



City of Fairmont Improves Performance and Service with the Sensus AMI Solution

WEST VIRGINIA UTILITY REDUCES EXCESS WATER USAGE BY 25 MILLION GALLONS PER YEAR

CHALLENGE

Reduce non-revenue water loss and improve billing management process

SOLUTION

Use smart water network to monitor water consumption including leaks, inactive accounts and unauthorized use

REACH FARTHER

Build strong customer relationships through billing accuracy and transparency



Nestled in the rolling hills of northern West Virginia, collegiate life reigns supreme in the **City of Fairmont**, which is home to Fairmont State University and just 20 miles northeast from the University of West Virginia. As with any college town, residential turnover is the norm, with the constant move-ins and move-outs straining the city's water utility resources.

"We serve many rental properties and apartments, so there's a lot to manage in terms of monitoring customer usage and handling inactive accounts," said Mark Moore, utility controller, City of Fairmont Utilities. "Additionally, it can be challenging to keep non-revenue water to a minimum while ensuring the best possible service to our customers."

Opportunity for better efficiency

Amid the hustle and bustle, the process for reading meters and managing customer billing grew inefficient. The metering system used by City of Fairmont Utilities required



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MARK MOORE, *Utility Controller, City of Fairmont Utilities*

technicians to walk or drive by each of its 14,500 water meters for readings and then track them with a handheld device for billing. This meant that meters could only be read occasionally, and leaks or undetected water use might run for weeks.

In conjunction with the West Virginia Public Service Commission, the utility decided a complete upgrade to an advanced metering infrastructure (AMI) solution was necessary to tackle the issue of non-revenue water and to better meet customer needs.

“With AMI, we knew that we’d be able to get information from our meters in a timely way,” said David Sago, utility manager, City of Fairmont Utilities. “The solution would

allow the utility to dramatically improve our efforts to derive revenue from the water we were delivering while also taking boots off the ground and devoting those resources to other important functions.”

Bringing the vision to life

City of Fairmont Utilities set out to put its plan for a smart water solution into action. The water utility team needed the solution to:

- Reduce human error and estimation in meter readings
- Enhance leak detection efforts
- Monitor unconventional and/or inactive accounts
- Empower customers to view their usage and identify issues in real-time
- Aid in budgeting for water conservation and cost savings

After a thorough evaluation process, the utility determined that the **Sensus AMI solution** addressed those needs.

Implementing a smart water network

Working with a distributor partner, City of Fairmont Utilities initially installed 6,500 Sensus water meters covering its two largest routes along with commercial meters, with the intention to roll out the full solution over a five-year period. However, the benefits



City of Fairmont Utilities deployed iPERL water meters and reduced excess water usage by 25 million gallons per year with our AMI solution.



were realized so quickly the utility decided to shorten the implementation timeframe.

“The impact of our Sensus AMI solution was so immediate that we installed the rest of the meters right off the bat,” said Moore.

The solution included 14,500 **Sensus iPERL® residential meters**, and a combined 200 **OMNI™ Compound (C²)** and **OMNI™ Turbo (T²)** commercial meters. The utility bolstered its deployment with **Sensus FieldLogic™** and **Regional Network Interface (RNI)™** software, delivered via the **Sensus Software as a Service (SaaS)** platform. Finally, the **Sensus FlexNet® communication network** and **Sensus Analytics** served as the backbone of the utility’s smart water network, enabling Fairmont to remotely monitor water usage and increase billing accuracy for customers across the region.

Immediate and lasting impact

Upon launch, City of Fairmont Utilities quickly learned that approximately 15 percent of its old meters were failing to provide accurate readings, and multiple meter pit locations needed renewal.

“It used to be an exhaustive process for staff to track and evaluate our meters across the five counties we serve,” said Moore.

“The Sensus AMI solution took care of this immediately, allowing us to virtually track and monitor metering performance in even our most rural locations.”

Since launching, the utility has achieved more than 99 percent accuracy in its meter readings, while saving \$30,000 a year by reducing non-revenue water, improving billing accuracy and enhancing overall system performance. Additionally, the utility has notified nearly 3,000 customers of leaks or issues with continuous usage since deployment, helping customers reduce excess water consumption by an average of 25 million gallons per year.

“With time saved on meter readings and billing, we’ve diverted those staff resources to an ongoing data and meter testing program,” added Sago. “This initiative will help us ensure accuracy and great customer service for years to come.”