

Utility Case Study: City of Wadsworth, Ohio



Public Power Utility's Load Control Program Meets Curtailment Goals



Background

The City of Wadsworth, Ohio has owned and operated its own electric distribution system since 1916. Electricity is purchased from American Municipal Power, Inc., a nonprofit organization serving 128 municipal electric communities in seven states. Wadsworth Electric currently serves residential, commercial, and industrial customers from a population of roughly 20,000, with rates averaging 40% lower than those offered by privately owned utilities.

In 2009, Wadsworth Electric received a federal Recovery Act Smart Grid Investment Grant Award to deploy smart meters for the purpose of, among other things, implementing infrastructure needed for two-way communications. With those funds, they initiated a Connected Grid Project, which involved system-wide deployment of advanced metering infrastructure (AMI) and the targeted installation of in-home displays (IHD), home area networks (HAN), programmable communicating thermostats (PCT), load control devices (LCD), and distribution automation equipment (DAE). The goal was to provide customers with the ability to monitor and control their own energy use, while also providing the technology option of a demand response (DR) solution.

In 2012, Comverge was chosen as the vendor for the HAN and IHD programs. This included providing the equipment and implementing the plan, a portion of which was a load control program supported by

Utility Case Study Executive Summary

The City of Wadsworth Load Control Program

Background

Wadsworth Electric: Electric distribution system owned and operated by the City of Wadsworth, OH, since 1916. Purchases electricity from American Municipal Power of Ohio, a nonprofit group of municipally owned and operated electric systems.

Goals

Wadsworth selected Comverge in 2012 to deploy home area network and in-home display infrastructure to implement a load control program supported by a dynamic pricing program.

Solution

Comverge provided the software, hardware, web portal, and support services needed to integrate with Wadsworth's existing software and worked with Wadsworth developers to offer customers a DR program (Peak Rewards) and a time-of-use program (Right-Time Pricing).

Results

Aggressive marketing resulted in 20% participation of eligible customers in only eight months. Initial energy savings estimates consequently were revised upwards by more than 30%.

a dynamic pricing program. According to Gene Post, Wadsworth's Manager of Electric and Communications, Comverge was chosen because, "they had the experience of doing this program with other power companies. We liked that they had done it before and understood us. We're a smaller public power utility and we wanted someone with whom we could work one-on-one."

Solution

Comverge provided Wadsworth with a comprehensive turnkey solution comprised of enterprise-class IntelliSOURCE, a demand response management system. Comverge also provided the necessary hardware, along with a package of support

services, including installation, marketing and recruitment, call center operations, and program management.

The hardware solution offered two-way interactive communication using the customer's provided broadband service. This was integrated with both the IntelliPEAK load control switch and the IntelliTEMP 900 web-programmable thermostat for cost-effective advanced load control.

Of paramount importance was IntelliSOURCE's easy AMI integration with Wadsworth's OpenWay® system, part of Itron, Inc.'s meter data management software, as well as with the Logos.NET™ Public Administration financial suite from New World Systems, Wadsworth's customer information service vendor.

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Gene Post, General Manager, City of Wadsworth Electric and Communications

Comverge worked with Wadsworth developers and its contractors to integrate Comverge's web portal within the City of Wadsworth customer portal, allowing Wadsworth utility customers access using a single sign-on.

Strategies

To offer customers the opportunity to actively respond to energy price changes, Comverge introduced the Right-Time Pricing program, based on a time-of-use (TOU) model. Customers who opt into the program receive free installation of either a PCT or IntelliFOCUS IHD and are incented to move their heavier electricity use to off-peak times of day to reduce the amount charged for higher peak hours during summer weekdays.

To offer customers with central air conditioners the choice of an automatic response to peak energy curtailment events, Comverge introduced the Peak Rewards program, utilizing a demand response platform. Customers who opt into the program receive free installation of either a PCT or load control switch, along with installation and annual participation financial credits. In return, they allow Wadsworth Electric to cycle their A/C compressors during times of

high electricity demand June through September.

Peak Rewards also offered additional monthly participation credits during the summer for pool pumps and hot water heaters operating off of a load control switch.

Results

After an aggressive campaign utilizing direct marketing, door-to-door sales, and cross-marketing with the City of Wadsworth, Comverge's project management team enrolled and installed devices between November 2012 and June 2013 in excess of 20% of the city's eligible customer base. According to Wadsworth Assistant Service Director, Harry Stark, the City's three-year goal was to save 4,000 megawatt hours of electricity. After two years, factoring in the projected savings from the Comverge programs, this was revised upwards to 5,300 hours.

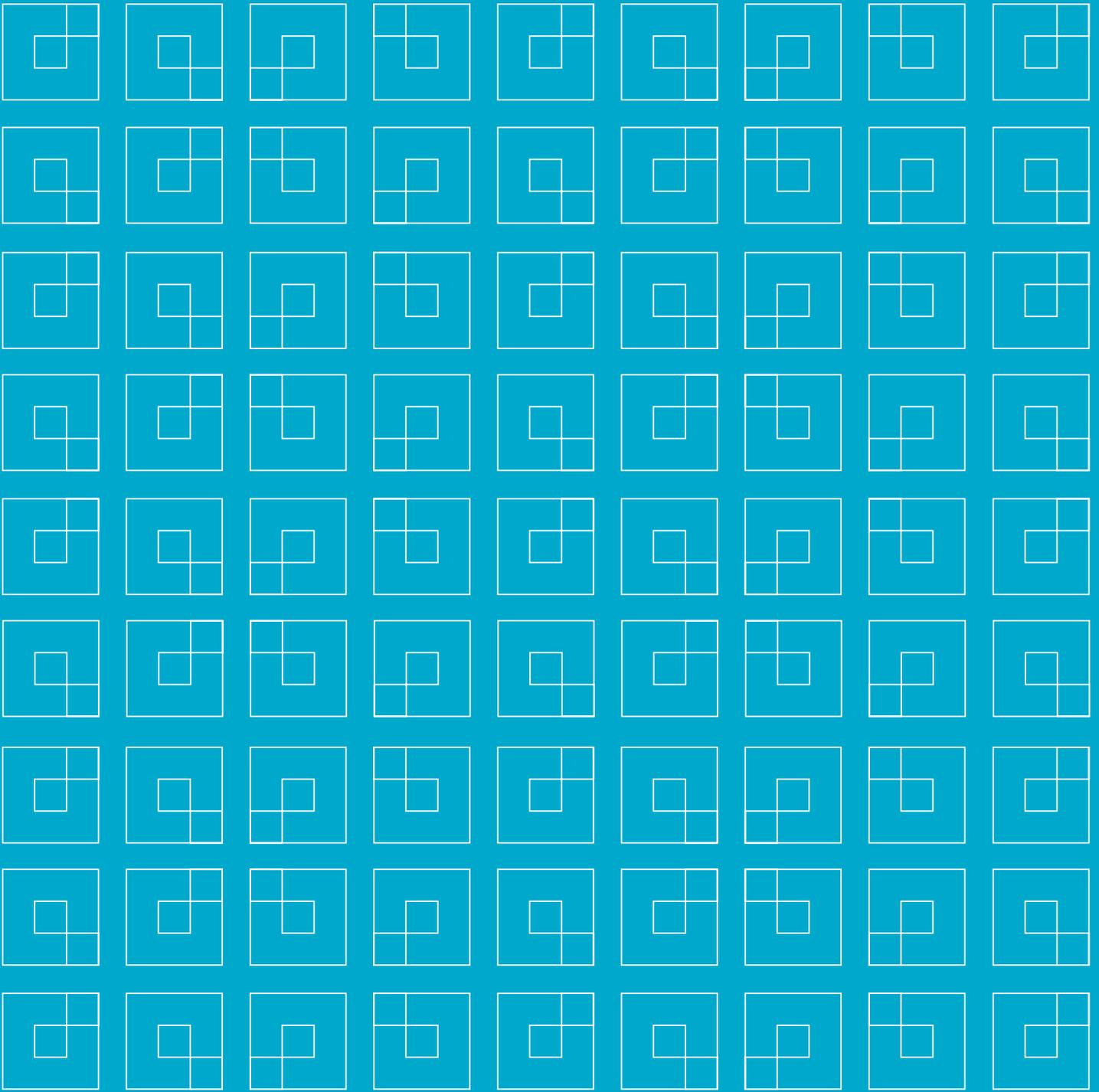
Commenting on the weekly meetings and day-to-day working relationship with Comverge, Gene Post stated, "[T]he project management has gone well."

Said Comverge's Craig Snedeker, Executive Director and General Manager: "Helping the City of Wadsworth implement their HAN program

gives us great pride. What has already been achieved with Wadsworth is a great example to other municipalities and public power utilities of what is possible for their load control and energy efficiency goals."

About Comverge

Comverge is an industry-leading provider of integrated demand response, energy efficiency and customer engagement solutions that enable electric utilities to ensure grid reliability, lower energy costs, meet regulatory demands and enhance the customer experience. Through its combination of software, hardware and services, Comverge helps utilities optimize every aspect of a demand management program, from participant recruitment and device installation to call center support, control events and measurement and verification. Comverge has worked with hundreds of electric utilities to deploy nearly six million energy management devices and enroll more than 1.6 million residential customers into mass-market demand management programs. For more information, visit www.comverge.com and follow us on Twitter at @Comverge.



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