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Arizona Corporation Commission  
**DOCKETED**

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Docket Control Center  
Arizona Corporation Commission  
1200 West Washington  
Phoenix, Arizona 85007

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RE: Compliance Filings as Required by Decision No. 68112  
Docket Nos. E-01345A-03-0775 and E-01345A-04-0657

Pursuant to Paragraph 32(e) of the Proposed Settlement Agreement and Decision in Docket No. E-01345A-04-0657, Arizona Public Service is submitting the following document:

- Attachment 1 – AMS Plan Biannual ACC Report

If you have any questions on the enclosed information, please call me at 602-250-2708.

Sincerely,

Brian F. Brumfield  
Regulatory Affairs Supervisor, Regulation and Pricing

Attachment

CC: Compliance Section

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# Arizona Public Service

## AMS Plan Biannual ACC Report

### September 2006

#### **Introduction**

Decision No. 68112 (Proposed Settlement Agreement, paragraph 32(e)) requires Arizona Public Service (APS) to provide the Commission with biannual reports related to the status of APS' remote meter reading pilot and implementation plans for the next six years. This report provides a description of the meter reading technology being implemented, APS' plan for implementation, the number and type of customers involved in the pilot program, the costs associated with implementation, and the operational efficiencies associated with implementation. This report is the second filing addressing the current status of the AMS Plan and the progress since the last filing in March 2006.

#### **Overview**

Since the last biannual report filed in March of 2006, APS has continued to move forward with the AMS Pilot. The testing of the automated interfaces between the PowerOneData (PID) system and APS' Customer Information System continues. The number of customers with automated meters in the pilot has increased and APS has also begun implementing AMS meters in some new growth areas.

During the same period of time, APS has continued to review other AMS vendor products. This monitoring is relevant as the AMS industry matures especially given the activity within the AMS market due to the Energy Policy Act of 2005 (EPAct). The FERC response to EPAct identified APS as having more than twice as many Time of Use (TOU) customers as the next highest utility in the United States. With a large number of TOU customers and with two additional new TOU rates, APS can experience significant cost efficiencies using AMS meters. As customers select different rates to meet their lifestyles, an AMS meter allows APS to remotely change the customer's rate instead of sending a field serviceperson to perform a meter exchange.

#### **Project Status**

The installation of AMS meters has progressed slower than originally anticipated as additional work in the automation of back office tasks has been required. PID has contracted a third party to rewrite the website that allows their utility customers to manage the AMS system. This rewrite is to be completed later this year. The interfaces from the PID system to the APS Customer Information System are also expected to be tested and installed by year end.

By the end of this year, PID will also provide APS with a handheld diagnostic device that allows APS field personnel to determine GPRS cellular and 900 MHZ RF signal strength in any given area. This feature enables service personnel to determine the most advantageous locations to set hub meters.

## **Deployment Plan**

APS has installed an additional 1200 AMS meters in the field during the last six months. Additional hubs were set in the field in order to reduce potential communication errors. The current client to hub ratio in the pilot area is approximately 20:1. Once APS field personnel receive the handheld diagnostic device to help determine optimal hub locations, hub to client ratios are expected to increase to approximately 35:1.

To date, the deployment of AMS meters is concentrated within multi-unit residential housing complexes. This is due to the high occupant turn-over rates. Without AMS, each time a unit changes tenants, APS must send field service personnel to the location to read the meter in order to generate a final bill for the customer. With AMS, the ability to collect remote meter reads eliminates the requirement for a field visit. Today an AMS admin is remotely collecting the read from the meter. IS modifications will be installed by the end of the year that will fully automate the collection of a customer's final read.

APS has also begun installing AMS meters in a few selected growth areas within metro Phoenix that have GPRS cellular coverage. In addition, the three automated meters that were set on top of the remote, difficult to visit Newman Peak have provided reads on all but five days in the last six months. This has proven that AMS is a viable solution where there is GPRS cellular coverage in difficult to read remote areas.

## **Costs**

This project consists of four main cost components; meters, monthly GPRS communications, meter installation, and cost to interface the PID system with current APS applications.

### **Meters:**

APS has purchased 7,930 PID meters at an average cost of \$101 per meter. The cost per meter will continue to decline to approximately \$90 as additional meters are purchased based on the contract with PID.

### **Communications:**

After sending an RFP to three cellular companies, APS awarded a contract to KORE Wireless in 2005. The contract covers the transfer of data through the GPRS communications network. Ongoing monthly communication costs for the pilot have been running at approximately \$0.47 per meter. This number is inflated for the pilot based on additional communication being performed to exercise all functionality in the meter. This compares with the current monthly cost per meter read of approximately \$0.90 using the current meter reading workforce.

### **Meter Installation:**

The AMS field operations team has installed 1,708 meters through August 2006. In addition to the current deployment strategy, AMS meters have been installed on three new apartment complexes in metro Phoenix consisting of approximately 600 meters. The

team is expecting to increase the number of service personnel in October based on the volume of installations planned.

**Integration:**

APS has spent approximately \$1,800,000 to integrate the P1D system into the current APS computer systems. This work consists of design, testing, and installation of modifications to current APS computer systems in order to interface with the P1D system. This work is currently scheduled to be completed by the end of 2006.

**Operational Efficiencies**

AMS systems provide opportunities to improve operational efficiency. The ability to read meters and remotely program them to facilitate customer rate changes provides immediate operating efficiency as well as the potential to significantly reduce the cost of implementing new rate structures in the future.

The table below shows the number of field visits eliminated thus far during 2006 for the AMS meters. This includes trips for transfer of service, meter exchanges for rate changes, and read verifies.

YYYY/MM	Transfer of Service	Rate Change & Verify	Total
2006/01	50	2	52
2006/02	59	0	59
2006/03	57	2	59
2006/04	43	1	44
2006/05	148	3	151
2006/06	185	0	185
2006/07	188	6	194
2006/08	187	9	196
Total	917	23	940

Fewer trips to the field result in less mileage, reduced fuel consumption, fewer emissions and possibly a reduction in vehicular accidents.

APS will continue to evaluate these efficiencies as well as others that may come from areas such as reduction in revenues lost due to energy theft, outage notification, and the possibility of fewer OSHA recordable accidents in those areas where the meters are being read remotely.

**Summary**

In conclusion, APS is continuing the AMS pilot and installation of additional meters in the field. The meters will continue to be deployed within multifamily residential settings and in new growth areas that have the appropriate communications coverage. APS will continue to monitor the AMS market for other advances in technology. The next report will be submitted in March 2007.