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**BEFORE THE ARIZONA CORPORATION COMMISSION**

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GARY PIERCE  
Chairman  
BOB STUMP  
Commissioner  
SANDRA D. KENNEDY  
Commissioner  
PAUL NEWMAN  
Commissioner  
BRENDA BURNS  
Commissioner

Arizona Corporation Commission

**DOCKETED**

MAR - 3 2011

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IN THE MATTER OF THE APPLICATION  
OF ARIZONA PUBLIC SERVICE  
COMPANY FOR APPROVAL OF THE  
COMPANY'S 2011 DEMAND SIDE  
MANAGEMENT IMPLEMENTATION  
PLAN

DOCKET NO. E-01345A-10-0219

DECISION NO. 72215

ORDER

Open Meeting  
February 17, 2011  
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

Background

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

2. APS provides service in the counties of Apache, Cochise, Coconino, Gila, La Paz, Maricopa, Navajo, Pima, Pinal, Yavapai and Yuma. The Company services over 1.1 million customers in Arizona, including approximately 984,000 Residential and 120,000 Commercial customers.

3. On June 1, 2011, APS filed an application for approval of the Company's 2011 Demand Side Management Implementation Plan (the "2011 Plan"). The 2011 Plan filing was in

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1 compliance with the provisions of the settlement agreement in the Company's most recent rate  
2 case, as approved by the Arizona Corporation Commission in Decision No. 71448.

3 4. The proposed 2011 Plan reflects changes to the existing APS DSM portfolio, and  
4 sets out the programs and measures by which APS plans to meet the energy savings goals agreed  
5 upon in the Settlement Agreement.

6 *The APS DSM Implementation Plan Filings (June 1, June 30 and August 2, 2010)*

7 5. The first Implementation Plan filing, dated June 1, 2010, was followed by two  
8 supplemental filings, on June 30, 2010<sup>1</sup> and on August 2, 2010. (The material filed on August 2<sup>nd</sup>  
9 included material originally planned for the August 16th filing.) With respect to changes and  
10 enhancements, the scope of each filing is as follows:

- 11 • June 1: Proposed Enhancements to Existing Residential and Non-Residential  
12 Programs and one new Residential program (Conservation Behavior Pilot  
13 Program ); preliminary budget and preliminary Demand-Side Management  
14 Adjustor Charge ("DSMAC") estimate;<sup>2</sup>
- 15 • June 30: Proposed New Prescriptive and Direct Install Measures for Non-  
16 Residential Program and the Bid for Efficiency Pilot;
- 17 • August 2: Proposed New Residential Shade Tree Pilot Program and New  
18 Measures for the Existing Residential Homes Program; also, Proposed New  
19 Residential Multi-Family Homes Program (originally planned for the August 16  
20 filing); final budget and DSMAC estimates.

21 6. *2011 APS Implementation Plan; Commission Actions*. The 2011 Plan has been  
22 addressed in multiple parts.

- 23 • On November 1, 2010, the Conservation Behavior Pilot program was approved  
24 by the Commission (Decision No. 71950). Decision No. 71950 primarily  
25 addressed the Conservation Behavior Pilot Program, one of three new  
26 Residential behavior-based programs. In the Decision, the Company's initial  
27 estimates regarding the budget, revenue requirement and DSMAC were also  
28 discussed, but no recommendation or order was made regarding the DSMAC;<sup>3</sup>

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26 <sup>1</sup> The First Supplemental filing was originally scheduled for July 1 (see the Application, page 7) but actually filed on  
27 June 30<sup>th</sup>.

27 <sup>2</sup> In addition, Filing 1 requested that costs associated with the Home Energy Information ("HEI") Pilot Program, along  
28 with marketing costs for certain rates, be recovered through the DSMAC.

28 <sup>3</sup> The actual DSMAC will be addressed in the current order, so that any Commission-ordered modifications or changes  
can be taken into account when the adjustor rate is reset.

- 1 • On December 10, 2010, in Decision No. 72032, the Commission approved  
2 changes to the existing Residential programs, the Consumer Products,  
3 Appliance Recycling, and Energy Wise programs;
- 4 • On January 6, 2011, in Decision No. 72060, the Commission approved two  
5 proposed new Residential programs (the Shade Tree pilot program and Multi-  
6 Family Energy Efficiency) and a new HVAC Diagnostic measure proposed for  
7 the existing Residential HVAC program. Decision No. 72060 also ordered the  
8 development of an integrated renewables and energy efficiency pilot program;
- 9 • On January 20, 2011, in Decision No. 72088, the Commission approved  
10 proposals relating to the Non-residential components of the DSM Portfolio,  
11 including multiple new Non-residential measures.

12 7. Scope of Review for this Order. The primary focus of Staff's review and analysis  
13 will be the type and amount of funding to be recovered through the Demand-Side Management  
14 Adjustor Charge ("DSMAC") and the reset of the DSMAC (meaning the reset of the adjustor  
15 charge per kWh and per kW). The review and analysis will include: (i) the Company's calculations  
16 and proposal concerning reset level for the DSMAC; (ii) Staff's calculations and recommendation  
17 concerning reset for the DSMAC; and (iii) the average bill impacts for the proposed reset levels.

18 8. In addition to the cost recovery, also discussed will be the scope of the outside audit  
19 (ordered in Decision No. 71460) and the Non-residential Coin Operated Washers proposed for  
20 inclusion in the Non-residential program.

21 9. Description of the DSMAC. The DSMAC is used to recover DSM-related costs.  
22 The DSMAC and the adjustor charge for renewables are combined and appear on Residential bills  
23 as the "Environmental benefits surcharge." For non-residential customers, the charges for DSM  
24 and renewables are listed separately on bills.

### 25 **Estimated 2011 DSM Portfolio Budget**

26 10. Below is a table showing the Company's projected budget for each program  
27 approved by the Commission, broken out by category. Budget information for the programs  
28 appeared in previous orders (listed herein), but is shown herein, in the Program Cost Table, to  
provide a more complete picture of the APS DSM Portfolio, and to set out the components of  
program costs that are proposed for recovery through the DSMAC.

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## PROGRAM COST TABLE

Programs	Rebates	Training/ Technical	Consumer Education	Implementation	Program Marketing	Planning/ Administra tion	Financing	Total
Consumer Products <sup>4</sup>	\$4,401,000	\$41,000	\$145,000	\$1,767,000	\$975,000	\$218,000	\$0	\$7,547,000
Existing Homes	\$9,715,000	\$334,000	\$365,000	\$3,129,000	\$807,000	\$257,000	\$205,000	\$14,812,000
New Construction	\$1,300,000	\$175,000	\$125,000	\$412,000	\$588,000	\$200,000	\$0	\$2,800,000
Appliance Recycling	\$315,000	\$0	\$21,000	\$996,000	\$314,000	\$15,000	\$0	\$1,661,000
Low Income	\$2,594,000	\$10,000	\$20,000	\$50,000	\$30,000	\$75,000	\$0	\$2,779,000
Conservation Behavior	\$0	\$0	\$25,000	\$897,000	\$0	\$95,000	\$0	\$1,017,000
Multi-Family	\$590,000	\$10,000	\$25,000	\$555,000	\$62,000	\$35,000	\$0	\$1,277,000
Shade Trees	\$50,000	\$45,000	\$25,000	\$244,000	\$55,000	\$25,000	\$0	\$444,000
Total for Residential	\$18,965,000	\$615,000	\$751,000	\$8,050,000	\$2,831,000	\$920,000	\$205,000	\$32,337,000
Large Existing Facilities	\$8,588,000	\$388,000	\$87,000	\$3,165,000	\$867,000	\$601,000	\$96,000	\$13,792,000
New Construction	\$1,769,000	\$127,000	\$25,000	\$1,025,000	\$284,000	\$180,000	\$0	\$3,410,000
Small Business	\$3,315,000	\$92,000	\$10,000	\$607,000	\$205,000	\$183,000	\$48,000	\$4,460,000
Schools	\$2,239,000	\$99,000	\$13,000	\$678,000	\$221,000	\$113,000	\$95,000	\$3,458,000
Energy Information Systems	\$138,000	\$10,000	\$5,000	\$20,000	\$10,000	\$12,000	\$0	\$195,000
Totals for Non-Residential	\$16,049,000	\$716,000	\$140,000	\$5,495,000	\$1,587,000	\$1,089,000	\$239,000	\$25,315,000
Total Residential and Non-residential	\$35,014,000	\$1,331,000	\$891,000	\$13,545,000	\$4,418,000	\$2,009,000	\$444,000	\$57,652,000
Percentage of Cost by Category	60.7%	2.3%	1.5%	23.5%	7.7%	3.5%	0.8%	-
Measurement, Evaluation and Research	-	-	-	-	-	-	-	\$2,500,000
Total Program Costs	-	-	-	-	-	-	-	\$60,152,000

11. Because DSM programs are funded by APS customers, the best way of managing DSM programs is to ensure that as much money as possible is being returned to APS ratepayers who are willing and able to participate in energy efficiency programs. On Page 12, paragraph 40 of Decision No. 72060, concerning the Shade Tree program, Staff expressed concern about implementation costs being high, relative to costs for rebates and incentives. We agree with that concern. The Shade Tree program was approved for a total budget of \$440,000. The rebates and

<sup>4</sup> These numbers do not include the added cost of distributing 500,000 CFLs, as ordered by the Commission, rather than the 150,000 originally proposed by the Company.

1 incentives budgeted for this program are only \$50,000. Therefore, the incentive ration is only 11.2  
2 percent. That is not a desirable result.

3 12. For our future consideration, we would like Staff to take into account the ratio of  
4 incentives to total program budget for each DSM program. When APS submits its implementation  
5 plan, it should take into consideration how the incentive ratio is apportioned.

6 **Energy Efficiency Savings**

7 13. Savings Goals. For the 2011 DSM Plan year, the APS Energy Efficiency annual  
8 energy savings goal is 1.25 percent of its total energy resources needed to meet retail load,  
9 meaning 391,000 MWh of energy savings. APS projects that 352,000 MWh would come from  
10 energy efficiency programs and 39,000 MWh would come from demand response programs.

11 14. The 1.25 percent energy savings goal was set in the Settlement Agreement.  
12 Paragraph 14.1 provided that, if higher savings goals were adopted by the Commission, those  
13 higher goals would supersede any established in the Settlement Agreement. However, because the  
14 Electric Energy Efficiency Rules base savings on a percentage of the retail energy sales in the  
15 previous calendar year, while the Settlement Agreement calculates savings as a percentage of total  
16 energy resources (retail sales, plus distributed generation, plus energy efficiency), the Settlement  
17 Agreement standards are more stringent and remain the governing standard for the Company's  
18 energy savings goals.

19 15. Projected Energy Savings: Per Program and Total. The Projected Energy Savings  
20 Table shows the Company's projected energy savings on a per-program basis, and it shows how  
21 each program and sector would contribute to the energy efficiency savings needed to achieve the  
22 savings goal of 1.25 percent of total energy resources needed to meet retail loads. It also sets out  
23 how the Net Benefits are achieved.

24 **PROJECTED ENERGY SAVINGS TABLE<sup>5</sup>**

Programs	Capacity Savings MW	Annual MWh Savings	Lifetime MWh Savings	Societal Benefits	Societal Costs	Net Benefits
Consumer Products	14.0	99,000	615,000	\$40,054,000	\$8,230,000	\$31,824,000
Existing Homes	15.9	21,000	256,000	\$28,295,000	\$19,000,000	\$9,295,000
New Construction	4.9	8,000	155,000	\$16,410,000	\$4,426,000	\$11,984,000

28 <sup>5</sup> Carbon compliance and water externalities have been removed from the Societal and Net Benefits.

1	Appliance Recycling	1.6	11,000	66,000	\$4,241,000	\$1,346,000	\$2,895,000
2	Low Income	0.2	2,000	35,000	\$2,529,000	\$2,529,000	\$0
3	Conservation Behavior	3.4	25,000	25,000	\$1,069,000	\$1,017,000	\$52,000
4	Multi-Family	0.6	4,000	36,000	\$2,261,000	\$1,326,000	\$935,000
5	Shade Trees	0.4	1,000	19,000	\$1,431,000	\$979,000	\$452,000
6	<b>Total for Residential</b>	<b>41.0</b>	<b>171,000</b>	<b>1,207,000</b>	<b>\$96,290,000</b>	<b>\$38,853,000</b>	<b>\$57,437,000</b>
7	Large Existing Facilities	15.1	101,000	1,287,000	\$62,192,000	\$23,608,000	\$38,584,000
8	New Construction	1.6	27,000	377,000	\$16,260,000	\$5,367,000	\$10,893,000
9	Small Business	6.1	28,000	439,000	\$19,454,000	\$5,115,000	\$14,339,000
10	Schools	4.6	23,000	314,000	\$15,534,000	\$4,795,000	\$10,739,000
11	Energy Information Systems	0.2	2,000	27,000	\$996,000	\$241,000	\$755,000
12	<b>Totals for Non-Residential</b>	<b>27.6</b>	<b>181,000</b>	<b>2,444,000</b>	<b>\$114,436,000</b>	<b>\$39,126,000</b>	<b>\$75,310,000</b>
13	<b>Total, Residential and Non-residential</b>	<b>68.6</b>	<b>352,000</b>	<b>3,651,000</b>	<b>210,726,000</b>	<b>\$77,797,000</b>	<b>\$132,747,000</b>
14	Measurement, Evaluation and Research	-	-	-	-	\$2,500,000	\$(2,500,000)
15	Performance Incentive	-	-	-	-	\$8,421,000	\$(8,421,000)
16	<b>Total</b>	<b>68.6</b>	<b>352,000</b>	<b>3,651,000</b>	<b>210,726,000</b>	<b>\$88,900,000</b>	<b>\$121,826,000</b>

16. Projected Emissions Savings. Below is a table with the Company's projected emissions savings arising from its DSM Portfolio. This table represents quantified, non-monetized emissions savings.

Emission	Water Million Gallons	SOx Pounds	NOx Pounds	CO2 Million Pounds	PM10 Pounds
Consumer Products	195	2,737	51,998	553	15,191
Existing Homes	81	1,139	21,645	230	6,323
New Construction	49	690	13,105	139	3,829
Appliance Recycling	21	294	5,580	59	1,630
Low Income	11	156	2,959	31	865
Conservation Behavior	8	111	2,114	22	618
Multi-Family	11	160	3,044	32	889
Shade Trees	6	86	1,632	17	477
<b>Total for Residential</b>	<b>382</b>	<b>5,373</b>	<b>102,077</b>	<b>1,083</b>	<b>29,822</b>
Large Existing Facilities	408	5,727	108,816	1,157	31,789
New Construction	120	1,678	31,875	339	9,312
Small Business	139	1,954	37,117	395	10,843
Schools	100	1,397	26,549	282	7,756
Energy Information Systems	9	120	2,283	24	667
<b>Totals for Non-Residential</b>	<b>776</b>	<b>10,876</b>	<b>206,640</b>	<b>2,197</b>	<b>60,367</b>
<b>Total, Residential and Non-residential</b>	<b>1,158</b>	<b>16,249</b>	<b>308,717</b>	<b>3,280</b>	<b>90,189</b>

1 **CALCULATION OF THE DSMAC: OVERVIEW**

2 17. The DSMAC is used to recover most<sup>6</sup> of the program costs for the 2011 DSM  
3 Implementation year, along with other costs associated with the Demand-Side Management  
4 portfolio. These related costs include Measurement, Evaluation and Research (“MER”) to assess  
5 the Company’s DSM programs, balances from previous program years, the Performance Incentive,  
6 and recovery for the Company’s Demand Response programs.<sup>7</sup> (These costs will be discussed in  
7 more detail, herein, in the section entitled “*Estimated 2011 DSM Budget and the Estimated DSM*  
8 *Revenue Requirement.*”)

9 18. The discussion with respect to Demand Response will include a discussion of costs  
10 related to the proposed Home Energy Information (“HEI”) Pilot Program, along with marketing  
11 costs for certain rates<sup>8</sup>, through the DSMAC. Although the HEI pilot itself is addressed in another  
12 docket (E-01345A-10-0075), if the pilot is approved by the Commission, all or part of the costs  
13 related to it may be recovered through the DSMAC, impacting the level of the reset.

14 **Estimated DSM 2011 Budget and Demand-Side Management Adjustor Charge (“DSMAC”)**

15 19. *Estimated 2011 DSM Budget and the Estimated DSM Revenue Requirement.* The  
16 updated information from the August 2 filing was used for the estimated 2011 DSM Budget table,  
17 since these numbers reflect the Company’s most current budget projection. This estimate does not  
18 reflect any modifications as a result of Commission actions or as proposed by Staff. Each budget  
19 category is described in the section following the table.

20 **APS Estimated 2011 DSM Budget**  
21 **(budget categories described below)**

22 Energy Efficiency Program Costs	\$57,652,000
23 Measurement, Evaluation and Research	\$2,500,000
24 Total Energy Efficiency Costs (without 25 Performance Incentive)	\$60,152,000
26 Performance Incentive	\$8,421,000
27 Total Energy Efficiency Costs (with 28 Performance Incentive)	\$68,573,000
Demand Response	\$10,620,000
Total 2011 DSM Budget	\$79,193,000

<sup>6</sup> \$10 million of the DSM portfolio budget is recovered in base rates.

<sup>7</sup> Demand Response costs are allowed to be recovered through the DSMAC.

<sup>8</sup> Critical Peak Pricing, Residential Super Peak Rate, Time of Use Rate, and the Interruptible Rate.

1           20.    Energy Efficiency Program Costs. This amount reflects the projected total program  
2 costs for the 2011 DSM Implementation year, as reflected in the Program Cost Table, herein.

3           21.    Measurement, Evaluation and Research (“MER”). This category is defined in the  
4 most current APS DSM Semi-Annual Progress Report (September 1, 2010) as “[a]ctivities that  
5 will identify current baseline efficiency levels and the market potential of DSM measures, perform  
6 process evaluations, verify that energy-efficient measures are installed, track savings, and identify  
7 additional energy efficiency research.”

8           22.    Total Energy Efficiency Costs (without Performance Incentive). This represents  
9 the total of the program costs and the costs for MER, without the Performance Incentive.

10          23.    Performance Incentive. The Performance Incentive is calculated based on the level  
11 of energy savings APS achieves relative to its annual energy savings goals. The Performance  
12 Incentive is then capped, or limited, based on the program costs.<sup>9</sup>

13          24.    The table below lists the percentages used for calculating the Performance Incentive  
14 and the cap on the Performance Incentive for each range of achievement, as set in the Settlement  
15 Agreement.

Achievement Relative to the Energy Efficiency Goals	Performance Incentive as % of Net Benefits	Performance Incentive Capped at % of Program Costs
Less than 85%	0%	0%
85% to 95%	6%	12%
96% to 105%	7%	14%
106% to 115%	8%	16%
116% to 125%	9%	18%
Above 125%	10%	20%

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23          25.    To illustrate how the formula would work, if APS achieves energy savings equal to  
24 at least 96 percent (but no more than 105 percent) of its annual goal, the Performance Incentive  
25 would be based on 7 percent of the Net Benefits achieved, capped at 14 percent of the program  
26 costs. The calculation below shows how to calculate the Performance Incentive proposed by APS:

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28 <sup>9</sup> Section 14.2 of the 2009 Settlement Agreement states the following “The existing performance incentive for energy efficiency programs shall be modified to be a tiered performance incentive as a % of net benefits, capped at a tiered % of program costs.”



Calculation of Performance Incentive (Assuming Standard is Met)	
Line 1	7% of Net Benefits (\$121,826,000) = \$8,527,820
Line 2	14% of Total Program Costs (\$60,152,000) = \$8,421,000
Line 3	Performance Incentive = \$8,421,000 (Line 1 capped at Line 2)

26. Total Energy Efficiency Costs (with Performance Incentive). This represents the total of the program costs and the costs for MER, and also includes the Performance Incentive.

27. Demand Response. Demand Response is defined in the Electric Efficiency Rules as "modification of customers' electricity consumption patterns, affecting the timing or quantity of customer demand and usage, achieved through intentional actions taken by an affected utility or customer because of changes in prices, market conditions, or threats to system reliability." Demand Response, as it relates to DSM, reduces the demand for electricity during peak periods, increasing the likelihood that a utility can postpone or avoid building new generation and transmission facilities. Under Decision No. 67744 (April 7, 2005), APS is allowed to recover costs for demand response programs through the DSMAC, but the Performance Incentive is based only on the DSM Portfolio's energy-efficiency programs.

28. Total 2011 DSM Budget. This amount reflects the total DSM costs arising from the 2011 DSM Implementation Plan.

#### **Estimated 2011 Revenue Requirements for the DSMAC**

29. The APS Estimated 2011 Revenue Requirement table for the DSMAC reflects the budget for DSM programs, as adjusted to arrive at the actual revenue to be recovered through the DSMAC. This estimate also does not reflect any modifications as a result of Commission actions or as proposed by Staff. Staff's recommended adjustments will be listed and discussed in the section entitled "*Staff's Estimated 2011 DSM Budget*."

APS Estimated 2011 Revenue Requirements for DSMAC	
Total 2011 DSM Budget	\$79,193,000
2009 Budget Carryover to 2011	\$5,332,979
Amount Recovered in Base Rates	(\$10,000,000)

Credit for Gains from Asset Sales	(\$118,079)
Recovery of True-up Balance for 2008	\$359,100
Total Revenue Requirement for DSMAC - 2011	\$74,767,000

30. Total 2011 DSM Budget. See the Program Costs Table herein.

31. 2009 Budget Carryover to 2011. In accordance with the Settlement Agreement, the basis for calculating the DSMAC was changed from historic to projected, meaning that the amount to be recovered through the DSMAC is now calculated by projecting DSM costs for the next year, adjusted for previous under- or over-collections. One impact of this provision was that, due to this transition, historic 2009 costs and projected 2010 costs would be recovered at the same time and through the same charge (minus \$10,000,000 already recovered through base rates). Decision No. 71460, which reset the DSMAC for the 2010 Implementation year, ordered that recovery of the 2009 historic costs be spread over three years. The 2009 Budget Carryover of \$5,332,979 represents the second of the three recoveries.

32. Amount Recovered in Base Rates. \$10 million of the DSM portfolio budget is recovered in base rates, so this amount is subtracted from the revenue requirement to be recovered through the DSMAC.

33. Credit for Gains from Asset Sales. APS reported \$118,079 in Net Gains on Utility Property accounts as of December 31, 2009. Decision No. 71716 ordered that this amount be applied to the DSMAC account balance.

34. Recovery of True-up Balance. Each year's DSMAC is set based on projections, and the Company may either over- or under-recover the costs of its DSM Portfolio. During the annual reset of the DSMAC any previous over- or under-collections are taken into account in calculating the revenue requirement and the DSMAC. With respect to the \$359,100 amount, the 2009

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1 collection of 2008 costs<sup>10</sup> was delayed a month, which contributed to an under-recovery of those  
2 costs.

3 35. Total Revenue Requirement for DSMAC – 2011. This represents the total amount  
4 APS is proposing to recover through the DSMAC.

5 36. APS Estimates for the DSMAC. The Company has proposed the following per kWh  
6 and per kW DSMACs. (The per kW DSMAC is paid by demand-billed Non-residential customers.  
7 It is not paid by Residential or non-demand-billed Non-residential customers.)

Unit	Current Charge	Proposed Charge <sup>11</sup>
Per kWh	\$0.001646	\$0.002694
Per kW	\$0.720083	\$0.960

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11 37. The alternative DSMACs recommended by Staff are listed in the section entitled  
12 “Staff’s Recommendations for the DSMACs.”

13 **Estimated 2011 DSM Budget.**

14 38. The table below indicates where Staff’s recommended budget estimate varies from  
15 the Company’s estimate.

Staff’s Estimated 2011 DSM Budget	Company Estimate	Staff Estimate
Energy Efficiency Program Costs	\$57,652,000	\$57,652,000
<i>Increased cost of CFL giveaway (Consumer Products program)</i>		\$700,000
Measurement, Evaluation and Research	\$2,500,000	\$2,500,000
Total Energy Efficiency Costs (without Performance Incentive)	\$60,152,000	\$60,852,000
<i>Performance Incentive</i>	\$8,421,000	\$8,519,000
Total Energy Efficiency Costs (with Performance Incentive)	\$68,573,000	\$69,371,280
Demand Response	\$10,620,000	\$9,456,016
Total 2011 DSM Budget	\$79,193,000	\$78,827,296

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<sup>10</sup> 2007 costs were rolled into the under-recovered amount to be collected for 2008.

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<sup>11</sup> The Company’s June 1 filing provided a preliminary estimate of \$0.002682 per kWh for the DSM adjuster charge, or DSMAC. In the August 2<sup>nd</sup> filing, the estimated DSMAC was revised slightly upward to \$0.002694 per kWh (for a total increase of \$0.000012 per kWh). The change was due to increases in the estimates for the Existing Homes and Shade Tree programs, and to the performance incentive.

1           39.     Staff's Recommended Revisions. Staff's estimate for the 2011 DSM Budget varies  
2 from the Company's in three ways: (i) it includes an estimate on the impact of increasing the  
3 number of CFL giveaways from 150,000 up to 500,000, as ordered by the Commission (350,000  
4 added CFL giveaways at approximately \$2.00 per CFL = \$700,000); (ii) it takes into account the  
5 impact of increased spending for CFLs on the Performance Incentive (increased program costs  
6 would raise the cap and increase the level of the incentive); and (iii) it includes Staff's  
7 recommended adjustment to the HEI Pilot Program in another docket. (Staff's recommended  
8 adjustment would decrease the Demand Response portion of the DSM Portfolio by \$1,163,999.)

9           40.     Increased CFL Giveaways. Staff's estimates are based on APS being able to  
10 purchase and distribute all 500,000 CFLs, but actual participation numbers could be lower. Staff  
11 has included information on the potential costs associated with the additional CFLs in order to  
12 provide a more complete estimate of the 2011 DSM budget and the revenue requirement that will  
13 ultimately be recovered through the DSMAC.

14           41.     Recovery for the Home Energy Information ("HEI") Pilot Program. The HEI pilot  
15 program is addressed in another docket (Docket No. E-01345A-10-0075). As indicated in Staff's  
16 report in that docket, Staff believes that the primary purpose of the HEI pilot program is to gather  
17 information on implementing Demand Response, which is recoverable through the DSMAC.  
18 Based on Staff's modifications and recommendations in Docket No. E-01345A-10-0075, Staff has  
19 recommended that the total HEI-related costs to be recovered through the DSMAC be set at  
20 \$2,517,016, rather than the \$3,681,015 requested by the Company. The lower amount reflects  
21 Staff's position that the Pre-Pay Option is not DSM and that costs for the Pre-Pay Option should  
22 not be recovered through the DSMAC. It also reflects the removal of consulting expenses that  
23 Staff determined are not part of the proposed HEI Pilot Program.

24           42.     The Table below summarizes the differences between the Company-proposed  
25 recovery for HEI and Staff recommendations in that docket:

26 ...

27 ...

28 ...

HEI Pilot	APS Proposed Budget	Staff's Proposed Budget	Difference
Non-capital-related expenses	\$2,835,000	\$2,281,000	\$554,000
Capital-related Carrying Costs	\$721,015	\$236,016	\$484,999
Consultant Expenses	\$125,000	\$0	\$125,000
Totals	\$3,681,015	\$2,517,016	\$1,163,999

43. Because the purpose of creating a pilot program is to gather information about implementing DSM, it is essential for the Commission to be made aware of relevant information for the purpose of evaluating the merits of each program. Accordingly, APS must file an evaluation report for the HEI pilot program in the 2011 Implementation Plan by December 31, 2011. This report shall provide a mid-point assessment of information gathered on the program. In addition, APS must file a final report by December 31, 2012, assessing all of the gathered information and state why it believes each program should or should not be fully implemented.

44. The remainder of the Demand Response budget arises from the APS Solutions program already approved by the Commission, along with MER and marketing costs for a number of new, existing and proposed rates, such as time-of-use, super peak, and interruptible. (APS plans additional marketing for the existing rates.) Staff has recommended that these new MER and marketing costs, equaling \$260,000, be recovered through the DSMAC.

#### **Estimated 2011 Revenue Requirements for DSMAC**

45. Revenue Requirement. Staff's estimate of the revenue requirement includes the same adjustments as the Company's, but is based on Staff's revised 2011 DSM Budget.

#### **Staff Estimate: 2011 Revenue Requirements for DSMAC**

	Company's Estimate	Staff's Estimate
Total 2011 DSM Budget	\$79,193,000	\$78,827,296
2009 Budget Carryover to 2011	\$5,332,979	\$5,332,979
Amount Recovered in Base Rates	(\$10,000,000)	(\$10,000,000)
Credit for Gains from Asset Sales	(\$118,079)	(\$118,079)
Recovery of True-up Balance	\$359,100	\$359,100
Total Revenue Requirement for DSMAC - 2011	\$74,767,000	\$74,401,296

...

1           46. Staff's Recommendations for the DSMACs. Based on its recommended  
2 modifications, Staff has recommended the following per kWh and per kW DSMACs. (The per  
3 kW DSMAC is paid by demand-billed Non-residential customers. Residential and non-demand-  
4 billed Non-residential customers pay the per-kWh charge.)

Unit	Current Charge	APS Proposed Charge	Staff Proposed Charge
Per kWh	\$0.001646	\$0.002694	\$0.002681
Per kW	\$0.720083	\$0.960	\$0.9555

8 **Estimated Residential Bill Impacts for APS-proposed DSMACs and Staff Recommended**  
9 **DSMACs**

10           47. Estimated Residential Bill Impacts for the APS-proposed DSMAC. The monthly  
11 bill impact for the APS-proposed DSMAC of \$0.002694 per kWh, meaning the change in the bill  
12 that would result from the higher DSMAC, would be approximately \$1.23 per month, or \$14.80  
13 per year, for a Residential household with average kWh usage.

14           48. Estimated Residential Bill Impacts from Staff-recommended DSMAC. The monthly  
15 bill impact for the Staff-recommended DSMAC of \$0.002681 per kWh, meaning the change in the  
16 bill that would result from the higher DSMAC, would be approximately \$1.22 per month, or  
17 \$14.61 per year, for a Residential household with average kWh usage.

18           49. Effective Date of New DSMAC. The DSMAC is scheduled to reset once a year, in  
19 March<sup>12</sup>, following Commission approval. The new DSMAC rate, designed to recover costs of the  
20 APS 2011 Demand Side Management Implementation Plan will not be reflected in rates until the  
21 first billing cycle of March 2011.

22           50. Because the DSMAC is used to recovery program costs for APS' DSM  
23 implementation plans, we believe it is important to be always mindful that the costs are borne by  
24 the Company's ratepayers. DSM is a worthy pursuit. But, the means of achieving goals come at a  
25 price. The Company's 2011 Implementation Plan's proposed DSMAC revenue requirement of  
26 \$74,767,000 is a significant amount.

27  
28 <sup>12</sup> Settlement Agreement (Docket No. 08-0172, Page 29, Paragraph 14.6); approved in Decision No. 71448.

1           51.     Accordingly, every publication, educational brochure, promotional aid, website  
2 content, radio advertisement television advertisement and internet advertisement related to the  
3 2011 plan should make it clear that the program being advertised is paid for by APS ratepayers.

4           52.     Evaluation Process. Programs and measures proposed by APS are evaluated by  
5 Staff for cost-effectiveness, on a projected basis. If approved, and once implemented, these  
6 programs and measures are evaluated on an ongoing basis, through a process called  
7 "Measurement, Evaluation and Research: ("MER"). (The term is defined, herein, as one of the  
8 budget categories for the DSM 2011 Budget.) These activities are performed by Navigant  
9 Consulting, an independent third party consulting company overseen by APS. Navigant also  
10 provides input and screening services, including benefit/cost analysis, for potential new programs  
11 and measures, but does not provide implementation services for APS programs.

12           53.     Outside Audit. Decision No. 71460 (1/26/2010) stated the following:

13                     *Given the high levels of ratepayer funding for the APS Energy*  
14                     *Efficiency portfolio, and its complexity, Staff has*  
15                     *recommended that an audit be performed, by an independent*  
16                     *third party, separate from the Company's existing*  
17                     *Measurement, Evaluation and Research portfolio component.*  
                      *The auditor is to be selected by Staff, in consultation with the*  
                      *Company.*

18           54.     Decision No. 71460 also states that the audit will be performed at a time to be  
19 determined by Staff, and may include, but would not be limited to, the following elements:

- 20                     • *Verifying the correct installation of a sampling of DSM measures;*
- 21                     • *Comparing projected and actual MWh savings required to meet the energy*  
22                     *savings goal;*
- 23                     • *Reviewing projected and actual net benefits;*
- 24                     • *Comparing the performance incentive against savings achieved to confirm*  
25                     *that the level of performance incentive corresponds with actual savings;*
- 26                     • *Reviewing any other calculation relating to the portfolio or performance*  
27                     *incentive;*
- 28                     • *Reviewing the program costs for appropriateness;*

...

- 1           • *Comparing the projected and actual energy efficiency performance of*  
2           *program measures;*
- 3           • *Determining whether fuel switching is taking place;*
- 4           • *Reviewing a sampling of documentation relating to the payment of*  
5           *incentives; and*
- 6           • *Determining whether any baselines utilized for determining energy savings*  
7           *should be reset due to changes in standards.*

8           55. Staff has recommended that the following elements be added to the list of items to  
9 be reviewed by an auditor:

- 10           • Reviewing any escalations used for reasonableness;
- 11           • Reviewing the hourly marginal costs for 2009 and 2010 for reasonableness,  
12           both generally and in reflecting actual avoided costs;
- 13           • Confirming that an appropriate true-up of the performance incentive has been  
14           done in cases where actual savings have differed from projected savings  
15           sufficiently to impact the performance incentive; and
- 16           • Confirming that no costs recovered through the DSMAC are also recovered in  
16           base rates.

17 **Non-residential Measures: Coin Operated Washers**

18           56. Decision No. 72088 ordered that the four Coin Operated Washer measures not be  
19 approved for inclusion in the APS Non-residential program at that time. Analysis had not been  
20 completed on new savings data provided to Staff, so the cost-effectiveness of these measures had  
21 not been confirmed. Staff was directed, in Open Meeting, to complete its analysis and include  
22 updated information on the cost-effectiveness of the measures in another Open Meeting.

23           57. Based on the new data and additional review, Staff has determined that the Coin  
24 Operated Washer measures are cost-effective, on a projected basis, with benefit-cost ratios ranging  
25 from 1.5 to 2.1. Staff has recommended that the Coin Operated Washers be approved as measures  
26 for the Non-residential DSM portfolio. Staff has also recommended that the Coin Operated  
27 Washers be eliminated as measures if they do not prove cost-effective in practice.

28 ...



1 58. Summary of Recommendations

- 2 • Staff has recommended that the new MER and marketing costs, equaling  
3 \$260,000, be recovered through the DSMAC.
- 4 • Staff has recommended that the Coin Operated Washers be approved as  
5 measures for the Non-residential DSM portfolio.
- 6 • Staff has recommended that the Coin Operated Washers be eliminated as  
7 measures if they do not prove cost-effective in practice.
- 8 • Staff has recommended that the following elements be added to the list of items  
9 to be reviewed by an outside auditor:
- 10 ▪ Reviewing any escalations used for reasonableness;
  - 11 ▪ Reviewing the hourly marginal costs for 2009 and 2010 for  
12 reasonableness, both generally and in reflecting actual avoided costs;
  - 13 ▪ Confirming that an appropriate true-up of the performance incentive has  
14 been done in cases where actual savings have differed from projected  
15 savings sufficiently to impact the performance incentive; and
  - 16 ▪ Confirming that no costs recovered through the DSMAC are also  
17 recovered in base rates.
- 18 • Staff has recommended that the DSMACs be reset to \$0.002681 per kWh and  
19 \$0.9555 per kW.

18 CONCLUSIONS OF LAW

19 1. APS is an Arizona public service corporation within the meaning of Article XV,  
20 Section 2, of the Arizona Constitution.

21 2. The Commission has jurisdiction over APS and over the subject matter of the  
22 application.

23 3. The Commission, having reviewed the application and Staff's Memorandum dated  
24 February 3, 2011, concludes that it is in the public interest to approve the APS 2011 Energy  
25 Efficiency Implementation Plan, with the modifications proposed by Staff, as amended in Docket  
26 No. E-01345A-10-0075.

27 ...

28 ...

ORDER

1  
2 IT IS THEREFORE ORDERED that the DSMACs be reset to \$0.002717 per kWh and  
3 \$0.9685 per kW.

4 IT IS FURTHER ORDERED that the new MER and marketing costs, equaling \$260,000,  
5 be recovered through the DSMAC.

6 IT IS FURTHER ORDERED that the Coin Operated Washers be approved as measures for  
7 the Non-residential DSM portfolio.

8 IT IS FURTHER ORDERED that the Coin Operated Washers be eliminated as measures if  
9 they do not prove cost-effective in practice.

10 IT IS FURTHER ORDERED that the following additional elements be added to the list of  
11 items to be reviewed by an outside auditor:

- 12 • Reviewing any escalations used for reasonableness;
- 13 • Reviewing the hourly marginal costs for 2009 and 2010 for reasonableness,  
14 both generally and in reflecting actual avoided costs;
- 15 • Confirming that an appropriate true-up of the performance incentive has been  
16 done in cases where actual savings have differed from projected savings  
17 sufficiently to impact the performance incentive; and
- 18 • Confirming that no costs recovered through the DSMAC are also recovered in  
19 base rates.

20 IT IS FURTHER ORDERED that Arizona Public Service Company shall, for every  
21 publication, educational brochure, promotional aid, website content, radio advertisement,  
22 television advertisement and internet advertisement related to its 2011 DSM implementation plan,  
23 make it clear that the program being advertised is paid for Arizona Public Service Company's  
24 ratepayers.

25 IT IS FURTHER ORDERED that in all future DSM filings that deal with or have an effect  
26 on the DSM budget for a program or programs, Staff shall take into account the ratio of incentives  
27 to total program budget for each DSM program and Arizona Public Service Company shall take  
28 into consideration how the incentive ratio is apportioned.






...

1 IT IS FURTHER ORDERED that Arizona Public Service Company shall file, in Docket  
 2 Control under Docket No. E-01345A-10-0075, an evaluation report for the HEI pilot program by  
 3 December 31, 2011. This report shall provide a mid-point assessment of information gathered on  
 4 the program.

5 IT IS FURTHER ORDERED that Arizona Public Service Company shall file, in Docket  
 6 Control under Docket No. E-01345A-10-0075, a final report on the HEI pilot program by  
 7 December 31, 2012, assessing all of the gathered information and state why it believes this  
 8 program should or should not be fully implemented.

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

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

11  
 12   
 13 CHAIRMAN  
 14   
 15 COMMISSIONER  
 16  COMMISSIONER  
 17  COMMISSIONER  
 18  COMMISSIONER

17 IN WITNESS WHEREOF, I, ERNEST G. JOHNSON,  
 18 Executive Director of the Arizona Corporation Commission,  
 19 have hereunto, set my hand and caused the official seal of  
 20 this Commission to be affixed at the Capitol, in the City of  
 Phoenix, this 31<sup>st</sup> day of March, 2011.

21  
 22   
 23 ERNEST G. JOHNSON  
 24 EXECUTIVE DIRECTOR

25 DISSENT: \_\_\_\_\_

26 DISSENT: \_\_\_\_\_

27 SMO:JMK:lhmlWVC

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