



Project Summary

Customer:

Town of Pembroke, NC

Type of Project:

Metering Asset Management Program

Benefits:

Freeing up of staff from reading meters to performing other priority projects

Improved customer service, from billing accuracy to immediate and proactive notification of issues

Opportunity to generate additional revenue for town

A fully deployed and ongoing TCO solution

Advanced Metering Infrastructure (AMI) systems have become a valuable tool not only for the financial stability of water utilities but also in enhancing productivity and improving customer service. However, the implementation of AMI requires significant support, maintenance, technology and software expertise as well as funding to cover the up-front installation costs of the network and smart meters. Those issues often put AMI beyond the reach of small and medium-sized communities. USG Water Solutions's metering asset management program was designed with those utilities in mind.

According to Town Manager Tyler W. Thomas, tasking Pembroke's lean public works staff to read meters created a strain on resources, "Meter reading essentially shut down public works for at least two, sometimes three days," said Thomas. In addition, the town's old meters were getting stuck or not reading correctly, and there was the potential for billing problems that could affect customer service. The effects of the town's old system and aging infrastructure also had potential implications beyond customer service. "We also knew that our old system was contributing to non-revenue water loss. We knew that we had an issue with our old system, and it was something that we wanted to address, but we just hadn't been approached with the possibility of addressing it collectively in a turnkey manner," Thomas added.

The town had a longstanding relationship with USG Water, which had been supplying asset management services for the town's water tanks. After conferring with USG Water, the town made the decision to replace its old metering system with smart meters and an AMI system that would modernize its metering network with state-of-the-art hardware and software. Through its turnkey asset management program, USG Water would take responsibility for the planning, installation and ongoing maintenance of the AMI network and all its assets. Pembroke's relationship with USG Water was just one factor in moving ahead with the decision. "A lot came down to their expertise and the way that they structured the solution. USG Water managed the entire metering project, from the replacement and procurement of the infrastructure to the integration with our billing software," said Thomas.

USG Water offers a complete turnkey solution, from AMI and meter installation to integration with our billing software.

That, combined with ongoing maintenance and flexible payment terms, was the difference-maker for the town.

– Tyler W. Thomas, Town Manager, Pembroke, North Carolina





Home to approximately 3,200 residents, the Town of Pembroke, North Carolina, is located in Robeson County, 90 miles inland and northwest from the Atlantic Coast. Its water system consists of three wells, two water treatment plants, and four elevated storage tanks. It services the water needs of approximately 1,400 users that include the community at large and the University of North Carolina Pembroke. The town also provides water for several Lumbee Tribe Housing Developments and the Tribal Government Complex.

USG Metering Asset Management Program (AMP™)

USG Water's program comprises four phases:

1. Installation: The first step is to design and install a customized AMI system with turnkey installation of smart water meters to maximize the utility's revenue through accurate meter readings and billing. Pembroke's AMI system is constructed in a way that it can grow with the town with additional infrastructure and meters as needed, using the best technology solution.

- 2. **Integration:** USG Water then integrates the host AMI software and billing systems, supplying a cloud-based meter data management system for storage and analysis of data
- 3. **System management:** Over the life of the system, metering data is analyzed by USG Water on a daily basis to guarantee system performance.
- 4. **Long-term maintenance:** USG Water provides a 15 year warranty and maintenance of the entire system. This includes proactive, ongoing preventative and corrective maintenance of the AMI network and equipment with warranty and RMA management.

USG Water spreads the initial deployment cost over many years, and this provides the utility with a predictable annual cost – usually a monthly fee per smart meter – that allows for easy planning and budgeting. USG Water also provides a single point of contact and responsibility for the full asset management program, streamlining the process, and providing operational peace of mind.

Benefits

Thomas reports that Pembroke is already seeing benefits from the metering asset management program including better use of manpower and improved morale. Importantly, the town has achieved significant improvements in customer service. "We can be proactive: When we detect that a customer has a problem, we can notify them almost instantaneously. That goes a long way with our customers."

"We were very pleased with the subject matter expertise that USG Water and their team possesses and has brought throughout the whole experience."

- Tyler W. Thomas, Town Manager,

