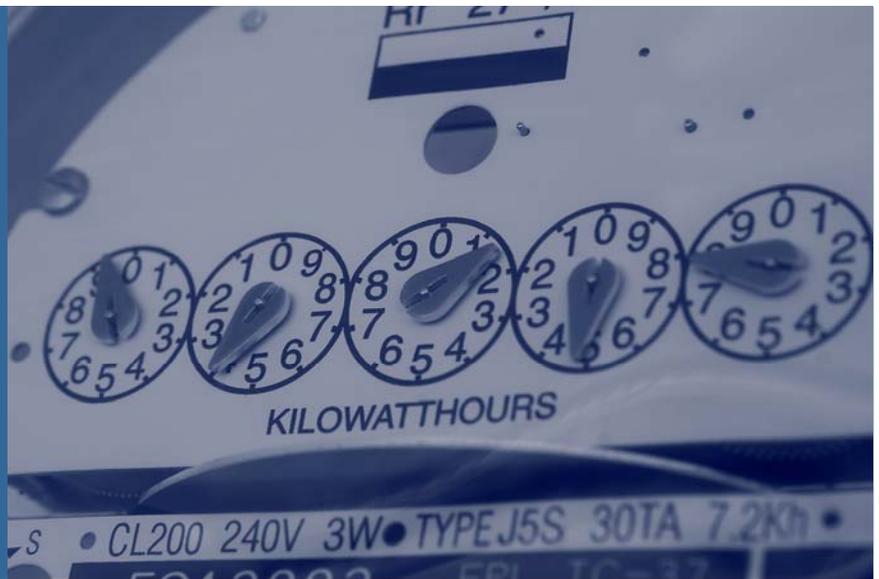


Electric Utilities



Customer Case Study

Conservation Resource Solutions

Working closely with electric utility and competitive electricity provider customers and select M2M technology vendors, CRS has been able to successfully implement a highly effective web-based energy use data acquisition and reporting solution, enabling commercial energy customers to participate in ISO-New England's "Real Time Demand Response Program"

COMPANY DESCRIPTION

- Conservation Resource Solutions, Inc. (CRS) specializes in integrating metering systems with application software to provide affordable web access to usage information and management tools.
- CRS utility and non-utility customers supply power to nearly 2.5 million customers throughout New England.
- CRS has enabled or provides management services for over 250 MW of demand response capability at over 300 commercial, industrial and institutional customer facilities in the six state New England region.

PROJECT GOALS

- Deploy technology to help successfully bring the ISO-New England's Real Time Demand Response Program to its commercial customer base.
- Enable the program with a solution, that was cost effective, easy-to-deploy, and able to work regardless of the available communications services.

SOLUTION COMPONENTS

- iEMS Application Software
- COM1000 Industrial Internet Appliance

Background

An Independent System Operator (ISO) is an entity that controls and administers access to an electric transmission grid in a region or state. A major goal for any ISO is to provide access to power on a fair and balanced basis for a number of independent energy utilities.

Demand response programs are one method that an ISO may use to help meet that goal. Demand response programs are where local utilities and their enrolled customers can be called upon to reduce their electricity consumption in response to either system reliability problems or high wholesale market prices. These programs provide a lower cost, reduced risk, and more environmentally sound solution to managing capacity demands, helping to manage electric power grid reliability and prevent blackouts.

Challenges

One of the requirements for customer participation in the ISO-NE program is the ability for the ISO to obtain (5) minute interval electricity demand data to the ISO-NE control room every (5) minutes. Such detailed info is needed because in an emergency, the ISO-NE needs to know in near real time that demand reduction assets are performing properly.



Another challenge for CRS was communications. Utilities and competitive electricity providers needed the ability to communicate with any qualifying commercial, industrial or institutional customer within the ISO-NE footprint. That meant the demand response management system not only had to interface with a wide variety of revenue meters, but also provide stable and reliable data transport across any available communications network.

"Simple Com Tools has enabled CRS to improve our service offering to our diverse utility and non-utility customer base and ensure a compelling ROI. Demand-side response is an excellent example of this. We look forward to continuing to provide quality, value added solutions to our customers using the COM1000."

— Todd Moran, CR Solutions

The Solution

After a great deal of research and technical vetting, several New England utilities and competitive electricity providers selected the iEMS solution from Conservation Resource Solutions, Inc. (CRS). Based in Cumming, Georgia, CRS is a technology integrator and service provider specializing in Internet-enabled meter data collection, management, and application solutions for multiple resource usage sectors (electricity, natural gas, water, and steam). CRS is also an ISO-NE certified Internet-Based Communication System (IBCS) provider, and as such, also provides demand response event communication services to certain demand response market participants and their enrolled customer assets.

To meet its customer's reporting interval and communications requirements, CRS selected the COM1000™ Industrial Internet Appliance from Simple Com Tools as its data collection hardware. With its ability to interface to a wide variety of meters, capture and totalize usage data, and transport the data to the iEMS server over any network architecture, the COM1000 enabled CRS with a solution that would work with all potential network options, a factor crucial to simplifying customer installation, turn-up, and troubleshooting.

Conclusion

The final solution implemented now provides CRS and its customers with the reliable five-minute usage data collected from any end-use customer premise, utilizing nearly any type of existing or newly installed revenue meter, transported over any available network technology. The iEMS application web portal allows CRS customers and their end-users to not only measure and verify demand response performance, but it also provides timely usage data and analytical tools to better monitor and manage electricity consumption. This open and flexible solution ensures optimal energy service delivery, savings for the end-user customer base, and a valuable platform for energy conservation.



Find out how the COM1000 can help enable your M2M solution.

Contact SCT today.



Machine-To-Machine – Simplified

