



0000094364

RECEIVED

Leland R. Snook
Director
State Regulation & Pricing

Tel. 602-250-3730
Fax 602-250-3003
e-mail Leland.Snook@aps.com

Mail Station 9708
PO Box 53999
Phoenix, Arizona 85072-3999

2009 MAR -6 P 3:31

AZ CORP COMMISSION
DOCKET CONTROL

March 6, 2009 ORIGINAL

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

RE: MARCH 2009 AMI PLAN BIENNIAL ACC REPORT
DECISION NO. 68112
DOCKET NO. E-01345A-03-0775 and E-01345A-04-0657

Dear Sir or Madam:

Pursuant to Paragraph 32(e) of the Proposed Settlement Agreement attached to Decision No. 68112:

“For the next six years, APS shall provide the Commission with biannual reports related to the status of the remote meter reading pilot and implementation plan. The reports shall provide 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 cost associated with implementation, and the operational efficiencies associated with implementation.”

Attached please find the the March 2009 AMI Biannual ACC Report.

If you should have any questions regarding the information contained herein, please call me at 602-250-3730.

Sincerely,

Leland R. Snook

Arizona Corporation Commission
DOCKETED

MAR - 6 2009

LRS/jjb

Attachments

Cc: Brian Bozzo
Barbara Keene

DOCKETED BY

**Arizona Public Service
AMI Plan Biannual ACC Report
March 2009**

Introduction

Decision No. 68112 (Proposed Settlement Agreement, paragraph 32(e) requires Arizona Public Service (APS) to provide the Arizona Corporation Commission with biannual reports through 2011 related to the status of APS's remote meter reading implementation. This report provides a description of the meter reading technology being installed, APS's plan for implementation, the number and type of customers involved in the program, and the costs and operational efficiencies associated with implementation. This is the seventh biannual filing addressing the status of the Advanced Metering Infrastructure (AMI) Plan and progress since the last report filed in September 2008.

Overview

Since the last biannual report APS has continued to install AMI meters both within and outside of metro Phoenix. The number of customers with AMI smart meters has increased and AMI meters are now installed in almost forty different cities and towns within APS's service territory, including Yuma, Prescott Valley, and Flagstaff.

APS began installing meters as part of a smart meter initiative in 2006, and has installed 156,000 PowerOneData (P1D) smart meters to date. Elster Electricity LLC acquired PowerOneData and in May 2008 APS awarded a contract to Elster for an additional 800,000 smart meters for residential, commercial and industrial customers.

The Elster AMI metering system, EnergyAxis® and the PowerOneData AMI system are similar and complementary. Each builds a wireless communications network among the meters and communicates data to a "hub" or "collector" meter that in turn provides data to APS through a cellular connection.

EnergyAxis® is an advanced metering infrastructure system that provides a platform for APS to improve operations and customer service with features such as remote connect/disconnect, voltage monitoring, outage notification, and bi-directional communication for both residential and commercial meters.

In May 2008, APS also signed a contract with Aclara Software Inc. to implement its Energy Vision® Meter Data Management System (MDMS) and its Bill Prism® web portal products. The Energy Vision® product will be the system that houses all AMI interval usage data and will support a number of future programs that will utilize the APS investment in AMI.

Integration of the Elster metering technologies with the MDMS will allow APS customers to monitor energy usage and enable APS to identify and correct service interruptions more quickly. It will also provide efficiencies in meter reading, billing and customer service operations.

Project Status

Meter Deployment:

The AMI field operations team completed the installation of all P1D meters since the last filing of this report. APS has approximately 156,000 P1D meters installed. Installation of Elster meters began in December 2008 and to date approximately 14,500 have been installed. APS expects to deploy a total of 160,000 Elster smart meters by the end of 2009. In the next four years, APS plans to install approximately 800,000 additional smart meters.

Systems Integration:

Over the last six months, APS's integration focus has been parallel endeavors of integrating EnergyAxis® with the Elster AMI system and establishing the technical requirements phase for the MDMS and Bill Prism®.

Milestones achieved include:

- Integration of Elster EnergyAxis®, this solution enables APS to bill from Elster meters and performs service orders in the same manner as the P1D system
- Completion of the core MDMS phase, which included design and technical requirements identification
- Gathering of technical requirements for Bill Prism® integration with APS.com

Currently, work is underway to integrate both the P1D and Elster AMI systems with the Aclara MDMS. APS will complete the first phase of implementation in the second quarter of 2009. The MDMS will provide the foundation to support future integrations with APS AMI systems. This MDMS will house all interval usage data at APS.

In conjunction with implementing the first phase of MDMS, APS will also install the Aclara Bill Prism® product during 2nd quarter of 2009. Utilizing the data in MDMS, Bill Prism® will integrate with aps.com and empower customers to make more informed choices regarding the way they use and manage their electricity.

Costs

This project consists of three main cost components: meters and meter installation, monthly cellular communications, and interface development.

Meters and Installation:

The new Elster AMI technology allowed APS to add three phase meters to the AMI project. APS is also purchasing the majority of Elster residential AMI meters with integrated remote service switches. This switch significantly improves the efficiency of managing turn on and shut off orders as well as providing a foundation to implement additional features in the future. The average installed cost of an Elster meter for this reporting period was approximately \$157.00. This includes single phase, three phase and collector meters.

Monthly Cellular Communications:

APS has a contract with KORE Wireless to provide cellular service for meter communications. Through February 2009 the monthly per meter communication cost for P1D meters was approximately \$0.20. The cost of communication for Elster meters will be included in the next biannual report, as we do not yet have enough data to calculate the cost.

Interface Development:

APS has spent approximately \$3.2 million dollars on Information Technology (IT) integration. This cost includes hardware, software license fees and interface to APS systems.

Operational Efficiencies

The ability to read and program meters remotely provides immediate operational efficiencies as well as offering the potential to significantly reduce the cost of implementing new rate designs. The table below illustrates the number of field visits eliminated during the last six months for customers with AMI meters.

YYYY/MM	Transfer of Service	Rate Change & Verify	Connects	Disconnects	Total
2008/09	8638	948	0	0	9586
2008/10	8193	884	0	0	9077
2008/11	5774	590	0	0	6364
2008/12	7886	777	0	0	8663
2009/01	6925	729	16	9	7679
2009/02	5681	642	65	60	6448
Total	43,097	4,570	81	69	47,817

Fewer field trips result in reduced fuel consumption and fewer emissions, which support APS's effort to reduce its carbon footprint. Reducing field trips also supports the APS corporate value of safety by conceivably reducing vehicular accidents and other safety-related events.

In addition, over the last twelve months, APS has continued to utilize AMI meters to resolve meter reading access issues as part of the Access Improvement Plan

(AIP) approved by the Commission in May, 2007. As of December 2008, more than 3,136 meter reading access issues have been resolved through the use of AMI technology.

Summary

Since the September 2008 report, APS has:

- Completed installation of P1D meters, bringing the total number of installed P1D meters to 156,000
- Installed 14,500 Elster meters
- Implemented new remote connect/disconnect capabilities
- Successfully completed the integration of Elster EnergyAxis® System and APS Customer Information System
- Successfully finished the initial requirements phase for integration of the Energy Vision® MDMS product
- Gathered the technical requirements for the Bill Prism® and APS.com integration

Within the next six months APS expects to:

- Implement the first phase of Energy Vision® MDMS
- Install the Aclara Bill Prism® product
- Continue deployment of Elster smart meters
- Explore additional applications that can leverage smart meter data

In conclusion, APS continues to deploy AMI smart meters throughout its service territory. Over the last six months APS has made significant progress in implementing a system to manage AMI meter data, as well as providing a backbone to interface future AMI systems.

The next report will be submitted in September 2009.