, INC.'S ENERGY
EFFICIENCY IMPLEMENTATION PLAN.
(DOCKET NO. E-04204A-12-0219)

Decision No. 74262, dated January 7, 2014, ordered Staff to re-calculate the cost effectiveness of all of UNS Electric, Inc.'s 2013 Energy Efficiency Implementation Plan measures, review and calculate the cost-effectiveness of the new energy efficiency measures UNS Electric, Inc. proposed for its 2013 Energy Efficiency Implementation Plan, and file a report and recommendations by May 30, 2014. Staff filed its report and recommendations on May 30, 2014. Attached is a proposed Order that contains Staff's recommendations.

Steven M. Olea, Director
Utilities Division

SMO:CLA:sms\JMA

ORIGINATOR: Candrea Allen

Attachment: Original and Thirteen Copies

Arizona Corporation Commission
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JUL 14 2014

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BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner

IN THE MATTER OF THE COST-EFFECTIVENESS REVIEW OF MEASURES PROPOSED IN UNS ELECTRIC, INC.'S ENERGY EFFICIENCY IMPLEMENTATION PLAN.

DOCKET NO. E-04204A-12-0219
DECISION NO. _____
ORDER

Open Meeting
July 22 and July 23, 2014
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

INTRODUCTION

1. On June 1, 2012, UNS Electric, Inc. ("UNS Electric" or "Company") filed an application with the Arizona Corporation Commission ("Commission") requesting approval of its 2013 Energy Efficiency Implementation Plan ("EE Plan") and a change to its Demand-Side Management ("DSM") Surcharge. On January 7, 2014, in Decision No. 74262, the Commission approved the EE Plan with modifications. Decision No. 74262 required Commission Utilities Division Staff ("Staff") to re-calculate the cost effectiveness of all of UNS Electric's EE Plan's measures, review and calculate the cost-effectiveness of the new energy efficiency ("EE") measures UNS Electric proposed for its 2013 EE Plan, and file a report and recommendations by May 30, 2014. Decision No. 74262 further ordered that the DSM Surcharge be lowered to \$0.002660 per kWh and is subject to early reset based on Staff's report of cost-effectiveness of all of the measures.

1 **EE PLAN OVERVIEW**

2 2. UNS Electric's current EE Plan and its DSM Surcharge were approved by the
3 Commission in Decision No. 74262, dated January 7, 2014. UNS Electric's current EE Plan was
4 approved at a budget level of \$5,388,473. The current DSM Surcharge was set at \$0.002660 per kWh.

5 3. Appendix A, also included with the Staff memo filed on May 30, 2014, as part of this
6 docket, is a list of all previous Commission-approved measures and the cost-effectiveness ratio that
7 Staff has re-calculated for those measures.

8 4. The Company's proposed EE Plan filed June 1, 2012, sought to modify existing
9 programs by adding new measures. Decision No. 74262 did not approve the implementation of any
10 new measures at that time but directed Staff to evaluate those new measures and report Staff's
11 recommendations regarding the new measures. The table below details those new measures and also
12 details any modifications or terminations that UNS Electric has communicated to Staff.

13 **Proposed Energy Efficiency Program Modifications, Additions, or Terminations**

14

Residential	
Efficient Products Program	
15 Residential 2x 16 Incandescent	• Add a measure providing a rebate for 2x Incandescent light bulbs.
17 ENERGY STAR® 18 Central Air Conditioner/Heat Pump	• Add a measure offering a \$300 rebate for installing a central air conditioner/heat pump.
19 ENERGY STAR® 20 Clothes Washer	• Add a measure providing a \$100 rebate for purchasing an energy efficient clothes washer.
21 ENERGY STAR® 22 Dishwasher	• Add a measure providing a \$10 rebate for purchasing an energy efficient dishwasher.
23 ENERGY STAR® 24 Refrigerator	• Add a measure providing a \$20 rebate for purchasing an energy efficient refrigerator.
25 ENERGY STAR® Room 26 Air Conditioner	• Add a measure providing a \$35 rebate for purchasing an energy efficient room air conditioner.
27 Heat Pump Water Heater	• Add a measure offering a \$400 rebate for installing a heat pump water heater.
28	

Commercial & Industrial	
C&I Facilities/Schools	
Canopy LED	• Add a measure offering an incentive for installing a canopy LED.
Refrigerated Case LED	• Add a measure offering an incentive for installing a refrigerated case LED.
Computer Power Monitoring System	• Add a measure offering an incentive for installing a computer power monitoring system.
Behavioral Programs	
Home Energy Reports	• Discontinue this measure in 2014.
Residential Financing	• Discontinue this measure in 2014.

PROPOSED PROGRAM CHANGES

A. Efficient Products Program

Current Program

5. The Efficient Products Program promotes the purchase of energy efficient retail products through in-store buy down promotions and the promotion of EE products in general.

Proposed Changes

6. UNS Electric had requested to continue the current Efficient Products Program and to add seven new measures (Residential 2x Incandescent, Heat Pump Water Heater, Energy Star Central Air Conditioner, Energy Star Clothes Washer, Energy Star Dishwasher, Energy Star Refrigerator, and Energy Star Room Air Conditioner). The new measures would offer residential customers additional opportunities to reduce energy consumption.

Proposed Budget

7. The 2014 proposed budget for the Efficient Products Program is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	2013 (Current)	2014 (Proposed)
Incentives	\$416,143	\$396,548
Non-Incentive Cost	\$350,042	\$507,697
Total Program Cost	\$766,185	\$904,245

1 8. The last approved budget for this program, approved in Decision No. 74262, was
2 \$766,185 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014,
3 the actual expenses incurred in 2013 for this program were \$741,510. The proposed budget for this
4 program for 2014, as can be seen above, is \$904,245 which represents an increase of \$138,060 over
5 the 2013 budget or roughly an 18% increase.

6 *Recommendations*

7 9. As can be seen in Appendix A, Staff's analysis demonstrates that all currently approved
8 measures in the Efficient Products Program are found to have a benefit-cost ratio greater than one
9 with the exception of Advanced Power Strips – Load Sensor and Variable Speed Pool Pumps. Staff
10 recommends that these two be discontinued.

11 10. In addition to completing a benefit-cost analysis on all existing measures, Staff also
12 completed a benefit-cost analysis on the proposed new measures. The cost-effectiveness ratios for the
13 proposed new measures can be seen in the table below. The Residential 2x Incandescent, Energy Star
14 Central Air Conditioner, Energy Star Clothes Washer, Energy Star Dishwasher, Energy Star
15 Refrigerator, and Energy Star Room Air Conditioner all have benefit-cost ratios of 1.0 or above with
16 the exception of the Residential 2x Incandescent and Energy Star Room Air Conditioner which would
17 both reach a ratio of 1.0 if environmental benefits were monetized. The Heat Pump Water Heater has
18 a benefit-cost ratio of well below one; therefore, Staff does not recommend approval of this measure.
19 Given the increase in the number of available measures, Staff recommends an increase in the Efficient
20 Products Program budget to \$904,245, if the Commission approves all the measures with a benefit-
21 cost ratio of at least 1.0 If the Commission does not approve the new measures, Staff recommends
22 that the budget proposed by the Company be reduced to \$834,727 to reflect removal of the incentives
23 associated with those measures.

Proposed Measure	Ratio
Residential 2x Incandescent	0.95
Heat Pump Water Heater	0.72
Energy Star Central Air Conditioner	1.94
Energy Star Clothes Washer	1.07
Energy Star Dishwasher	2.39

Energy Star Refrigerator	1.08
Energy Star Room Air Conditioner	0.97

B. Residential Appliance Recycling Program

Current Program

11. This program is designed to remove and recycle inefficient yet functioning refrigerators and freezers.

Proposed Changes

12. The Company has not proposed any changes to this program.

Proposed Budget

13. The 2014 proposed budget for the Residential Appliance Recycling Program is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	2013 (Current)	2014 (Proposed)
Incentives	\$40,250	\$39,000
Non-Incentive Cost	\$184,999	\$94,513
Total Program Cost	\$225,249	\$133,513

14. The last approved budget for this program, approved in Decision No. 74262, was \$225,249 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$72,101. The proposed budget for this program for 2014 as can be seen above is \$133,513 which represents a decrease of \$91,736 from the 2013 budget or roughly a 41% decrease. The Company is requesting a decrease to the budget as participation has been lower than expected.

Recommendations

15. The Residential Appliance Recycling Program is comprised of two measures both of which Staff found to have a benefit-cost ratio greater than one (as can be seen in Appendix A). Staff

...

1 recommends continuation of the Residential Appliance Recycling Program along with approval of the
2 decrease in the budget dollars to \$133,513.

3 C. Residential New Construction Program

4 *Current Program*

5 16. This is an existing program that has been ongoing since 2008. The goal of the
6 program is to award incentives to more energy efficient homes. To qualify, new homes are required to
7 meet the ENERGY STAR version 3 standards which require a Home Energy Rating System
8 (“HERS”) score of ≤ 73 .

9 *Proposed Changes*

10 17. The Company has not proposed any changes to this program.

11 *Proposed Budget*

12 18. The 2014 proposed budget for the Residential New Construction Program is detailed
13 below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of
14 the cost-effective energy efficiency programs.

	2013 (Current)	2014 (Proposed)
Incentives	\$82,500	\$56,000
Non-Incentive Cost	\$156,246	\$42,342
Total Program Cost	\$238,745	\$98,342

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20 19. The last approved budget for this program, approved in Decision No. 74262, was
21 \$238,745 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014,
22 the actual expenses incurred in 2013 for this program were \$156,414. The proposed budget for this
23 program for 2014 as can be seen above is \$98,342 which represents a decrease of \$140,403 from the
24 2013 budget or roughly a 59% decrease. The Company is requesting a decrease to the budget as
25 participation levels have been lower than anticipated.

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Recommendations

20. The one approved measure in the Residential New Construction Program is found to have a benefit-cost ratio greater than one. Staff recommends continuation of the Residential New Construction program along with approval of the decrease in the budget dollars to \$98,342.

D. Existing Homes and Audit Direct Install Program

21. This program is designed to encourage homeowners to increase the energy efficiency of their homes. UNS Electric had proposed to offer five measures in 2014 for the Existing Homes and Audit Direct Install Program (all electric and dual fuel previously shown as separate measures are now displayed as one measure): Air Sealing, Air Sealing & Attic Insulation, Duct Test & Repair, ER HVAC with QI & Duct Sealing, and Shade Screens.

Proposed Budget

22. The 2014 proposed budget for the Existing Homes and Audit Direct Install is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	Current	UNS Electric Proposed	Staff Proposed
Incentives	\$399,125	\$490,500	\$399,125
Non-Incentive Cost	\$473,864	\$421,450	\$473,864
Total Program Cost	\$872,989	\$911,950	\$872,989

23. The last approved budget for this program, approved in Decision No. 74262, was \$872,989 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$866,765. The proposed budget for this program for 2014 as can be seen above is \$911,950 which represents an increase of \$38,961 from the 2013 budget or roughly a 4% increase.

Recommendations

24. As can be seen in Appendix A, Staff's analysis demonstrates that all currently approved measures, except for Shade Screens and Air Sealing, in the Existing Home and Audit Direct Install

1 Program are found to have a benefit-cost ratio greater than one Air Sealing & Attic Insulation has a
 2 benefit-cost ratio of 0.95 but would reach a ratio of 1.0 if environmental benefits were monetized.)
 3 Staff recommends continuation of the Existing Homes and Audit Direct Install program, and
 4 discontinuing those measures which are not cost-effective at this time. Given the expenses from 2013
 5 being so close to the existing budget and the discontinuation of two measures, Staff recommends that
 6 the budget remain at \$872,989 as was previously approved.

7 E. Shade Tree Program

8 *Current Program*

9 25. This is an existing program targeted to residential customers including low-income
 10 families allowing them to purchase two desert-adapted, five-gallon trees per year which must be
 11 planted on the south, west, or east side of the home. Qualifying tree purchases will result in a \$15.00
 12 credit per tree on their electric bill.

13 *Proposed Changes*

14 26. The Company had not proposed any changes to this program.

15 *Proposed Budget*

16 27. The 2014 proposed budget for the Shade Tree Program is detailed below. Overall
 17 Program Development, Analysis, and Reporting costs would be allocated across all of the cost-
 18 effective energy efficiency programs.

	2013 (Current)	2014 (Proposed)
Incentives	\$14,000	\$19,800
Non-Incentive Cost	\$25,413	\$14,300
Total Program Cost	\$39,413	\$34,100

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 24 28. The last approved budget for this program, approved in Decision No. 74262, was
 25 \$39,413 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014,
 26 the actual expenses incurred in 2013 for this program were \$31,737. The proposed budget for this
 27 program for 2014 as can be seen above is \$34,100 which represents a decrease of \$5,313 from the
 28

1 2013 budget or roughly a 13% decrease. The Company has lowered the budget to reflect more closely
2 the actual non-incentive costs incurred.

3 *Recommendations*

4 29. As can be seen in Appendix A, the Shade Tree Program is found to have a benefit-cost
5 ratio slightly higher than one. Staff recommends continuation of the Shade Tree Program along with
6 approval of the decrease in the budget dollars to \$34,100.

7 F. Residential Low Income Weatherization Program

8 *Current Program*

9 30. This program is designed to improve the energy efficiency of homes for customers
10 whose income falls within the defined federal poverty guidelines.

11 *Proposed Changes*

12 31. The Company has not proposed any changes to this program.

13 *Proposed Budget*

14 The 2014 proposed budget for the Residential Low Income Weatherization Program is detailed below.
15 Overall Program Development, Analysis, and Reporting costs would be allocated across all of the
16 cost-effective energy efficiency programs.

	Current	UNS Electric Proposed	Staff Proposed
Incentives	\$324,000	\$327,320	\$324,000
Non-Incentive Cost	\$27,817	\$46,080	\$27,817
Total Program Cost	\$351,817	\$373,400	\$351,817

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21 32. The last approved budget for this program, approved in Decision No. 74262, was
22 \$351,817 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014,
23 the actual expenses incurred in 2013 for this program were \$153,701 (according to the Company, the
24 2013 DSM Program Report for Low Income Weatherization incorporated adjustments from the
25 previous year resulting in an expense reported lower than actual). The proposed budget for this
26 program for 2014 as can be seen above is \$373,400 which represents an increase of \$21,583 from the
27 2013 budget or roughly a 6% increase.

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1 *Recommendations*

2 33. The Residential Low Income Weatherization Program is found to have a benefit-cost
3 ratio greater than one (as can be seen in Appendix A). The proposed budget for the Low Income
4 Weatherization Program incorporates an incentive of \$2,338 to weatherize 140 homes compared to
5 the budgeted 130 homes the previous year. UNS Electric has found that on average, the
6 weatherization agencies spend below the cap of \$3,000 to weatherize homes. The increase in budget
7 allows for the administration of a greater number of homes. While Staff is in agreement that allowing
8 for a greater number of homes being weatherized is advantageous to the residential customers, Staff
9 also recognizes that UNS Electric reported the completed weatherizing of only 99 households in 2013
10 and 119 in 2012. Staff recommends continuation of the Residential Low Income Weatherization
11 Program at the currently approved budget level of \$351,817.

12 G. Residential Multi-Family Program13 *Current Program*

14 34. This program is designed to promote energy efficiency in the residential multi-family
15 sector, on properties with five or more units.

16 *Proposed Changes*

17 35. The Company has not proposed any changes to this program.

18 *Proposed Budget*

19 36. The 2014 proposed budget for the Residential Multi-Family Program is detailed below.
20 Overall Program Development, Analysis, and Reporting costs would be allocated across all of the
21 cost-effective energy efficiency programs.

	2013 (Current)	2014 (Proposed)
Incentives	\$14,725	\$13,567
Non-Incentive Cost	\$48,667	\$28,379
Total Program Cost	\$63,392	\$41,946

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26 37. The last approved budget for this program, approved in Decision No. 74262, was
27 \$63,392 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014,
28 the actual expenses incurred in 2013 for this program were \$61,384. The proposed budget for this

1 program for 2014 as can be seen above is \$41,946 which represents a decrease of \$21,446 from the
 2 2013 budget or roughly a 34% decrease. The decrease in budget dollars for 2014 can be attributed to
 3 saturation of the reach of the program to the existing large scale multi-family housing facilities. In
 4 2014, efforts will be re-directed to aggregating smaller scale multi-family projects.

5 *Recommendations*

6 38. The Residential Multi-Family Program is comprised of three measures all of which
 7 Staff found to have a benefit-cost ratio greater than one (as can be seen in Appendix A). Staff
 8 recommends continuation of the Residential Multi-Family Program along with approval of the
 9 decrease in the budget dollars to \$41,946.

10 H. C&I/Schools Facilities

11 39. In Decision No. 74262, the Schools Facilities program was combined with the C&I
 12 Facilities program. UNS Electric had requested budget approval to continue this combined program.

13 *Proposed Changes*

14 40. UNS Electric had requested to add three new measures: Canopy LED, Refrigerated
 15 Case LED, and Computer Power Monitoring System. The new measures would offer non-residential
 16 customers additional opportunities to reduce their energy consumption.

17 *Proposed Budget*

18 41. The 2014 proposed budget for the C&I/Schools Facilities program is detailed below.
 19 Overall Program Development, Analysis, and Reporting costs would be allocated across all of the
 20 cost-effective energy efficiency programs.

	2013 (Current)	2014 (Proposed)
Incentives	\$544,335	\$544,335
Non-Incentive Cost	\$410,011	\$410,011
Total Program Cost	\$954,346	\$954,346

24 42. The last approved budget for this program, approved in Decision No. 74262, was
 25 \$954,346 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014,
 26 the actual expenses incurred in 2013 for this program were \$785,109. The proposed budget for this
 27 program for 2014 as can be seen above is \$954,346 which represents no change from the approved
 28 2013 budget.

1 *Recommendations*

2 43. Staff completed a benefit-cost analysis on all three new measures in addition to all of
3 the existing measures (in Appendix A) offered as part of the C&I/Schools Facilities Program. All of
4 the existing measures were found to have a benefit-cost ratio greater than or equal to one except for
5 Advanced Power Strips – Occupancy Sensors, LED Channel Signs, and Refrigerated Display Gaskets.
6 Staff's ratios for the new measures can be seen in the table below.

7 44. Staff recommends discontinuing the Advanced Power Strips -- Occupancy Sensors,
8 LED Channel Signs, and Refrigerated Display Gaskets. While discontinuing three measures, UNS
9 Electric is adding three new measures and asking for the budget to remain at the same level it was
10 approved at in Decision No. 74262. If the Commission approves the three new requested measures,
11 Staff recommends approval for 2014 of the continuation of the budget at the previously approved
12 level of \$954,346. If the Commission does not approve the three new measures, Staff recommends
13 that the budget be reduced to \$894,696, to reflect removal of the incentives associated with those
14 measures.

Measure	Ratio
Canopy LED	1.06
Refrigerated Case LED	1.78
Computer Power Monitoring System	1.12

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18 I. Bid For Efficiency Program

19 45. This program is designed so customers or project sponsors can propose their own
20 energy efficiency projects and then bid competitively for incentives within Program guidelines.

21 *Proposed Changes*

22 46. The Company has not proposed any changes to this program.

23 *Proposed Budget*

24 47. The 2014 proposed budget for the Bid For Efficiency Program is detailed below.
25 Overall Program Development, Analysis, and Reporting costs would be allocated across all of the
26 cost-effective energy efficiency programs.

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	Current	UNS Electric Proposed	Staff Proposed
Incentives	\$240,000	\$240,000	\$240,000
Non-Incentive Cost	\$83,582	\$97,441	\$83,582
Total Program Cost	\$323,582	\$337,441	\$323,582

48. The last approved budget for this program, approved in Decision No. 74262, was \$323,582 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$200,074. The proposed budget for this program for 2014 as can be seen above is \$337,441 which represents an increase of \$13,859 from the 2013 budget or roughly a 4% increase.

Recommendations

49. Staff found the Bid For Efficiency Program to be cost-effective (as can be seen in Appendix A). Given the actual expenses incurred for 2013 were less than budgeted, Staff recommends continuation of the Bid For Efficiency Program at the same previously approved budget dollars of \$323,582.

J. Retro-Commissioning Program

50. The purpose of this program is to identify deficiencies in existing facilities and make necessary adjustments to produce energy savings and other benefits, such as improved occupant comfort.

Proposed Changes

51. There was no participation in this program in 2013. UNS Electric's initial delivery model for this program included the same program being implemented for Tucson Electric Power ("TEP"). A Retro-Commissioning Program was not approved for TEP. UNS Electric is in the process of re-evaluating its delivery method to remain cost-effective with this program.

Proposed Budget

52. The 2014 proposed budget for the Retro-Commissioning Program is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

...

	2013 (Current)	2014 (Proposed)
Incentives	\$198,000	\$44,000
Non-Incentive Cost	\$58,352	\$78,116
Total Program Cost	\$256,352	\$122,116

53. The last approved budget for this program, approved in Decision No. 74262, was \$256,352 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$5,920. The proposed budget for this program for 2014 as can be seen above is \$122,116 which represents a decrease of \$134,236 from the 2013 budget or roughly a 52% decrease.

Recommendations

54. Staff found the Retro-Commissioning Program to be cost-effective (as can be seen in Appendix A). Given the Company's intention to re-evaluate the delivery method of this program, Staff recommends continuation of the Retro-Commissioning Program along with approval of the decrease in the budget dollars to \$122,116.

K. C&I Demand Response

55. The purpose of this program is to manage peak demand and mitigate system emergencies through a commercial and industrial load curtailment program. UNS Electric had requested budget approval to continue this program.

Proposed Changes

56. The Company has not proposed any changes to this program.

Proposed Budget

57. The 2014 proposed budget for the C&I Demand Response program is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	2013 (Current)	2014 (Proposed)
Incentives	\$0	\$0
Non-Incentive Cost	\$245,052	\$388,544
Total Program Cost	\$245,052	\$388,544

1 58. The last approved budget for this program, approved in Decision No. 74262, was
2 \$245,052 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014,
3 the actual expenses incurred in 2013 for this program were \$195,447. The proposed budget for this
4 program for 2014 as can be seen above is \$388,544 which represents an increase of \$143,492 from the
5 2013 budget or roughly a 59% increase. UNS Electric anticipates actively recruiting participants in
6 this program in 2014 from the 41 existing C&I customers enrolled on an interruptible rate.

7 *Recommendations*

8 59. Staff found the C&I Demand Response program to have a benefit-cost ratio greater
9 than one (as can be seen in Appendix A). Staff recommends continuation of the C&I Demand
10 Response program along with approval of the increase in the budget dollars to \$388,544 to allow the
11 Company an adequate amount of time and funding to get this program fully functioning.

12 L. Home Energy Reports Program

13 60. This program utilizes reports designed to instigate behavioral changes in customers'
14 energy consumption.

15 *Proposed Changes*

16 61. UNS Electric has planned to utilize economies of scale to control the costs of this
17 program by combining it with the Home Energy Reports Program offered by UNS Gas. The Home
18 Energy Reports Program was not approved for UNS Gas. Given that the program was not cost-
19 effective in 2013 (DSM Program Report indicated a benefit-cost ratio of 0.43) and that costs were not
20 spread across both utilities, UNS Electric has notified Staff it will be terminating this program in 2014.

21 62. The last approved budget for this program, approved in Decision No. 74262, was
22 \$242,881 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014,
23 the actual expenses incurred in 2013 for this program were \$91,106. UNS Electric's proposed budget
24 for 2014 for this program is \$50,000 to pay expenses needed to terminate the program.

25 *Recommendations*

26 63. Staff recommends the discontinuation of the Home Energy Reports Program and that
27 \$50,000 be allocated to this program in 2014.

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1 M. Behavioral Comprehensive Program

2 64. The purpose of this program is to educate residential customers on how changes in
3 behavior, including purchasing decisions, can improve energy efficiency. This program consists of
4 four subprograms: Direct Canvassing, K-12 Education, Community Education, and CFL Giveaway.

5 *Proposed Changes*

6 65. The Company has not proposed any changes to this program.

7 *Proposed Budget*

8 66. The 2014 proposed budget for the Behavioral Comprehensive Program is detailed
9 below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of
10 the cost-effective energy efficiency programs.

	2013 (Current)	2014 (Proposed)
Incentives	\$108,845	\$131,366
Non-Incentive Cost	\$120,853	\$152,433
Total Program Cost	\$229,697	\$283,809

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15 67. The last approved budget for this program, approved in Decision No. 74262, was
16 \$229,697 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014,
17 the actual expenses incurred in 2013 for this program were \$358,267. The proposed budget for this
18 program for 2014 as can be seen above is \$283,809 which represents an increase of \$54,112 from the
19 2013 budget or roughly a 24% increase.

20 *Recommendations*

21 68. All four subprograms were found to be cost-effective (as can be seen in Appendix A).
22 Given the high degree of participation and interest in these subprograms, Staff recommends
23 continuation of the Behavioral Comprehensive Program along with approval of the increase in the
24 budget dollars to \$283,809.

25 N. Education and Outreach Program

26 69. This program is responsible for the marketing of the UNS Electric portfolio as a
27 whole, as well as general consumer education about energy efficiency.

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Proposed Changes

70. The Company has not proposed any changes to this program.

Proposed Budget

71. The 2014 proposed budget for the Education and Outreach Program is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	Current	UNS Electric Proposed	Staff Proposed
Incentives	\$0	\$0	\$0
Non-Incentive Cost	\$141,884	\$161,400	\$141,884
Total Program Cost	\$141,884	\$161,400	\$141,884

72. The last approved budget for this program, approved in Decision No. 74262, was \$141,884 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$74,336. The proposed budget for this program for 2014 as can be seen above is \$161,400 which represents an increase of \$19,516 from the 2013 budget or roughly a 14% increase.

Recommendations

73. Staff understands that the Education and Outreach program is not evaluated as a benefit-cost measure but rather is a support program that enables the success of other measures. Given the actual expenses incurred for 2013 were less than budgeted, Staff recommends continuation of the Education and Outreach Program at the same previously approved budget dollars of \$141,884.

O. Residential Energy Financing Program

74. The purpose of this program is to offer home improvement loans to UNS Electric customers seeking to finance home energy efficiency improvements.

Proposed Changes

75. No program loans were issued in 2013. UNS Electric has notified Staff it will be terminating this program in 2014 due to a lack of participation.

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1 76. The last approved budget for this program, approved in Decision No. 74262, was
 2 \$275,133 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014,
 3 the actual expenses incurred in 2013 for this program were \$2,566. UNS Electric has proposed no
 4 budget for this program for 2014.

5 *Recommendations*

6 77. Staff recommends the discontinuation of the Residential Energy Financing Program
 7 and that no budget dollars be allocated to this program in 2014.

8 P. Codes Support Program

9 78. This program strives to maximize energy savings through adherence to local building
 10 energy codes and enhanced energy efficient appliance standards.

11 *Proposed Changes*

12 79. The Company has not proposed any changes to this program.

13 *Proposed Budget*

14 80. The 2014 proposed budget for the Codes Support Program is detailed below. Overall
 15 Program Development, Analysis, and Reporting costs would be allocated across all of the cost-
 16 effective energy efficiency programs.

	Current	UNS Electric Proposed	Staff Proposed
Incentives	\$0	\$0	\$0
Non-Incentive Cost	\$18,447	\$36,225	\$18,447
Total Program Cost	\$18,447	\$36,225	\$18,447

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 21 81. The last approved budget for this program, approved in Decision No. 74262, was
 22 \$18,447 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014,
 23 the actual expenses incurred in 2013 for this program were \$1,872. The proposed budget for this
 24 program for 2014 as can be seen above is \$36,225 which represents an increase of \$17,778 from the
 25 2013 budget or roughly a 96% increase.

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1. *Recommendations*

2 82. Staff understands that the Codes Support Program is not evaluated as a benefit-cost
3 measure but rather is a support program that enables the success of other measures. Given the actual
4 expenses incurred for 2013 were less than budgeted, Staff recommends continuation of the Codes
5 Support Program at the same previously approved budget dollars of \$18,447.

6 **BUDGET**

UNS Electric 2014 EE BUDGET				
	Current	UNS Proposed	Staff Proposed (with new measures)	Staff Proposed (without new measures)
	2013	2014	2014	2014
<u>Residential Programs</u>				
Efficient Products	\$766,185	\$904,245	\$904,245	\$834,727
Appliance Recycling	\$225,249	\$133,513	\$133,513	\$133,513
Res. New Construction	\$238,745	\$98,342	\$98,342	\$98,342
Existing Homes and Audit Direct Install	\$872,989	\$911,950	\$872,989	\$872,989
Shade Tree	\$39,413	\$34,100	\$34,100	\$34,100
Low Income Weatherization	\$351,817	\$373,400	\$351,817	\$351,817
Multi-Family	\$63,392	\$41,946	\$41,946	\$41,946
Subtotal	\$2,557,790	\$2,497,496	\$2,436,952	\$2,367,434
<u>C&I Programs</u>				
C&I Facilities	\$954,346	\$954,346	\$954,346	\$894,696
Bid for Efficiency-Pilot	\$323,582	\$337,441	\$323,582	\$323,582
Retro-Commissioning	\$256,352	\$122,116	\$122,116	\$122,116
C&I Demand Response	\$245,052	\$388,544	\$388,544	\$388,544
Subtotal	\$1,779,332	\$1,802,447	\$1,788,588	\$1,728,938
<u>Behavioral Programs</u>				
Home Energy Reports	\$242,881	\$50,000	\$50,000	\$50,000
Behavioral Comprehensive Program	\$229,697	\$283,809	\$283,809	\$283,809
Subtotal	\$472,578	\$333,809	\$333,809	\$333,809
<u>Support Programs</u>				
Education and Outreach	\$141,884	\$161,400	\$141,884	\$141,884
Residential Energy Financing	\$275,133	\$0	\$0	\$0
Codes Support	\$18,447	\$36,225	\$18,447	\$18,447
Program Development, Analysis and Reporting	\$143,308	\$200,000	\$200,000	\$200,000

Subtotal	\$578,772	\$397,625	\$360,331	\$360,331
Total	\$5,388,472	\$5,031,377	\$4,919,680	\$4,790,512

83. The above table details UNS Electric's proposed energy efficiency budget for 2014 and Staff's recommended budgets with and without approval of the new measures.

DSM SURCHARGE

84. Decision No. 74262 set the current DSM Surcharge at \$0.002660 per kWh. The Decision further directed Staff to re-evaluate the current DSM Surcharge after re-calculating the cost-effectiveness of UNS Electric's currently approved energy efficiency measures.

85. The chart below details UNS Electric's DSM Surcharge collections and expenses since 2008 and the impact on the under/over balance if no change is made to the DSM Surcharge in 2014.

Year	DSM Expenses	Performance Incentive	DSM Surcharge Collection	Annual Under/Over Collection Balance
2008	\$461,445	N/A	\$568,168	(\$106,723)
2009	\$1,436,777	N/A	\$1,198,367	\$238,410
2010	\$1,784,322	N/A	\$1,595,795	\$188,527
2011	\$2,113,396	\$191,462	\$1,752,607	\$552,251
2012	\$4,507,014	\$387,954	\$6,847,151	(\$1,952,183)
2013	\$3,874,609	\$345,113	\$7,160,031	(\$2,940,309)
2014*	\$4,919,681	\$451,188	\$4,466,413	\$904,456
TOTAL	\$19,097,244	\$1,375,717	\$23,588,532	(\$3,115,571)

*Estimated 2014 Expenses, Performance Incentive, and DSM Surcharge collection

86. As of the end of March 2014, UNS Electric was over-collected approximately \$4.3 million in its DSM Surcharge collections compared to expenses.

87. Given the estimation as can be seen above that UNS Electric will only have returned approximately \$900,000 of the over collection by the end of 2014, Staff recommends that the DSM Surcharge be reduced further to \$0.001500 per kWh. This would result in a monthly decrease of approximately \$0.99 for the average residential customer using 855 kWh in a month. This would also result in approximately \$1.7 million of the over collection being returned by the end of 2014.

88. Staff also recommends that this surcharge remain in effect until UNS Electric's next Energy Efficiency Implementation Plan is approved or until the next adjustor reset filing. At that

...

1 time, the amount of over collection having been returned would be evaluated again to gauge if a
2 further reduction is necessary.

3 CONCLUSIONS OF LAW

4 1. UNS Electric, Inc. is an Arizona public service corporation within the meaning of
5 Article XV, Section 2, of the Arizona Constitution.

6 2. The Commission has jurisdiction over UNS Electric, Inc. and over the subject matter
7 of the application.

8 3. The Commission, having reviewed Staff's memorandum dated May 30, 2014,
9 concludes that it is in the public interest to approve the Energy Efficiency Plan modifications as
10 discussed herein.

11 ORDER

12 IT IS THEREFORE ORDERED that the Residential 2x Incandescent, Energy Star Central
13 Air Conditioner, Energy Star Clothes Washer, Energy Star Dishwasher, Energy Star Refrigerator, and
14 Energy Star Room Air Conditioner be approved as new measures in the Efficient Products Program.

15 IT IS FURTHER ORDERED that the Heat Pump Water Heater not be approved as a new
16 measure in the Efficient Products Program.

17 IT IS FURTHER ORDERED that the Advanced Power Strips -- Load Sensor and Variable
18 Speed Pool Pump be discontinued as available measures in the Efficient Products Program.

19 IT IS FURTHER ORDERED that the Efficient Products Program be continued with a
20 budget of \$904,245.

21 IT IS FURTHER ORDERED that the Residential Appliance Recycling Program be continued
22 with a budget of \$133,513.

23 IT IS FURTHER ORDERED that the Residential New Construction Program be continued
24 with a budget of \$98,342.

25 IT IS FURTHER ORDERED that the Shade Screens and Air Sealing be discontinued as
26 available measures in the Existing Homes and Audit Direct Install Program.

27 IT IS FURTHER ORDERED that the Existing Homes and Audit Direct Install Program be
28 continued with a budget of \$872,989.

1 IT IS FURTHER ORDERED that the Shade Tree Program be continued with a budget of
2 \$34,100.

3 IT IS FURTHER ORDERED that the Residential Low Income Weatherization Program be
4 continued with a budget of \$351,817.

5 IT IS FURTHER ORDERED that the Residential Multi-Family Program be continued with a
6 budget of \$41,946.

7 IT IS FURTHER ORDERED that the Canopy LED, Refrigerated Case LED, and Computer
8 Power Monitoring System be approved as new measures in the combined C&I/Schools Facilities
9 Program.

10 IT IS FURTHER ORDERED that the Advanced Power Strips – Occupancy Sensors, LED
11 Channel Signs, and the Refrigerated Display Gaskets be discontinued as available measures in the
12 combined C&I/Schools Facilities Program.

13 IT IS FURTHER ORDERED that the combined C&I/Schools Facilities Program be continued
14 with a budget of \$954,346.

15 IT IS FURTHER ORDERED that the Bid For Efficiency Program be continued with a
16 budget of \$323,582.

17 IT IS FURTHER ORDERED that the Retro-Commissioning Program be continued with a
18 budget of \$122,116.

19 IT IS FURTHER ORDERED that the C&I Demand Response Program be continued with a
20 budget of \$388,544.

21 IT IS FURTHER ORDERED that the Home Energy Report Program be discontinued and
22 that \$50,000 be allocated as a budget in 2014 for this program to cover expenses associated with
23 terminating the program.

24 IT IS FURTHER ORDERED that the Behavioral Comprehensive Program be continued
25 with a budget of \$283,809.

26 IT IS FURTHER ORDERED that the Education and Outreach Program be continued with a
27 budget of \$141,884.

28 ...

1 IT IS FURTHER ORDERED that the Residential Energy Financing Program be
2 discontinued with no budget dollars allocated to the program in 2014.

3 IT IS FURTHER ORDERED that the Codes Support Program be approved with a budget of
4 \$18,447.

5 IT IS FURTHER ORDERED that the DSM surcharge be \$0.001500 per kWh.

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1 IT IS FURTHER ORDERED that UNS Electric, Inc. file a revised Demand Side
2 Management Adjustment Schedule in compliance with the Decision in this case within 15 days of the
3 effective date of this Decision.

4 IT IS FURTHER ORDERED that the DSM Surcharge set herein is subject to possible early
5 reset with the filing of the next UNS Electric Energy Efficiency Implementation Plan or the next
6 adjustor reset filing.

7 IT IS FURTHER ORDERED that this Decision shall become effective immediately.

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9 **BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION**

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CHAIRMAN

COMMISSIONER

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COMMISSIONER

COMMISSIONER

COMMISSIONER

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IN WITNESS WHEREOF, I, JODI JERICH, Executive
Director of the Arizona Corporation Commission, have
hereunto, set my hand and caused the official seal of this
Commission to be affixed at the Capitol, in the City of
Phoenix, this _____ day of _____, 2014.

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JODI JERICH
EXECUTIVE DIRECTOR

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DISSENT: _____

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DISSENT: _____

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SMO:CLA:sms\JMA

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Appendix A

Staff Calculated Benefit-Cost Ratios for UNS Electric Energy Efficiency Programs

Sector	Program Name	Measure Name	Status of Measure	Benefit-Cost Ratio
Residential	Efficient Products	Advanced Power Strips - Load Sensor	existing	0.80
Residential	Efficient Products	ES Integral CFL	existing	2.23
Residential	Efficient Products	Pool Pump Timers	existing	1.95
Residential	Efficient Products	Residential 2x Incandescent	new	0.95
Residential	Efficient Products	Heat Pump Water Heater	new	0.72
Residential	Efficient Products	Energy Star Central Air Conditioner	new	1.94
Residential	Efficient Products	Energy Star Clothes Washer	new	1.07
Residential	Efficient Products	Energy Star Dishwasher	new	2.39
Residential	Efficient Products	Energy Star Refrigerator	new	1.08
Residential	Efficient Products	Energy Star Room Air Conditioner	new	0.97
Residential	Efficient Products	Variable Speed Pool Pump	existing	0.90
Residential	Appliance Recycling	Freezer Recycling	existing	1.66
Residential	Appliance Recycling	Refrigerator Recycling	existing	1.66
Residential	Residential New Construction	Energy Smart Homes	existing	1.70
Residential	Existing Home	Air Sealing	existing	0.86
Residential	Existing Home	Air Sealing & Attic Insulation	existing	0.95
Residential	Existing Home	Duct Test and Repair	existing	1.13
Residential	Existing Home	ER HVAC with QI & Duct Sealing	existing	1.10
Residential	Existing Home	Shade Screens	existing	0.57
Residential	Shade Trees	Shade Trees	existing	1.05
Residential	LIW	LIW	existing	1.02
Residential	Multi-Family	ES Integral CFL	existing	1.80
Residential	Multi-Family	Faucet Aerators - Electric WH only	existing	2.42
Residential	Multi-Family	Low Flow Showerheads - Electric WH only	existing	2.04
C&I	C&I/Schools Facilities	14 SEER Packaged and Split AC's	existing	1.19
C&I	C&I/Schools Facilities	14 SEER Packaged and Split HP's	existing	2.03
C&I	C&I/Schools Facilities	15 SEER Packaged and Split AC's	existing	1.12
C&I	C&I/Schools Facilities	15 SEER Packaged and Split HP's	existing	2.00
C&I	C&I/Schools Facilities	16 SEER Packaged and Split AC's	existing	1.06
C&I	C&I/Schools Facilities	16 SEER Packaged and Split HP's	existing	1.89
C&I	C&I/Schools Facilities	Advanced Power Strips - Load Sensor	existing	1.22
C&I	C&I/Schools Facilities	Advanced Power Strips - Occupancy Sensors	existing	0.80
C&I	C&I/Schools Facilities	Advanced Power Strips - Timer Plug Strip	existing	2.78
C&I	C&I/Schools Facilities	Anti sweat heater controls	existing	1.96
C&I	C&I/Schools Facilities	Custom Measures	existing	1.91
C&I	C&I/Schools Facilities	Daylighting controls	existing	1.00
C&I	C&I/Schools Facilities	Delamping	existing	6.91
C&I	C&I/Schools Facilities	Energy efficient exit signs	existing	1.26
C&I	C&I/Schools Facilities	Evaporator Fan Controls*	existing	1.35
C&I	C&I/Schools Facilities	Exterior HIDs to T8/T5	existing	2.63
C&I	C&I/Schools Facilities	Hard Wire CFL	existing	1.15
C&I	C&I/Schools Facilities	High Efficiency Evaporator Fan Motors (ECM)	existing	1.69
C&I	C&I/Schools Facilities	High Efficiency Evaporator Fan Motors (PSC)	existing	2.06
C&I	C&I/Schools Facilities	Induction Lighting	existing	1.02
C&I	C&I/Schools Facilities	Integral Screw In CFL	existing	1.38
C&I	C&I/Schools Facilities	Integrated Refrigerated Controls and Motor Retro-fits*	existing	1.62
C&I	C&I/Schools Facilities	Interior HIDs to T8/T5	existing	3.45
C&I	C&I/Schools Facilities	LED Channel Signs	existing	0.74
C&I	C&I/Schools Facilities	Occupancy sensors	existing	1.33
C&I	C&I/Schools Facilities	Outdoor CFL	existing	3.58
C&I	C&I/Schools Facilities	Premium T8 Lighting	existing	1.49
C&I	C&I/Schools Facilities	Programmable Thermostats	existing	3.64
C&I	C&I/Schools Facilities	Reduced LPD	existing	1.34
C&I	C&I/Schools Facilities	Refrigerated Display Automatic Door Closers	existing	2.76
C&I	C&I/Schools Facilities	Refrigerated Display Gaskets	existing	0.83
C&I	C&I/Schools Facilities	Screw in cold cathode CFL	existing	2.31
C&I	C&I/Schools Facilities	Shade Screens	existing	1.00
C&I	C&I/Schools Facilities	Standard T8 Lighting	existing	1.04
C&I	C&I/Schools Facilities	Variable Speed Drives	existing	2.70
C&I	C&I/Schools Facilities	Vending Miser - Beverage Case Controls	existing	2.19
C&I	C&I/Schools Facilities	Vending Miser - Reach-in Cooler Controls	existing	2.41
C&I	C&I/Schools Facilities	Vending Miser - Snack Machine Controls	existing	1.41
C&I	C&I/Schools Facilities	Window Films	existing	1.43
C&I	C&I/Schools Facilities	Canopy LED	new	1.06
C&I	C&I/Schools Facilities	Computer Power Monitoring System	new	1.78
C&I	C&I/Schools Facilities	Refrigerated Case LED	new	1.12
C&I	C&I/Schools Facilities	Bid For Efficiency	existing	1.79
C&I	C&I/Schools Facilities	Retro-Commissioning	existing	1.37
C&I	C&I/Schools Facilities	C&I Direct Load Control (Demand Response)	existing	2.66
Behavioral Programs	Home Energy Reports	Home Energy Reports	terminating	n/a
Behavioral Programs	Behavioral Comprehensive Program	CFL Outreach Promotion (13W CFLs)	existing	1.70
Behavioral Programs	Behavioral Comprehensive Program	Community Education Kit	existing	1.86
Behavioral Programs	Behavioral Comprehensive Program	Direct Canvasing	existing	1.78
Behavioral Programs	Behavioral Comprehensive Program	K-12 Education Kit	existing	3.65
Support Program	Education and Outreach	Education and Outreach	existing	n/a
Support Program	Residential Financing	Residential Financing	terminating	n/a
Support Program	Codes Support	Codes Support	existing	n/a

* These two C&I measures were inadvertently omitted from Appendix A to Decision No. 74262 dated January 7, 2014. These two measures were previously approved in Decision No. 70524 dated September 30, 2008.