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## MEMORANDUM

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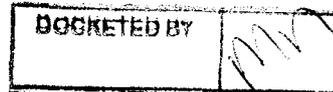
TO: THE COMMISSION

FROM: Utilities Division

DEC - 2 2009

AZ CORP COMMISSION  
DOCKET CONTROL

DATE: December 2, 2009



RE: ARIZONA PUBLIC SERVICE COMPANY – APPLICATION FOR APPROVAL OF 2010 ENERGY EFFICIENCY IMPLEMENTATION PLAN (DOCKET NO. E-01345A-08-0172)

On July 15, 2009, Arizona Public Service Company (“APS” or “the Company”) filed an application in compliance with the provisions of the Proposed Settlement Agreement (the “Settlement Agreement”) filed on June 12, 2009, in the APS Rate Application Docket (Docket No. E-01345A-08-0172). The APS 2010 Energy Efficiency Implementation Plan (“the Plan”) sets out the programs and measures by which APS plans to meet the energy savings goals agreed upon in the Settlement Agreement.

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 978,000 Residential and 119,000 Commercial customers.

### Settlement Agreement Requirement

The Demand-Side Management (“DSM”) provisions of the Settlement Agreement required that the Plan include the following general elements: new or expanded programs and program elements necessary for achieving the 2010 energy efficiency goals; the estimated energy savings by program; and a range of estimated program costs by program necessary to meet the goals.

Signatories to the Settlement Agreement agreed that the Plan should, at a minimum, include the following specific elements:

- A customer repayment/financing program element for schools, municipalities and small businesses fully integrated in the non-residential programs;
- A goal to install DSM measures through existing or enhanced program measures for at least 100 schools by December 31, 2010;
- A review of the APS low-income weatherization program for possible enhancement;

- A Residential Existing Homes Program with the new Home Performance element and the existing HVAC element, with a goal of serving 1,000 existing homes by December 31, 2010;
- A *non-residential* high performance new construction program element with a second tier of performance and a higher financial incentive; and
- A *residential* high performance new home program element with a second tier of performance and a higher financial incentive, which APS was to file with the Commission on or before June 30, 2009.

Scope of Review

To expedite implementation of new programs, new portfolio components and program enhancements, Staff has reviewed the following four Implementation Plan elements for this document:

Residential

- Low income Weatherization (existing program; multiple enhancements)
- Appliance Recycling (new program)

Non-Residential

- Schools program (existing program; increase in customer cap)
- Self Direction (new portfolio component)

Summarized descriptions will be provided for existing programs, but the focus of Staff's review and analysis will be new programs, new portfolio components and program enhancements. Measures previously determined by Staff to be cost-effective will not be re-evaluated for cost-effectiveness at this time, unless new information indicates that re-evaluation is necessary. Furthermore, Staff reserves the right to update its recommendations regarding the four programs discussed herein in the event that new or additional information becomes available or new issues, problems, or policies are identified.

The remaining plan elements will be addressed in a later document. These are listed below:

Residential

- Consumer Products (existing program; three new measures)
- Residential Existing Homes (existing program; adds Home Performance enhancement)
- Residential New Construction (existing program; Energy Star Plus)

Non-Residential

- Non-Residential New Construction (existing program; adds second performance tier)
- Non-Residential Customer Repayment Financing Program (new portfolio component)

Overall Portfolio

- Demand-Side Management Adjustor charge (recovery for program costs)
- Performance Incentive
- Budget increases for existing programs.

**RESIDENTIAL PROGRAMS**

**Low Income Weatherization**

The Settlement Agreement provides that the APS low income weatherization program should be reviewed for possible enhancement. (14.11)

Existing Program Description. The current APS low-income weatherization program (also known as the "Energy Wise Low Income Assistance Program") was approved most recently in Decision No. 68647, but a version of the APS low-income weatherization program has been in place since late 1998.

The existing program provides four types of assistance to low-income customers:

- Weatherization: Although the APS Energy Wise program is independent of the federal Weatherization Assistance Program ("WAP"), the weatherization program is conducted in accordance with WAP rules. Weatherization includes installation of measures designed to improve energy efficiency, such as insulation and sunscreens, along with repairs and improvements to the building envelope. General repairs allowed under program rules include roof repairs and repair or replacement of windows and doors. Repair or replacement of ceilings in order to support insulation is permitted, as is repair or replacement of structurally unsound floor areas.
- Health and Safety: provides for installation of energy-efficient window unit air conditioners and heat pumps prescribed by a medical doctor;
- Repair and Replacement: provides for repair or replacement of air conditioners, heat pumps, evaporative coolers, refrigerators and water heaters. Replacement is allowed only when the cost of repair exceeds the cost of replacement, when repairs would not render the appliance operable, or when the appliance would be unsafe, even if repaired;
- Bill Assistance: provides crisis bill assistance of up to \$400 once in a 12-month period to low income families. Crises are defined as (i) loss or

reduction of income; (ii) unexpected or unplanned expenses resulting in a lack of resources; or (iii) a condition that endangers the health or safety of the household.

There is a \$6,000 per-home cap and the program is delivered through local community action agencies. The Arizona Community Action Association (“ACAA”) manages the contracts for the APS weatherization and bill assistance programs, and contracts directly with the community action agencies for weatherization work. The ACAA then ensures that the work done meets program requirements, receives all the invoices from the various agencies and submits the invoices to APS for payment.

Program Enhancements. The Company proposes to make the following changes to its existing weatherization program.

- Increase to 200% of Federal Poverty Level: APS has proposed that the income eligibility guideline be changed from the current 150% of the Federal Poverty Level (“FPL”) to 200% of the FPL. The change will allow APS to maintain consistency with WAP rules, eliminate the administrative issues that arise from having different eligibility guidelines, and qualify more individuals to participate in the Energy Wise program. (The proposed change to the income eligibility guideline for weatherization does not apply to the Bill Assistance component of the Low Income Weatherization program. Bill Assistance for customers in the 150%+ to 200% of FPL income range will be funded by APS, as addressed in the Settlement Agreement.)
- Evaporative Cooler to Heat Pump/Air Conditioner Conversions: In the Implementation Plan, APS originally proposed to convert evaporative coolers to energy efficient heat pumps, with 50% considered to be weatherization and 50% to be considered health and safety. The Company has restated its proposal so that evaporative coolers would be replaced with air conditioners in homes with gas heating, and with heat pumps in homes with electric heat, in order to address concerns over fuel switching.

The current low income weatherization program only allows for conversion of evaporative coolers as a health and safety measure, with a doctor’s note (and with none of the cost counting toward weatherization.)

- Multifamily Housing: APS is proposing to provide a weatherization funding pool for non-profit 501c3 housing authorities, in order to weatherize multi-family housing projects owned by the housing authorities. APS is proposing a budget of \$720,000, to weatherize 200 units at an average cost of \$3,000 per unit. Under the Company proposal, \$600,000 would go to weatherization of multi-family housing units, while 20% of that amount, or \$120,000 would go to delivery costs.

- Refrigerator Replacement: APS has proposed that refrigerator replacement be allowed as part of weatherization, rather than only as a repair and replacement measure.
- Weatherization Kits: APS has proposed a \$37,500 budget for weatherization kits containing low flow showerheads, CFLs, outlet insulation pads and other energy saving devices. In discussions with Staff, APS has explained that the weatherization kits are not intended to contain a standard selection of items, but rather to reflect the needs of the local community, as expressed by the participating community action agency.

Under this proposal, families prequalified for weatherization would receive weatherization kits from the weatherization provider, who would be responsible for training and follow-up on use of the kits. APS proposes that 500 kits be distributed, each worth approximately \$75.

- Marketing and Consumer Education: APS proposes an additional \$10,000 to increase its marketing efforts designed to help low income customers become more energy efficient and aware. These efforts would include increased consumer education, including promotions, demos, weatherization seminars, distribution of the weatherization kits and outreach efforts targeting the multi-family housing segment.

Budget Allocation, Current and Proposed

Proposed increases to the Weatherization budget are listed by category in the table below, in bold.

| Category               | Budget as of Decision No. 68647 | Proposed Increased Marketing | Proposed Increase to 200% of FPL | Proposed Multifamily | Proposed Refrigerator Replacement (as weatherization) | Proposed Weatherization Kits | Total Summary by Category |
|------------------------|---------------------------------|------------------------------|----------------------------------|----------------------|---|------------------------------|---------------------------|
| Weatherization         | \$479,400                       |                              | <b>\$333,000*</b>                | <b>\$600,000</b>     | <b>\$45,000</b>                                       | <b>\$37,500</b>              | \$1,494,900               |
| Health and Safety      | \$14,100                        |                              |                                  |                      |   |                              | \$14,100                  |
| Repair and Replace     | \$70,500                        |                              |                                  |                      |   |                              | \$70,500                  |
| Program Delivery       | \$141,000                       |                              | <b>\$67,000*</b>                 | <b>\$120,000</b>     |   |                              | \$328,000                 |
| Bill Assistance        | \$250,000                       |                              |                                  |                      |   |                              | \$250,000                 |
| Third Party Management | \$50,000                        |                              |                                  |                      |   |                              | \$50,000                  |

|                             |             |          |           |           |          |          |             |
|-----------------------------|-------------|----------|-----------|-----------|----------|----------|-------------|
| Training Tech. Support. MER | \$10,000    |          |           |           |          |          | \$10,000    |
| Marketing and Promotion     | \$10,000    | \$10,000 |           |           |          |          | \$20,000    |
| APS Administration          | \$75,000    |          |           |           |          |          | \$75,000    |
| Totals: New/Proposed        | \$1,100,000 | \$10,000 | \$400,000 | \$720,000 | \$45,000 | \$37,500 | \$2,312,500 |

\*Changed to reflect lower program delivery and higher implementation costs. Now consistent with delivery costs for the Multifamily component.

### Staff Analysis and Recommendations on Proposed Program Enhancements

Increase to 200% of FPL. Under the current income guidelines, in order to be eligible for the weatherization program, a family of two could make \$21,855, or 150% of the FPL of \$14,570. Under the change proposed by APS (and already adopted at the federal level), the eligibility level for a family of two would be raised to \$29,140. For a family of four, the eligibility level would change from \$33,075 to \$44,100 (based on the 2009 FPL of \$22,050).

APS states that the increase to 200% of FPL is intended to help working poor customers who have been struggling, but unable to qualify for weatherization assistance. On an administrative level, the current mismatch between federal and state eligibility standards means that customers at 150% of FPL have to be tracked differently from customers at 200% of FPL, and this creates an added burden for agencies with limited staffing.

Staff believes it is reasonable to revise eligibility standards upward for order to avoid conflicting with federal standards, and to broaden the range of customers eligible to receive weatherization services and other assistance from the Energy Wise program. Staff recommends that the eligibility requirement be changed from 150% of FPL to 200% of FPL.

Evaporative Cooler Conversions: Heat Pumps and Air Conditioners. As stated above, APS originally proposed to convert evaporative coolers to energy efficient heat pumps. Since heat pumps provide both cooling and heating, their installation would not only replace the evaporative coolers used in summer, but also the electric heaters or gas furnaces used in winter. In the case of homes with gas furnaces, this would result in fuel switching, which is to say, moving a customer from using one fuel source to another. In communications with Staff, APS indicated that this was not the intent of the proposed enhancement, and added that the Company proposes to replace evaporative coolers with electric heat pumps only in homes with electric heat. In homes with gas heat, evaporative coolers would be replaced with air conditioners, thereby avoiding fuel switching.

Replacing evaporative coolers with air conditioners in homes with gas heating also avoids unnecessary expense and promotes a cost-effective approach to energy efficiency. Heat pumps are generally more expensive than air conditioners, and are more likely to be cost effective in homes where they are replacing electric heating.

Evaporative Cooler Conversion to Air Conditioners; Energy Efficiency Concerns. The main issue with respect to converting from evaporative coolers to air conditioners is that air conditioners generally use more power than do evaporative coolers. According to the U.S. Department of Energy website:

“Evaporative coolers cost about one-half as much to install as central air conditioners and use about one-quarter as much energy. However, they require more frequent maintenance than refrigerated air conditioners and they’re suitable only for areas with low humidity.”

Conversions made necessary by health and safety considerations are, and would remain, a reasonable expenditure of weatherization funds. But Staff is concerned that replacing evaporative coolers with either air conditioners or heat pumps is likely to *increase* energy usage in many homes, meaning that allowing conversions on the expanded basis proposed by APS could work against the basic goal of the energy efficiency implementation plan.

Reasons for Evaporative Cooler Conversion. Staff was informed by weatherization stakeholders that crews fully audit homes before any work is done and that measures that would not be energy efficient are either not performed, or performed using non-weatherization funding, such as funding for health and safety or repair and replacement. Information from weatherization stakeholders indicates that converting to air conditioning can result in lower energy bills, if the conversion is combined with other weatherization measures, such as improved attic insulation, tighter and more insulated duct work, reduced air infiltration, elimination of room pressures and the installation of programmable thermostats and shade screens. A weatherization agency noted a 50% reduction in the utility bills of a home during summer where the evaporative cooler was replaced and the above weatherization measures were also installed. If such savings can be documented consistently, conversion may be justified from an energy use standpoint, taking into account other weatherization activities, and keeping in mind that evaporative coolers considered for replacement would be old, inefficient and/or poorly maintained due to limited customer resources.

It was also noted by weatherization stakeholders that evaporative coolers can run constantly, as compared to air conditioners. (Although Staff notes that evaporative coolers are, like air conditioners, equipped with thermostats.) Another consideration in favor of conversion is that evaporative coolers require an open system, which tends to leak, and makes a home with an evaporative cooler less energy efficient during the winter. Higher water usage and higher water bills were also cited as reasons for conversion.

Although not directly related to energy efficiency, another reason for conversions is the increased risk of water damage and mold associated with evaporative coolers. These problems are more likely to occur for some low income customers, who may find it difficult to keep up with the more frequent maintenance required by evaporative coolers, for either financial reasons,

or because they are physically unable to attend to maintenance themselves. (Conversions made on this basis should be classified as health and safety measures.)

Staff Recommendation. Although Staff takes into account the concerns expressed regarding evaporative coolers, these concerns would not justify performing evaporative cooler conversions as a matter of course, or the automatic crediting of 50% of such conversions to weatherization costs. Staff recommends that evaporative cooler conversion be restricted to home (or multifamily) weatherizations which produce energy savings and lower energy bills for low income customers, unless evaporative cooler conversion is necessary for the health or safety of low income customers.

Staff is concerned about the possible impact of evaporative cooler conversions on low-income customer energy bills. In order to confirm that these conversions are, in fact, providing savings for low-income customers, energy savings should be verified based on lower energy bills or lower energy usage following weatherization. (A representative sampling of weatherizations featuring evaporative cooler conversions should be reviewed for this purpose.)

Any conversion that does not produce such energy and cost savings for low income customers should be classified as a Health and Safety expenditure and would not be included in the program costs used to calculate the cap on the performance incentive. If energy savings have been confirmed, Staff recommends that the cost of conversion can be credited to weatherization and may be included as a program cost for purposes of calculating the cap on the performance incentive.

Multifamily Housing. Making multifamily housing eligible for the low-income weatherization program would provide for economies of scale, making weatherization measures more cost-effective. Servicing multiple homes at the same location would make it practical to weatherize more households, more efficiently, and at lower cost. The addition of this program element would also open up participation to low-income apartment dwellers, a customer segment with generally limited opportunities to participate in, or benefit from, energy efficiency programs.

Staff questioned the 20% of the Multifamily budget for delivery costs. In its response, APS stated that the proposed costs are "consistent with the current weatherization program" and that monies for administrative costs would be paid to the community action agency managing a multifamily weatherization project.

Staff recommends that the multifamily housing program component be approved by the Commission. Staff also recommends that the same guidelines governing the use of DSM funds for single family housing be applied to multifamily housing.

Refrigerator Replacement. Under current program guidelines, refrigerators are replaced only when repair costs would exceed the replacement cost, or when the refrigerator would be inoperable or unsafe, even if repaired. As a proposed enhancement, refrigerators could be

replaced as a weatherization measure, in order to enhance the energy efficiency of the homes being weatherized.

APS proposes a budget of \$45,000 for this component, projecting a maximum of 300 replacements at a cost of \$150. In response to a Staff inquiry regarding the estimated \$150 replacement cost, the Company stated this was an average cost for the typically smaller units found in homes being weatherized.

Based on current data, Staff analysis indicates that replacement of older and inefficient refrigerators is likely to be cost-effective. Staff recommends that a working refrigerator be replaced only when the energy savings provided over the lifetime of a new refrigerator exceed its entire cost, as opposed to only the incremental cost of a more efficient unit. (This recommendation excepts instances where refrigerator replacement would be allowable as a Repair and Replacement measure.)

Staff also recommends that, if feasible, refrigerators replaced as part of the Low Income Weatherization Program be disposed of so that they do not remain on the market. When possible, these refrigerators should be recycled using the same recycling concern that would decommission and process refrigerators from the Residential Appliance Recycling Program.

Staff also recommends that low income customers participating in the Low Income Weatherization program also be eligible to participate in the Appliance Recycling program, if the home being weatherized includes appliances meeting the Appliance Recycling program's eligibility requirements. (For example, to be eligible, refrigerators would have to be working second refrigerators and between 10 and 30 cubic feet in capacity; they would also have to be removed from the home and taken out of service.)

Weatherization Kits. Staff discussion with stakeholders indicates that two of the measures proposed for inclusion in the weatherization kits are unlikely to be cost-effective, and would be of limited value in improving energy efficiency. Outlet insulation pads are an ineffective form of insulation and low flow showerheads may be difficult for some customers to install, or not desired by the customer. (In addition, removing and replacing showerheads may cause leaks when there is older, possibly galvanized, plumbing, in place.) Staff recommends that outlet insulation pads and low flow showerheads not be included in the weatherization kits.

A revised and flexible form for the weatherization kits is more likely to provide energy savings and benefits to customers. Staff recommends that APS consult with local community action agencies in order to determine the types of low cost measures that should be included, based on the areas where the kits would be distributed.

Examples of items that could be a part of the weatherization kits include CFLs and information on how customers can improve energy efficiency. (CFLs should be accompanied by specific guidance on where CFLs should be installed to provide the greatest benefit.) Local community action agencies may limit the kits to CFLs and energy saving information, or request

other low cost items, such as refrigerator magnets with energy saving tips (to increase awareness on a longer-term basis), and refrigerator thermometers (to help consumers to avoid overcooling). Participating community action agencies may also propose other weatherization items, which can be included in the kits if APS determines that to do so would be reasonable on an economic basis.

Of the \$37,500 allocation proposed for weatherization kits, any funding not spent after 500 kits have been distributed, or at the end of the program year, should be retained in the Weatherization program and used for other weatherization activities.

Marketing and Consumer Education. APS has proposed to increase its marketing and consumer education for the low income weatherization program, with more promotions and events, including weatherization seminars. Increased marketing and consumer education activities would include distribution of the weatherization kits. APS also plans to use the additional funding in order to reach the multifamily housing segment and to provide funds to support community action agency efforts to market their weatherization programs.

The existing budget for Marketing and Promotion is \$10,000, so the additional \$10,000 proposed in the Implementation Plan would represent a doubling of expenditures in this category, but would also be more reflective of the proposed overall budget increase of \$1,212,500, from \$1,100,000 to \$2,312,500. The requested increase would also make it easier to reach the multifamily housing customer segment proposed to be included in the weatherization program.

Staff recommends that the increase in marketing and consumer education for low-income customers be approved, but also recommends that APS work to ensure that low income customers have access to any proposed form of education, marketing or outreach. In addition, Staff recommends that APS describe its marketing and consumer education activities and provide copies of brochures and other marketing materials in the semi-annual report filed with the Commission, or any successive report ordered by the Commission.

Low Income Weatherization Program Cost Components for Calculating Performance Incentive. Weatherization measures are specifically designed to produce energy savings, while health and safety measures and repair and replacement measures only create energy savings under limited circumstances. Under the program in its current form, Weatherization costs count toward the Company's DSM spending requirements. However, Health and Safety or Repair and Replacement measures count toward the APS spending requirement only under the following circumstances:

- "i. When installing (for Health and Safety) or replacing an air conditioner, heat pump, or other appliance, APS may only count the incremental cost between an average appliance model and a more energy-efficient appliance model toward its minimum DSM spending requirements.

- ii. When repairing an appliance, costs for repairs may only be counted as DSM if the repair results in a reduction of energy use.”

Staff recommends that similar restrictions remain in place for the enhanced Energy Wise program, under the new methodology for calculating performance incentives. As noted in the Settlement Agreement, performance incentives are based on the Company's achievements relative to its Energy Efficiency goals. Although the Company should recover the cost of all its Health and Safety activities, spending that does not produce energy savings must be excluded from the program costs used to calculate the cap on performance incentives. Repair and Replacement costs should only be recovered and included in the program costs used to calculate the cap on performance incentives if the result of a repair or replacement is a reduction in energy use. Including spending unrelated to creating energy savings would ratchet up the cap on performance incentives and may result in incentive dollars being paid out for activities that do not produce energy savings.

Staff recommends that, for purposes of calculating the cap on the performance incentive, expenditures for the Health and Safety and Repair and Replacement components of the weatherization program should only be included (i) to the extent of the incremental cost of the higher efficiency equipment being used to replace an appliance (as compared to the cost of a standard appliance); and (ii) to the extent that appliance repairs result in reduced energy use.

Bill assistance, although important to customer protection, also does not produce energy savings. (In Decision No. 67744, bill assistance is counted toward spending requirements because an earlier settlement agreement provided that Bill Assistance was to be treated as DSM. The current Settlement Agreement makes no such provision.) Although the Company should continue to recover the cost of the Bill Assistance component, Staff recommends that Bill Assistance not be included as a program cost for purposes of calculating the cap on performance incentives. As with the Health and Safety, and Repair and Replacement components, including such spending for Bill Assistance ratchets up the cap on performance incentives and may result in incentive dollars being paid out for activities that do not produce energy savings.

Reporting Requirements. Staff recommends that APS continue to report on the Energy Wise program in its semi-annual report filed with the Commission, or in any succeeding form of report ordered by the Commission, and that the reporting include information and data on the new, or enhanced, program components approved by the Commission. The information and data reported should include the number of customers participating, the level of spending for energy efficiency measures, the level of spending associated with non-energy-efficiency measures, the number of measures installed, by type of measure, and the estimated energy and environmental savings arising from this portfolio component, along with any other information necessary for the Commission to understand the progress and status of the program.

Staff recommends that the Low Income Weatherization Program be approved, with the program enhancements as modified by Staff recommendations.

**Appliance Recycling**

*Description.* This is a new program targeting APS Residential customers. APS proposes to provide a \$30 incentive and free removal for working second refrigerators and freezers in households. (Another advantage for customers is that it frees them from any municipal fees they would otherwise have to pay for pick-up and disposal of old units.) APS projects that it will have 9,516 participating units, consisting of approximately 8,564 refrigerators and 952 freezers.

APS also proposes to dispose of the old refrigerators and freezers, recycling them in order to remove inefficient appliances permanently from the market. Currently, discarded appliances are shipped out of state for recycling, but appliance recyclers have indicated that the additional volume from the APS program would justify an in-state facility. APS has requested that an implementation contractor build a new recycling facility in Arizona, to create jobs in Arizona, limit transport costs and decrease the environmental impact of shipping old appliances long distances.<sup>1</sup> The appliance recycling contractor would own and operate the facility, verify customer eligibility and pick up the appliances.

*Eligibility.* The Appliance Recycling program is open to Residential customers in their own homes and renters. Although many apartment dwellers may not own the major appliances in their rental homes or unit, they will be eligible if they own appliances meeting program requirements. Landlords would also be eligible to participate, if they meet program requirements.

*Proposed Budget.* The proposed budget for the new Appliance Recycling program is shown in the table below:

| Year                        | 2010        |
|-----------------------------|-------------|
| Incentives                  | \$286,000   |
| Consumer Education          | \$19,000    |
| Program Implementation      | \$911,000   |
| Program Marketing           | \$182,000   |
| Planning and Administration | \$30,000    |
| Total Budget                | \$1,428,000 |

*Cost-Effectiveness.* Second refrigerators and freezers are usually older models, and likely to be far less efficient than up-to-date efficiency appliances. Older appliances are also costly for consumers to operate. In one example, the Energy Star site estimates that a pre-1990 side-by-

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<sup>1</sup> Appliance recyclers have estimated that it would take at least three to six months to build a local recycling facility. The program could start collecting appliance in six to eight weeks and would ship appliances out of state until the Arizona facility opened.

side refrigerator may cost \$17.55 a month to operate, while an Energy Star model from 2001 or later would cost \$6.63. Generally, Energy Star notes that a pre-1993 model refrigerator may cost \$100 more to run, per year, than newer, efficient models. The existing inefficiencies of older refrigerators and freezers may also be exacerbated by storage in garages or on porches, causing them to expend more power in order to keep their contents cool, and making them even more costly for consumers to operate.

APS estimates savings of 700 to 1,100 kWh. Staff calculations indicate that the new program would be cost-effective, even based on the lower end estimate for kWh savings, with a benefit to cost ratio of 2.05. At the high end of estimated savings, Staff estimates a benefit to cost ratio of 3.08.

Federal Appliance Rebate Program. The federal government is working toward a program offering rebates to consumers who buy energy-efficient appliances, including refrigerators. APS conferred with the Arizona Energy Office and understands that AEO does not anticipate requiring consumers to turn in old appliances in order to obtain rebates. The Company also believes that participating retailers would neither require, nor have the ability to remove or absorb the old appliances. If the program takes the form expected, and customers are not required to turn in their old appliances, it is possible that the two programs would dovetail; participation in the APS appliance recycling program would be enhanced, because rebates are available for efficient appliances. At the same time, participation in the federal rebates program could be enhanced, particularly by the ease with which old appliances could be disposed of through the APS program.

The final details of the federal appliance program, if passed, are not known at this time. APS has informed Staff that it will work to ensure that its refrigerator/freezer recycling program will be positioned to benefit from any synergies made possible by a federal appliance program.

Reporting. Staff recommends that APS report on the Appliance Recycling program in its semi-annual report filed with the Commission, or in any succeeding form of report ordered by the Commission, and that the reporting include information and data on the new, or enhanced, program components approved by the Commission. The information and data reported should include the number of customers participating, the level of spending for energy efficiency measures, the level of spending associated with non-energy-efficiency measures, the number of measures installed by type of measure, and the estimated energy and environmental savings arising from this portfolio component, along with any other information necessary for the Commission to understand the progress and status of the program. Any ongoing problems and their proposed solutions should also be reported.

Staff Recommendation. Staff recommends that the Appliance Recycling Program be approved, with the modifications recommended herein.

## NON-RESIDENTIAL PROGRAMS

### Self-Direction

*Program Component Description.* Self Direction is a new program component. The Settlement Agreement states that large commercial or industrial customers using more than 40 million kWh per year should be allowed to self direct their DSM charges, based on an aggregation of all the customer's accounts. This allows large customers to reserve 85% of their DSM contributions for their specific use, for eligible energy efficiency projects at their own facilities. Self direction is offered to commercial and industrial customers because they have the technical knowledge, ability and resources to implement DSM programs.

The rules governing Self Direction include the following:

- After a customer informs APS of its intent to self-direct, 85% of that customer's DSM contributions will be reserved for the customer's energy efficiency projects, while 15% will be reserved to cover self-direction program administration, management, verification, measurement and evaluation, and low-income programs;
- Eligible customers must notify APS on or before December 1 of each year that they are electing Self Direction. Self Direction funds will be reserved for tracking purposes for the following calendar year. Funds will not be set aside retroactively.
- Self Direction customers must continue to make their DSM contributions through base rates and the DSMAC;
- Self Direction funds are paid once a year in December, after a DSM project has been completed by the customer and then verified by APS. Funding will be paid out each December, until the project is 100% funded, or until the tenth year of funding.
- Once the final Self Direction payment has been made, the customer may apply to continue in Self Direction. If the customer does not apply before December 1, then that customer will be eligible to participate in APS' Non-Residential DSM programs beginning January 1.
- If self direction energy efficiency projects are not completed within two years of the self direction election date, the funds will not be available to the customer and will revert to the program account;

- Eligible customers must commit all their accounts and facilities for the period of a Self Direction project, and are not permitted to participate in APS Solutions for Business programs during the funding period for the project;
- Groups of customers may not form associations for the purpose of meeting the Self Direction minimum of 40 million kWh, but a single large customer may aggregate its accounts for this purpose.
- Self Direction projects must be cost-effective and meet the same requirements as the Non-Residential Existing Facilities and Non-Residential New Construction DSM Program, with the same prescriptive and incentive measures. Annual customer incentive caps do not apply to Self Direction funds.
- An energy efficiency project application must be filed within two years of election, and include the following; the name of the customer, a description of the project, its schedule and its scope, and the savings, cost and payback of the project;
- APS will review and administer the Self Direction funding and accounting. APS will verify that the technologies meet program specifications and that savings claims are supported. APS will also provide measurement and evaluation after a Self Direction project begins operation. Documentation requirements will be identical to APS Non-Residential program requirements.
- All savings from self directed programs are to be claimed as part of the Company energy efficiency portfolio targets.

Staff Analysis and Recommendations on Proposed Program Component

Other States. A 2009 American Council for an Energy Efficient Economy (“ACEEE”) study listed 17 states with Self Direction programs of various types, some more structured and requiring significant measurement and verification, with others more loosely structured and requiring little or no measurement and verification.<sup>2</sup> As a rationale for Self Direction, the study cited the built-in incentive for large industrial customers to make energy efficiency projects cost-effective, and the greater ability of such customers to meet their own energy efficiency needs, as compared to more general publicly funded programs. A December 2008 policy brief by the Electricity Consumer Resource Council (“ELCON”) similarly sets out the position that large industrial customers would opt for the most cost-effective measures as being “in their own best

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<sup>2</sup> ACEEE, *Implementing Industrial Self-Direct Provisions*, Anna Chittum and R. Neal Elliot, Summer Study on Energy Efficiency in Industry, July 30, 2009.

interest”, and that larger customers needed energy efficiency projects tailored to their particular industry or facility.<sup>3</sup> In terms of concerns, ACEEE cites the impact on societal benefits of Self Direct programs, including losses to general DSM revenue, and the issue of funding for low-income, weatherization assistance, education and outreach.

Staff’s review indicates that the proposed Self Direction program component has been designed to allow large customers to use their DSM contributions for projects that will meet their energy efficiency needs. Staff also notes that the program component has been designed to promote cost-effective projects, and to measure and verify project savings. A broader benefit is also provided for, in that 15% of DSM contributions by Self Direction customers would be retained, in part to cover low income program costs.

Aggregation. In response to a Staff inquiry, APS confirmed that a parent company could aggregate the kWh usage of its subsidiaries to reach the 40 million kWh threshold. To do so, APS would use the same criteria as is used for determining the customer cap, meaning by limiting aggregation to related entities governed by the same decision-making entity.

Low Income Program Costs. The Settlement Agreement included language indicating that the 15% retained from a customer opting for Self Direction would be used to cover Self Direction program administration, management, verification, measurement *and low-income program costs*. Staff notes, however, that the Implementation Plan omitted the language on low-income program costs. In discussions with Staff, APS indicated that the language used was not intended to exclude low income programs from coverage by the 15% retained by APS. For purposes of clarification, Staff recommends that, as per the Settlement Agreement, the 15% retained from customers opting for Self Direction be used to cover self direction program administration, management and verification, measurement and evaluation *and low-income program costs*.

DSM Funds To Be Used for Incremental Costs. In the Settlement Agreement, Attachment C, paragraph 5 of the Self Direction Provisions states the following:

“Self Direction funds will be paid once a year in December beginning in the year that the DSM project is completed and verified by the APS Solutions for Business team. If project costs exceed the credited amount in one year, then funding will continue to be paid in December of each year until the project is 100% funded or on the tenth year of funding, whichever comes sooner.”

For purposes of clarification, it should be understood that the project costs being funded at 100% (or until the tenth year) include only the incremental cost of higher efficiency measures. For

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<sup>3</sup> ELCON, *Financing Energy Efficiency Investments of Large Industrial Customers: What is the Role of Electric Utilities?*, December 2008.

example, Self Direction funds are not intended to pay for the entire cost of a new motor, but rather for the difference between a standard motor and a more energy-efficient motor.

Reporting Requirements. Staff recommends that APS address the Self Direction component in its Demand Side Management Semi-Annual Report filed with the Commission, or in any succeeding form of report ordered by the Commission. As per the Settlement Agreement, all kWh, kW and environmental savings will count toward meeting the APS energy efficiency targets, and will be reported as APS DSM/energy efficiency savings.

Although energy and environmental savings data for Self Directed projects should be integrated with reporting for the Non-Residential Large Existing Facilities or New Construction DSM Programs, there should also be reporting on the status and progress of Self Direction as a separate program component. This reporting should include participation levels, the level of spending, the number of measures installed (by type of measure), and the estimated energy and environmental savings arising from this portfolio component, along with any other information or data necessary for evaluation of the Self Direction program component. Any significant problems and proposed solutions should also be reported.

Staff recommends that the Self Direction component of the Energy Efficiency Implementation Plan be approved, in accordance with the provisions of the Settlement Agreement, and in accordance with Staff's clarifications and recommendations.

## SCHOOLS

Existing Program Description. This program sets aside DSM funding exclusively for all schools, including public schools, charter schools, and private schools to participate in the Non-Residential programs.<sup>4</sup> The program assists schools in reducing energy use in school buildings, by providing schools with incentives for energy efficiency measures, such as upgrade to lighting and HVAC. The program also provides educational and training materials to assist in school conservation projects.

Schools are also allowed to participate in any Non-Residential DSM program, and may do so before the Schools budget is fully subscribed and without districts reaching their caps. Schools of any size may also participate in the Direct Install measure incentives available to other Non-Residential customers.

In the APS Demand Side Management Semi-Annual Report for the first half of 2009, the Company states that, as of June 30<sup>th</sup>, it had received a total of 78 applications from 19 school districts, and paid out \$797,399 in incentives to schools (\$298,122 under the Schools program and the remaining \$509,740 paid under the other Non-Residential programs). The Company also reported annual kWh savings of 11,359,458 for school projects completed in the first half of

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<sup>4</sup> Decision No. 68488 states "The Commission directs that all schools, K through 12, in APS Service Territory are eligible for the Schools Program."

2009. Lifetime kWh savings arising from these same school projects was reported at 177,740,605.

Proposed Program Enhancements. The Settlement Agreement provides the following:

“A goal for APS to serve, meaning the installation of measures, through its existing DSM programs or enhanced program elements, at least 100 schools by December 31, 2010.”

In the Implementation Plan APS also proposes to raise the customer cap for the schools program from \$25,000 to \$100,000 per school district, in order to respond to the increased emphasis on energy efficiency for schools and in keeping with the increased Schools budget.

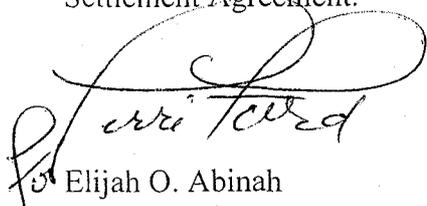
Proposed Schools Budget

The total proposed Schools Budget is set forth in the table below. The average annual budget cited in Decision No. 70666 is \$1,363,000, so the proposed budget of \$3,056,000 represents an increase of approximately \$1,693,000.

| Year                              | 2010        |
|-----------------------------------|-------------|
| Incentives                        | \$1,917,000 |
| Training and Technical Assistance | \$40,000    |
| Consumer Education                | \$13,000    |
| Program Implementation            | \$781,000   |
| Program Marketing                 | \$253,000   |
| Planning and Administration       | \$52,000    |
| Total Budget                      | \$3,056,000 |

Analysis and Recommendations

Staff recommends approving the APS proposal to raise the customer cap for the schools program from \$25,000 to \$100,000 per district. This is reasonable in light of the increase in the Schools budget and would facilitate reaching the 100-school minimum goal set forth in the Settlement Agreement.

A handwritten signature in black ink, appearing to read "Elijah O. Abinah". The signature is written in a cursive style with a large, looping initial "E".

Elijah O. Abinah  
Assistant Director  
Utilities Division

EOA:JMK:lhm\JFW

ORIGINATOR: Julie McNeely-Kirwan

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**BEFORE THE ARIZONA CORPORATION COMMISSION**

KRISTIN K. MAYES  
Chairman  
GARY PIERCE  
Commissioner  
PAUL NEWMAN  
Commissioner  
SANDRA D. KENNEDY  
Commissioner  
BOB STUMP  
Commissioner

IN THE MATTER OF THE APPLICATION )  
OF ARIZONA PUBLIC SERVICE )  
COMPANY FOR APPROVAL OF ITS 2010 )  
ENERGY EFFICIENCY )  
IMPLEMENTATION PLAN )

DOCKET NO. E-01345A-08-0172  
DECISION NO. \_\_\_\_\_  
ORDER

Open Meeting  
December 15 and 16, 2009  
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. On July 15, 2009, APS filed an application in compliance with the provisions of the Proposed Settlement Agreement (the "Settlement Agreement") filed on June 12, 2009, in the APS Rate Application Docket (Docket No. E-01345A-08-0172). The APS 2010 Energy Efficiency Implementation Plan ("the Plan") sets out the programs and measures by which APS plans to meet the energy savings goals agreed upon in the Settlement Agreement.

3. 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

...

1 customers in Arizona, including approximately 978,000 Residential and 119,000 Commercial  
2 customers.

3 Settlement Agreement Requirement

4 4. The Demand-Side Management ("DSM") provisions of the Settlement Agreement  
5 required that the Plan include the following general elements: new or expanded programs and  
6 program elements necessary for achieving the 2010 energy efficiency goals; the estimated energy  
7 savings by program; and a range of estimated program costs by program necessary to meet the  
8 goals.

9 5. Signatories to the Settlement Agreement agreed that the Plan should, at a minimum,  
10 include the following specific elements:

- 11 • A customer repayment/financing program element for schools, municipalities  
12 and small businesses fully integrated in the non-residential programs;
- 13 • A goal to install DSM measures through existing or enhanced program  
14 measures for at least 100 schools by December 31, 2010;
- 15 • A review of the APS low-income weatherization program for possible  
16 enhancement;
- 17 • A Residential Existing Homes Program with the new Home Performance  
18 element and the existing HVAC element, with a goal of serving 1,000 existing  
19 homes by December 31, 2010;
- 20 • A *non-residential* high performance new construction program element with a  
21 second tier of performance and a higher financial incentive; and
- 22 • A *residential* high performance new home program element with a second tier  
of performance and a higher financial incentive, which APS was to file with the  
Commission on or before June 30, 2009.

23 Scope of Review

24 6. To expedite implementation of new programs, new portfolio components and  
25 program enhancements, Staff has reviewed the following four Implementation Plan elements for  
26 this document:

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Residential

- Low income Weatherization (existing program; multiple enhancements)
- Appliance Recycling (new program)

Non-Residential

- Schools program (existing program; increase in customer cap)
- Self Direction (new portfolio component)

7. Summarized descriptions will be provided for existing programs, but the focus of Staff's review and analysis will be new programs, new portfolio components and program enhancements. Measures previously determined by Staff to be cost-effective will not be re-evaluated for cost-effectiveness at this time, unless new information indicates that re-evaluation is necessary.

8. The remaining plan elements will be addressed in a later document. These are listed below:

Residential

- Consumer Products (existing program; three new measures)
- Residential Existing Homes (existing program; adds Home Performance enhancement)
- Residential New Construction (existing program; Energy Star Plus)

Non-Residential

- Non-Residential New Construction (existing program; adds second performance tier)
- Non-Residential Customer Repayment Financing Program (new portfolio component)

Overall Portfolio

- Demand-Side Management Adjustor charge (recovery for program costs)
- Performance Incentive
- Budget increases for existing programs.

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1 **RESIDENTIAL PROGRAMS**

2 **Low Income Weatherization**

3 9. The Settlement Agreement provides that the APS low income weatherization  
4 program should be reviewed for possible enhancement. (14.11)

5 10. Existing Program Description. The current APS low-income weatherization  
6 program (also known as the "Energy Wise Low Income Assistance Program") was approved most  
7 recently in Decision No. 68647, but a version of the APS low-income weatherization program has  
8 been in place since late 1998.

9 11. The existing program provides four types of assistance to low-income customers:

- 10 • Weatherization: Although the APS Energy Wise program is independent of the  
11 federal Weatherization Assistance Program ("WAP"), the weatherization  
12 program is conducted in accordance with WAP rules. Weatherization includes  
13 installation of measures designed to improve energy efficiency, such as  
14 insulation and sunscreens, along with repairs and improvements to the building  
15 envelope. General repairs allowed under program rules include roof repairs and  
16 repair or replacement of windows and doors. Repair or replacement of ceilings  
17 in order to support insulation is permitted, as is repair or replacement of  
18 structurally unsound floor areas.
- 19 • Health and Safety: provides for installation of energy-efficient window unit air  
20 conditioners and heat pumps prescribed by a medical doctor;
- 21 • Repair and Replacement: provides for repair or replacement of air conditioners,  
22 heat pumps, evaporative coolers, refrigerators and water heaters. Replacement  
23 is allowed only when the cost of repair exceeds the cost of replacement, when  
24 repairs would not render the appliance operable, or when the appliance would  
25 be unsafe, even if repaired;
- 26 • Bill Assistance: provides crisis bill assistance of up to \$400 once in a 12-month  
27 period to low income families. Crises are defined as (i) loss or reduction of  
28 income; (ii) unexpected or unplanned expenses resulting in a lack of resources;  
or (iii) a condition that endangers the health or safety of the household.

24 12. There is a \$6,000 per-home cap and the program is delivered through local  
25 community action agencies. The Arizona Community Action Association ("ACAA") manages  
26 the contracts for the APS weatherization and bill assistance programs, and contracts directly with  
27 the community action agencies for weatherization work. The ACAA then ensures that the work  
28 ...

1 done meets program requirements, receives all the invoices from the various agencies and submits  
2 the invoices to APS for payment.

3 13. Program Enhancements. The Company proposes to make the following changes to  
4 its existing weatherization program.

- 5 • Increase to 200% of Federal Poverty Level: APS has proposed that the income  
6 eligibility guideline be changed from the current 150% of the Federal Poverty  
7 Level ("FPL") to 200% of the FPL. The change will allow APS to maintain  
8 consistency with WAP rules, eliminate the administrative issues that arise from  
9 having different eligibility guidelines, and qualify more individuals to  
10 participate in the Energy Wise program. (The proposed change to the income  
11 eligibility guideline for weatherization does not apply to the Bill Assistance  
12 component of the Low Income Weatherization program. Bill Assistance for  
13 customers in the 150%+ to 200% of FPL income range will be funded by APS,  
14 as addressed in the Settlement Agreement.)

- 11 • Evaporative Cooler to Heat Pump/Air Conditioner Conversions: In the  
12 Implementation Plan, APS originally proposed to convert evaporative coolers to  
13 energy efficient heat pumps, with 50% considered to be weatherization and 50%  
14 to be considered health and safety. The Company has restated its proposal so  
15 that evaporative coolers would be replaced with air conditioners in homes with  
16 gas heating, and with heat pumps in homes with electric heat, in order to  
17 address concerns over fuel switching.

16 The current low income weatherization program only allows for conversion of  
17 evaporative coolers as a health and safety measure, with a doctor's note (and  
18 with none of the cost counting toward weatherization.)

- 18 • Multifamily Housing: APS is proposing to provide a weatherization funding  
19 pool for non-profit 501c3 housing authorities, in order to weatherize multi-  
20 family housing projects owned by the housing authorities. APS is proposing a  
21 budget of \$720,000, to weatherize 200 units at an average cost of \$3,000 per  
22 unit. Under the Company proposal, \$600,000 would go to weatherization of  
23 multi-family housing units, while 20% of that amount, or \$120,000 would go to  
24 delivery costs.
- 23 • Refrigerator Replacement: APS has proposed that refrigerator replacement be  
24 allowed as part of weatherization, rather than only as a repair and replacement  
25 measure.
- 25 • Weatherization Kits: APS has proposed a \$37,500 budget for weatherization  
26 kits containing low flow showerheads, CFLs, outlet insulation pads and other  
27 energy saving devices. In discussions with Staff, APS has explained that the  
28 weatherization kits are not intended to contain a standard selection of items, but  
rather to reflect the needs of the local community, as expressed by the  
participating community action agency.

Under this proposal, families prequalified for weatherization would receive weatherization kits from the weatherization provider, who would be responsible for training and follow-up on use of the kits. APS proposes that 500 kits be distributed, each worth approximately \$75.

- Marketing and Consumer Education: APS proposes an additional \$10,000 to increase its marketing efforts designed to help low income customers become more energy efficient and aware. These efforts would include increased consumer education, including promotions, demos, weatherization seminars, distribution of the weatherization kits and outreach efforts targeting the multi-family housing segment.

Budget Allocation, Current and Proposed

Proposed increases to the Weatherization budget are listed by category in the table below, in bold.

| Category                    | Budget as of Decision No. 68647 (Current) | Proposed Increased Marketing | Proposed Increase to 200% of FPL | Proposed Multifamily | Proposed Refrigerator Replacement (as weatherization) | Proposed Weatherization Kits | Total Summary by Category |
|-----------------------------|---|------------------------------|----------------------------------|----------------------|---|------------------------------|---------------------------|
| Weatherization              | \$479,400                                 |                              | \$333,000*                       | \$600,000            | \$45,000  | \$37,500                     | \$1,494,900               |
| Health and Safety           | \$14,100                                  |                              |                                  |                      |   |                              | \$14,100                  |
| Repair and Replace          | \$70,500                                  |                              |                                  |                      |   |                              | \$70,500                  |
| Program Delivery            | \$141,000                                 |                              | \$67,000*                        | \$120,000            |   |                              | \$328,000                 |
| Bill Assistance             | \$250,000                                 |                              |                                  |                      |   |                              | \$250,000                 |
| Third Party Management      | \$50,000                                  |                              |                                  |                      |   |                              | \$50,000                  |
| Training Tech. Support. MER | \$10,000                                  |                              |                                  |                      |   |                              | \$10,000                  |
| Marketing and Promotion     | \$10,000                                  | \$10,000                     |                                  |                      |   |                              | \$20,000                  |
| APS Administration          | \$75,000                                  |                              |                                  |                      |   |                              | \$75,000                  |
| Totals: New/Proposed        | \$1,100,000                               | \$10,000                     | \$400,000                        | \$720,000            | \$45,000  | \$37,500                     | \$2,312,500               |

\*Changed to reflect lower program delivery and higher implementation costs. Now consistent with delivery costs for the Multifamily component.

Staff Analysis and Recommendations on Proposed Program Enhancements

14. Increase to 200% of FPL. Under the current income guidelines, in order to be eligible for the weatherization program, a family of two could make \$21,855, or 150% of the FPL of \$14,570. Under the change proposed by APS (and already adopted at the federal level), the ...

1 eligibility level for a family of two would be raised to \$29,140. For a family of four, the eligibility  
2 level would change from \$33,075 to \$44,100 (based on the 2009 FPL of \$22,050).

3 15. APS states that the increase to 200% of FPL is intended to help working poor  
4 customers who have been struggling, but unable to qualify for weatherization assistance. On an  
5 administrative level, the current mismatch between federal and state eligibility standards means  
6 that customers at 150% of FPL have to be tracked differently from customers at 200% of FPL, and  
7 this creates an added burden for agencies with limited staffing.

8 16. Staff believes it is reasonable to revise eligibility standards upward for  
9 Weatherization, Health and Safety, and Repair and Replacement, in order to avoid conflicting with  
10 federal standards, and to broaden the range of customers eligible to receive weatherization services  
11 and other assistance from the Energy Wise program. Staff has recommended that the eligibility  
12 requirement be changed from 150% of FPL to 200% of FPL.

13 17. Evaporative Cooler Conversions: Heat Pumps and Air Conditioners. As stated  
14 above, APS originally proposed to convert evaporative coolers to energy efficient heat pumps.  
15 Since heat pumps provide both cooling and heating, their installation would not only replace the  
16 evaporative coolers used in summer, but also the electric heaters or gas furnaces used in winter. In  
17 the case of homes with gas furnaces, this would result in fuel switching, which is to say, moving a  
18 customer from using one fuel source to another. In communications with Staff, APS indicated that  
19 this was not the intent of the proposed enhancement, and added that the Company proposes to  
20 replace evaporative coolers with electric heat pumps only in homes with electric heat. In homes  
21 with gas heat, evaporative coolers would be replaced with air conditioners, thereby avoiding fuel  
22 switching.

23 18. Replacing evaporative coolers with air conditioners in homes with gas heating also  
24 avoids unnecessary expense and promotes a cost-effective approach to energy efficiency. Heat  
25 pumps are generally more expensive than air conditioners, and are more likely to be cost effective  
26 in homes where they are replacing electric heating.

27 19. Evaporative Cooler Conversion to Air Conditioners; Energy Efficiency Concerns.  
28 The main issue with respect to converting from evaporative coolers to air conditioners is that air

1 conditioners generally use more power than do evaporative coolers. According to the U.S.  
2 Department of Energy website:

3 "Evaporative coolers cost about one-half as much to install  
4 as central air conditioners and use about one-quarter as much  
5 energy. However, they require more frequent maintenance  
6 than refrigerated air conditioners and they're suitable only for  
7 areas with low humidity."

8 20. Conversions made necessary by health and safety considerations are, and would  
9 remain, a reasonable expenditure of weatherization funds. But Staff is concerned that replacing  
10 evaporative coolers with either air conditioners or heat pumps is likely to *increase* energy usage in  
11 many homes, meaning that allowing conversions on the expanded basis proposed by APS could  
12 work against the basic goal of the energy efficiency implementation plan.

13 21. Reasons for Evaporative Cooler Conversion. Staff was informed by weatherization  
14 stakeholders that crews fully audit homes before any work is done and that measures that would  
15 not be energy efficient are either not performed, or performed using non-weatherization funding,  
16 such as funding for health and safety or repair and replacement. Information from weatherization  
17 stakeholders indicates that converting to air conditioning can result in lower energy bills, if the  
18 conversion is combined with other weatherization measures, such as improved attic insulation,  
19 tighter and more insulated duct work, reduced air infiltration, elimination of room pressures and  
20 the installation of programmable thermostats and shade screens. A weatherization agency noted a  
21 50% reduction in the utility bills of a home during summer where the evaporative cooler was  
22 replaced and the above weatherization measures were also installed. If such savings can be  
23 documented consistently, conversion may be justified from an energy use standpoint, taking into  
24 account other weatherization activities, and keeping in mind that evaporative coolers considered  
25 for replacement would be old, inefficient and/or poorly maintained due to limited customer  
26 resources.

27 22. It was also noted by weatherization stakeholders that evaporative coolers can run  
28 constantly, as compared to air conditioners. (Although Staff notes that evaporative coolers are, like  
air conditioners, equipped with thermostats.) Another consideration in favor of conversion is that

1 evaporative coolers require an open system, which tends to leak, and makes a home with an  
2 evaporative cooler less energy efficient during the winter. Higher water usage and higher water  
3 bills were also cited as reasons for conversion.

4 23. Although not directly related to energy efficiency, another reason for conversions is  
5 the increased risk of water damage and mold associated with evaporative coolers. These problems  
6 are more likely to occur for some low income customers, who may find it difficult to keep up with  
7 the more frequent maintenance required by evaporative coolers, for either financial reasons, or  
8 because they are physically unable to attend to maintenance themselves. (Conversions made on  
9 this basis should be classified as health and safety measures.)

10 24. Staff Recommendation. Although Staff takes into account the concerns expressed  
11 regarding evaporative coolers, these concerns would not justify performing evaporative cooler  
12 conversions as a matter of course, or the automatic crediting of 50% of such conversions to  
13 weatherization costs. Staff has recommended that evaporative cooler conversion be restricted to  
14 home (or multifamily) weatherizations which produce energy savings and lower energy bills for  
15 low income customers, unless evaporative cooler conversion is necessary for the health or safety  
16 of low income customers.

17 25. Staff is concerned about the possible impact of evaporative cooler conversions on  
18 low-income customer energy bills. In order to confirm that these conversions are, in fact,  
19 providing savings for low-income customers, energy savings should be verified based on lower  
20 energy bills or lower energy usage following weatherization. (A representative sampling of  
21 weatherizations featuring evaporative cooler conversions should be reviewed for this purpose.)

22 26. Any conversion that does not produce such energy and cost savings for low income  
23 customers should be classified as a Health and Safety expenditure and would not be included in the  
24 program costs used to calculate the cap on the performance incentive. If energy savings have been  
25 confirmed, Staff recommends that the cost of conversion can be credited to weatherization and  
26 may be included as a program cost for purposes of calculating the cap on the performance  
27 incentive.

28 ...

1           27.    Multifamily Housing. Making multifamily housing eligible for the low-income  
2 weatherization program would provide for economies of scale, making weatherization measures  
3 more cost-effective. Servicing multiple homes at the same location would make it practical to  
4 weatherize more households, more efficiently, and at lower cost. The addition of this program  
5 element would also open up participation to low-income apartment dwellers, a customer segment  
6 with generally limited opportunities to participate in, or benefit from, energy efficiency programs.

7           28.    Staff questioned the 20% of the Multifamily budget for delivery costs. In its  
8 response, APS stated that the proposed costs are "consistent with the current weatherization  
9 program" and that monies for administrative costs would be paid to the community action agency  
10 managing a multifamily weatherization project.

11           29.    Staff has recommended that the multifamily housing program component be  
12 approved by the Commission. Staff has also recommended that the same guidelines governing the  
13 use of DSM funds for single family housing be applied to multifamily housing.

14           30.    Refrigerator Replacement. Under current program guidelines, refrigerators are  
15 replaced only when repair costs would exceed the replacement cost, or when the refrigerator would  
16 be inoperable or unsafe, even if repaired. As a proposed enhancement, refrigerators could be  
17 replaced as a weatherization measure, in order to enhance the energy efficiency of the homes being  
18 weatherized.

19           31.    APS proposes a budget of \$45,000 for this component, projecting a maximum of  
20 300 replacements at a cost of \$150. In response to a Staff inquiry regarding the estimated \$150  
21 replacement cost, the Company stated this was an average cost for the typically smaller units found  
22 in homes being weatherized.

23           32.    Based on current data, Staff analysis indicates that replacement of older and  
24 inefficient refrigerators is likely to be cost-effective. Staff has recommended that a working  
25 refrigerator be replaced only when the energy savings provided over the lifetime of a new  
26 refrigerator exceed its entire cost, as opposed to only the incremental cost of a more efficient unit.  
27 (This recommendation excepts instances where refrigerator replacement would be allowable as a  
28 Repair and Replacement measure.)

1           33. Staff has also recommended that, if feasible, refrigerators replaced as part of the  
2 Low Income Weatherization Program be disposed of so that they do not remain on the market.  
3 When possible, these refrigerators should be recycled using the same recycling concern that would  
4 decommission and process refrigerators from the Residential Appliance Recycling Program.

5           34. Staff has also recommended that low income customers participating in the Low  
6 Income Weatherization program also be eligible to participate in the Appliance Recycling  
7 program, if the home being weatherized includes appliances meeting the Appliance Recycling  
8 program's eligibility requirements. (For example, to be eligible, refrigerators would have to be  
9 working second refrigerators and between 10 and 30 cubic feet in capacity; they would also have  
10 to be removed from the home and taken out of service.)

11           35. Weatherization Kits. Staff discussion with stakeholders indicates that two of the  
12 measures proposed for inclusion in the weatherization kits are unlikely to be cost-effective, and  
13 would be of limited value in improving energy efficiency. Outlet insulation pads are an ineffective  
14 form of insulation and low flow showerheads may be difficult for some customers to install, or not  
15 desired by the customer. (In addition, removing and replacing showerheads may cause leaks when  
16 there is older, possibly galvanized, plumbing, in place.) Staff has recommended that outlet  
17 insulation pads and low flow showerheads not be included in the weatherization kits.

18           36. A revised and flexible form for the weatherization kits is more likely to provide  
19 energy savings and benefits to customers. Staff has recommended that APS consult with local  
20 community action agencies in order to determine the types of low cost measures that should be  
21 included, based on the areas where the kits would be distributed.

22           37. Examples of items that could be a part of the weatherization kits include CFLs and  
23 information on how customers can improve energy efficiency. (CFLs should be accompanied by  
24 specific guidance on where CFLs should be installed to provide the greatest benefit.) Local  
25 community action agencies may limit the kits to CFLs and energy saving information, or request  
26 other low cost items, such as refrigerator magnets with energy saving tips (to increase awareness  
27 on a longer-term basis), and refrigerator thermometers (to help consumers to avoid overcooling).

28 ...

1 Participating community action agencies may also propose other weatherization items, which can  
2 be included in the kits if APS determines that to do so would be reasonable on an economic basis.

3 38. Of the \$37,500 allocation proposed for weatherization kits, any funding not spent  
4 after 500 kits have been distributed, or at the end of the program year, should be retained in the  
5 Weatherization program and used for other weatherization activities.

6 39. Marketing and Consumer Education. APS has proposed to increase its marketing  
7 and consumer education for the low income weatherization program, with more promotions and  
8 events, including weatherization seminars. Increased marketing and consumer education activities  
9 would include distribution of the weatherization kits. APS also plans to use the additional funding  
10 in order to reach the multifamily housing segment and to provide funds to support community  
11 action agency efforts to market their weatherization programs.

12 40. The existing budget for Marketing and Promotion is \$10,000, so the additional  
13 \$10,000 proposed in the Implementation Plan would represent a doubling of expenditures in this  
14 category, but would also be more reflective of the proposed overall budget increase of \$1,212,500,  
15 from \$1,100,000 to \$2,312,500. The requested increase would also make it easier to reach the  
16 multifamily housing customer segment proposed to be included in the weatherization program.

17 41. Staff has recommended that the increase in marketing and consumer education for  
18 low-income customers be approved, but also has recommended that APS work to ensure that low  
19 income customers have access to any proposed form of education, marketing or outreach. In  
20 addition, Staff has recommended that APS describe its marketing and consumer education  
21 activities and provide copies of brochures and other marketing materials in the semi-annual report  
22 filed with the Commission, or any successive report ordered by the Commission.

23 42. Low Income Weatherization Program Cost Components for Calculating  
24 Performance Incentive. Weatherization measures are specifically designed to produce energy  
25 savings, while health and safety measures and repair and replacement measures only create energy  
26 savings under limited circumstances. Under the program in its current form, Weatherization costs  
27 count toward the Company's DSM spending requirements. However, Health and Safety or Repair

28 ...

1 and Replacement measures count toward the APS spending requirement only under the following  
2 circumstances:

3           “i. When installing (for Health and Safety) or replacing  
4 an air conditioner, heat pump, or other appliance, APS may  
5 only count the incremental cost between an average  
6 appliance model and a more energy-efficient appliance  
7 model toward its minimum DSM spending requirements.

8           ii. When repairing an appliance, costs for repairs may  
9 only be counted as DSM if the repair results in a reduction of  
10 energy use.”

11           43. Staff has recommended that similar restrictions remain in place for the enhanced  
12 Energy Wise program, under the new methodology for calculating performance incentives. As  
13 noted in the Settlement Agreement, performance incentives are based on the Company’s  
14 achievements relative to its Energy Efficiency goals. Although the Company should recover the  
15 cost of all its Health and Safety activities, spending that does not produce energy savings must be  
16 excluded from the program costs used to calculate the cap on performance incentives. Repair and  
17 Replacement costs should only be recovered and included in the program costs used to calculate  
18 the cap on performance incentives if the result of a repair or replacement is a reduction in energy  
19 use. Including spending unrelated to creating energy savings would ratchet up the cap on  
20 performance incentives and may result in incentive dollars being paid out for activities that do not  
21 produce energy savings.

22           44. Staff has recommended that, for purposes of calculating the cap on the performance  
23 incentive, expenditures for the Health and Safety and Repair and Replacement components of the  
24 weatherization program should only be included (i) to the extent of the incremental cost of the  
25 higher efficiency equipment being used to replace an appliance (as compared to the cost of a  
26 standard appliance); and (ii) to the extent that appliance repairs result in reduced energy use.

27           45. Bill assistance, although important to customer protection, also does not produce  
28 energy savings. (In Decision No. 67744, bill assistance is counted toward spending requirements  
because an earlier settlement agreement provided that Bill Assistance was to be treated as DSM.  
The current Settlement Agreement makes no such provision.) Although the Company should

1 continue to recover the cost of the Bill Assistance component, Staff has recommended that Bill  
2 Assistance not be included as a program cost for purposes of calculating the cap on performance  
3 incentives. As with the Health and Safety, and Repair and Replacement components, including  
4 such spending for Bill Assistance ratchets up the cap on performance incentives and may result in  
5 incentive dollars being paid out for activities that do not produce energy savings.

6 46. Reporting Requirements. Staff has recommended that APS continue to report on  
7 the Energy Wise program in its semi-annual report filed with the Commission, or in any  
8 succeeding form of report ordered by the Commission, and that the reporting include information  
9 and data on the new, or enhanced, program components approved by the Commission. The  
10 information and data reported should include the number of customers participating, the level of  
11 spending for energy efficiency measures, the level of spending associated with non-energy-  
12 efficiency measures, the number of measures installed, by type of measure, and the estimated  
13 energy and environmental savings arising from this portfolio component, along with any other  
14 information necessary for the Commission to understand the progress and status of the program.

15 47. Staff has recommended that the Low Income Weatherization Program be approved,  
16 with the program enhancements as modified by Staff recommendations.

17 **Appliance Recycling**

18 48. Description. This is a new program targeting APS Residential customers. APS  
19 proposes to provide a \$30 incentive and free removal for working second refrigerators and freezers  
20 in households. (Another advantage for customers is that it frees them from any municipal fees  
21 they would otherwise have to pay for pick-up and disposal of old units.) APS projects that it will  
22 have 9,516 participating units, consisting of approximately 8,564 refrigerators and 952 freezers.

23 49. APS also proposes to dispose of the old refrigerators and freezers, recycling them in  
24 order to remove inefficient appliances permanently from the market. Currently, discarded  
25 appliances are shipped out of state for recycling, but appliance recyclers have indicated that the  
26 additional volume from the APS program would justify an in-state facility. APS has requested that  
27 an implementation contractor build a new recycling facility in Arizona, to create jobs in Arizona,  
28 limit transport costs and decrease the environmental impact of shipping old appliances long

1 distances.<sup>1</sup> The appliance recycling contractor would own and operate the facility, verify customer  
2 eligibility and pick up the appliances.

3 50. Eligibility. The Appliance Recycling program is open to Residential customers in  
4 their own homes and renters. Although many apartment dwellers may not own the major  
5 appliances in their rental homes or unit, they will be eligible if they own appliances meeting  
6 program requirements. Landlords would also be eligible to participate, if they meet program  
7 requirements.

8 51. Proposed Budget. The proposed budget for the new Appliance Recycling program  
9 is shown in the table below:

| Year                        | 2010        |
|-----------------------------|-------------|
| Incentives                  | \$286,000   |
| Consumer Education          | \$19,000    |
| Program Implementation      | \$911,000   |
| Program Marketing           | \$182,000   |
| Planning and Administration | \$30,000    |
| Total Budget                | \$1,428,000 |

15 52. Cost-Effectiveness. Second refrigerators and freezers are usually older models, and  
16 likely to be far less efficient than up-to-date efficiency appliances. Older appliances are also costly  
17 for consumers to operate. In one example, the Energy Star site estimates that a pre-1990 side-by-  
18 side refrigerator may cost \$17.55 a month to operate, while an Energy Star model from 2001 or  
19 later would cost \$6.63. Generally, Energy Star notes that a pre-1993 model refrigerator may cost  
20 \$100 more to run, per year, than newer, efficient models. The existing inefficiencies of older  
21 refrigerators and freezers may also be exacerbated by storage in garages or on porches, causing  
22 them to expend more power in order to keep their contents cool, and making them even more  
23 costly for consumers to operate.

24 53. APS estimates savings of 700 to 1,100 kWh. Staff calculations indicate that the  
25 new program would be cost-effective, even based on the lower end estimate for kWh savings, with  
26

27 <sup>1</sup> Appliance recyclers have estimated that it would take at least three to six months to build a local recycling facility.  
28 The program could start collecting appliance in six to eight weeks and would ship appliances out of state until the  
Arizona facility opened.

1 a benefit to cost ratio of 2.05. At the high end of estimated savings, Staff estimates a benefit to  
2 cost ratio of 3.08.

3 54. Federal Appliance Rebate Program. The federal government is working toward a  
4 program offering rebates to consumers who buy energy-efficient appliances, including  
5 refrigerators. APS conferred with the Arizona Energy Office and understands that AEO does not  
6 anticipate requiring consumers to turn in old appliances in order to obtain rebates. The Company  
7 also believes that participating retailers would neither require, nor have the ability to remove or  
8 absorb the old appliances. If the program takes the form expected, and customers are not required  
9 to turn in their old appliances, it is possible that the two programs would dovetail; participation in  
10 the APS appliance recycling program would be enhanced, because rebates are available for  
11 efficient appliances. At the same time, participation in the federal rebates program could be  
12 enhanced, particularly by the ease with which old appliances could be disposed of through the APS  
13 program.

14 55. The final details of the federal appliance program, if passed, are not known at this  
15 time. APS has informed Staff that it will work to ensure that its refrigerator/freezer recycling  
16 program will be positioned to benefit from any synergies made possible by a federal appliance  
17 program.

18 56. Reporting. Staff has recommended that APS report on the Appliance Recycling  
19 program in its semi-annual report filed with the Commission, or in any succeeding form of report  
20 ordered by the Commission, and that the reporting include information and data on the new, or  
21 enhanced, program components approved by the Commission. The information and data reported  
22 should include the number of customers participating, the level of spending for energy efficiency  
23 measures, the level of spending associated with non-energy-efficiency measures, the number of  
24 measures installed by type of measure, and the estimated energy and environmental savings arising  
25 from this portfolio component, along with any other information necessary for the Commission to  
26 understand the progress and status of the program. Any ongoing problems and their proposed  
27 solutions should also be reported.

28 ...

1           57.    Staff Recommendation. Staff has recommended that the Appliance Recycling  
2 Program be approved, with the modifications recommended herein.

3 **NON-RESIDENTIAL PROGRAMS**

4           **Self-Direction**

5           58.    Program Component Description. Self Direction is a new program component.  
6 The Settlement Agreement states that large commercial or industrial customers using more than 40  
7 million kWh per year should be allowed to self direct their DSM charges, based on an aggregation  
8 of all the customer's accounts. This allows large customers to reserve 85% of their DSM  
9 contributions for their specific use, for eligible energy efficiency projects at their own facilities.  
10 Self direction is offered to commercial and industrial customers because they have the technical  
11 knowledge, ability and resources to implement DSM programs.

12           59.    The rules governing Self Direction include the following:

- 13           • After a customer informs APS of its intent to self-direct, 85% of that  
14 customer's DSM contributions will be reserved for the customer's energy  
15 efficiency projects, while 15% will be reserved to cover self-direction program  
16 administration, management, verification, measurement and evaluation, and  
17 low-income programs;
- 18           • Eligible customers must notify APS on or before December 1 of each year that  
19 they are electing Self Direction. Self Direction funds will be reserved for  
20 tracking purposes for the following calendar year. Funds will not be set aside  
21 retroactively.
- 22           • Self Direction customers must continue to make their DSM contributions  
23 through base rates and the DSMAC;
- 24           • Self Direction funds are paid once a year in December, after a DSM project  
25 has been completed by the customer and then verified by APS. Funding will  
26 be paid out each December, until the project is 100% funded, or until the tenth  
27 year of funding.
- 28           • Once the final Self Direction payment has been made, the customer may apply  
to continue in Self Direction. If the customer does not apply before December  
1, then that customer will be eligible to participate in APS' Non-Residential  
DSM programs beginning January 1.
- If self direction energy efficiency projects are not completed within two years  
of the self direction election date, the funds will not be available to the  
customer and will revert to the program account;

- 1 • Eligible customers must commit all their accounts and facilities for the period  
2 of a Self Direction project, and are not permitted to participate in APS  
3 Solutions for Business programs during the funding period for the project;
- 4 • Groups of customers may not form associations for the purpose of meeting the  
5 Self Direction minimum of 40 million kWh, but a single large customer may  
6 aggregate its accounts for this purpose.
- 7 • Self Direction projects must be cost-effective and meet the same requirements  
8 as the Non-Residential Existing Facilities and Non-Residential New  
9 Construction DSM Program, with the same prescriptive and incentive  
10 measures. Annual customer incentive caps do not apply to Self Direction  
11 funds.
- 12 • An energy efficiency project application must be filed within two years of  
13 election, and include the following; the name of the customer, a description of  
14 the project, its schedule and its scope, and the savings, cost and payback of the  
15 project;
- 16 • APS will review and administer the Self Direction funding and accounting.  
17 APS will verify that the technologies meet program specifications and that  
18 savings claims are supported. APS will also provide measurement and  
19 evaluation after a Self Direction project begins operation. Documentation  
20 requirements will be identical to APS Non-Residential program requirements.
- 21 • All savings from self directed programs are to be claimed as part of the  
22 Company energy efficiency portfolio targets.

23 Staff Analysis and Recommendations on Proposed Program Component

24 60. Other States. A 2009 American Council for an Energy Efficient Economy  
25 (“ACEEE”) study listed 17 states with Self Direction programs of various types, some more  
26 structured and requiring significant measurement and verification, with others more loosely  
27 structured and requiring little or no measurement and verification.<sup>2</sup> As a rationale for Self  
28 Direction, the study cited the built-in incentive for large industrial customers to make energy  
efficiency projects cost-effective, and the greater ability of such customers to meet their own  
energy efficiency needs, as compared to more general publicly funded programs. A December  
2008 policy brief by the Electricity Consumer Resource Council (“ELCON”) similarly sets out the

<sup>2</sup> ACEEE, *Implementing Industrial Self-Direct Provisions*, Anna Chittum and R. Neal Elliot, Summer Study on Energy Efficiency in Industry, July 30, 2009.

1 position that large industrial customers would opt for the most cost-effective measures as being “in  
2 their own best interest”, and that larger customers needed energy efficiency projects tailored to  
3 their particular industry or facility.<sup>3</sup> In terms of concerns, ACEEE cites the impact on societal  
4 benefits of Self Direct programs, including losses to general DSM revenue, and the issue of  
5 funding for low-income, weatherization assistance, education and outreach.

6 61. Staff’s review indicates that the proposed Self Direction program component has  
7 been designed to allow large customers to use their DSM contributions for projects that will meet  
8 their energy efficiency needs. Staff also notes that the program component has been designed to  
9 promote cost-effective projects, and to measure and verify project savings. A broader benefit is  
10 also provided for, in that 15% of DSM contributions by Self Direction customers would be  
11 retained, in part to cover low income program costs.

12 62. Aggregation. In response to a Staff inquiry, APS confirmed that a parent company  
13 could aggregate the kWh usage of its subsidiaries to reach the 40 million kWh threshold. To do  
14 so, APS would use the same criteria as is used for determining the customer cap, meaning by  
15 limiting aggregation to related entities governed by the same decision-making entity.

16 63. Low Income Program Costs. The Settlement Agreement included language  
17 indicating that the 15% retained from a customer opting for Self Direction would be used to cover  
18 Self Direction program administration, management, verification, measurement *and low-income*  
19 *program costs*. Staff notes, however, that the Implementation Plan omitted the language on low-  
20 income program costs. In discussions with Staff, APS indicated that the language used was not  
21 intended to exclude low income programs from coverage by the 15% retained by APS. For  
22 purposes of clarification, Staff has recommended that, as per the Settlement Agreement, the 15%  
23 retained from customers opting for Self Direction be used to cover self direction program  
24 administration, management and verification, measurement and evaluation *and low-income*  
25 *program costs*.

26 ...

27 \_\_\_\_\_

28 <sup>3</sup> ELCON, *Financing Energy Efficiency Investments of Large Industrial Customers: What is the Role of Electric Utilities?*, December 2008.

1           64.    DSM Funds To Be Used for Incremental Costs. In the Settlement Agreement,  
2 Attachment C, paragraph 5 of the Self Direction Provisions states the following:

3                           “Self Direction funds will be paid once a year in December  
4 beginning in the year that the DSM project is completed and  
5 verified by the APS Solutions for Business team. If project  
6 costs exceed the credited amount in one year, then funding  
7 will continue to be paid in December of each year until the  
8 project is 100% funded or on the tenth year of funding,  
9 whichever comes sooner.”

10 For purposes of clarification, it should be understood that the project costs being funded at 100%  
11 (or until the tenth year) include only the incremental cost of higher efficiency measures. For  
12 example, Self Direction funds are not intended to pay for the entire cost of a new motor, but rather  
13 for the difference between a standard motor and a more energy-efficient motor.

14           65.    Reporting Requirements. Staff has recommended that APS address the Self  
15 Direction component in its Demand Side Management Semi-Annual Report filed with the  
16 Commission, or in any succeeding form of report ordered by the Commission. As per the  
17 Settlement Agreement, all kWh, kW and environmental savings will count toward meeting the  
18 APS energy efficiency targets, and will be reported as APS DSM/energy efficiency savings.

19           66.    Although energy and environmental savings data for Self Directed projects should  
20 be integrated with reporting for the Non-Residential Large Existing Facilities or New Construction  
21 DSM Programs, there should also be reporting on the status and progress of Self Direction as a  
22 separate program component. This reporting should include participation levels, the level of  
23 spending, the number of measures installed (by type of measure), and the estimated energy and  
24 environmental savings arising from this portfolio component, along with any other information or  
25 data necessary for evaluation of the Self Direction program component. Any significant problems  
26 and proposed solutions should also be reported.

27           67.    Staff has recommended that the Self Direction component of the Energy Efficiency  
28 Implementation Plan be approved, in accordance with the provisions of the Settlement Agreement,  
and in accordance with Staff’s clarifications and recommendations.

...



1 Proposed Schools Budget

2 72. The total proposed Schools Budget is set forth in the table below. The average  
3 annual budget cited in Decision No. 70666 is \$1,363,000, so the proposed budget of \$3,056,000  
4 represents an increase of approximately \$1,693,000.

| Year                              | 2010        |
|-----------------------------------|-------------|
| Incentives                        | \$1,917,000 |
| Training and Technical Assistance | \$40,000    |
| Consumer Education                | \$13,000    |
| Program Implementation            | \$781,000   |
| Program Marketing                 | \$253,000   |
| Planning and Administration       | \$52,000    |
| Total Budget                      | \$3,056,000 |

10  
11 Analysis and Recommendations

12 73. Staff has recommended approving the APS proposal to raise the customer cap for  
13 the schools program from \$25,000 to \$100,000 per district. This is reasonable in light of the  
14 increase in the Schools budget and would facilitate reaching the 100-school minimum goal set  
15 forth in the Settlement Agreement.

16 CONCLUSIONS OF LAW

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

19 2. The Commission has jurisdiction over APS and over the subject matter of the  
20 application.

21 3. The Commission, having reviewed the application and Staff's Memorandum dated  
22 December 2, 2009, concludes that it is in the public interest to approve the APS 2010 Energy  
23 Efficiency Implementation Plan elements discussed here, with the modifications proposed by  
24 Staff.

25 ORDER

26 IT IS THEREFORE ORDERED that the proposed changes to the Low-income  
27 Weatherization program be approved, as discussed herein.

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IT IS FURTHER ORDERED that the new Appliance Recycling program be approved, as discussed herein.

IT IS FURTHER ORDERED that the proposed changes to the Schools program be approved, as discussed herein.

IT IS FURTHER ORDERED that the Self Direction component of the Arizona Public Service Company Implementation program be approved, as discussed herein.

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

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

CHAIRMAN

COMMISSIONER

COMMISSIONER

COMMISSIONER

COMMISSIONER

IN WITNESS WHEREOF, I, ERNEST G. JOHNSON, Executive Director of the Arizona Corporation Commission, have hereunto, set my hand and caused the official seal of this Commission to be affixed at the Capitol, in the City of Phoenix, this \_\_\_\_\_ day of \_\_\_\_\_, 2009.

\_\_\_\_\_  
ERNEST G. JOHNSON  
EXECUTIVE DIRECTOR

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

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

EOA:JMK:lhmvJFW

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