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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

Arizona Corporation Commission
DOCKETED
MAR 19 2014
DOCKETED BY nr

IN THE MATTER OF THE APPLICATION OF ARIZONA PUBLIC SERVICE COMPANY FOR APPROVAL OF ITS 2013 DEMAND SIDE MANAGEMENT IMPLEMENTATION PLAN AND REQUEST FOR RELIEF FROM ARIZONA ADMINISTRATIVE CODE R14-2-2404 (E) AND (H)

DOCKET NO. E-01345A-12-0224

DECISION NO. 74406

ORDER

Open Meeting
March 11 and 12, 2014
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. Arizona Public Service Company ("APS" or "Company") is certificated to provide electric service within portions of Arizona, pursuant to authority granted by the Arizona Corporation Commission ("Commission").

**INTRODUCTION**

2. On June 1, 2012, APS filed its proposed 2013 Demand-Side Management ("DSM") Implementation Plan ("2013 DSM Plan") in compliance with the Arizona Administrative Code ("A.A.C.") Electric Energy Efficiency Standards ("EE Rules") R14-2-2401 through R14-2-2419. In its proposed 2013 DSM Plan, APS has also requested a waiver of A.A.C. R14-2-2404.E, which specifies the amount of energy savings from building codes that can be applied to meeting the standard and A.A.C. R14-2-2404.H, which indicates that energy savings from energy efficiency improvements to a utility's delivery system are prohibited from counting toward the EE Standard.

APS's 2013 DSM Plan describes the DSM and Demand Response ("DR") programs that it proposes to be continued, modified, or discontinued.

3. On December 13, 2012, APS filed a supplement ("2013 DSM Supplement") to its 2013 DSM Implementation Plan, which provides actual estimated budget and energy savings and benefits for each proposed program. On December 31, 2012, APS filed for approval revisions to its performance incentive pursuant to Decision No. 73183 (May 24, 2012). APS is requesting approval of its proposed revisions to its performance incentive structure to be incorporated in its 2014 DSM Implementation Plan.

4. During the June 11, 2013 Open Meeting, the Commission directed that a generic docket (Docket No. E-00000XX-13-0214) be opened to address DSM and energy efficiency. The Commission indicated a desire to review the effectiveness of existing DSM and energy efficiency programs and measures before approving new ones and only approved recently-filed DSM/EE Plans for certain utilities as they related to the plans' "status quo" (i.e. new programs and/or measures or modifications and/or enhancements to existing programs were not approved). Due to the Commission's action, Staff will recommend similar treatment for the APS 2013 DSM Plan. A comprehensive list of all the current DSM/EE measures that have been approved by the Commission is attached as Appendix1.

**2013 DSM PLAN**

5. In its 2013 DSM Plan, APS proposes to continue implementation of existing EE and DR programs that have been previously approved by the Arizona Corporation Commission ("Commission"). There are no new programs proposed by APS in its 2013 DSM Plan. However, APS is proposing to modify and/or eliminate current Commission approved measures. APS's current portfolio includes a combination of programs targeted to multiple customer segments as detailed below.

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***Residential Programs***

- Consumer Products
- Existing Homes HVAC
- Home Performance with ENERGY STAR®
- Residential New Construction*
- Appliance Recycling
- Low Income Weatherization*
- Conservation Behavior*
- Multi-Family Energy Efficiency*[1]
- Shade Trees*

***Non-Residential Programs (Solutions for Business)***

- Large Existing Facilities*
- New Construction*[1]
- Small Business*
- Schools*
- Energy Information Services*

***Demand Response Programs***

- APS Peak Solutions® Program*
- Super Peak Rate*
- Time-of-Use Rates*
- Critical Peak Pricing Rates*
- Interruptible Rate and Peak Time Rebate*[2]
- Home Energy Information Pilot Program

6. APS is not proposing any changes to the programs marked with an asterisk listed above. Therefore, Staff is not addressing these programs at this time. The focus of Staff's review will be those programs to which APS is proposing modifications.

***<u>Proposed Program Changes</u>***

7. The existing programs that APS is proposing modifications to include the: Consumer Products Program, Existing Homes HVAC Program, Home Performance with ENERGY STAR®, Appliance Recycling Program, Multi-Family Energy Efficiency Program, Non-Residential New Construction, and Home Energy Information Pilot Program. These modifications are detailed in the table below.

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[1] APS is not proposing any changes to the structure of the program. However, APS is proposing changes to the incentive level provided.

[2] Approved as Demand Response programs in Decision No. 73183.

**2013 Proposed Program Modifications**

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|---|
| **Residential Consumer Products** |
| • Add "2x" incandescent light bulbs |
| • Add Light Emitting Diode ("LED") light bulbs |
| • Suspend seasonal pool pump timers |
| **Residential Existing Homes** |
| • Separate current duct test and repair rebate into two tiers |
| • Reduce the rebate amount for heating ventilation and air conditioning ("HVAC") quality installation |
| • Continue the HVAC Diagnostic on a permanent basis |
| **Residential Home Performance with ENERGY STAR®** |
| • Discontinue the shade screen rebate |
| • Discontinue the direct install faucet aerators |
| • Add direct install smart strips |
| • Postpone implementation of performance based incentives |
| • Separate current duct test and repair rebate into two tiers |
| **Residential/Non-Residential Appliance Recycling** |
| • Increase max limit of participation to 50 fridges/freezers for multi-family facilities |
| • Increase the rebate level from $30 to $50 for residential and non-residential |
| **Multi-Family Energy Efficiency Program** |
| • Discontinue BOP Renovation Option |
| • Reduce the BOP incentive amount |
| **Non-Residential New Construction/Renovation** |
| • Reduce the incentive levels for the whole building measure |
| • Reduce the design cap incentive from $125,000 to $50,000 |
| **Home Energy Information Pilot Program** |
| • Remove in-home energy information display |
| • Extension of program through the end of 2014 |
| • Continue to recover carrying costs until next rate case |
| • Increase non-capital costs and carrying costs collected through DSMAC |

## A. Consumer Products Program

*Current Program*

8. The current program includes two measures: high-efficiency Environmental Protection Agency ("EPA")/Department of Energy ("DOE") ENERGY STAR® approved lighting and energy efficient variable speed pool pumps and seasonal pool pump timers. For the EPA/DOE lighting measure, APS solicits discount pricing from compact fluorescent lamps ("CFLs") manufacturers and distributes the CFLs through local retailers. The discounted pricing is passed on to customers through a negotiated agreement with lighting manufacturers and retailers.

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*Proposed Changes*

9. First, APS is proposing a new efficient lighting measure designed to promote the purchase of "2x" incandescent bulbs ("2x bulbs"). The 2x bulbs use new technology that provide the same lighting quality of traditional incandescent bulbs while using half the energy and lasting twice as long. The 2x bulbs provide an energy saving alternative for customers who do not like CFLs. APS is proposing to provide an incentive of up to 50 percent of the incremental cost per bulb. However, the 2x bulbs are not yet available in retail stores in APS's service area. According to APS, the 2x bulbs are available in limited quantities online.

10. In addition, APS is proposing a new efficient measure designed to promote the purchase of LED bulbs. According to APS, LEDs are currently the most efficient lighting technology available for residential lighting applications. LEDs currently provide the same light output as a 60 watt incandescent bulb while using only 12 watts of energy, making LEDs five times more efficient. In addition, LEDs have an average life span of twenty thousand hours and do not contain mercury. Despite having higher incremental costs compared to traditional incandescent bulbs, the longer life and lower operating costs of LEDs remain cost effective. APS is proposing to offer an incentive of up to 50 percent of the incremental cost per bulb.

11. Pursuant to Decision No. 72032 (December 10, 2010), APS has updated the energy savings and cost effectiveness analyses for CFLs to address the Energy Independence and Security Act ("EISA") national lighting efficiency standards, which went into effect in January 2012. These standards are being phased in over a three-year period. The standards apply to 100 watt incandescent bulbs in 2012, 75 watt incandescent bulbs in 2013, and 60 watt incandescent bulbs in 2014. The savings analysis for 100 and 75 watt equivalent CFLs now uses an updated baseline, which is an incandescent bulb that meets the new EISA standards. For example, and EISA compliant bulb will produce close to the equivalent light output of today's 100 watt incandescent bulbs while using only 75 watts of energy. By comparison a CFL only uses 23-26 watts (depending on the type of CFL bulb) to produce the same amount of light.

12. Finally, APS is proposing to suspend seasonal pool pump timer measure due to the lack of availability of the products.

*Proposed Budget*

13. The proposed budget for the Consumer Products Program for 2013 is presented in the table below:

**2013 Proposed Consumer Products Program Budget**

| | |
|---|---|
| Rebates/Incentives | $5,161,000 |
| Training/Technical Assistance | $32,000 |
| Consumer Education | $77,000 |
| Program Implementation | $2,260,000 |
| Program Marketing | $770,000 |
| Planning and Administration | $500,000 |
| Financing | $0 |
| **Total Program Costs** | **$8,800,000** |
| Incentives as % of Total Budget | 59% |

*Cost Effectiveness*

14. Arizona Administrative Code R14-2-2412.B requires the Societal Test be used for determining the cost-effectiveness of a DSM program or measure. Under the Societal Test, in order to be cost-effective, the ratio of benefits to costs must be greater than one. That is, the incremental benefits to society of a program must exceed the incremental costs of having the program in place.

15. Staff's review of the benefits and costs associated with the proposed additional measures in the Consumer Products Program found that the 2x incandescent bulbs and the LED bulbs are cost effective. Staff's benefit-cost analysis is presented in the table below.

| Measure | #of Units | Present Value DSM Savings | Present Value DSM Costs | Benefit/Cost ratio |
|---|---|---|---|---|
| 2x incandescent bulbs | 25,000 | $41,308.47 | $29,829.22 | 1.48 |
| LED bulbs | 200,000 | $3,423,865.12 | $3,180,790.77 | 1.08 |

*Recommendations*

16. Although these measures are cost effective, Staff does not recommend approval of the introduction of the 2x incandescent and LED bulbs because of the Commission's desire to preserve the status quo while it evaluates the effectiveness of the existing programs and measures. Because seasonal pool pump timers are currently not available, Staff has recommended that APS be allowed to discontinue the seasonal pool pumps measure. Lastly, Staff has recommended

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approval of the Consumer Products Program at its current Commission approved budget of $7,524,000.

**B. Existing Homes Program-Heating Ventilating Air Conditioning ("HVAC")**

*Current Program*

17. The current program provides financial incentives, contractor training, and consumer education to promote the proper installation and maintenance of energy efficient HVAC systems. The current Existing Homes Program HVAC includes the Air Conditioner ("AC")/Quality Installation ("QI") Rebate, Duct Test and Repair, and HVAC Diagnostics measures.

18. First, the AC/QI Rebate measure offers financial incentives to homeowners for buying energy efficient equipment (all Seasonal Energy Efficiency Ratio "SEER" levels and Energy efficiency Ratio "EER" of 10.8 or above) that is installed in accordance with the program requirements for air flow, refrigerant charge, and sizing. APS requires all residential AC/QI rebates to meet APS's quality install standards. Secondly, the Duct Test and Repair provides financial incentives for customers to have their HVAC system's duct work tested for leakage and repaired. The incentive for the current Duct Test and Repair measure is 75 percent of the job cost up to a $250 maximum. Finally, the HVAC Diagnostics measure provides financial incentives to customers who have their existing AC unit or heat pump tuned-up to improve efficiency. The tune-up includes a correction of the refrigerant charge, leak repair (if necessary), condenser coil cleaning, and airflow correction. These activities are verified on-site during the tune-up process with a diagnostic system that records the equipment status before and after the tune-up is performed.

*Proposed Changes*

19. APS is not proposing any changes to the AC/QI Rebate measure; however APS is proposing to reduce the AC/QI rebates from $270 to $245, citing a decrease in the incremental cost. The reduction in the AC/QI rebate amount would ensure that APS remains in compliance with Decision No. 68488 (February 23, 2006) which specifies that incentives are not to exceed 75

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percent of the incremental costs of a measure. The current HVAC Diagnostics measure was approved in Decision No. 72060 (January 6, 2011). APS is proposing to continue the HVAC Diagnostics measure without any changes to the structure of the measure. In addition, APS is proposing to separate the existing Duct Test and Repair measure into the following two tiers.

- Tier 1: Prescriptive Duct Repair would require seal and/or repair work on the prescribed areas. This would not require Test-In and Test-Out with air leakage measurement equipment. The incentive would be 75 percent of the job cost up to a $200 maximum.
- Tier 2: Duct Test and Repair (the current measure structure) includes the prescriptive work described in the Tier 1 level and would also require the Test-In and Test-Out with air leakage measurement equipment. The incentive would be 75 percent of the job cost up to a $400 maximum.

20. APS states that it is proposing the prescriptive Duct Repair incentive in an effort to expand the reach of the Duct repair measure. In addition, APS states that many HVAC contractors do not take advantage of the current rebate due to the time and expense associated with the air leakage tests required to receive the rebate. The prescriptive Duct Repair (Tier 1) incentive would allow contractors who do not take advantage of the current rebate an opportunity to receive an incentive for simple duct work. The Duct Test and Repair (Tier 2) incentive would increase in an effort to recognize the larger jobs and to create separation from the prescriptive Duct Repair incentive.

*Proposed Budget*

21. The proposed budget for the Existing Homes Program for 2013 is presented in the table below:

**2013 Existing Homes Program Proposed Budget**

| | |
|---|---:|
| Rebates/Incentives | $3,671,000 |
| Training/Technical Assistance | $160,000 |
| Consumer Education | $110,000 |
| Program Implementation | $1,303,000 |
| Program Marketing | $270,000 |
| Planning and Administration | $356,000 |

| | |
|---|---|
| Financing | $30,000 |
| **Total Program Costs** | **$5,900,000** |
| Incentives as % of Total Budget | 62% |

*Cost Effectiveness*

22. Staff's review of the benefits and costs associated with the proposed additional measure in the Existing Homes HVAC Program found that the prescriptive Duct Repair (Tier 1) measure is cost effective with a benefit cost ratio of 1.57. Staff's benefit-cost analysis is presented in the table below.

| Measure | #of Units | Present Value DSM Savings | Present Value DSM Costs | Benefit/Cost ratio |
|---|---|---|---|---|
| Prescriptive Duct Repair | 4,000 | $2,907,881.70 | $1,852,338.99 | 1.57 |

23. The existing Duct Test and Repair (Tier 2) measure approved in Decision No. 73089 was found to be cost effective.

*Recommendations*

24. To preserve the status quo, Staff has not recommended that the existing Duct Test and Repair measure be split into two tiers. However, Staff has recommended approval of the proposed reduction in the incentive level for AC/QI from $270 to $245. In addition, Staff has recommended approval of APS's revised budget of $5,900,000 which is a reduction from the current Commission-approved budget of $6,336,000.

**C. Home Performance with ENERGY STAR® ("HPES") Program**

*Current Program*

25. The current HPES Program promotes a whole house approach to energy efficiency. The program offers incentives and financing for improvements to the building envelope of existing residential homes with APS's service area. The current HPES Program includes measures such as air sealing, insulation, duct sealing, faucet aerators, and low flow showerheads. In addition, the HPES Program utilizes certifies contractors to perform detailed checkups on a customer's home to diagnose energy inefficiencies. The HPES Checkup provides a comprehensive list of potential improvements that would make a customer's home more energy efficient. A customer can choose the improvements, if any, to be installed by the contractor. The cost of the HPES Checkup is $99

and includes ten CFLs, one low flow showerhead, and two faucet aerators, in addition to the evaluation and energy efficiency recommendations for the home. The contractor who completes the HPES Checkup receives a $200 incentive after submitting documentation that is then approved by APS. The current HPES Program also provides incentives for the main components of the program, listed below:

- Duct Test and Repair -The incentive for the current Duct Test and Repair measure is 75 percent of the job cost up to a $250 maximum.
- Air Sealing-The incentive for the current Air Sealing measure is 75 percent of the job cost up to a $250 maximum.
- Insulation with Air Sealing-The current incentive for the Insulation with Air Sealing measure is 75 percent of the job costs up to a $500 maximum.
- Shade Screen-The current incentive for the Shade Screen Measure is $1 per square foot up to a maximum of $250.
- Performance Based Rebates:

**Current Performance Based Rebate Structure**

| Incentive Based on Whole House Energy Savings | Incentive $/kWh | Total Incentive Cap |
|---|---|---|
| Tier 1: 10%-15% | $0.25 | $3,000 |
| Tier 2: 15%-20% | $0.30 | $3,000 |
| Tier 3: 20%-30% | $0.35 | $3,000 |
| Tier 4: >30% | $0.40 | $3,000 |

26. Customers who participate in the HPES can also participate in the Residential Energy Efficiency Financing Program ("REEF"). The REEF Program offers customers financing for energy efficiency improvements. In addition, Customers may also participate in other APS residential incentive measures like the Consumer Products Program and the Appliance Recycling Program. Measures included in these programs are also recommended when appropriate as part of the HPES Checkup.

*Proposed Changes*

27. APS will continue to offer the shade screen measure as part of the HPES Program but is proposing to discontinue the shade screen rebate, to improve the Program's cost

effectiveness. APS is also proposing to remove the low flow faucet aerator measure from the HPES Program. According to APS, the installation rate of the low flow faucet aerators has been lower than expected. As a replacement for the faucet aerators, APS is proposing to add Direct Install Smart Strips. The smart strips will be installed if a customer has a home entertainment system or home office. The smart strip links one home electronic device to a series of other electronics. If the main device is shut off, the smart strip will terminate power to the other linked devices. Further, APS is proposing to separate the existing HPES Duct Test and Repair measure into two tiers (as described in the Existing Homes Program section). Finally, APS is proposing to postpone the performance-based rebate structure until it can be further evaluated. This measure was approved in Decision No. 73089 (April 5, 2012) but has not yet been implemented.

*Proposed Budget*

28. The proposed budget for the Home Performance with ENERGY STAR® Program for 2013 is presented in the table below:

**2013 Home Performance with ENERGY STAR® Program Proposed Budget**

| | |
|---|---|
| Rebates/Incentives | $3,927,000 |
| Training/Technical Assistance | $50,000 |
| Consumer Education | $75,000 |
| Program Implementation | $900,000 |
| Program Marketing | $150,000 |
| Planning and Administration | $249,000 |
| Financing | $175,000 |
| **Total Program Costs** | **$5,526,000** |
| Incentives as % of Total Budget | 71% |

*Cost Effectiveness*

29. The cost effectiveness for the Prescriptive Duct Repair and the Duct Test and Repair measures are included in the Existing Homes Program section. Staff's review of the benefits and costs associated with the proposed additional measure in the Home Performance with ENERGY STAR® Program found that the Direct Install Smart Strips measure is cost effective. Staff's benefit-cost analysis is presented in the table below.

| Measure | #of Units | Present Value DSM Savings | Present Value DSM Costs | Benefit/Cost ratio |
|---|---|---|---|---|
| Direct Install Smart Strips | 2,750 | $ 82,894.93 | $ 77,938.04 | 1.06 |

*Recommendations*

30. Staff has not recommended that the existing Duct Test and Repair measure be revised as described in the Existing Homes Program HVAC section above. In addition, Staff has not recommended that the smart strip measure be approved. Further, Staff has recommended that the performance based rebate structure not be implemented at this time. Staff has recommended that the low flow faucet aerator measure and the rebate for the shade screen measure be discontinued for the reasons stated above. Lastly, Staff has recommended that the budget for the HPES Program be approved at its current Commission-approved level of $5,108,000.

**D. Appliance Recycling Program (Residential and Non-Residential)**

*Current Program*

31. The current Appliance Recycling Program targets the removal of functional second refrigerators and freezers in residential households, businesses, and multi-family properties. Many of the appliances that are replaced remain functional and become secondary units that are underutilized energy-consuming appliances in a garage or a basement. In an effort to remove older inefficient appliances from the grid, APS currently offers a $30 per unit rebate to customers for free pick-up and recycling. In addition, APS has partnered with Sears to offer this program to customers that purchase new refrigerators and freezers.

32. Residential customers are currently limited to two appliances that can be recycled, per household, per year. Currently, non-residential customers are limited to two appliances, per account, per year.

*Proposed Changes*

33. APS is proposing to increase the maximum number of appliances that can be recycled for non-residential customers to 50 units, per meter, per year. APS states that it has received several requests from non-residential customers to expand the participation limit. In addition, APS is proposing to increase the current rebate from $30 per unit to $50 per unit from residential and non-residential customers. APS states that the increased rebate would be in line with the rebate level of Salt River Project's $50 rebate level. Because the two service areas benefit

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synergistically from each company's advertising, APS believes that offering the same rebate would be less confusing to customers who which to participate in the program.

*Proposed Budget*

34. The proposed budget for the Appliance Recycling Program for 2013 is presented in the table below:

**<u>2013 Appliance Recycling Program Proposed Budget</u>**

| | |
|---|---|
| Rebates/Incentives | $462,000 |
| Training/Technical Assistance | $0 |
| Consumer Education | $23,000 |
| Program Implementation | $750,000 |
| Program Marketing | $215,000 |
| Planning and Administration | $150,000 |
| Financing | $0 |
| **Total Program Costs** | **$1,600,000** |
| Incentives as % of Total Budget | 29% |

*Cost Effectiveness*

35. The current Appliance Recycling Program was found to be cost effective and initially approved in Decision No. 71444 dated December 23, 2009.

*Recommendations*

36. Staff has not recommended approval of expanding the maximum number of appliances that can be recycled for non-residential customers to 50 units, per meter, per year. In addition, Staff has not recommended approval of increasing the current rebate from $30 per unit to $50 per unit from residential and non-residential customers. However, Staff has recommended approval of the revised budget which is a reduction from the current Commission-approved budget of $1,633,000.

**E. Multi-Family Energy Efficiency Program ("MEEP")**

*Current Program*

37. The current MEEP program targets multifamily properties and dormitories to promote energy efficiency. The MEEP takes a two track approach to address the challenges of reaching the multifamily market. The first track is a direct install program that provides energy efficient CFLs, showerheads, and faucet aerators to retrofit each dwelling unit in the community. These measures are provided at no cost the multifamily community but are required to be installed

by the facility personnel. The direct install program also works through the APS Solutions for Business to provide energy assessments to assist communities in identifying additional energy savings opportunities and available APS rebates within the multifamily facility but outside of the individual dwelling (i.e. common area buildings, swimming pools, laundries, and outdoor lighting).

38. Track two is a new construction/renovation program that offers a per dwelling rebate from $650 to $900 for projects that build or renovate to a higher level of energy efficiency. The rebate amount increases as a higher level of energy efficiency is achieved. The energy efficiency requirements are modeled after the ENERGY STAR® Qualified Homes National Attached Home Builder Option Package. Builders can choose from one of four Builder Option Packages ("BOP") and achieve compliance through a prescriptive or performance path. The prescriptive path offers a list of mandatory and optional measures that are designed to deliver the program's required energy savings. The mandatory measures maybe matched with the optional measures of the builder's choice. Each BOP requires a different number of optional measures to reach compliance.

39. The performance path allows builders to achieve compliance by using any chosen building design as long as the building's performance when tested is verified to deliver the minimum energy savings required. These projects must be tested by a certified Home Energy Rating System ("HERS") rater and assigned a HERS rating. The HERS is an index used to measure, test, and rate building performance. BOP compliance is reached when the HERS rating meets or exceeds the minimum required HERS ratings established for each BOP. The minimum HERS index scores for each BOP is presented in the table below.

**MEEP New Construction/Renovation Performance Standards**

| Builder Option Package | HERS Score |
|---|---|
| BOP 1 | 81 |
| BOP 2 | 78 |
| BOP 3 | 75 |
| BOP Renovation | 79 |

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40. APS also provides a design incentive for builders that want to use energy modeling to create their project building designs. The incentive offsets the upfront costs of energy modeling by paying 50 percent of the energy modeling costs up to a maximum of $5,000.

*Proposed Changes*

41. APS is proposing to discontinue the BOP Renovation option because it is no longer cost effective. In addition, based on information APS is proposing to reduce the BOP incentive levels, as specified in the table below, due to growing demand and limited funding.

| **Builder Option Package** | **Current Incentive** | **Proposed Incentive** |
|---|---|---|
| BOP 1 | $650 | $200 |
| BOP 2 | $800 | $300 |
| BOP 3 | $900 | $400 |

*Proposed Budget*

42. The proposed budget for the MEEP for 2013 is presented in the table below:

**2013 MEEP Proposed Budget**

| | |
|---|---|
| Rebates/Incentives | $766,000 |
| Training/Technical Assistance | $0 |
| Consumer Education | $10,000 |
| Program Implementation | $804,000 |
| Program Marketing | $20,000 |
| Planning and Administration | $150,000 |
| Financing | $0 |
| **Total Program Costs** | **$1,750, 000** |
| Incentives as % of Total Budget | 46% |

*Cost Effectiveness*

43. Decision No. 73089 found the current Multi-Family Energy Efficiency Program to be cost effective.

*Recommendations*

44. Staff has recommended approval of APS's proposal to eliminate the BOP Renovation option because it is no longer cost effective. In addition, Staff has recommended

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approval of the reduced BOP incentive level. However, Staff has recommended that the budget be approved at its current Commission-approved level of $1,653,000.

**F. Non-Residential New Construction Program**

*Current Program*

45. The current Non-Residential New Construction program is comprised of three components:

- Design Assistance;
- Prescriptive Measures; and
- Custom Efficiency Measures

46. Design Assistance involves efforts to integrate energy efficiency measures into a customer's design process to influence equipment/system selection and specification as early in the design process as possible. Prescriptive Measures incentives are available for energy efficiency improvements in measures such as lighting, HVAC, motors, building envelope, and refrigeration. The Custom Efficiency Measures, which includes the Whole Building Design component, influences customers, developers, and design professionals to design, build and invest in higher performing building through a stepped performance incentive structure with the incentive level increasing as the building performance improves. The Whole Building Design incentives are designed to complement the Leadership in Energy and Environmental Design ("LEED") green building certification system which was developed by the United States Green Building Council.

47. As part of the Whole Building Design component, APS currently offers incentives for owners/developers that range from $0.10 to $0.26 per kWh saved during the first year of operation. The incentives are tied to savings ranging from 10 percent to 30 percent above the American Society of Heating, Refrigeration, and Air Conditioning Engineers ("ASHRAE") 90.1 - 2007 building standard baseline. The maximum incentive for owners/developers is 75 percent of the incremental cost, up to $500,000[3] per customer, per year. Incentives for the building/design teams range from $0.04 to $0.12 per kWh saved during the first year of operation for savings from

[3] Decision No. 72088 increased the maximum incentive from $300,000 to $500,000.

10 percent to 30 percent above ASHRAE 90.1 – 2007 building standard baseline. The maximum incentive for building/design team is $125,000.

*Proposed Changes*

48. APS is proposing to reduce the incentive levels for the Whole Building Design component in order to reduce the New Construction Program budget. APS is proposing to offer incentives for owners/developers that range from $0.06 to $0.14 per kWh saved during the first year of operation. In addition, incentives paid for building/design teams would range from $0.02 to $0.05 per kWh saved during the first year of operations. Further, APS is proposing to reduce the maximum incentive for building/design teams to $50,000.

*Proposed Budget*

49. The proposed budget for the Non-Residential New Construction Program for 2013 is presented in the table below:

**2013 Non-Residential New Construction Proposed Budget**

| | |
|---|---:|
| Rebates/Incentives | $4,129,024 |
| Training/Technical Assistance | $113,000 |
| Consumer Education | $28,800 |
| Program Implementation | $831,000 |
| Program Marketing | $105,000 |
| Planning and Administration | $130,000 |
| Financing | $0 |
| **Total Program Costs** | **$5,336,824** |
| Incentives as % of Total Budget | 77% |

*Cost Effectiveness*

50. Decision No. 71460 found the Non-Residential New Construction Program to be cost-effective.[4]

*Recommendations*

51. Staff has recommended approval of APS's proposal to reduce the incentive levels offered, as described above. However, Staff has recommended that the budget for the Non-

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[4] Decision Nos. 72088 and 73089 approved modifications to the existing program that did not affect the cost-effectiveness of the program.

Residential New Construction Program be approved at its current Commission-approved level of $3,478,000.

**DEMAND RESPONSE ("DR")/LOAD MANAGEMENT PROGRAMS**

**G. Interruptible Rate and Peak Time Rebate Program**

52. Pursuant to Decision No. 73183 (May 24, 2012), the Commission approved two additional demand response programs, an experimental peak time rebate program for residential customers and an interruptible rate for extra-large business customers.

53. The residential peak time rebate program provides a bill credit to the customer for the kWh they reduce during the specified critical hours. The kWh reduction is an estimated amount based on the actual metered usage versus the expected or "baseline" usage during the specified hours. The program targets the same critical hours as the critical peak pricing program. APS will experiment with both concepts until the next rate case; at which time APS will determine which rate concept should be offered for permanent deployment.

54. The interruptible rate program offers demand response to extra-large business customers that are not eligible for the Peaks Solutions program. APS states that participants are incented to reduce load to a pre-determined level during called critical days. The incentives vary by options, which are chosen by the customer. These options include the maximum critical days per year and the notification lead time.

*Recommendations*

55. Staff has recommended that the residential peak time rebate program and the interruptible rate program remain in effect as previously approved by the Commission.

**H. Home Energy Information Pilot Program**

*Current Program*

56. In Decision No. 72214, (March 3, 2011) the Commission approved APS's Home Energy Information Pilot Program ("HEI Pilot"). The HEI Pilot is designed to test available Home Area Network technologies and determine communication devices, DR strategies, and the mix of "smart" home applications that can be most effectively employed in a residential setting. The HEI Pilot is designed to assess customer acceptance, value, and frequency of usage of in-home energy

displays or other communication devices intended to assist customers in managing their daily energy usage.

57. The Pilot was initially planned to be conducted over two consecutive summer seasons (2011 and 2012) allowing APS to select technology vendors, solicit residential participants, install devices, and communication systems, and determine measurement and evaluation techniques. In Decision No. 72215 (March 3, 2011), the Commission ordered APS to file a mid-point evaluation report by December 31, 2011 and a final report by December 31, 2012 for the HEI Pilot Program. The reports were to provide an assessment on information gathered on the Program and state why APS believed each program should or should not be fully implemented, respectively.

58. Due to the delay in the initial approval and implementation of the HEI Pilot, the Commission granted APS an extension of the program until December 31, 2013, in Decision No. 73089 (April 5, 2012). However, APS was limited to the original budgets approved for the program in Decision No. 72214. On December 31, 2012, APS filed its mid-point assessment report on the HEI Pilot Program, as required in Decision No. 72215.

59. The HEI Pilot includes the following technology assessment programs:

A. Critical Peak Pricing with Consumer Control Device
B. In–Home Energy Information Display
C. Smart Thermostat or Control Switch with APS Direct Load Control
D. "Smart" Communications Devices (i.e. smart phones, Personal Digital Assistant, and Computer Energy Information)
E. Pre-Pay Energy Service

60. The data collected and analyzed in the HEI Pilot will allow APS to better design and implement future DR, Energy Efficiency, and smart grid applications. The Pre-Pay element of the HEI Pilot was deployed in July 2012. APS states that the development of the other technologies has taken more time and money than initially anticipated because these programs are complex and require several advanced systems to be securely integrated between APS and its vendors.

61. The initial budget approved in Decision No. 72214 consisted of $2,835,000 of non-capital related costs and $698,837 of capital related carrying costs for a total of $3,533,837.

*Proposed Program*

62. APS is proposing to remove the in-home energy information display assessment program from the HEI Pilot. APS states that it has determined that in-home energy information display is not viable based on system integration complexities. Therefore, the $23,870 in costs associated with the in-home energy information display would be removed from the proposed budget. APS is requesting that the HEI Pilot be extended, through the end of 2014, to capture two full consecutive summer seasons of data for the Measurement, Evaluation, and Research ("MER") study. In addition, APS is requesting that it be allowed to continue to recover the carrying costs associated with the HEI Pilot through the Demand-Side Management Adjustor Charge ("DSMAC") until the next rate case proceeding.

63. APS is also requesting that the Commission approve an additional $310,000 of non-capital program costs (above the $2,835,000) through the extension period (through the end of 2014). Finally, APS is requesting that the Commission approve an additional $1.05 million of capital costs (above the $3,019,900) through the extension period ending December 31, 2014, plus the amortization and recovery through the DSMAC of carrying costs associated with this additional capital spending over the 48 months ending July 1, 2016. Only non-capital costs and the carrying costs[5] associated with the capital spending are collected through the DSMAC. The carrying costs associated with the capital spending that would be recovered through the DSMAC in 2013 would amount $1,140,476. The non-capital program costs that would be recovered through the DSMAC in 2013 would amount to $1,676,209 (which includes the removal of the $23,870 for the in-home energy information display).

*Proposed Budget*

64. The proposed budget for the HEI Pilot Program (excluding the in-home display) for 2013 is presented in the table below:

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[5] Carrying costs include depreciation expense at rates established by the Commission, property taxes, and return on both debt and equity at the pre-tax weighted average cost of capital.

**2013 HEI Pilot Proposed Budget**

| | |
|---|---|
| **Non-Capital Program Costs** | **$1,676,209** |
| Equipment/Audits[6] | $951,918 |
| Training/Technical Assistance | $0 |
| Consumer Education | $14,100 |
| Program Implementation | $212,317 |
| Program Marketing | $45,900 |
| Planning and Administration | $198,763 |
| MER | $253,211 |
| **Capital Carrying Costs** | **$1,140,476** |
| | |
| **Total Costs Recovered through DSMAC in 2013** | **$2,816,685[7]** |

*Cost Effectiveness*

65. Staff's review of the benefits and costs associated with the HEI Pilot Program found it to be cost effective. Technology assessment programs A-D would be combined rather than offered to customers individually. However, the prepay element would be offered individually. Therefore, Staff's benefit-cost analysis was done in the same manner for consistency. Staff's benefit-cost analysis (excluding the in-home display) is presented in the table below.

| Measure | #of Units | Present Value DSM Savings | Present Value DSM Costs | Benefit/Cost ratio |
|---|---|---|---|---|
| Prepay | 40,000 | $ 56.15 | $ 18.97 | 2.96 |
| Technology Assessment Programs A-D | 25,000 | $ 1,054.57 | $ 722.16 | 1.46 |

*Recommendations*

66. Although the proposed modifications are not in keeping with the status quo, Staff understands that the program has progressed well beyond the pilot phase and is in near full production. According to APS, the costs incurred reflect activities related to up-front program implementation and IT integration efforts, which include software development and hardware procurement, communications to support broadband internet and advanced metering, and activities to integrate hardware into the APS system.

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[6] Includes thermostats, broadband to Zigbee Gateway, USB in meter, installation of equipment, and Home Energy Audits and also includes the removal of the $23,870 for the in-home energy information display.
[7] Total after the removal of the $23,870 for the in-home energy information display.

67. In addition, APS has performed extensive field-testing which allowed APS to identify technology gaps and make system adjustments as necessary prior to implementation. Despite the integration challenges which delayed the program, the system integration process is now complete. Because APS has already made a significant investment in the HEI Pilot Program, Staff believes that preserving the status quo would jeopardize the progress made related to the system integrations discussed above and the capital investments made. Therefore, Staff recommends approval of APS's proposed modifications to its HEI Pilot Program as described above, including the removal of the $23,870 in costs for the in-home energy information display. In addition, Staff recommends approval of the additional funding requested by APS.

68. Staff also recommends that the deadline for filing the final assessment report required in Decision No. 72215 be extended to no later than June 1, 2014. (The final report should be filed in Docket No. E-01345A-10-0075.) Further, Staff recommends that the HEI Pilot Program continue on an experimental/pilot basis until further order of the Commission. When APS files its final assessment report, APS should include a recommendation, for Commission approval, to continue (as a permanent program) or discontinue the HEI Pilot Program. Because Staff is recommending that the HEI Pilot Program be extended, Staff also recommends that APS revise its Experimental Service Schedule 16 to eliminate language that refers to the HEI Pilot Program's availability through December 31, 2013.

**Other Energy Efficiency Initiatives**

69. APS's 2013 DSM Plan requests that the energy savings from codes and standards allowed to count toward the EE Standard be increased from a maximum to thirty-three percent to a minimum of at least fifty percent. In addition, APS is requesting approval to allow energy savings resulting from generation and delivery system improvements and facilities upgrades to count toward the EE Standard.

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*Codes and Standards Support Initiatives ("C&S")*

70. APS states that this initiative would encourage energy savings by improving compliance levels with existing energy codes and standards and promoting the adoption of higher local building energy codes and appliance standards in jurisdictions throughout APS's service area. Integrating with the Solutions for Business Non-Residential Technical Training Series, APS will develop and offer training classes designed to promote the adoption of new C&S while improving compliance rates with existing C&S. C&S objectives include:

- Raising awareness of current C&S;
- Better prepare code officials and building professionals to adhere to existing standards;
- Promote new versions of the code by highlighting key changes and economic benefits; and
- Advocate for C&S updates over time.

71. APS will participate in outreach that includes: participation in energy code adoption committees, providing technical support (calculations, research, and information) to code adoption committees, providing public testimony in support of C&S adoption before city councils, and creating strategic alliances and partnerships with other utilities and C&S advocacy groups to leverage activities in a manner that will achieve greater impacts.

72. APS is requesting Commission approval to increase the cap on claimed savings for the C&S initiative from a maximum of 33 percent to at least 50 percent. APS states that the current 33 percent maximum discourages APS from supporting updates to building codes and appliance efficiency standards because such updates eliminate the potential for claiming savings that APS can count toward meeting the Energy Efficiency standard. In addition, APS is requesting an increase in budget from $100,000 to $400,000 in 2013.

*APS Resource Savings Initiative*

73. APS is currently investigating the savings impacts of various Energy Efficiency improvements to APS's system resources. APS states that efficiency system improvements will result in measurable energy efficiency savings. APS is evaluating savings from generation improvements and facilities upgrades that include but are not limited to, the installation of high-efficiency motors and variable speed drives. Facilities upgrades include the installation of energy

efficiency upgrades at APS facilities. APS anticipates that it will include savings from generation improvements and facilities upgrades in its 2014 DSM Implementation Plan and applying the savings toward meeting the Energy Efficiency standard.

74. In addition, APS is currently evaluating savings impacts from various delivery systems (transmission and distribution) improvements to APS's system. Delivery system improvements would include high efficiency transformer upgrades, and integrated volt VAR controls. APS states that it is not requesting that generation improvement, facilities upgrades, and delivery system improvements be funded through the DSMAC, only that the any savings resulting from such upgrades and/or improvements be counted toward the meeting the energy efficiency standards.

*Recommendations*

75. Staff notes that A.A.C. R14-2-2404(E) specifies that a "…utility may count toward meeting the standard *up to* [emphasis added] one third of the energy savings, resulting from energy efficiency building codes…." Staff has not recommended that APS be granted a waiver of the maximum contained in A.A.C. R14-2-2404(E). In addition, A.A.C. R14-2-2404(H) specifies that delivery system improvements cannot count toward the Energy Efficiency standard. Therefore, Staff has not recommended that APS be granted a waiver of A.A.C. R14-2-2404(H). In addition, Staff has recommended that the proposed increase in the Codes and Standards budget not be approved.

76. Although the EE Rules do not specifically prohibit generation improvements and facilities upgrades from counting toward the energy efficiency standard, Staff interprets generation improvements and facilities upgrades in the same manner as delivery system upgrades which are specifically prohibited under the EE Rules. Therefore, Staff recommends that APS not be allowed to count energy savings from such improvements toward meeting the energy efficiency standard.

**Performance Incentive**

*Current Performance Incentive*

77. The most recent performance incentive structure, approved in Decision No. 73183 (Docket No. E-01345A-11-0224), is a tiered system that is based on a percentage of net benefits

that is capped at a percentage of program costs. APS is allowed to earn a performance incentive based on the level of energy savings achieved relative to its annual energy savings goals. For example, should APS achieve between 85 percent to 95 percent of the energy efficiency standard, then the performance incentive is calculated as six percent of forecasted net benefits capped at 12 percent of the proposed programs costs[8] (as specified and defined in the DSM Plan of Administration). The tables below show the proposed performance incentive calculation:

| Achievement Relative to the Energy Efficiency Goals | Performance incentive as % of Energy Efficiency Net Benefits | Performance Incentive Capped at % of Energy Efficiency Program Costs |
|---:|---:|---:|
| < 85% | 0% | 0% |
| 85% to 95% | 6% | 12% |
| 96% to 105% | 7% | 14% |
| >105% | 8% | 16% |

| | |
|---|---|
| Energy Savings (kWh) | 522,000,000 |
| Percent of EE Goal | 100% |

| | Net Benefits | Program Costs |
|---|---|---|
| Incentive % | 7% | 14% |
| 2013 DSM Plan | $66,195,000 | $71,842,000[9] |
| Calculated Incentive | $4,634,000 | $10,057,880 |

| | |
|---|---|
| Performance Incentive | $4,634,000 |

*Proposed Performance Incentive*

78. Decision No. 73183, which approved APS's most recent rate case and settlement agreement, was left open "…to allow [APS] to file by December 31, 2012, an application for consideration and approval of a new Performance Incentive structure in the Demand Side Management Adjustor Clause…". APS filed its proposal on December 31, 2012. APS's proposed performance incentive structure would continue to be based on the tiered system that has been approved. However, rather than being capped at a percent of energy efficiency program costs, the performance incentive would be capped at a dollar amount per kWh of savings. APS is proposing

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[8] Excludes DR/Load Management program costs.
[9] Total Energy Efficiency program costs + C&S + MER

that the performance incentive be capped at \$0.0125 per kWh saved. In addition, APS is proposing that its new performance incentive structure go into effect beginning 2014.

79. APS states that the proposed performance incentive structure remains consistent with the terms of the settlement agreement approved in Decision No. 73183. The proposed performance incentive would improve the link to savings while eliminating direct ties to energy efficiency spending levels. With a specified \$0.0125/ kWh saved cap, the performance incentive would not exceed this amount regardless of the net benefits achieved. The proposed performance incentive cap of \$0.0125/kWh saved equals the total amount of the performance incentive of approved in APS's 2012 DSM Plan, of \$6,665,000 (Decision No. 73089).

*Recommendations*

80. Staff has recommended that the current performance incentive structure approved in Decision No. 73183 remain in effect for 2013. In addition, Staff has recommended that APS's proposed performance incentive for 2013 of \$4,634,000 be approved. Staff has further recommended that the proposed revisions to the performance incentive structure be approved to go into effect in 2014. Staff notes that its recommendation regarding APS's performance incentive is similar to what the Commission approved for Tucson Electric Power Company in Decision No. 73912.

**Measurement, Evaluation, and Research ("MER")/Reporting Requirements**

*Current MER/Reporting Requirements*

81. APS integrates the most recent annual MER adjustments and process and impact findings in its annual Implementation Plan. The MER process verifies the impact and cost effectiveness of the energy efficiency programs. Navigant Consulting, an independent third-party energy consulting company, provides the energy efficiency program measurement and evaluation services. These measurement and evaluation activities include, but are not limited to:

- Performing process evaluation to indicate how well programs are working to achieve objectives; and
- Performing impact evaluation to verify that energy efficiency measures are installed as expected; measuring savings on installed projects to monitor the actual program savings

that are achieved; and research activities to refine savings and cost benefit models and identify additional opportunities for energy efficiency.

82. The approach for measurement and evaluation of the energy efficiency programs is to integrate data collection and tracking activities directly into the program implementation process. In fact, Commission Decision No. 69663 (June 27, 2007) requires APS to

> Use measured savings obtained from APS customers by the MER contractor beginning no later than July 1, 2007; and that the averages of actual measured usage, for both standard and upgraded equipment, should be recalculated by the MER from usage samples for each prescriptive measure based on new measurements from the field no less frequently than every two years.

83. Decision No. 73089, specified that the reporting requirements of the EE Rules superseded previous requirements of individual Decisions for APS. APS was also required to provide additional information in its Annual DSM Progress Report filed on March 1 of each year.

84. In addition, Decision No. 73732 approved APS's Lost Fixed Cost Recovery Mechanism ("LFCR") which allows for the recovery of lost fixed costs associated with the amount of energy efficiency savings and distribution generation that is authorized by the Commission and determined to have occurred.

*Proposed MER Budget*

85. APS proposes to increase the MER budget in 2013 from $2,300,000 to $2,500,000 to cover ongoing MER activities associated with energy efficiency programs. APS will perform measurement and verification of the DR programs peak load reduction with detailed modeling and statistical techniques. These costs are built into the DR program budget.

*Recommendations*

86. Staff has recommended that the reporting requirements specified in Decision No. 73089 remain in effect for 2013. In addition, Staff has recommended that in its Annual DSM Progress Reports, APS include the amount of DSM funds collected from customers, by customer class. Further, Staff has recommended that APS include in its Annual DSM Progress Reports the actual retail kWh sales, by customer class, from the previous period.

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87. Staff has further recommended that for the purpose of calculating the true-up for the LFCR, that beginning with APS's Annual DSM Progress Report (and MER reports), filed on March 1, 2014, APS provide energy efficiency savings for customers taking service under rate schedules E-32 L, E-32 Time-of-Use ("TOU"), E-34, E-35 and E-36 XL, and metered General Service customers under rate schedule E-30 and lighting services. These customers are not subject to the LFCR mechanism, because either no fixed costs will remain unrecovered or other rate designs are in place to address lost fixed costs. Staff has further recommended that APS's MER budget be approved at its current Commission-approved level of $2,300,000.

## Energy Savings

88. APS provided Staff with updated projected EE/DR savings. The initial savings estimate for 2013 was 549,000,000 kWh. APS now estimates that savings for 2013 will be 522,000,000 kWh. The table below shows the previous years' actual energy savings (2011 and 2012) compared to the *revised* estimated energy savings in 2013.

| | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|
| Actual/Projected Sales (kWh)* | 27,709,463,000 | 28,210,326,000[10] | 28,154,136,000 | 27,893,879,000 |
| | | | | |
| Required Savings (%) | | 1.25% | 3.00% | 5.00% |
| Required Savings from Prior year Sales (kWh) | | 346,368,288 | 846,309,780 | 1,407,706,800 |
| | | | | |
| EE/DR Program Savings (kWh)** | | 441,334,000 | 551,639,000 | 522,000,000 |
| Total Cumulative Savings (kWh) | | 441,334,000 | 992,973,000 | 1,514,973,000 |
| Savings (%) | | 1.59% | 3.51% | 5.38% |
| | | | | |
| Difference Between Required and Projected/Actual Savings (kWh) | | 94,965,712 | 146,663,220 | 107,266,200 |

*2010, 2011, and 2012 kWh sales represent actual sales from annual reports. 2013 estimated kWh sales are estimated as provided in the 2013 DSM Supplement.
**Actual kWh savings based on DSM reports except for 2013 which are estimated.

## Budget

89. APS provided Staff with updated information regarding the proposed 2013 budget based on the revised estimated savings 2013, discussed above. The table below compares the total budget that was

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[10] From APS's 2011 Annual Report (Total kWh sales minus Resale)

approved for 2012, the original proposed 2013 budget, the revised proposed 2013 budget, and Staff's proposed budget.

| Energy Efficiency Programs | Approved Budget 2012[11] | Original APS Proposed 2013 | Revised APS Proposed 2013 | Staff Proposed 2013 |
|---|---|---|---|---|
| **Residential** | | | | |
| Consumer Products | $7,524,000 | $9,912,000 | $8,800,000 | $7,524,000 |
| Residential HVAC | $6,336,000 | $6,108,000 | $5,900,000 | $5,900,000 |
| Home Performance w/ Energy Star | $5,108,000 | $5,526,000 | $5,526,000 | $5,108,000 |
| New Construction | $3,151,000 | $6,631,000 | $6,352,000 | $3,151,000 |
| Appliance Recycling | $1,633,000 | $1,748,000 | $1,600,000 | $1,600,000 |
| Low Income Weatherization | $2,476,000 | $2,476,000 | $2,476,000 | $2,476,000 |
| Conservation Behavior | $1,053,000 | $1,055,000 | $1,055,000 | $1,053,000 |
| Multi-Family | $1,653,000 | $1,916,000 | $1,750,000 | $1,653,000 |
| Shade Trees | $297,000 | $332,000 | $332,000 | $297,000 |
| **Total Residential** | **$29,231,000** | **$35,704,000** | **$33,791,000** | **$28,762,000** |
| **Non-Residential** | | | | |
| Large Existing Facilities | $17,834,000 | $20,455,000 | $19,833,801 | $17,834,000 |
| New Construction | $3,478,000 | $5,420,000 | $5,336,824 | $3,478,000 |
| Small Business | $4,631,000 | $4,612,000 | $3,899,169 | $3,899,169 |
| Schools | $3,520,000 | $2,647,000 | $2,599,000 | $2,599,000 |
| Energy Information Services | $77,000 | $104,000 | $104,000 | $77,000 |
| **Total Non-Residential** | **$29,540,000** | **$33,238,000** | **$31,772,794** | **$27,887,169** |
| | | | | |
| **Total Energy Efficiency** | **$58,771,000** | **$68,942,000** | **$65,563,794** | **$56,649,169** |
| | | | | |
| Codes and Standards | $100,000 | $400,000 | $400,000 | $100,000 |
| Measurement Evaluation and Research | $2,300,000 | $2,500,000 | $2,500,000 | $2,300,000 |
| Performance Incentive | $6,665,000 | $4,634,000 | $4,634,000 | $4,634,000 |
| **Total C&S/MER/PI** | **$9,065,000** | **$7,534,000** | **$7,534,000** | **$7,034,000** |
| | | | | |
| **Demand Response/Load Management Programs** | **Approved Budget 2012** | **Original APS Proposed 2013** | **Revised APS Proposed 2013** | **Staff Proposed 2013** |
| APS Peak Solutions | $8,065,000 | $8,065,000 | $2,200,000 | $2,200,000 |
| Home Energy Information Pilot Program | $899,000 | $2,841,000 | $2,816,685 | $2,816,685 |
| Demand Response Marketing/MER of Rate Options[12] | $200,000 | $200,000 | $200,000 | $200,000 |
| **Total Demand Response/Load Management** | **$9,164,000** | **$11,106,000** | **$5,216,685** | **$5,216,685** |
| | | | | |
| **Total EE, C&S/MER/PI, DR/Load Management** | **$77,000,000** | **$87,557,684** | **$78,314,479** | **$68,899,854** |

90. Currently, APS has the flexibility to shift budgeted funds from one program to another within the same sector (Residential or Non-Residential) per calendar year with the exception that funds

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[11] Decision No. 73089.

[12] The spending/budgets for The Demand Response Marketing/MER of Rate Options includes the Super Peak Rate, Critical Peak Pricing Rates, Interruptible Rate, Peak Time Rebate Programs, and the Time-of-Use Rates.

cannot be shifted from Low Income or Schools programs. In addition, APS has the ability to exceed any DSM program annual budget by up to 5 percent without prior Commission approval.

**Demand-Side Management Adjustment Charge ("DSMAC")**

91. The DSMAC provides for the recovery of DSM program costs, including energy efficiency programs, demand response programs, and energy efficiency performance incentives. The DSMAC approved by the Commission collects funds to pay for the Commission approved energy efficiency programs prior to the program costs being incurred. The DSMAC is applied to Standard Offer and Direct Access service schedules as a monthly per kWh charge (Residential and General Service customers with non-demand billing service schedules) or kW demand charge (General Service customers with demand billing service schedules). The following items are included in the calculation of the DSMAC (as specified and defined in the DSM Plan of Administration):

- Projected program costs ("PC");
- Projected performance incentive ("PI");
- True-up balance ("TU");
- Interest associated with any over collection of DSMAC costs for the prior period ("I")[13]; and
- Projected retail energy (kWh) sales ("kWh sales").

The following formula is used in calculating the DSMAC:

$$\frac{PC+PI+TU+I}{\text{kWh Sales}}$$

92. The true-up balance is the difference between the actual program costs and actual revenue recovered through the DSMAC. The DSMAC for 2013 includes the total true-up amount for 2011 EE, DR/Load Management programs. In addition, the total true-up amount includes a true-up for the performance incentive.

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[13] The interest is based on the one-year Nominal Treasury Maturities rate from the Federal Reserve H-15 or its successor publication, to be adjusted annually on the first business day of the calendar year. Under-collections do not accrue interest.

*Proposed DSMAC*

93. The table below shows the revenue requirement for the calculation of the 2013 DSMAC based on APS's proposed budget compared to the revenue requirement based on APS's revised proposed budget:

| | APS Proposed | Staff Proposed |
|---|---|---|
| ***Revised*** Total 2013 Budget | $78,314,479 | $68,899,854 |
| Amount Recovered in Base Rates | ($10,000,000) | ($10,000,000) |
| Less credit from True-up | ($7,155,000) | ($7,155,000) |
| Less interest on True-up credit | ($9,000) | ($9,000) |
| Less Gain on Sale of Assets[14] | ($261,000) | ($261,000) |
| **Total Revenue Requirement** | **$60,889,479** | **$51,474,854** |

94. Based on the revised proposed budget and revenue requirement for 2013, APS is requesting a DSMAC of $0.002184 per kWh and $0.823 per kW. This is a decrease from the current DSMAC of $0.002717 per kWh and $0.9685 per kW.

*Recommendations*

95. Because Staff has proposed a lower total budget for 2013, Staff has calculated the DSMAC for 2013 to be $0.001845 per kWh and $0.696 per kW using the forecasted kWh and kW sales for 2013 provided by APS in its 2013 DSM Supplement. This is a decrease from the revised proposal from APS of $0.002184 per kWh and $0.823 per kW.

**RECOMMENDATIONS**

96. Below are Staff's recommendations regarding the proposed modifications to the APS 2013 DSM Plan.

***Staff recommendations regarding programs/measures with no proposed modifications***

- Staff has recommended that the Residential New Construction Program remain in effect as previously approved by the Commission including the current Commission-approved budget of $3,151,000.
- Staff has recommended that the Conservation Behavior Program remain in effect as previously approved by the Commission including the current Commission-approved budget of $1,053,000.

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[14] Decision No. 71716 dated June 3, 2010, approved the customer credit amount in APS's Net Gains on Utility Property to be counted toward the DSMAC.

- Staff has recommended that the Shade Tree Program remain in effect as previously approved by the Commission including the current Commission-approved budget of $297,000.
- Staff has recommended that the Low Income Weatherization Program remain in effect as previously approved by the Commission including the current Commission-approved budget of $2,476,000.
- Staff has recommended that the Large Existing Facilities Program remain in effect as previously approved by the Commission including the current Commission-approved budget of $17,834,000.
- Staff has recommended that the Small Business Program remain in effect as previously approved by the Commission.
- Staff has recommended that the Small Business Program revised budget of $3,899,169 be approved which is a reduction from the current Commission-approved budget of $4,631,000.
- Staff has recommended that the Schools Program remain in effect as previously approved by the Commission.
- Staff has recommended that the Schools Program revised budget of $2,599,000 be approved which is a reduction from the current Commission-approved budget of $3,520,000.
- Staff has recommended that the Energy Information Service Program remain in effect as previously approved by the Commission including the current Commission-approved budget of $77,000.
- Staff has recommended that the APS Peak Solutions and Demand Response Marketing/MER of Rate Options remain in effect as approved by the Commission.
- Staff has recommended that the APS Peak Solutions revised budget of $2,200,000 be approved which is a reduction from the Commission-approved $8,065,000.
- Staff has recommended approval of the Demand Response Marketing/MER of Rate Options at its current Commission-approved budget of $200,000.

- Staff has recommended that the residential peak time rebate program and the interruptible rate program remain in effect as previously approved by the Commission.

***Staff recommendations regarding programs/measures with proposed modifications***

*Consumer Products Program*

- Staff has not recommended approval of the 2x incandescent bulbs.
- Staff has not recommended approval of the LED bulbs.
- Staff has recommended that APS be allowed to discontinue the seasonal pool pumps.
- Staff has recommended approval of the Consumer Products Program at its current Commission-approved budget of $7,524,000.

*Existing Homes Program-HVAC*

- Staff has not recommended that the Duct Test and Repair measure as part of the Existing Homes Program HVAC or the HPES Program be modified.
- Staff has recommended approval of the proposed reduction in the incentive level for AC/QI from $270 to $245.
- Staff has recommended approval of APS's revised budget of $5,900,000 for the Existing Homes Program HVAC which is a reduction from the Commission-approved budget of $6,336,000.

*HPES Program*

- Staff has not recommended that the smart strip measure as part of the HPES Program be approved.
- Staff has not recommended that the performance-based rebate structure as part of the HPES Program be implemented at this time.
- Staff has recommended removal of the low flow faucet aerator measure as part of the HPES Program.
- Staff has recommended that the rebate for the shade screen measure be discontinued.
- Staff has recommended that the budget for the HPES Program be approved at its current Commission-approved level of $5,108,000.

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*Appliance Recycling Program*

- Staff has not recommended approval of expanding the maximum number of appliances that can be recycled for non-residential customers to 50 units, per meter, per year.
- Staff has not recommended approval of increasing the current rebate from $30 per unit to $50 per unit from residential and non-residential customers.
- Staff has recommended approval of the revised Appliance Recycling Program budget of $1,600,000 which is a reduction from the Commission-approved budget of $1,633,000.

*Multi-Family Energy Efficiency Program*

- Staff has recommended approval of APS's proposal to eliminate the Multi-Family Energy Efficiency Program BOP Renovation option.
- Staff has recommended approval of the reduced Multi-Family Energy Efficiency Program BOP incentive level.
- Staff has recommended that the budget for the Multi-Family Energy Efficiency Program be approved at its current Commission-approved level of $1,653,000.

*Non-Residential New Construction Program*

- Staff has recommended approval of APS's proposal to reduce the incentive levels for the Non-Residential New Construction Program.
- Staff has recommended that the budget for the Non-Residential New Construction Program be approved at its current Commission-approved level of $3,478,000.

*Home Energy Information Pilot Program*

- Staff has recommended approval of APS's proposed modifications to its HEI Pilot Program.
- Staff has recommended approval of removing the $23,870 in costs for the in-home energy information display from the HEI Pilot Program.
- Staff has recommended approval of the additional funding in the amount of $2,816,685 for the HEI Pilot Program.
- Staff has recommended that APS revise its Experimental Service Schedule 16 to eliminate language that refers to the HEI Pilot Program's availability through December 31, 2013.

- Staff has recommended that the deadline for filing the final assessment report required in Decision No. 72215 be extended to no later than June 1, 2014 with the final assessment report being filed in Docket No. E-01345A-10-0075.
- Staff has recommended that the HEI Pilot Program continue on an experimental/pilot basis until further order of the Commission. When APS files its final assessment report, APS should include a recommendation, for Commission approval, to continue (as a permanent program) or discontinue the HEI Pilot Program.

*Other Energy Efficiency Initiatives*

- Staff has not recommended that APS's request to count more than one third of energy efficiency savings, resulting from energy efficiency building codes and standards, per A.A.C. R14-2-2404(E) be granted.
- Staff has not recommended that APS be granted a waiver of A.A.C. R14-2-2404(H) which specifies that delivery system improvements cannot count toward meeting the Energy Efficiency standard.
- Staff has recommended that the budget for Codes and Standards be approved at the current Commission approved budget of $100,000.
- Staff has not recommended approval of APS's request to count energy savings from generation improvements and facilities upgrades toward meeting the Energy Efficiency standard.

*Performance Incentive*

- Staff has recommended that the current performance incentive structure approved in Decision No. 73183 remain in effect for 2013.
- Staff has recommended that APS's proposed performance incentive for 2013 of $4,634,000 be approved.
- Staff has recommended that the proposed revisions to the performance incentive structure described above be approved to go into effect in 2014.

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*MER/Reporting Requirements*

- Staff has recommended that the reporting requirements specified in Decision No. 73089 remain in effect for 2013.
- Staff has recommended that in its DSM Annual Progress Reports, APS include the amount of DSM funds collected from customers, by customer class.
- Staff has recommended that APS include in its DSM Annual Progress Reports the actual retail kWh sales, by customer class, from the previous period.
- Staff has recommended that for the purpose of calculating the true-up for the LFCR, that beginning with APS's Annual DSM Progress Report (and MER reports), filed on March 1, 2014, APS provide energy efficiency savings for customers taking service under rate schedules E-32 L, E-32 Time-of-Use ("TOU"), E-34, E-35 and E-36 XL, and metered General Service customers under rate schedule E-30 and lighting services.
- Staff has recommended that the budget for MER be approved at the current Commission-approved level of $2,300,000.

*Other*

- Staff has recommended that the proposed total budget for 2013 should be reduced from the revised APS proposed total budget of $78,314,479 to Staff's proposed total budget of $68,899,854.
- Staff has recommended that a total revenue requirement of $51,474,854 be approved based on Staff's proposed total 2013 budget of $68,899,854.
- Staff has recommended that APS continue to maintain the flexibility to shift budgeted funds from one program to another within the same sector (Residential or Non-Residential) per calendar year with the exception that funds cannot be shifted from Low Income or Schools programs.
- Staff has recommended that APS continue to maintain the ability to exceed any DSM program annual budget by up to 5 percent without prior Commission approval.

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- Staff has recommended a DSMAC amount of $0.001845 per kWh and $0.696 per kW based on the forecasted kWh and kW sales for 2013 provided by APS and the revenue requirement proposed by Staff.
- Staff has recommended that APS be required to file its DSMAC tariff, as a compliance item in this docket, within 15 days of the effective date of the Decision in this matter.
- Staff recommends that if APS finds any Commission-approved program or measure is no longer cost-effective, APS should file, in this docket a letter stating that the program or measure will be discontinued.
- Staff has recommended that the APS 2013 DSM Plan as modified and specified herein remain in effect until further order of the Commission.

*Additional Reporting Requirements for Demand-Side Management (DSM) Annual Progress Reports*

97. In addition to any other reporting requirements, we find that it is in the public interest to require APS to supplement its DSM Annual Progress Reports, beginning with the report filed in 2014, a chart that lists all Commission-approved programs and measures, the Commission-approved budgeted expenditures by program, the actual annual expenditures by program, the planned cost effectiveness ratio per measure (last calculated by Staff), and the actual cost effectiveness ratio per measure (using the Staff-approved method with all criteria updated with the most recent data available). In addition, the DSM Annual Progress Reports shall include data on program and measure annual kWh savings and lifetime kWh savings (plan and actual data), plus program cost-effectiveness test benefits, costs, and net benefits (plan and actual data).

*Re-calculation of the DSM/EE Plan's Measures' Cost-Effectiveness for Purposes of a Possible Early Reset of the Demand-Side Management Adjustment Charge (DSMAC)*

98. We find that it is important and in the public interest to ensure that only DSM/EE measures that are truly cost effective continue to be funded. Because APS's Plan's measures' cost effectiveness have not been recently re-calculated, we find it reasonable and necessary to direct Staff to review and re-calculate the cost effectiveness of all the measures included in the DSM/EE Plan. To ensure consistent consideration of all available DSM/EE measures, Staff should also

review and calculate the cost-effectiveness of any new proposed DSM/EE measures. By September 19, 2014 Staff shall file a report on its review of the measures, and include recommendations based on its re-calculations for possible early reset of the DSMAC. Interested parties and stakeholders shall file any comments on the Staff report and recommendations within 30 days of Staff filing its report and recommendations.

99. We find the DSMAC approved herein interim and subject to possible early reset upon further Commission consideration of the Staff report and comments concerning the re-calculation of the cost effectiveness of the DSM/EE Plan's measures.

## CONCLUSIONS OF LAW

1. Arizona Public Service Company is an Arizona public service corporation within the meaning of Article XV, Section 2, of the Arizona Constitution.

2. The Commission has jurisdiction over Arizona Public Service Company and over the subject matter of the application.

3. The Commission, having reviewed the application and Staff's Memorandum dated October 30, 2013, concludes that it is in the public interest to approve the Arizona Public Service Company 2013 Demand-Side Management Implementation Plan, as discussed herein.

## ORDER

IT IS THEREFORE ORDERED that the Arizona Public Service Company 2013 Demand-Side Management Implementation Plan be and hereby is approved, as discussed herein.

IT IS FURTHER ORDERED that the Residential New Construction Program remain in effect as previously approved by the Commission including the current Commission-approved budget of $3,151,000.

IT IS FURTHER ORDERED that the Conservation Behavior Program remain in effect as previously approved by the Commission including the current Commission-approved budget of $1,053,000.

IT IS FURTHER ORDERED that the Shade Tree Program remain in effect as previously approved by the Commission including the current Commission-approved budget of $297,000.

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IT IS FURTHER ORDERED that the Low Income Weatherization Program remain in effect as previously approved by the Commission including the current Commission-approved budget of $2,476,000.

IT IS FURTHER ORDERED that the Large Existing Facilities Program remain in effect as previously approved by the Commission including the current Commission-approved budget of $17,834,000.

IT IS FURTHER ORDERED that the Small Business Program remain in effect as previously approved by the Commission.

IT IS FURTHER ORDERED that the Small Business Program revised budget of $3,899,169 is approved which is a reduction from the current Commission-approved budget of $4,631,000.

IT IS FURTHER ORDERED that the Schools Program remain in effect as previously approved by the Commission.

IT IS FURTHER ORDERED that the Schools Program revised budget of $2,599,000 is approved which is a reduction from the current Commission-approved budget of $3,520,000.

IT IS FURTHER ORDERED that the Energy Information Service Program remain in effect as previously approved by the Commission including the current Commission-approved budget of $77,000.

IT IS FURTHER ORDERED that the Arizona Public Service Company Peak Solutions and Demand Response Marketing/MER of Rate Options remain in effect as approved by the Commission.

IT IS FURTHER ORDERED that the Arizona Public Service Company Peak Solutions revised budget of $2,200,000 is approved which is a reduction from the current Commission-approved $8,065,000.

IT IS FURTHER ORDERED that the Demand Response Marketing/MER of Rate Options remain in effect as previously approved by the Commission at its current Commission-approved budget of $200,000.

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IT IS FURTHER ORDERED that the residential peak time rebate program and the interruptible rate program remain in effect as previously approved by the Commission.

IT IS FURTHER ORDERED that the four new measures, specifically 2X incandescent light bulbs, LED light bulbs, prescriptive duct test and repairs, and smart strips found by Staff to be cost effective are approved.

IT IS FURTHER ORDERED that the 2x incandescent bulb measure is approved.

IT IS FURTHER ORDERED that the LED bulb measure is approved.

IT IS FURTHER ORDERED that the seasonal pool pump timers are discontinued.

IT IS FURTHER ORDERED that the Consumer Products Program be approved at its current Commission-approved budget of $7,524,000.

IT IS FURTHER ORDERED that the modifications to the Duct Test and Repair measure as part of the Existing Homes Program HVAC and the Home Performance with ENERGY STAR® Program are approved.

IT IS FURTHER ORDERED that the incentive level for AC/QI as part of the Existing Homes Program HVAC be reduced from $270 to $245.

IT IS FURTHER ORDERED that the revised budget of $5,900,000 for the Existing Homes Program HVAC is approved which is a reduction from the current Commission-approved budget of $6,336,000.

IT IS FURTHER ORDERED that the smart strip measure as part of the Home Performance with ENERGY STAR® Program is approved.

IT IS FURTHER ORDERED that the performance-based rebate structure as part of the Home Performance with ENERGY STAR® Program not be implemented at this time.

IT IS FURTHER ORDERED that the low flow faucet aerator measure as part of the Home Performance with ENERGY STAR® Program be removed.

IT IS FURTHER ORDERED that the rebate for the shade screen measure as part of the Home Performance with ENERGY STAR® Program be discontinued.

IT IS FURTHER ORDERED that the budget for the Home Performance with ENERGY STAR® Program be approved at its current Commission-approved level of $5,108,000.

IT IS FURTHER ORDERED that the expansion of the maximum number of appliances that can be recycled for non-residential customers to 50 units, per meter, per year is not approved.

IT IS FURTHER ORDERED that the increase in the current rebate for residential and non-residential customers from $30 per unit to $50 per unit as part of the Appliance Recycling Program is not approved.

IT IS FURTHER ORDERED that the revised Appliance Recycling Program budget of $1,600,000 is approved which is a reduction from the Commission-approved budget of $1,633,000.

IT IS FURTHER ORDERED that the elimination of the Multi-Family Energy Efficiency Program BOP Renovation option is approved.

IT IS FURTHER ORDERED that the reduction in the Multi-Family Energy Efficiency Program BOP incentive level is approved, as discussed in Finding of Fact No. 41.

IT IS FURTHER ORDERED that the budget for the Multi-Family Energy Efficiency Program is approved at its current Commission-approved level of $1,653,000.

IT IS FURTHER ORDERED that the reduction in the incentive levels for the Non-Residential New Construction Program is approved, as discussed in Finding of Fact No. 48.

IT IS FURTHER ORDERED that the budget for the Non-Residential New Construction Program is approved at its current Commission-approved level of $3,478,000.

IT IS FURTHER ORDERED that the proposed modifications and additional funding to the Home Energy Information Pilot Program are approved.

IT IS FURTHER ORDERED that Arizona Public Service Company remove $23,870 in costs for the in-home energy information display from the Home Energy Information Pilot Program.

IT IS FURTHER ORDERED that the budget for the Home Energy Information Pilot Program be approved at the level of $2,816,685.

IT IS FURTHER ORDERED that Arizona Public Service Company shall revise its Service Schedule 16 to eliminate language that refers to the Home Energy Information Pilot Program's availability through December 31, 2013.

IT IS FURTHER ORDERED that the deadline for filing the final assessment report required in Decision No. 72215 is extended to no later than February 13, 2015, with the final assessment report being filed in Docket No. E-01345A-10-0075.

IT IS FURTHER ORDERED that the HEI Pilot Program continue on an experimental/pilot basis until further order of the Commission. When Arizona Public Service Company files its final assessment report, Arizona Public Service Company shall include a recommendation, for Commission approval, to continue (as a permanent program) or discontinue the HEI Pilot Program.

IT IS FURTHER ORDERED that Arizona Public Service Company's request to count more than one third of energy efficiency savings, resulting from energy efficiency building codes and standards, per A.A.C. R14-2-2404(E), toward meeting the Energy Efficiency standard is not approved.

IT IS FURTHER ORDERED that the prohibition contained in A.A.C. R14-2-2404(H) is waived, and APS may count cost-effective energy savings from transmission and delivery system improvements toward compliance with the energy efficiency standard. Specific programs including anticipated costs and energy savings must be proposed and approved through the implementation plan process. Any energy savings from approved programs shall not increase the LFCR, enable Arizona Public Service Company to qualify for a performance incentive, or otherwise increase the performance incentive amount.

IT IS FURTHER ORDERED that the budget for Codes and Standards be approved at the current Commission approved budget of $100,000.

IT IS FURTHER ORDERED that Arizona Public Service Company may count cost-effective energy savings from improvements to Arizona Public Service Company facilities and generation systems toward compliance with the energy efficiency standard. Specific programs including anticipated costs and energy savings must be proposed and approved through the implementation plan process. Any energy savings from improvements to Arizona Public Service Company facilities and generation systems shall not increase the LFCR, enable Arizona Public

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Service Company to qualify for a performance incentive, or otherwise increase the performance incentive amount.

IT IS FURTHER ORDERED that the current performance incentive structure approved in Decision No. 73183 shall remain in effect for 2013.

IT IS FURTHER ORDERED that Arizona Public Service Company's proposed performance incentive for 2013 of $4,634,000 is approved.

IT IS FURTHER ORDERED that the proposed revisions to the performance incentive structure described herein are approved to go into effect in 2014.

IT IS FURTHER ORDERED that the reporting requirements specified in Decision No. 73089 remain in effect until further order of the Commission.

IT IS FURTHER ORDERED that in its DSM Annual Progress Reports, Arizona Public Service Company include the amount of DSM funds collected from customers, by customer class.

IT IS FURTHER ORDERED that Arizona Public Service Company include in its DSM Annual Progress Reports the actual retail kWh sales, by customer class, from the previous period.

IT IS FURTHER ORDERED that beginning with Arizona Public Service Company's Annual DSM Progress Report (and MER reports) filed on March 1, 2014, Arizona Public Service Company provide energy efficiency savings for customers taking service under rate schedules E-32 L, E-32 Time-of-Use ("TOU"), E-34, E-35 and E-36 XL, and metered General Service customers under rate schedule E-30 and lighting services.

IT IS FURTHER ORDERED that the budget for MER be approved at the current Commission-approved level of $2,300,000.

IT IS FURTHER ORDERED that the proposed total budget for 2013 will be reduced from the revised Arizona Public Service Company proposed total budget of $78,314,479 to Staff's proposed total budget of $68,899,854.

IT IS FURTHER ORDERED that a total revenue requirement of $51,474,854 is approved based on Staff's proposed total 2013 budget of $68,899,854.

IT IS FURTHER ORDERED that the twenty-five percent budget shifting limits contained in Decision Nos. 68488 and 68648 be changed to fifty percent to allow Arizona Public Service

Company to mitigate the impact of a reduced budget while effectively responding to market needs among program segments to maximize customer value. However, the requirement prohibiting funds budgeted for the low income customers and schools programs from being shifted to other programs shall remain in effect.

IT IS FURTHER ORDERED that Arizona Public Service Company may, upon providing 30-day advance notice to the Commission, reduce incentive levels in order to more effectively manage program spending or respond to market conditions.

IT IS FURTHER ORDERED that Arizona Public Service Company continue to maintain the ability to exceed any DSM program annual budget by up to 5 percent without prior Commission approval.

IT IS FURTHER ORDERED that the DSMAC amount of $0.001845 per kWh and $0.696 per kW is approved.

IT IS FURTHER ORDERED that Arizona Public Service Company shall file, with Docket Control, as compliance items in this docket, its revised DSMAC tariff and Experimental Service Schedule 16, consistent with the terms of this Decision, within 15 days of the effective date of the Decision in this matter.

IT IS FURTHER ORDERED that if Arizona Public Service Company finds any Commission-approved program or measure is no longer cost-effective, Arizona Public Service Company shall file, in this docket, a letter stating that the program or measure will be discontinued.

IT IS FURTHER ORDERED that Arizona Public Service Company shall include in its DSM Annual Progress Reports, beginning with a supplement to the report due by March 1, 2014, a chart that lists all Commission- approved programs and measures, the Commission-approved budgeted expenditures by program, the actual annual expenditures by program, the planned cost effectiveness ratio per measure (last calculated by Staff), and the actual cost effectiveness ratio per measure (using the Staff-approved method with all criteria updated with the most recent data available). In addition, the DSM Annual Progress Reports shall include data on program annual kWh savings and lifetime kWh savings (plan and actual data), plus program cost-effectiveness test benefits, costs, and net benefits (plan and actual data). The supplement shall be filed by April 30, 2014 using the latest avoided costs.

IT IS FURTHER ORDERED that Staff shall re-calculate the cost effectiveness of all of Arizona Public Service Company's DSM/EE Plan's measures, review and calculate the cost-effectiveness of any new DSM/EE measures and file a report and recommendations by September 19, 2014. Interested parties and stakeholders shall file any comments on the Staff report and recommendations within thirty (30) days of Staff filing its report and recommendations.

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IT IS FURTHER ORDERED that the Arizona Public Service Company 2013 DSM Plan as modified and specified herein shall apply in 2014 and remain in effect until further order of the Commission.

IT IS FURTHER ORDERED that Decision No. 73923 providing that Arizona Public Service Company file its 2014 DSM Plan forty-five days after this decision no longer applies in light of this decision.

IT IS FURTHER ORDERED that this Order shall become effective immediately.

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

CHAIRMAN COMMISSIONER

COMMISSIONER COMMISSIONER COMMISSIONER

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 19th day of March, 2014.

JODI JERICH
EXECUTIVE DIRECTOR

DISSENT: ______________________

DISSENT: ______________________

SMO:CLA:sms\WVC

SERVICE LIST FOR: Arizona Public Service Company
DOCKET NO.: E-01345A-12-0224

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| Measure | Decision No. | Benefit/Cost Ratio[1] |
|---|---|---|
| **ENERGY EFFICIENCY PROGRAMS** | | |
| **Residential** | | |
| **Consumer Products Program** | | |
| CFLs | 73089 | 3.09 |
| Giveaway CFLs | 73089 | 2.76 |
| Variable Speed Pool Pumps | 73089 | 1.04 |
| Pool Pump Timers | 73089 | 1.65 |
| **Residential New Construction Program** | | |
| ENERGY STAR Version 3 (Tier 1) | 73089 | 1.36 |
| ENERGY STAR Tier 2 | 73089 | 1.39 |
| **Existing Homes HVAC Program** | | |
| Equipment + Quality Installation | 73089 | 1.14 |
| Duct Repair Performance (Duct Test and Repair) | 73089 | 1.36 |
| HVAC Diagnostics | 73089 | 1.00 |
| **Home Performance with ENERGY STAR® Program** | | |
| HPES Audits | 73089 | 0.00 |
| Duct Repair Performance (Duct Test and Repair) | 73089 | 3.22 |
| Air Sealing | 73089 | 1.79 |
| Attic Insulation | 71460 | 1.03 |
| Air Sealing + Attic Insulation | 73089 | 1.04 |
| Direct Install - Shower Heads | 73089 | 1.57 |
| Direct Install - CFLs | 73089 | 5.88 |
| Direct Install – Faucet Aerators | 73089 | 3.91 |
| Shade Screens | 73089 | 1.20 |
| Performance Incentive – Tier 1 | 73089 | 1.59 |
| Performance Incentive – Tier 2 | 73089 | 1.43 |
| Performance Incentive – Tier 3 | 73089 | 1.11 |
| Performance Incentive – Tier 4 | 73089 | 1.05 |
| **Appliance Recycling Program** | | |
| Refrigerator/Freezer Recycle | 71444 | 2.05 - 3.08 |
| **Shade Tree Program** | | |
| Shade Trees | 72060 | 1.15 |
| **Conservation Behavior Program** | | |
| Home Energy Reports | 71950 | 1.27 |
| **Multi-Family Energy Efficiency Program** | | |
| Direct Install Measures (Shower Heads/Faucet Aerators/CFLs)[2] | 73089 | 1.47 |

[1]The Benefit/Cost Ratios included for residential and some non-residential measures came directly from the Commission Decisions listed. However, Decision No. 70637 did not include the Benefit/Cost Ratios for the listed measures. Therefore, APS used the Benefit/Cost Ratios included in its work papers provided to Staff at the time of the initial application in Docket No. E-01345A-05-0477.

| | | |
|---|---|---|
| Builder Option Package 1, 2, 3, and Major Renovation[3] | 73089 | 1.05 |
| Design Assistance - Incentive Only | 73089 | 0.00 |
| **Low-Income Weatherization Program** | | |
| Low Income Weatherization/Limited Income Bill Assistance | 68647 | 1.00 |
| **HEI Pilot Program[4]** | | |
| | | |
| **Non-Residential Programs (Solutions for Business)[5]**<br>Large Existing Facilities Program[1]<br>New Construction Program[2]<br>Schools Program[3]<br>Small Business Program[4]<br>Energy Information Services Program[5] | | |
| Air Conditioning & Heat Pump Units (<65,000 Btu/h - ≥ 240,000 Btu/h - package/split AC and Package terminal units)[1,2,3,4] | 70637 | 1.14 - 2.68 |
| AC Diagnostic Tune up - (Duct Sealing/Economizer Repair/Testing, Coil Cleaning, & Refrigerant Charge and Air Flow Correction) [1,3,4] | 70637 | 1.50 - 6.25 |
| Air Cooled Chillers (< 150 Tons - >= 150 Tons) [1,2,3,4] | 70637 | 4.43 - 4.62 |
| Anti-Sweat Heater Controls[1,3,4] | 70637 | 1.21 - 6.01 |
| Refrigeration Automatic Door Closers[1,3,4] | 72088 | 1.93 |
| CFLs (Hardwired/Screw In)[1,3,4] | 70637 | 1.26 - 5.16 |
| CO Sensor[1,2,3,4] | 72088 | 2.53 |
| $CO_2$ Sensor[1,2,3,4] | 72088 | 2.27 |
| Coin Operated Laundry[1,2,3,4] | 72215 | 1.50 – 2.10 |
| Cold Cathode Fluorescent Lighting[1,3,4] | 70637 | 1.84 - 5.13 |
| Cooling Tower Subcooling (HVAC) [1,3,4] | 72088 | 1.15 |
| Custom Measures[1,2,3,4] | 70637 | 2.73 - 6.84 |
| Daylighting Controls[1,2,3,4] | 70637 | 2.12 – 5.83 |
| Delamping[1,3,4] | 70637 | 4.17 - 7.57 |
| Efficient Compressor[1,2,3,4] | 72088 | 3.29 |
| Efficient Condenser[1,2,3,4] | 72088 | 2.27 |
| Emergency Management Systems - Digital Controls[1,3,4] | 73089 | 0.99 |
| Emergency Management Systems - Lighting Controls[1,3,4] | 73089 | 1.19 |
| Emergency Management Systems - Pneumatic Controls or no existing EMS Controls[1,3,4] | 73089 | 1.01 |
| Energy Efficiency Motor Rewind[1] | 72088 | 1.46 |

[2] Decision No. 73089 did not provide the Benefit/Cost Ratio for each separate measure.
[3] Decision No. 73089 did not provide the Benefit/Cost Ratio for each separate measure.
[4] Staff did not initially conduct a cost benefit analysis on the HEI Pilot Program as Staff did not recommend approval of the HEI Pilot Program as a DSM measure at the time.
[5] The Non-Residential Programs may share many of the same measures. Each measure listed indicates the program in which it is applicable.

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|---|---|---|
| Energy Information Services[5] | 70637 | 3.14 |
| Floating Head Pressure Controls[1,3,4] | 72088 | 4.59 |
| Heat Pump Water Heater[1,2,3,4] | 72088 | 1.61 - 2.03 |
| High Intensity Discharge Lighting (T8/T5HO)[1,3,4] | 70637 | 1.21 - 5.71 |
| High Performance Window Glazing[1,2,3,4] | 70637 | 1.75 |
| High Efficiency Evaporator Fan Motors (Electronically Commutated Motors/Permanent Split Capacitor) [1,2,3,4] | 70637 | 3.49 - 91.44 |
| High Efficiency Freezers[1,2,3,4] | 70637 | 3.30 - 5.76 |
| High Efficiency Ice Makers[1,2,3,4] | 70637 | 1.09 - 3.68 |
| High Efficiency Refrigerator[1,2,3,4] | 70637 | 1.09 - 1.45 |
| Hotel Room Control[1,3,4] | 72088 | 1.77 |
| Induction Lighting[1,3,4] | 70637 | 1.75 - 2.29 |
| LED - Channel Signs[1,3,4] | 72088 | 1.13 |
| LED - Incandescent w Reflector[1,3,4] | 73089 | 2.01 |
| LED - Incandescent w/o Reflector[1,3,4] | 73089 | 2.99 |
| LED - MR-16[1,3,4] | 73089 | 1.56 |
| LED - Pedestrian Walk Signs[1,3,4] | 73089 | 1.09 |
| LED - Refrigeration Strip Lighting w Motion Sensor[1,2,3,4] | 73089 | 1.67 |
| LED - Refrigeration Strip Lighting w/o Motion Sensor[1,2,3,4] | 73089 | 1.59 |
| LED Traffic Lights[1] | 72088 | 1.52 |
| LED/Electroluminescent Exit Signs[1,3,4] | 70637 | 1.56 - 3.59 |
| Lighting Power Density[2,3] | 70637 | 2.02 - 3.63 |
| Occupancy Sensors[1,2,3,4] | 70637 | 1.36 - 5.80 |
| Outside Air Economizer[1,2,3,4] | 70637 | 1.02 - 1.60 |
| PC Power Management Software[1,2,3,4] | 72088 | 1.47 |
| Premium (High) Efficiency Motors (1 HP - ≥200 HP) [1,2,3,4] | 70637 | 1.26 - 7.12 |
| Standard T8 to Premium T8 (w/Electronic Ballast) [1,3,4] | 70637 | 1.24 - 1.42 |
| Programmable Thermostat[1,2,3,4] | 70637 | 1.45 - 16.66 |
| Quality Installation (Phase 1/Phase 2) [1,2,3,4] | 70637 | 1.68 - 6.74 |
| Reach-in Cooler Controls[1,2,3,4] | 70637 | 2.29 |
| Refrigerated Case (Evaporative Fan Controls/ Novelty Case Controls[1,3,4] | 70637 | 1.16 - 1.17 |
| Retro-Commissioning[1,3,4] | 70637 | 1.50 - 2.87 |
| Shade screens[1,2,3,4] | 72088 | 1.84 |
| Smart Strips[1,2,3,4] | 72088 | 1.15 - 3.83 |
| Strip Curtains[1,2,3,4] | 70637 | 1.66 – 3.10 |
| Standard T8/T5 with Electronic Ballast[1,3,4] | 70637 | 1.02 - 3.57 |
| T12 to T8 (Standard or Premium) [1,3,4] | | |
| -Retrofit Lighting | 70637 | 1.03 - 3.16 |
| -Direct Install | 72088 | 1.02 - 3.57 |
| Vending (Beverage/Snack) Machine Controls[1,2,3,4] | 70637 | 1.31 - 3.08 |
| Variable Speed Drivers (1 HP - ≥200 HP) [1,2,3,4] | 70637 | 1.11 - 9.80 |
| Water Cooled Chillers (< 150 Tons - >= 300 Tons)[1,2,3,4] | 70637 | 2.93 - 3.82 |
| Whole Building[2,3] | 71460 | 1.48 |