<u>MEMORANDUM</u>

TO: Docket Control

FROM: Ernest G. Johnson
Director
Utilities Division

DATE: September 27, 2004

RE: STAFF REPORT ON DEMAND-SIDE MANAGEMENT, RENEWABLES, AND DISTRIBUTED GENERATION ISSUES CONTAINED IN THE PROPOSED SETTLEMENT AGREEMENT OF ARIZONA PUBLIC SERVICE COMPANY'S REQUEST FOR RATE ADJUSTMENT (DOCKET NO. E-01345A-03-0437)

Attached is the Staff Report on Demand-side Management, Renewables, and Distributed Generation Issues contained in the proposed settlement agreement of Arizona Public Service Company's request for rate adjustment. Staff recommends approval of the settlement agreement.

EGJ:BEK:rdp

Originator: Barbara Keene

Attachment: Original and thirteen copies

Service List for: Arizona Public Service Company
Docket No. E-01345A-03-0437)

Christopher C. Kempley
Chief, Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Ernest G. Johnson
Director, Utilities Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Lyn Farmer
Chief, Hearing Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

STAFF REPORT
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION

ARIZONA PUBLIC SERVICE COMPANY

DOCKET NO. E-01345A-03-0437

DEMAND-SIDE MANAGEMENT, RENEWABLES, AND DISTRIBUTED GENERATION ISSUES
CONTAINED IN THE PROPOSED SETTLEMENT AGREEMENT

SEPTEMBER 2004

STAFF ACKNOWLEDGMENT

The Staff Report on Demand-side Management, Renewables, and Distributed Generation Issues Contained in the Proposed Settlement Agreement of Arizona Public Service Company's Request for Rate Adjustment, Docket No. E-01345A-03-0437, was the responsibility of the Staff member listed below.

Barbara Keene
Public Utilities Analyst

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Introduction

The proposed settlement agreement in the Arizona Public Service ("APS") rate proceeding (Docket No. E-01345A-03-0437) contains provisions regarding demand-side management ("DSM"), renewables, and distributed generation. These provisions are the result of settlement negotiations on a wide variety of issues in this case. As part of the overall settlement agreement, these provisions are in the public interest.

The settlement agreement is in the public interest because of the following:

- The agreement provides for APS to implement considerably more DSM than is being done today, resulting in customer savings, utility cost reductions, and reduced impact on the environment.

- The agreement provides safeguards to ensure that the level of DSM expenditures will be reasonable, including Commission approval of programs, unspent amounts in base rates being returned to customers, and APS filing semi-annual reports on its DSM programs.

- The agreement provides for expenditures for low income weatherization and bill assistance to more than double over test-year expenditures.

- The agreement places a high priority on energy-efficiency programs for schools, ultimately leading to savings for taxpayers.

- The agreement provides for the establishment of a collaborative DSM working group to provide APS with input on program development, implementation, and performance.

- The agreement changes the Environmental Portfolio Standard ("EPS") surcharge into an adjustment mechanism to allow for flexibility in funding the EPS if the Commission were to approve a funding change.

- The agreement provides for APS to issue a Request for Proposal in 2005 seeking renewable resources that should help provide further diversity to APS' generation portfolio.

Demand-side Management

Cost-effective DSM can meet the demand for electric energy services at a lower cost than purchasing or generating power. Reduced peak demand can delay the need for construction of new generation and transmission facilities. Reduced energy production may also lead to reduced air emissions from power plants and reduced consumption of water by generating unit cooling towers.

The settlement agreement provides for APS to spend $10 million each year through base rates for DSM, plus another $6 million per year through an adjustment mechanism. Although DSM spending could be phased in, APS would be obligated to spend at least $48 million on DSM during calendar years 2005 - 2007. Of that amount, at least $13 million would be spent during 2005, pending approval of the Final Plan discussed below. If APS does not spend the total $30 million in base rate allowance during 2005 - 2007, the unspent amount would be credited to the account balance for the DSM adjustor (described below) in 2008. Eligible DSM expenditures would be energy-efficiency programs, a performance incentive for APS, and low income bill assistance. DSM spending over $16 million per year could include demand response and additional energy efficiency programs.

Attached to the settlement agreement is a Preliminary Plan for eligible DSM-related items for calendar year 2005. The Preliminary Plan includes a listing and brief description of programs, program concepts, and program strategies and tactics. Within 120 days of Commission approval of the settlement agreement, APS would file a Final Plan for Commission approval. The Final Plan would include, at a minimum, program budgets and estimates of energy savings and load reductions.

The Preliminary Plan includes DSM programs for both residential and non-residential customers. At the top of the list is energy-efficient schools, under both new construction and retrofit of existing facilities.

APS would be allowed to recover a performance incentive based on a share of the net economic benefits resulting from energy-efficiency programs. The incentive would be capped at 10 percent of total DSM spending. The specific performance incentive would be included in the Final Plan.

Included in the $10 million annual base rate allowance would be at least $1 million for low income weatherization. Up to $250,000 of the $1 million could be used for bill assistance. The low income weatherization program helps low-income customers to have more energy-efficient homes by installing weather stripping and insulation; repairing ductwork; repairing roofs, windows, doors, ceilings, and floors; and adjusting, repairing, or replacing HVAC (heating, ventilation, and air conditioning) systems, evaporative coolers, and electric water heaters. The bill assistance portion of the program helps customers pay their electric bills. APS would file for Commission approval of the low income weatherization program within 60 days of the Commission's approval of the settlement agreement.

A DSM adjustment mechanism would be established for DSM expenditures above the $10 million in base rates. The adjustor rate, initially set at zero, would be reset each March 1, beginning with March 1, 2006. A per-kWh charge for the year would be calculated by dividing the account balance by the number of kWh used by customers in the previous calendar year. General Service customers that are demand billed would pay a per kW charge instead of a per kWh charge. The DSM adjustor would be applied to both standard offer and direct access customers. APS would combine the DSM adjustor and the EPS adjustor (to be discussed later in this report) as an "Environmental Benefits Surcharge" when billing residential customers. APS could combine the two adjustors when billing other customers.

Large customers whose single site usage is at least 20 MW and can demonstrate that their own DSM program is effective could file for Commission approval of an exemption from the DSM adjustor.

APS would file a plan of administration that describes how the DSM adjustor would operate.

Except for DSM programs that have already been approved, all DSM programs would be pre-approved by the Commission before APS could include their costs in any determination of total DSM costs incurred.

APS would file mid-year and end-year reports on its DSM programs.

APS would establish and maintain a collaborative DSM working group to provide APS with input on program development, implementation, and performance. At a minimum, Staff, the Residential Utility Consumer Office, Arizonans for Electric Choice and Competition, the Arizona State Energy Office, Western Resource Advocates, and Southwest Energy Efficiency Project would be invited to participate in the collaborate DSM working group.

APS would conduct a study to evaluate the merits of allowing large customers to self-direct DSM investments. The study would be filed within one year of Commission approval of the settlement agreement.

APS would conduct a study analyzing rate design modifications that could include, among others, mandatory time-of-use rates and expanded use of inclining block rates. A plan for the study would be presented to the collaborative DSM working group within 90 days of Commission approval of the settlement agreement. APS would submit the final results of the study to the Commission as part of its next general rate case application or within 15 months of Commission approval of the settlement agreement, whichever occurs first. APS would develop and propose to the Commission any appropriate rate design modifications that the study indicates would be reasonable, cost-effective, and practical.

Renewables

Increasing renewable energy could help to reduce reliance on conventional fuel sources such as natural gas. The settlement agreement addresses renewables issues in two ways: by addressing funding of the EPS and by establishing a special RFP.

Environmental Portfolio Standard

In regard to the EPS, APS would continue to recover $6 million annually in base rates. The existing EPS surcharge, which provided $6.5 million during the test year, would be converted into an adjustment mechanism to allow for Commission-approved changes to APS' EPS funding. Changes in funding could occur as a result of amendments to Rule 1618, or APS could apply to the Commission to increase EPS funding beyond that provided in base rates and the EPS surcharge. APS could not file such an application until one year after the termination of the EPS rulemaking docket. Staff would initiate a rulemaking proceeding to modify Rule 1618 within 120 days of Commission approval of the settlement agreement.

The initial charge of the EPS adjustor would be the same as contained in the current EPS surcharge tariff, including caps. Any change in EPS funding requirements would be collected from APS customers in a manner that maintains the proportions between customer categories in the current EPS surcharge. The EPS adjustor would apply to both standard offer and direct access customers. The revenue collected from direct access customers would be made available to electric service providers. For billing purposes, the EPS adjustor could be combined with the DSM adjustor as discussed in the DSM section of this report.

Renewables programs directly involving APS’ retail customers would be submitted to the Commission for approval. These programs would include those in which a rebate is given to retail customers.

Special RFP

APS would issue a special RFP in 2005 for at least 100 MW and 250,000 MWh per year of renewable energy resources for delivery beginning in 2006. Either in this solicitation or in subsequent procurements, APS would seek to acquire at least 10 percent of its annual incremental peak capacity needs from renewable resources.

Eligible resources would be solar, biomass/biogas, wind, small hydro (under 10 MW), hydrogen (other than from natural gas), and geothermal. These resources may be, but do not have to be, EPS-eligible. Resources need not provide firm capacity but must be deliverable to the APS system. The resources must be capable of providing at least 20,000 MWh of renewable energy annually, with a minimum of five years. Prices must be fixed or relatively stable and do not vary with either the price of natural gas or of electricity. Renewable resources must be no more costly than 125 percent of the market price of conventional resource alternatives. If APS does not receive sufficient in-state qualified bids, APS could acquire out-of-state resources to meet its 100 MW or 10 percent goals.

APS would circulate a draft of the RFP to potentially interested parties at least 30 days before issuing the RFP and conduct a meeting with potential bidders and interested parties at least 10 days before issuing the RFP.

If APS fails to acquire at least 100 MW of renewable resources pursuant to the RFP by December 31, 2006, APS would file a notice with the Commission by January 31, 2007, that describes the shortfall, explains the circumstances, and recommends actions.

Distributed Generation

In general terms, distributed generation (DG) is small-scale power generation units strategically located near consumers and load centers. DG has the potential to provide benefits to customers and support the economic operation of the power distribution grid.

In 1999, Staff formed a working group to investigate issues related to DG. The final report recommended that further workshops be held to acquire additional information for several issues. The settlement agreement provides for Staff to schedule workshops to consider outstanding issues concerning DG. The workshops may be followed by rulemaking.