

Customer and Community Satisfaction — Phoenix's Salt River Project

Smart Grid Supports Award-Winning Customer Service



Opportunity

Salt River Project (SRP), the largest provider of electricity to the greater Phoenix metropolitan area and third-largest public power utility in the nation, wanted to implement a Smart Grid solution that would increase customer satisfaction, improve services and lessen energy consumption during peak hours.

Solution

SRP selected the Elster EnergyAxis® Smart Grid solution and Elster smart meters to be deployed at nearly 1 million accounts, enabling the utility to enact and expand time-of-use (TOU) pricing programs, improve responsiveness to customer service requests, and provide customers with valuable insight into billing and consumption patterns.

Results

Since deploying the Elster EnergyAxis Smart Grid solution, SRP has:

- Been recognized by J.D. Power and Associates with the highest score in customer satisfaction for residential electric service among large utilities in the western United States for the 11th time in last 12 years
- Scored highest in the nation on residential customer satisfaction for the second consecutive year, and the fifth time in 12 years amongst large utilities for J.D. Power and Associates
- Seen a 20 percent increase in voluntary time-of-use rate program participation

A High Bar for Customer Service and Conservation

Salt River Project (SRP) is the third-largest public power utility in the United States, serving more than 935,000 electricity customers in the greater Phoenix, Arizona metropolitan area through a variety of resources, including solar, wind, biomass, geothermal, hydroelectricity, natural gas, coal and nuclear. The utility operates or participates in 11 major power plants, and provides electricity to residential and commercial customers across more than 2,900 square miles.



SRP serves the greater Phoenix area from its headquarters in Tempe.

SRP's Smart Grid consumer initiatives began with its deployment of Elster's EnergyAxis solution in 2004. While other utilities were still implementing manual-read or AMR meters, SRP was one of the first to deploy an Advanced Metering Infrastructure (AMI). Over the past six years, SRP has deployed approximately 582,000 residential, commercial and industrial smart meters to support its industry-leading customer service, reduce costs and generate environmental savings. (Please see "The Smart Grid Done Right—Phoenix's Salt River Project" case study.)

EnergyAxis enables SRP to offer all of its customers the ability to monitor and manage their energy consumption based on pre-selected time-of-use (TOU) billing rates. In addition, SRP has improved service with daily remote meter reads, remotely activated electricity connects and disconnects, a web portal where consumers can monitor their own energy usage, and notifications via email and text messages on billing and consumption.

The Smart Grid deployment was received favorably by SRP's customers, assuring no interruption in SRP's ability to continue winning recognition and honors from J.D. Power and Associates. SRP has scored highest in customer satisfaction for business and residential electric service among large electric utilities in the western United States for nine consecutive years, and 11 of the past 12 years. In fact, SRP is the only electric utility that has been ranked among the top 10 in the nation in all 12 of the years that J.D. Power has conducted the study.

"By 2010, we had received so much positive feedback and accolades around our customer service initiatives since the initial EnergyAxis deployment that we decided to double our investment," said Scott Trout, Manager of SRP's Federal Stimulus Program. "The ability to reliably provide extensive service benefits, such as time-of-use pricing and online monitoring capabilities, has earned SRP a reputation for top-notch customer service and energy consumption programs and practices."



With Elster's EnergyAxis solution, we were able to generate tremendous energy and cost saving benefits for our customers, making us an industry leader and providing a very successful model for customer service



SCOTT TROUT, MANAGER OF SRP'S FEDERAL STIMULUS PROGRAM

Each EnergyAxis smart meter is programmed to collect data, sending this information over Elster's IP-based secure wireless mesh network to data collectors, known as gatekeepers. The collected data is reported back to SRP according to the schedules and priorities the utility has established. SRP uses this information to improve energy management, enable demand response, and to offer consumers energy consumption monitoring and flexible TOU billing programs.

A trailblazer and industry leader, SRP brings together superior customer service, substantial cost efficiencies and environmental savings with its Elster EnergyAxis Smart Grid deployment.

Customers Reap Extensive Benefits of Smart Grid Deployment

Since initiating its Smart Grid deployment in 2004, SRP has enacted a number of customer service initiatives with the Elster EnergyAxis solution and received favorable industry recognition. The utility racked up major accomplishments such as quicker response to service requests, expanded access to TOU pricing, alerts of outages for faster repairs, timely remote connects/disconnects for move-ins/move-outs, easy access to online usage data for energy monitoring, and email and text message notifications of energy usage and billing thresholds pre-determined by the customer.

Improved Performance and Response Time

To date, SRP has installed more than 582,000 Elster smart meters, nearly 300,000 of which are equipped with remote connect/disconnect functionality. Notably, EnergyAxis enables many service orders to be completed quickly without sending a field technician to the premises, ensuring an even higher level of performance and response to customer inquiries and operational issues.

"The Phoenix area has a large transitory population, so the connect/disconnect capabilities of EnergyAxis met a strong need," said Trout. "In fact, Elster offered SRP its first EnergyAxis disconnect meter in 2005. Today, we have one of the largest single deployments of disconnect meters in the world."

The EnergyAxis Smart Grid deployment enables SRP to complete more than 25,000 service orders every month. SRP has completed more than 1 million service orders remotely without field visits since implementing the Elster EnergyAxis solution in 2004. "These service orders are conducted on a 7x24 basis for the utmost in flexibility and responsiveness while providing the utility with significant savings in cost and labor hours," he added.

Expanded Time-of-Use (TOU) Pricing

SRP possesses one of the world's largest two-way AMI systems for registered TOU pricing and, with Elster EnergyAxis, has enabled its customers to better monitor and manage their energy consumption based on pre-selected TOU rate programs.

To offer every one of its nearly one million customers immediate access to TOU pricing, SRP needed to rapidly extend its AMI mesh network footprint over its entire service territory – while still maintaining its in-house installation schedule of approximately 14,000 smart meters per month. Over a four month period, the utility deployed a robust sparse network over the remaining territory using a meter-based gatekeeper with a wireless WAN solution under the cover. With full network coverage in place, SRP can now enable TOU rates for any SRP customer regardless of the customer's location within SRP's large service territory.

Since it launched the program to all customers, the utility has seen a 20 percent increase in voluntary TOU rate program participation. Consumers access their own TOU and consumption data via the SRP web portal or email notifications. EnergyAxis smart meters collect and report TOU data as scheduled by SRP, helping customers to track their usage times and make decisions that benefit their wallets and the environment.

Adoption of Online Energy Management

With Elster EnergyAxis, SRP has been able to implement online energy management tools for customers to view their daily energy consumption, as part of the effectiveness of TOU pricing. Via a portal on the SRP website, customers are afforded a clear picture into how much energy they are using and how much it is costing at various times. In turn, customers can make decisions to use electricity during off-peak, less expensive hours, and have access to their historical energy use data to track progress. Customers are able to make meaningful adjustments to their energy usage patterns with insight and knowledge at their fingertips.

With data obtained from EnergyAxis smart meters, SRP is also able to alert customers via email or cell phone text message that they are approaching an energy usage or dollar amount threshold that the customer has established in advance. Customers can also get weekly emails with bill estimates and daily updates. By providing its customers with maximum access to this information and financial incentives, SRP is empowering consumers to be more aware of their usage and financial impacts, and enabling them to more effectively conserve energy. Every day, approximately 110,000 SRP customers view their Smart Meter daily usage on My Account.

SRP is rolling out approximately 14,000 new smart meters every month, and plans to finish the deployment to all of its nearly 1 million customers by the end of 2013, providing all of its customers with the full benefits of Smart Grid services powered by Elster EnergyAxis.

SALT RIVER PROJECT

Location

- Phoenix, Arizona, USA

Ownership

- Public

Installation

- 2004 – 2013 (projected)

Infrastructure Summary (November 2010)

- Residential: 582,000 end points
- Commercial/Industrial: 18,000
- Projected Total: ~ 1 million

Key Applications

- Residential disconnect/reconnect
- Residential TOU

Status

- In production
- Installing approx. 14,000 meters per month

Integrations

- Batch Connect/Disconnect Integration Tool
- Operational Reports



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