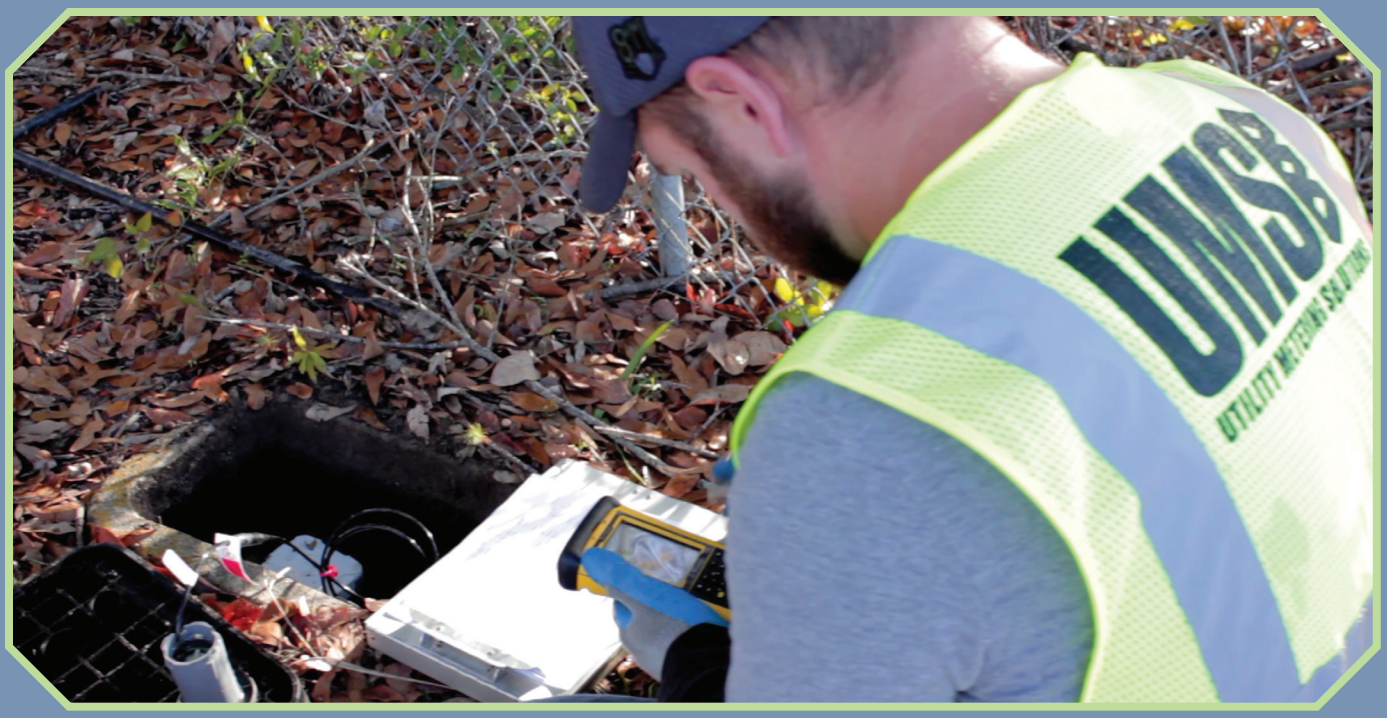
Louisiana City Funds Infrastructure Upgrade with Metering-as-a-Service Program

By Joey Mitchell



The City of Gonzales was seeking to give its customers accurate and timely water bills. The challenge stemmed from manual meter reading and old, outdated technology.

The business case for Advanced Metering Infrastructure (AMI) is compelling, as it provides accurate billing data, consistent and faster billing resolution, and operational efficiency through the elimination of manual operations. Access to more data lets utilities make informed decisions to streamline operations, boost customer service and provide valuable data that can be utilized to identify needed distribution system enhancements. While the benefits are widely accepted, the funding for advanced metering is often the biggest challenge to implementation. This forces utilities to balance multiple capital improvement projects, which often yields long deployment cycles and lagging program benefits.

For the City of Gonzales, Louisiana, managing its water service and providing superior customer service is a top priority and on-going mission. As a forward-thinking utility, Gonzales identified advanced metering technology as a solution to help identify water losses and inaccurate and irregular water bills. Beyond the smart technology, the city also worked hard to find a financing or funding solution that balanced benefit with investment.

Gonzales selected netAMP, the industry's first metering-as-a-service (MaaS) Program, which gives utilities one comprehensive solution to upgrade aging metering technology and enhance customer service capabilities while eliminating the need to finance or issue bonds for the project.

"netAMP gives us an advanced metering solution that we didn't even know was possible with our budget," says Gonzales Mayor Barney Arceneaux. "We upgraded all 5,000 services throughout the city leveraging a fixed, monthly subscription and then shared the investment cost with our customers. It's a win-win for the city and for our residents."

A New Way to Fund AMI

The EPA projects it will take $384 billion of investment in drinking water infrastructure over the next two decades to keep the nation's most precious natural resource flowing safely and reliably, according to the agency's Drinking Water

Utility Supervisor Janet McCrory (left) and Utilities Clerk Crystal Aikens track water usage from the office in Gonzales. *Photo taken by Ellyn Couvillion for The Advocate.*

Infrastructure Needs Survey and Assessment.

Finding innovative ways to fund and fix failing water infrastructure is a challenge most utilities will face and Gonzales was no exception.

The City of Gonzales required a partner who would not only fund its infrastructure, but also help implement and share in the responsibility of maintaining the advanced metering program though the program lifecycle. The city also required a solution that would eliminate large, upfront deployment expenses and debt service payments, as well as a solution that would not impact its bond rating.

"Without the netAMP Program, we would not have been able to expedite the deployment of our AMI Program," explains Jackie Baumann, chief engineer for the City of Gonzales. "UMS was our partner at every step and their deep industry relationship with our billing and technology partners was invaluable."

The netAMP program provided the City of Gonzales:

- **A fixed-monthly payment schedule** – A subscription program lets Gonzales classify the payment as an operating expense, rather than a capital expense.
- **A subscription service** – One service that includes all the AMI equipment, software and services to launch the metering program… as well as future software upgrades and on-going program support.
- **Fast integration** – Removing multiple procurement processes often required across equipment, labor, financing, etc. Combining these components into one package tailored for the City of Gonzales, eliminated the time and cost of several procurement processes.
- **Administrative ease** – netAMP assumes responsibility of obtaining low-cost capital to fund upfront project costs at rates that resemble traditional municipal borrowings. Since UMS is not faced with many of the barriers that slow down the financing process for municipalities, it is able to fund within days of utility or city council program approval.

Delivering Immediate Value to Customers

The City of Gonzales was seeking to give its customers accurate and timely water bills. The challenge stemmed from manual meter reading and old, outdated technology. Accurately measuring water consumption is essential to revenue collection and to providing reliable service to its customers.

Inaccurate measurement can lead to under-charging a customer and losing revenue or unfairly overbilling a customer and hindering customer service. In addition, measuring water accurately is an important part of water conservation, and in order to conserve water, customers must know how much they are using. With netAMP, the City of Gonzales was able to accomplish the following.

Reduce Billing Errors

Manual meter reading is prone to inaccurate data collection due to human error. Billing data can get lost or modified when entered manually or lead to issues with units of measure if systems are not installed correctly. An automated billing system combined with advanced metering can eliminate errors and cut costs to improve the billing process.

Improve Meter Accuracy

Meter accuracy declines with age and results in overcharging or undercharging. Traditionally, tracking meter performance has been a manual process. As the meter components and accuracy declines, it often leads to performance issues when the meter stops recording every data point on consumption. Detecting these errors is labor intensive, however leveraging the netAMP MaaS program, UMS performs annual meter testing and ensure all software upgrades are performed – delivering Gonzales the accuracy necessary to measure monthly water consumption.

Eliminate Estimated Monthly Usage

The City of Gonzales also had staffing challenges making timely water reading difficult and often resulting in estimated monthly usage. Billing cycles could vary between six-week to two-week cycles. The inconsistency drove increased customer complaints.

Unlocking Efficiency with Metering-as-a-Service

The City of Gonzales selected netAMP to enable billing accuracy, timely meter reads, and enhanced customer service. The MaaS Program exceeded the city's requirements.

"Our customer confidence and satisfaction sky-rocketed since implementing netAMP," says Baumann. "Customers went from very inaccurate and irregular billing cycles to a stable, reliable bill."

The new program provided all the AMI equipment, software and services including planning and readiness, installation, integration, training, maintenance and support. The new advanced program improved water measurement and reduced real water loss.

Delivering More Value to Residents

The benefits to customers are the most important success factor for The City of Gonzales. The netAMP program:

- Proactively detects water leaks in the community.
    - In the first month after the netAMP implementation, Gonzales received an automated alert about extremely high-water usage – in excess of 700 gallons an hour – from a residential customer. The city quickly determined that a main connection to the pool had burst and the excess water was visually undetectable because it flowed into the bayou behind the home.
- Reduces meter reading time by 71 percent. The city was able to push a button and read three routes in lieu of taking a week to read the same meters.
- Saved $339,000 annually by eliminating labor from manual meter reading.
- Empowers customers to view their usage online and identify issues in real-time
- Improves accurate and timely billing.

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