Missouri Gas Energy

Itron Technology Transforms Meter Reading & Customer Service

THE PROJECT

In March 1997, Missouri Gas Energy signed a contract with Itron Inc. to provide an automatic meter reading (AMR) system for MGE's entire service territory. Less than two years after installation commenced, MGE was able to collect regular monthly consumption reads on 497,000 gas meters for billing.

OBJECTIVE

Missouri Gas Energy's objectives in installing a territory-wide AMR system were essentially three-fold. First, and most importantly, MGE wanted to improve customer service and satisfaction by delivering accurate billing to its entire customer base in a timely manner. To accomplish this, MGE needed to eliminate the high number of estimated reads it was relying on for difficult-to-access indoor meters. The elimination of estimated reads, in turn, would reduce billing errors, high-bill complaints, billing adjustments and increase customer satisfaction. Second, MGE wanted to achieve optimum operational efficiency in its meter reading and billing operations. Lastly, MGE wanted to prepare for the future by building a meter reading infrastructure that would enable the utility to cost-effectively implement more advanced data collection technologies as the utility's strategic objectives and market demands dictate.

FUNCTIONALITY REQUIREMENTS

Missouri Gas Energy required an AMR solution that could be installed quickly to deliver accurate and timely monthly consumption reads for 497,000 gas meters (including some 30,000 indoor gas meters) in the most efficient manner possible. MGE also wanted a solution that would enable the utility to centralize and streamline its meter reading operations. In addition, MGE required a system that could efficiently perform beginning- and end-of-service or "succession reads" each day, as well as provide tamper reporting capability to detect and discourage theft of services.

CLIENT:
Missouri Gas Energy

TYPE:
Natural Gas Utility

LOCATION:
Headquartered in Kansas City, Missouri

SERVICE AREA:
Kansas City Metropolitan Area and Western Missouri

"We evaluated several vendors, and we felt that Itron was the only one that could provide us with the complete package to supply automation to all our meters."

— Steve Holcumb
AMR Project Manager
Missouri Gas Energy

SERVICE AREA PROFILE

Higher-density urban and suburban in Kansas City area, with smaller towns and rural customers in western Missouri.

SOLUTION PROFILE

Itron Mobile AMR to deliver peak operational efficiency for monthly consumption reads, beginning- and end-of-service reads, and tamper reporting capability. Itron Mobile AMR technology also lays the foundation for MGE to costeffectively "migrate" to more advanced data collection technologies such as a fixed network.

THE SOLUTION

To meet Missouri Gas Energy's immediate operational objectives and long-term strategic objectives, Itron's proven Mobile AMR technology provided the most costeffective solution. Mobile AMR technology delivers operational benefits by dramatically increasing meter reading efficiency and improving customer service through the elimination of estimated reads and the timely delivery of accurate consumption data for billing.

Itron Mobile AMR technology also provides an efficient solution for managing unscheduled reads. To achieve this, a route and reading schedule, which includes all succession and other unscheduled reads for a particular day, are loaded into a DataCommand Unit. The vehicle is then dispatched to the reading route, efficiently collecting the majority of unscheduled reads during a single shift. In addition, the Itron Mobile AMR system provides MGE with tamper reporting capability. Lastly, because the same Itron meter modules being read with Mobile AMR today can also be read using Itron Fixed Network data collection technology, Missouri Gas Energy has built a bridge to the future.

ROLLOUT

First on the list of Missouri Gas Energy's objectives in deploying a territory-wide AMR system was to provide improved customer service through the elimination of estimated reads. To achieve this objective as quickly as possible, MGE and Itron used a "turnkey" installation strategy in which Itron employed third-party contractors to install the system on a very aggressive schedule. Meter module installation began in the spring of 1997, and within 12 months, some 470,000 meter modules had been installed. As the meter modules were installed, MGE immediately began using its Itron DataCommand Units to collect the reads and deliver the data to billing.

RESULTS

With a 497,000-end-point AMR system installed and functioning, Missouri Gas Energy and its customers are now reaping the benefits of territory-wide automation. Meter reading efficiency at MGE has increased dramatically. Prior to installation, MGE relied on a staff of 72 full-time meter readers, compared to six full-time meter readers today. MGE has also reduced estimated reads — a continual source of customer frustration for utilities — from 8 percent to .04 percent. In turn, the reduction in estimated reads has increased overall billing accuracy and reduced the number of high-bill complaints, billing adjustments and call center traffic. In addition, the AMR system enabled MGE to consolidate its host processing operations from four locations to one location, to further enhance operational efficiency. By dedicating one DataCommand Unit to perform an average of 200 off-schedule "succession reads" per day, MGE is able to achieve a new level of order and efficiency in managing its beginning- and end-of-service orders. Taken together, these benefits enable Missouri Gas Energy to reduce meter reading costs, improve operational efficiency and increase customer satisfaction. "We were able to achieve every benefit we had expected up front. It's all come to fruition," said Randy Spector, AMR project manager at MGE.

ADDITIONAL BENEFITS

In addition to the operational and strategic benefits most often associated with AMR technology, installation of the system at MGE also afforded the utility a great opportunity to catch up on some deferred maintenance. “We were able to visit every meter location in our service territory,” said Holcumb. In addition to fitting all its meters with AMR modules, MGE also took the opportunity to change out some 22,000 antiquated meters and replace them with new ones. The installation process also gave MGE the opportunity to inspect all meter locations, update its records, perform needed maintenance and change out or correct meters that had been tampered with over the years.

THE FUTURE

When Missouri Gas Energy made the decision to deploy an Itron AMR system throughout its service territory to achieve immediate operational improvements and increased customer satisfaction, the utility was also keeping its options open for the future. Because the installed Itron meter modules can be read by all Itron’s radiobased AMR technologies, including a fixed network, MGE will be able to deploy more advanced network data collection technology in the future without having to change out the installed meter modules.

By all accounts, the Itron AMR installation at Missouri Gas Energy is a success. The project has been completed on time, within budget and the system is meeting the objectives MGE set forth at the outset. “We went through an extensive cost justification process and talked to a number of utilities that have used this equipment,” said Holcumb. “We also evaluated several vendors and we felt that Itron was the only contractor that could provide us with the complete package to supply automation to all of our meters. Overall, we’re very happy with the system; it’s given us all the things we wanted, as well as some additional benefits. This system has delivered as advertised.”

AMR Benefits Profile for Missouri Gas Energy

- Increased Meter Reading Efficiency
- Improved Billing Operations
- Reduced Estimated Reads
- Increased Billing Accuracy
- Reduced Customer Complaints
- Reduced Call Center Traffic
- Increased Customer Satisfaction
- Preparation for advanced data collection technology
- Efficient off-cycle reads
- Reduction in tampering
- Improved meter accuracy and revenue assurance

Itron is a world-leading technology and services company dedicated to the resourceful use of energy and water. We provide comprehensive solutions that measure, manage and analyze energy and water. Our broad product portfolio includes electricity, gas, water and thermal energy measurement devices and control technology; communications systems; software; as well as managed and consulting services. With thousands of employees supporting nearly 8,000 customers in more than 100 countries, Itron applies knowledge and technology to better manage energy and water resources.

Together, we can create a more resourceful world. Join us: **www.itron.com**

CORPORATE HEADQUARTERS

2111 N Molter Road
Liberty Lake, WA 99019
USA

Phone: 1.800.635.5461