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BEFORE THE ARIZONA CORPORATION COMM  
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KRISTIN K. MAYES, Chairman  
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2009 MAR -5 P 3: 02

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Arizona Corporation Commission

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IN THE MATTER OF THE INVESTIGATION  
OF REGULATORY AND RATE INCENTIVES  
FOR GAS AND ELECTRIC UTILITIES

DOCKET NO. E-00000J-08-0314  
G-00000C-08-0314

ENERGY EFFICIENCY WORKSHOP

The Southwest Energy Efficiency Project (SWEEP) appreciates the opportunity to submit comments and information in response to the Staff's questions on energy efficiency filed in this proceeding.

SWEEP has attached the direct testimony of Jeff Schlegel in the Arizona Public Service Company (APS) rate case proceeding (E-01345A-08-0172), which addresses several of Staff's questions. Mr. Schlegel, in his direct testimony:

1. Emphasizes that the total cost (sum of program and customer costs) for energy efficiency savings is two to four cents per lifetime kWh saved, delivered to the customer – significantly less than the cost of conventional generation, transmission, and distribution. P. 4.
2. Cites and agrees with the Western Governor Association finding: "We find that it is feasible to reduce electricity use 20% from projected levels in 2020, and do so cost effectively, through full deployment of best practice policies and programs." P. 5.
3. Recommends achieving three quarters of the 20% savings (or 15% savings by 2020) through utility sector energy efficiency programs, with the remaining 5% savings achieved through other policies including building energy codes and appliance standards. P. 5.
4. Proposes an Energy Efficiency Standard (EES) to (a) achieve energy savings equal to at least 15% of total energy resources needed to meet retail load in 2020; and (b) reduce summer peak demand by at least 15% of total capacity resources needed to meet retail peak demand in 2020. P. 5-6.
5. Estimates that achieving the EES goals (15% by 2020) in the APS service territory is roughly equivalent to achieving annual energy savings of 1.5% of retail energy sales each year over the 12-year period during 2009-2020, with allowance for some continued ramp up in the early years. P. 6.

6. Describes why it is important to have an energy efficiency standard or savings goal, so that the DSM energy efficiency programs and plans are focused primarily on the *effects and impacts* of energy and utility policies in any goal-setting process, and not primarily on the funding or spending levels. Simply spending money, even cost-effectively, should not be the primary focus of future goals for energy efficiency programs. P. 6.
7. Emphasizes that setting an Energy Efficiency Standard (EES) at a level of at least 15% by 2020 will increase energy efficiency program efforts to reach more utility customers and to reduce total customer costs, as well as to acquire the other benefits energy efficiency provides. P. 7.
8. Highlights the importance of reviewing and enhancing DSM programs on a regular basis, to update the programs and program offerings, to capture additional savings from new measures and opportunities, and to reach more customers. P. 7.
9. Recommends program enhancements and expansions that can achieve higher levels of energy savings and reach more customers, including:
  - High Performance and Zero-Net Energy Homes
  - High Performance and Zero-Net Energy Commercial Buildings
  - Home Performance Program Element for Existing Home Programs
  - Additional Funding and Program Enhancements for the Low Income Programs
  - Schools Customer Repayment Program Element
  - Small Business Customer Repayment Program Element. P. 8-9.
10. Proposes program funding levels, funding and cost recovery mechanisms, and an EES implementation plan process to support the EES. P. 10-12.
11. Recommends a two-prong approach to address the issue of utility under-recovery of fixed costs, through a combination of the use of a more current or future test year to reduce regulatory lag (or some other regulatory mechanism to address regulatory lag), and decoupling or some other mechanism to break the link between sales and revenues. SWEEP supports such regulatory mechanisms to address issues related to energy efficiency, i.e., when such mechanisms would be effective in substantially increasing customer energy efficiency and reducing the financial disincentive to utility support of increased energy efficiency. SWEEP is not in favor of decoupling or other mechanisms solely or primarily for the utility to recover authorized fixed costs. Therefore, in SWEEP's view the implementation of decoupling or other mechanisms should be premised on substantial increases in utility support of customer energy efficiency. The objective is to better align the utility financial interest with the customer and public interest. P. 13.
12. Supports performance incentive mechanisms that ensure a substantial majority of the net economic benefits of the programs accrue to customers, and that the vast majority of program expenditures fund program efforts to benefit customers, and not earnings for utilities. P. 13-14.

Thank you for the opportunity to submit these comments.

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8 Efficiency Project

9 **BEFORE THE ARIZONA CORPORATION COMMISSION**

10 MIKE GLEASON, CHARIMAN  
11 WILLIAM A. MUNDELL  
12 JEFF HATCH-MILLER  
13 KRISTIN K. MAYES  
14 GARY PIERCE

15 IN THE MATTER OF THE APPLICATION  
16 OF ARIZONA PUBLIC SERVICE  
17 COMPANY FOR A HEARING TO  
18 DETERMINE THE FAIR VALUE OF THE  
19 UTILITY PROPERTY OF THE COMPANY  
20 FOR RATEMAKING PURPOSES, TO FIX A  
21 JUST AND REASONABLE RATE OF  
22 RETURN THEREON, TO APPROVE RATE  
23 SCHEDULES DESIGNED TO DEVELOP  
24 SUCH RETURN

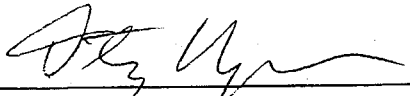
Docket No. E-01345A-08-0172

**NOTICE OF FILING TESTIMONY**

25 Southwest Energy Efficiency Project ("SWEEP"), through its undersigned  
counsel, hereby provides notice that it has this day filed the written direct testimony of  
Jeffrey A. Schlegel in connection with the above-captioned matter.

1 DATED this 19<sup>th</sup> day of December, 2008.

2 ARIZONA CENTER FOR LAW IN  
3 THE PUBLIC INTEREST

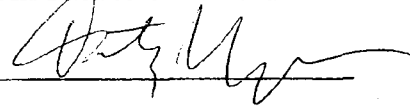
4 By   
5 Timothy M. Hogan  
6 202 E. McDowell Rd., Suite 153  
7 Phoenix, Arizona 85004  
8 Attorneys for Southwest Energy Efficiency  
9 Project

9 ORIGINAL and 13 COPIES of  
10 the foregoing filed this 19<sup>th</sup> day  
11 of December, 2008, with:

12 Docket Control  
13 Arizona Corporation Commission  
14 1200 W. Washington  
15 Phoenix, AZ 85007

16 COPIES of the foregoing  
17 electronically transmitted  
18 this 19<sup>th</sup> day of December, 2008  
19 to:

20 All Parties of Record  
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**BEFORE THE ARIZONA CORPORATION COMMISSION**

**COMMISSIONERS**

- MIKE GLEASON, Chairman
- WILLIAM A. MUNDELL
- JEFF HATCH-MILLER
- KRISTIN K. MAYES
- GARY PIERCE

IN THE MATTER OF THE APPLICATION OF  
ARIZONA PUBLIC SERVICE COMPANY FOR  
A HEARING TO DETERMINE THE FAIR  
VALUE OF THE UTILITY PROPERTY OF THE  
COMPANY FOR RATEMAKING PURPOSES,  
TO FIX A JUST AND REASONABLE RATE OF  
RETURN THEREON, AND TO APPROVE RATE  
SCHEDULES DESIGNED TO DEVELOP SUCH  
RETURN.

DOCKET NO. E-01345A-08-0172

**Permanent Rate Case**

Direct Testimony of

**Jeff Schlegel**  
**Southwest Energy Efficiency Project (SWEEP)**

December 19, 2008

**Direct Testimony of Jeff Schlegel, SWEEP  
Docket No. E-01345A-08-0172**

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1  
2  
3 **Introduction**

4 **Q. Please state your name and business address.**

5 A. My name is Jeff Schlegel. My business address is 1167 W. Samalayuca Drive,  
6 Tucson, Arizona 85704-3224.  
7

8  
9 **Q. For whom and in what capacity are you testifying?**

10  
11 A. I am testifying on behalf of the Southwest Energy Efficiency Project (SWEEP). I am  
12 the Arizona Representative for SWEEP.  
13

14  
15 **Q. Please describe Southwest Energy Efficiency Project.**

16  
17 A. SWEEP is a public interest organization dedicated to advancing energy efficiency as  
18 a means of promoting both economic prosperity and environmental protection in the  
19 six states of Arizona, Colorado, New Mexico, Nevada, Utah, and Wyoming. SWEEP  
20 works on state energy legislation, analysis of energy efficiency opportunities and  
21 potential, expansion of state and utility energy efficiency programs as well as the  
22 design of these programs, building energy codes and appliance standards, and  
23 voluntary partnerships with the private sector to advance energy efficiency. SWEEP  
24 is collaborating with utilities, state agencies, environmental groups, universities, and  
25 energy specialists in the region. SWEEP is funded primarily by foundations, the U.S.  
26 Department of Energy, and the U.S. Environmental Protection Agency.  
27

28  
29 **Q. What are your professional qualifications for presenting testimony in this**  
30 **docket?**

31  
32 A. I am an independent consultant specializing in policy analysis, evaluation and  
33 research, planning, and program design for energy efficiency and clean energy  
34 resources. I consult for public groups and government agencies, and I have been  
35 working in the field for over 20 years. In addition to my responsibilities with  
36 SWEEP, I am working or have worked extensively in many of the leading states that  
37 have effective energy efficiency programs, including California, Connecticut,  
38 Massachusetts, New Jersey, Vermont, and Wisconsin. In 1997, I received the  
39 Outstanding Achievement Award from the International Energy Program Evaluation  
40 Conference. I have represented SWEEP before the Commission since 2002.  
41

42  
43 **Q. Please summarize your testimony.**

44  
45 A. In my testimony I document the benefits of increasing energy efficiency in the APS  
46 service territory and demonstrate that increasing energy efficiency is in the public

1 interest; propose an Energy Efficiency Standard (EES) to set minimum goals for the  
2 ratepayer-funded and APS-administered energy efficiency programs; propose a  
3 specific EES goal to achieve energy savings equal to at least 15% of total energy  
4 resources needed to meet retail load in 2020, and to reduce summer peak demand by  
5 at least 15% of total capacity resources needed to meet retail peak demand in 2020;  
6 support timely cost recovery for the efficiency programs; oppose lost net revenue  
7 recovery proposed by APS; suggest other approaches for addressing the utility  
8 disincentive to large scale energy efficiency programs; and recommend revisions to  
9 the energy efficiency program performance incentive.

10  
11 **The Public Interest: Benefits of Increasing Energy Efficiency**

12  
13 **Q. What is the public interest in increasing energy efficiency in the APS Service**  
14 **Territory?**

15  
16 A. Increasing energy efficiency will provide significant and cost-effective benefits for  
17 APS customers (residential consumers and businesses), the electric system, the  
18 economy, and the environment. Increasing energy efficiency will save consumers  
19 and businesses money through lower electric bills, resulting in lower total costs for  
20 customers. Increasing energy efficiency will also reduce load growth, diversify  
21 energy resources, enhance the reliability of the electricity grid, reduce the amount of  
22 water used for power generation, reduce air pollution and carbon emissions, and  
23 create jobs and improve the economy. In addition, meeting a portion of load growth  
24 through increased energy efficiency can help to relieve system constraints in load  
25 pockets.

26  
27 By reducing electricity demand, energy efficiency mitigates electricity and fuel price  
28 increases and reduces customer vulnerability and exposure to price volatility. Energy  
29 efficiency does not rely on any fuel and is not subject to shortages of supply or  
30 increased prices for natural gas or other fuels.

31  
32 Energy efficiency is a reliable energy resource that costs less than other resources for  
33 meeting the energy needs of customers in the APS service territory. The total cost  
34 (sum of program and customer costs) for energy efficiency savings is two to four  
35 cents per lifetime kWh saved, delivered to the customer. This is significantly less  
36 than the cost of conventional generation, transmission, and distribution. The utility  
37 program cost to APS ratepayers is even lower, about two cents per lifetime kWh  
38 saved for a comprehensive portfolio of programs designed to serve all customer  
39 sectors. As APS has been ramping up its programs in 2005-2008, the energy  
40 efficiency savings have been achieved at a cost to APS ratepayers of about one cent  
41 per kWh.



1 **Q. What levels of savings might be achieved from energy efficiency programs?**

2  
3 A. Leading states are achieving annual energy savings equivalent to or exceeding 1% of  
4 retail electricity sales.<sup>1</sup> In addition, recently states have been setting higher goals,  
5 some around 1.5 to 2% of retail electricity sales.

6  
7 The Western Governors' Association Energy Efficiency Task Force stated that "We  
8 find that it is feasible to reduce electricity use 20% from projected levels in 2020, and  
9 do so cost effectively, through full deployment of best practice policies and  
10 programs."<sup>2</sup> SWEEP recommends achieving three quarters of the 20% savings (or  
11 15% savings by 2020) through utility sector energy efficiency programs, with the  
12 remaining 5% savings from other policies including building energy codes and  
13 appliance standards.

14  
15  
16 **Q. Can utility resource managers and regulators count on energy efficiency**  
17 **programs to save energy and provide the resources necessary to meet the needs**  
18 **of Arizona customers?**

19  
20 A. Yes. Experience across the country confirms that energy efficiency programs save  
21 energy that resource managers can count on. For example, Dr. David Berry of  
22 Western Resource Advocates conducted a statistical analysis of the relationship  
23 between state-level energy efficiency program effort and growth in electricity sales  
24 between 2001 and 2006 in the United States.<sup>3</sup> He found that the higher the utility  
25 efficiency program expenditures per capita and the greater the range of other  
26 efficiency programs offered, the greater the reduction in the growth of power sales.  
27 Application of the portfolio of energy efficiency programs used in the states with the  
28 most aggressive programs would have reduced the growth in a state's electricity sales  
29 by about 60% relative to the case where no efficiency programs were implemented.

30  
31 **The Energy Efficiency Standard (EES):**  
32 **Goals for Energy Savings and Peak Demand Reduction**

33  
34 **Q. Specifically, what actions should the Commission take to increase energy**  
35 **efficiency goals in the APS service territory?**

36  
37 A. The Commission should set APS Demand Side Management (DSM) energy  
38 efficiency program goals in the form of an Energy Efficiency Standard (EES). The  
39 EES should require APS DSM energy efficiency programs to: (1) achieve energy  
40 savings equal to at least 15% of total energy resources needed to meet retail load in

---

<sup>1</sup> ACEEE State Scorecard Report, 2008.

<sup>2</sup> Western Governors' Association, Clean and Diversified Energy Initiative, *Energy Efficiency Task Force Report*, January 2006, p. v.

<sup>3</sup> This study is described in David Berry, "The Impact of Energy Efficiency Programs on the Growth of Electricity Sales," *Energy Policy*, vol. 36 (2008): 3620-3625.

1 2020; and (2) reduce summer peak demand by at least 15% of total capacity resources  
2 needed to meet retail peak demand in 2020.

3  
4 Meeting the EES goals would provide cost-effective benefits to consumers, the  
5 electric system, the economy, and the environment. And meeting the EES goals  
6 would contribute substantially to the achievement of the adopted goal of the Western  
7 Governors Association (WGA) to increase energy efficiency 20% by 2020.

8  
9  
10 **Q. What level of energy savings would be needed to achieve the EES goals?**

11  
12 Achieving the EES goals (15% by 2020) is roughly equivalent to achieving annual  
13 energy savings of 1.5% of retail energy sales each year over the 12-year period during  
14 2009-2020, with allowance for some continued ramp up in the early years.

15  
16 Assuming the total energy needed to meet the needs of APS retail customers is about  
17 42,000,000 MWh in 2020 (based on a SWEEP estimate of the APS business as usual  
18 forecast), the sum of cumulative annual energy savings in 2020 would need to be  
19 6,300 MWh (15% of 42,000,000 MWh). In order to achieve that level, the energy  
20 efficiency programs would need to save on average about 525,000 MWh each year in  
21 the twelve years from 2009 through 2020. SWEEP recommends annual energy  
22 savings of at least 400,000 MWh in the early years, growing to about 600,000 MWh  
23 per year after the first 2-3 years of the 2009-2020 period.

24  
25  
26 **Q. Are the goals of the EES reasonable and achievable?**

27  
28 A. Yes, the proposed EES goals are both reasonable and achievable. The goals are  
29 reasonable and achievable considering the low level of energy efficiency activities in  
30 Arizona in the past, the successful ramp up and performance of energy efficiency  
31 efforts in the early years, and the energy efficiency program performance in leading  
32 states.

33  
34  
35 **Q. Why should the EES goals be based on savings and effects rather than  
36 spending?**

37  
38 A. SWEEP believes that it is important to focus primarily on the *effects and impacts* of  
39 energy and utility policies for setting goals, not primarily on the funding or spending  
40 levels. Simply spending money, even cost-effectively, should not be the primary  
41 focus of future goals for energy efficiency programs.

1 **Q. Should the EES goals be adopted in this proceeding?**

2  
3 A. It is essential to set goals to implement Commission policy, in this proceeding. Clear,  
4 multi-year goals help utilities, stakeholders, and customers understand how the future  
5 electric system will meet future customer load, in a manner consistent with the  
6 policies of the Commission. Therefore, it is essential to have a goal for APS to  
7 achieve, with a clear commitment and explicit requirement, and to increase that goal  
8 beyond what APS has achieved and was ordered to achieve in the past. Most  
9 importantly, it is essential to increase energy efficiency efforts to reach more APS  
10 customers and to reduce total customer costs, as well as to acquire the other benefits  
11 energy efficiency provides.  
12  
13

14 **Energy Efficiency Program Enhancements and Expansions**

15  
16 **Q. Is SWEEP proposing additional DSM energy efficiency programs to achieve the**  
17 **EES goals?**

18  
19 A. The existing Commission-approved DSM energy efficiency programs should be  
20 expanded to achieve the goals of the EES. While some additional DSM energy  
21 efficiency programs may be needed to achieve the EES goals, and may also be  
22 valuable for providing additional benefits to APS customers, the primary mechanism  
23 for achieving the EES goals should be the expansion of existing programs already  
24 approved by the Commission.  
25  
26

27 **Q. How would SWEEP expand the programs and increase program savings?**

28  
29 A. SWEEP recommends several DSM program enhancements to update and expand the  
30 existing programs, to capture additional savings from new measures and  
31 opportunities, and to reach more customers. SWEEP recommends that several  
32 program enhancements be added as *program elements* within the existing  
33 Commission-approved DSM programs, and not as new programs.  
34

35 It is important to review and refresh DSM programs on a regular basis, to update the  
36 programs and program offerings, to capture additional savings from new measures  
37 and opportunities, and to reach more customers. For example, there are opportunities  
38 to achieve higher savings per home in the Residential New Construction program by  
39 offering a second tier or level of energy efficiency within the existing program for  
40 high performance/very energy efficient homes, which, when combined with one or  
41 more renewable energy systems, can result in zero-net energy homes. This is  
42 important for two reasons. First, there are builders, developers, and homebuyers who  
43 are considering zero-net energy and high performance homes, and the DSM programs  
44 should encourage these homes to provide more savings and net benefits. Second, the  
45 recent national agreement for the 2009 IECC building energy code to be about 15%  
46 more energy efficient than the 2006 IECC means that new homes currently

1 considered to be energy efficient, including Energy Star homes (15% more energy  
2 efficient than the 2006 IECC), will simply be equivalent to the base building energy  
3 code once the 2009 IECC is adopted by local municipalities in Arizona.  
4

5 It is essential to plan ahead and develop the performance level for future energy  
6 efficient homes now, as a high performance second tier within the DSM program.  
7 Then the high performance second tier of today's DSM program will become the first  
8 energy efficiency tier in the program in the near future.  
9

10 Likewise, a second tier for high performance commercial buildings should be  
11 developed and offered in the Non-Residential New Construction program, to address  
12 national and regional initiatives for more energy efficient and green buildings, such as  
13 Architecture 2030, the New Buildings Institute Advanced Buildings, and higher  
14 levels of LEED.  
15

16 The most opportune time for builders, developers, and designers to consider  
17 significant changes and upgrades to their building designs and production systems is  
18 when the housing and construction industry is depressed. Now is the time to work  
19 with the building industry to develop the high performance buildings of the future.<sup>4</sup>  
20 The second tier, high performance program elements should be developed, approved  
21 by the Commission, and implemented as soon as possible, so that high performance  
22 and zero-net energy building projects can be developed now.<sup>5</sup>  
23  
24

25 **Q. Does SWEEP have some specific program enhancements in mind, which could  
26 be added as program elements within existing Commission-approved DSM  
27 programs?**  
28

29 **A. Yes, SWEEP recommends the following program enhancements be added as  
30 program elements (not new programs) within the existing Commission-approved  
31 DSM programs at this time.**  
32

### 33 High Performance and Zero-Net Energy Homes 34

35 APS should build on its current residential energy efficiency programs and implement  
36 a second tier, high performance home program element within the Residential New  
37 Construction program, i.e., new homes that are at least 30% more energy efficient  
38 than the 2006 IECC building energy code. This high performance home program  
39 element should serve as the energy efficiency component of an integrated zero-net  
40 energy home effort in Arizona (when combined with the renewable energy  
41 component).

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<sup>4</sup> SWEEP first recommended DSM program support for zero-net energy homes to the Commission on April 4, 2006 in Docket No. E-01345A-05-0477 (the APS DSM program docket), during Commission review of the APS residential DSM programs.

<sup>5</sup> APS and SWEEP have been discussing and developing a second tier, high performance home program element for several months. Therefore, APS should be able to file a proposal and report very soon.

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High Performance and Zero-Net Energy Commercial Buildings

APS should build on its current non-residential energy efficiency programs and develop a second tier, high performance commercial building program element within the Non-Residential New Construction program to provide DSM program support of zero-net energy commercial buildings, coordinated with renewable energy efforts – similar to the residential high performance home program element above.

Home Performance Program Element for the Existing Home HVAC Program

APS should build on its current residential energy efficiency programs and prepare a proposed Home Performance program element within the residential Existing Home HVAC program focused on capturing building shell, air sealing, duct sealing, and other opportunities for energy savings in existing homes, in addition to the savings from HVAC systems.

Additional Funding and Program Enhancements for the Low Income Program

APS should review its current low income program, review the effectiveness of the program and program elements, review the capability of the program and its partners to reach additional low income customers, and propose a budget increase and program enhancements identified during the review. The DSM Collaborative members, including Staff, as well as the low income and community action agencies, should participate in the review of the low income program.

Schools Customer Repayment Program Element

APS should develop a “customer repayment” element, possibly including on-the-bill repayment, for schools. In this program element, APS would pay for 100% of the measure installation cost up front. The school would receive a financial incentive (equivalent to a rebate amount) and the remainder of the cost would be repaid by the school on a monthly basis, using the energy cost savings.

Small Business Customer Repayment Program Element

APS should develop a “customer repayment” element, possibly including on-the-bill repayment, for small businesses, similar to the element proposed for schools above. The program element should include direct installation services provided by vendors and contractors.

1                   **Funding to Support the Energy Efficiency Standard EES Goals**  
2

3 **Q. What level of funding should be authorized to achieve the goals of the EES and**  
4 **secure the associated benefits?**  
5

6 A. The Commission should authorize adequate funding to achieve the goals of the EES.  
7 SWEEP estimates that energy efficiency program funding of \$0.0025 per kWh of  
8 retail energy sales (2.5 mills) will be necessary to ramp up and expand the energy  
9 efficiency programs in 2010-2011 to get on track to achieve the EES goals by 2020.  
10 By 2011, total DSM energy efficiency funding should be increased from about \$25  
11 million currently (the estimated spending in 2008) to \$75 million. Annual funding  
12 should be increased to at least \$50 million in 2010, to support the continued ramp up  
13 of the programs.  
14

15 Inadequate funding of DSM energy efficiency programs and the resulting under-  
16 achievement of cost-effective energy efficiency would lead to higher total costs for  
17 customers.  
18  
19

20                   **Development of an EES Implementation**  
21                   **Plan for the APS Service Territory**  
22

23 **Q. Should an EES implementation plan for the APS service territory be developed?**  
24

25 A. Yes. APS should file an implementation plan to achieve the goals of the EES,  
26 covering the 2009-2020 program years. The EES Implementation Plan should be  
27 developed by APS with input from and review by the Collaborative DSM Working  
28 Group, which includes Commission Staff and interested parties. The EES  
29 Implementation Plan would be reviewed by Staff, and then be reviewed and approved  
30 by the Commission prior to implementation.  
31

32 Since Staff will participate directly in the development of the EES Implementation  
33 Plan as part of the DSM Collaborative Working Group, the Commission should  
34 provide up to 60 days for Staff review of the EES Implementation Plan after it is filed  
35 by APS. The expansion of approved DSM programs should proceed as a result of the  
36 order in this proceeding, and should not be postponed for the development, review,  
37 and Commission approval of the EES Implementation Plan.  
38

39 The EES Implementation Plan should include the historical DSM program results,  
40 and should include a forecast for the expansion of the existing Commission-approved  
41 DSM energy efficiency programs.  
42  
43  
44  
45  
46

1 **DSM Funding and Cost-Recovery Mechanisms**

2  
3 **Q. Which DSM funding and cost-recovery mechanisms should be used to provide**  
4 **the additional DSM funding that will be needed to achieve the goals of the EES?**

5  
6 A. In general, energy efficiency funding and cost recovery could be accomplished  
7 through funding in base rates, a DSM adjustment mechanism, a system benefits  
8 surcharge, amortizing or capitalizing the DSM investments over time, or a  
9 combination of funding mechanisms.

10  
11 For APS, the Commission previously authorized a two-part DSM funding and cost-  
12 recovery mechanism, with one portion of the DSM funding in base rates (\$10 million)  
13 and the second portion of the DSM funding recovered using a DSM adjustment  
14 mechanism (for the amount in excess of the base rate DSM allowance).

15  
16 The two-part approach is adequate for the current level of authorized DSM funding.  
17 The Commission could choose to expand the current two-part approach or build upon  
18 it by using an additional funding mechanism for some or all of the additional funding  
19 needed to meet the goals of the EES.

20  
21  
22 **Q. Are there DSM funding and cost-recovery mechanisms that would reduce the**  
23 **rate impacts of the DSM program funding increase in the early years of the**  
24 **EES?**

25  
26 A. Yes. The Commission could choose to amortize or capitalize a portion of the DSM  
27 expenditures, similar to how investments in power plants are recovered through  
28 customer rates over time, thereby reducing the customer rate impacts of DSM  
29 programs in the early years of the EES. For example, the Commission could spread  
30 the additional DSM costs to ratepayers across several years (e.g., 5 years) in a manner  
31 that acknowledges that the energy efficiency benefits are achieved over several years.

32  
33  
34 **Q. Could a combination of DSM funding and cost-recovery mechanisms be used?**

35  
36 A. Yes. For example, the APS DSM energy efficiency funding could consist of a  
37 portion in base rates, a portion recovered through the DSM adjustment mechanism,  
38 and a portion capitalized or amortized over five years or more.

39  
40  
41 **Q. Does SWEEP have a preference for a particular funding and cost-recovery**  
42 **mechanism in this case?**

43  
44 A. SWEEP is open to considering any of the above funding and cost-recovery  
45 mechanisms and combinations. SWEEP does not have a strong preference for one  
46 particular mechanism. However, any funding mechanism or combination of

1 mechanisms should have, at a minimum, the same advantages of the two-part base  
2 rate and DSM adjustment mechanism approach in place at APS now, including but  
3 not limited to the flexibility to adjust funding outside of a rate case to meet customer  
4 demand for cost-effective, Commission-approved DSM services, and the ability to  
5 increase DSM funding above a base amount in the event that additional DSM  
6 programs are approved by the Commission between rate cases. In addition, SWEEP  
7 believes it would be best to build on the existing funding mechanisms and use a  
8 combination of mechanisms, as in the examples above, rather than implementing a  
9 new mechanism for 100% of the DSM funding.

### 10 11 12 **Removing Disincentives to Large Scale Energy Efficiency Programs**

13  
14 **Q. In Mr. Pickles' direct testimony (p. 22) APS proposes that it recover its program**  
15 **costs in the same year that they are spent and that this amount be based on**  
16 **projected DSM spending for both approved and pending programs, with a true-**  
17 **up to actual spending and recoveries in the following year. Do you support this**  
18 **proposal?**

19  
20 A. Yes. As energy efficiency programs increase in scale, APS should be assured that it  
21 will recover its costs in a timely manner. Delays in cost recovery may be a  
22 disincentive for APS to increase its efficiency program effort.

23  
24  
25 **Q. Mr. Pickles also indicates (p. 7) that under traditional ratemaking, utilities that**  
26 **administer large scale energy efficiency programs see a decline in revenue that**  
27 **results in the utility not fully recovering its fixed costs through rates. He also**  
28 **implies that in jurisdictions which do not address the recovery of lost revenues to**  
29 **cover fixed costs there is a disincentive to utilities to engage in large scale energy**  
30 **efficiency programs. Do you agree that this is an issue?**

31  
32 A. SWEEP agrees that under-recovery of fixed costs is an issue. However, SWEEP does  
33 not support APS' proposed remedy.

34  
35  
36 **Q. APS proposes to collect the otherwise unrecovered fixed costs due to DSM**  
37 **programs through an adjustment for lost net revenues. The APS-proposed**  
38 **adjustment recovers the difference between average retail rates and average**  
39 **variable costs for fuel and purchased power (Pickles direct testimony, p. 21). In**  
40 **particular, Mr. Pickles states (p. 21, lines 19-24) that APS proposes to "collect**  
41 **otherwise un-recovered fixed costs due to implemented DSM programs based on**  
42 **the MWh impacts in the previous year priced at the average retail rate less**  
43 **average variable costs for fuel and purchased power. These lost fixed cost**  
44 **contributions should include the impacts of all DSM programs since the last rate**  
45 **case but still within the life of the DSM measures." Does SWEEP support APS'**  
46 **proposal to recover what amounts to lost net revenues?**



1 A. No. SWEEP does not support lost net revenue recovery in general and SWEEP does  
2 not support APS' proposal specifically. While the recovery of otherwise unrecovered  
3 fixed costs removes a disincentive to APS' willingness to expand its energy  
4 efficiency programs significantly, there are several major disadvantages to APS'  
5 proposal.  
6

7  
8 **Q. What does SWEEP recommend instead?**  
9

10 A. SWEEP recommends a two-prong approach to address this issue, through a  
11 combination of the use of a more current or future test year to reduce regulatory lag,  
12 and decoupling or some other mechanisms to break the link between sales and  
13 revenues.  
14

15 Regarding the second prong, SWEEP supports decoupling mechanisms to address  
16 issues related to energy efficiency, i.e., when such mechanisms would be effective in  
17 substantially increasing customer energy efficiency and reducing the financial  
18 disincentive to utility support of increased energy efficiency. SWEEP is not in favor  
19 of decoupling solely or primarily as a mechanism for the utility to recover authorized  
20 fixed costs. Therefore, in SWEEP's view the implementation of decoupling is  
21 premised on substantial increases in APS support of customer energy efficiency, and  
22 the decoupling mechanism would reduce the financial disincentive to the utility of  
23 such increased energy efficiency.  
24

25 Commission approval of a decoupling mechanism, combined with Commission direct  
26 action to reduce regulatory lag (e.g., addressing the lagged effects of historic test  
27 years), would remove the financial disincentive and would increase APS support for  
28 energy efficiency. Increased APS support for energy efficiency would include  
29 increased DSM programs, and it should also include increased support of customer  
30 education and awareness efforts, energy efficient appliance standards, building  
31 energy codes, and state or federal legislation to increase energy efficiency. In other  
32 states, utility enthusiasm and support for energy efficiency has increased dramatically  
33 in utilities where decoupling has been implemented.  
34

35  
36 **Performance Incentives for Energy Efficiency Program Administration**  
37

38 **Q. APS, in Mr. Pickles direct testimony (p. 21), recommends that it be permitted to**  
39 **earn an increased performance incentive by removing the existing cap on APS'**  
40 **performance incentive (currently set at 10% of program expenditures). APS**  
41 **proposes to retain the current sharing relationship between ratepayers (who**  
42 **receive 90% of the net benefits of the programs) and shareholders (who receive**  
43 **10%). Does SWEEP support APS' proposal?**  
44

45 A. SWEEP does not support *removing* the cost cap on the performance incentive.  
46 SWEEP recommends increasing the cap to 20% of program expenditures, which

1 would allow APS to earn a larger portion of the share of net benefits (10%) allocated  
2 to APS (currently the cost cap results in APS actually earning a smaller portion of the  
3 10% of net benefits). It is important to ensure that a substantial majority of the net  
4 benefits of the program accrue to customers, and that the vast majority of program  
5 expenditures fund program efforts to benefit customers, not earnings for APS.  
6  
7

8 **Q. Does SWEEP have any recommendations or proposals for revising the**  
9 **performance incentive?**

10  
11 A. SWEEP is developing a revised energy efficiency program performance incentive,  
12 which SWEEP will file in the rate design portion of this proceeding.  
13  
14

#### 15 **Other DSM and Pricing Approaches**

16  
17 **Q. Are there other approaches to achieving energy savings and peak demand**  
18 **reductions that SWEEP recommends?**

19  
20 A. Yes. SWEEP supports complementary approaches such as demand response and load  
21 management programs to encourage peak load reductions, and pricing and rate  
22 designs to encourage energy efficiency and reduce peak demand. SWEEP supports  
23 these approaches as complements to effective energy efficiency policies and  
24 programs, not as replacements for cost-effective utility DSM energy efficiency  
25 programs.  
26  
27

#### 28 **Other DSM Issues**

29  
30 **Q. Are there other DSM and energy efficiency issues that require Commission**  
31 **attention and action?**

32  
33 A. Yes, SWEEP plans to address several other generic or over-arching DSM-related  
34 issues before the Commission, including the avoided costs used for cost-effectiveness  
35 analysis of the measures and programs, the program and portfolio planning process,  
36 the process for regulatory review, and reporting of DSM programs. SWEEP plans to  
37 address these issues in other forums before the Commission.  
38  
39

40 **Q. Does that conclude your direct testimony?**

41  
42 A. Yes.