# The City of Baytown Water Department

## Reducing Truck Rolls and Customer Inquiries with the R900® System's Consumption Activity History and Targeted Fixed Network

### GETTING ON TRACK WITH AMR – AND MOVING AHEAD

Since the early 1990s, the City of Baytown, Texas has relied on Neptune® meters. At first, readers walked routes to read meters by sight and enter the results into handhelds. A small number of touchpads followed before Baytown adopted mobile automatic meter reading (AMR) in 2005, using ProRead™ registers and R900® radio frequency meter interface units. The system increased metering accuracy and prevented transposed meter readings. In 2010, Gina Rivon joined the department as Utility Billing Manager. Working with Neptune and distributor HD Supply, Rivon began implementing E-CODER®)R900*i*™ integrated absolute encoder/RF MIUs to transition to more of a smart water system.

### PULLING MORE DATA INSTEAD OF METERS

With most reads for Baytown's approximately 23,000 services handled by mobile collection, reading time dropped to just two or three days, freeing up time and personnel to get back to crucial maintenance, optimizing work flows.

Coupled with the consumption activity history, Rivon's team can run exception reports to verify readings and check for leaks. "We can now take a second look at a meter or notify the customer if they have an open line on their side; and, if it's on the City's side, we can get Public Works to address it," she said.

Over the last summer, customers complained about their high water bills, even while the City took several measures to ensure the meter readings were correct. Some customers requested the City come remove their meter and test it – a costly process for Baytown, and for the customer, who would have to pay a $25 fee when the meter was found to be accurate as 99.9% of them always do.

Now using consumption activity history, the City can preempt complaints of high water bills. Halfway through 2016, re-reads and pull-tests had been reduced by "half, if not more in comparison to last year," she added, "and
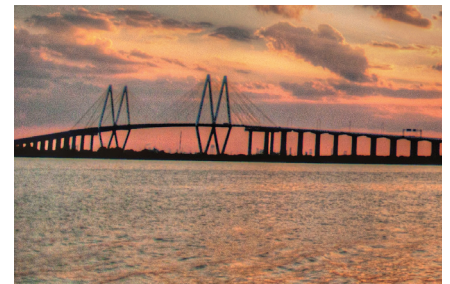
**CUSTOMER**
The City of Baytown Water Department, Baytown, Texas

**SERVICE TERRITORY**
The City of Baytown Water Department serves approximately 23,000 customers in the Gulf Coast region of Texas.

**SOLUTION BENEFITS**
Costly truck rolls for pulls/retests reduced by half

Manual reads reduced by 95%

Immediate answers for customers enabled with AMI

Migratable technology enables gradual transition to AMI

now whenever we get a customer call for a re-read, we automatically check to see exactly when they used the water and how much."

With up to 96 days of consumption history, the City can see a pattern of an intermittent or continuous leak and help customers save water as well as money. Rivon said, "We can tell them almost down to the penny where to look for the trouble. Then we don't have to send out a truck to remove and test a meter that we know works – preventing them from having to pay the fee." She said there has been a significant drop in customer calls and that the City has cut manual reads by 95%.

## NEW TERRITORY FOR DATA RECON

As Baytown continues to grow, Rivon has taken steps to ensure the City's metering capabilities grow along with it; and Neptune's migratable approach has enabled her to proceed at her own pace. "I'm not one to buy-in all at once," she explained. "I'd like to be able to try something, especially when you already know you have a quality product that works and that you're comfortable with. I prefer to take baby steps."

Enter the R900® Gateway. The fixed network data collector will be installed in an area where new subdivisions are being built. In Rivon's words, it will "eliminate lag time" in getting data from the field to the office. Personnel will now be able to provide data in seconds to answer customers' questions while still on the phone during a call.

Even in walk-by situations, immediate customer service is now possible. Beginning in October 2016, the City will pair Neptune's NGO™ app with Baytown's existing R900®

Belt Clip Transceivers to analyze water consumption in the field for homeowners, showing their usage on graphs so they can have a better understanding of what personnel see in the office.

Because Neptune's walk-by, mobile, and fixed network technology all receive data from the same endpoints, Baytown can make a gradual transition to full fixed network, without adding costs on the front end. Already, Rivon can demonstrate to other stakeholders the benefits of the Neptune System, including improved customer service, fewer costly truck rolls, and reduced manual reads.

As a manager with self-confessed "trust issues", Rivon has been pleased with the proof Neptune continually offers – accurate readings, fast, reliable communication, and products which allow gradual implementation over time. "The new technology allows us to gain the trust of our customers as we plan and budget for the future with an even smarter water utility. They can see how it's worked so far and how we've benefited from it." She summed up by saying, "I'm very passionate about what I do and want to know what all is available. Neptune gives me the tools so I can do what I need to do to provide the best service possible."

*"The new technology allows us to gain the trust of our customers as we plan and budget for the future with an even smarter water utility." - Gina Rivon, Utility Billing Manager, City of Baytown Water Department*