

CASE STUDY

ORION[®]

Radio Frequency System



Pictured above is the ORION[®] premium reading system along with the TRACE[®] Mini Mobile Interrogator used in the City of Red Bluff's water utility vehicle.

From TRACE[®] to ORION[®]

By: Ted Schaar

"We heard about the Badger Meter TRACE[®] automatic meter reading (AMR) system in 1991," said Water Division Supervisor John Jennings of the City of Red Bluff, California. "This was about when it was introduced and, at the time, we had four meter readers going out on disability with bad back claims, so we were looking for a better way."

Red Bluff has a population of about 13,000 and is located approximately 150 miles northeast of San Francisco. It sits astride the Sacramento River and was incorporated in 1876. The name was inspired by the crimson cliffs that line the west bank of the river.

Meters in pits

The area's temperate climate means that most of the meters in Red Bluff are housed in pits located near the curb. Before the Trace system was installed, meter readers needed to bend down and lift the pit lids to perform the monthly read. "The basic lid only weighs about eight or ten pounds, but we have more than 4,000 of them and if you do that day after day, month after month, it can take a toll," Jennings continued.

Although the Trace system was fairly new technology when he purchased it, Jennings was confident that Badger Meter would stand behind the product and take care of any issues that might arise. "There were some bumps in the beginning," Jennings recalled, "but Badger gave us excellent support every step of the way. In fact, I would say Badger Meter has stood behind its products."

Transition to Orion makes sense

According to Jennings, transitioning to the new Badger Meter ORION[®] AMR system was an easy decision to justify. "Basically, it was a no-brainer because the ORION transponders are less expensive and also can be read at a greater distance," he said. "Like municipalities across the country, we're always looking for ways to save time and money. We have to be; financially, we're on a tight leash."

Better read performance

Jennings continued: "Another aspect of the ORION system that we really like is that it can read meters at about twice the distance of the Trace equipment. That's the type of improvement that makes our people more efficient and gives them the time they need to do all the other things that need to be done around here."

The city has approximately 4,600 water meter hookups, and department personnel are also responsible for water mains and testing and maintaining fire hydrants, among other tasks. "With a small staff, we do everything that's required to operate a municipal water system," Jennings explained.

*ORION[®] is a registered trademark of Badger Meter, Inc.
TRACE[®] is a registered trademark of American Meter Company.*

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From TRACE® to ORION®

Battery replacements help motivate change-out

"More and more Trace-equipped meters needed their batteries replaced so we decided it was a good time to begin changing to the ORION system," Jennings pointed out. "We were going to be opening the pits anyway, so it made sense to change to ORION rather than just replacing the battery on the existing units."

Red Bluff is changing to ORION over time, so division personnel are reading the Trace units and the ORION units at the same time. "Our people put the ORION reader - which is fairly compact - on top of the microwave-oven-size Trace unit and they get reads from both types of transponders simultaneously," Jennings explained. "It works very well in the field and because both systems use the same CONNECT® software. It's not hard for our billing people to download the reads from both units pretty much at the same time."



*City of Red Bluff Water Division team:
BACK ROW: Marvin Eckels, Mike Jenson and Bill Leddy
FRONT ROW: Glen Walbridge and Steve Emerson*

Fans of Badger Meter, TRACE, and ORION

Jennings pointed out that he and other city officials often welcomed water utility personnel from other locations to tour Red Bluff to have a look at its Trace system, and he expects to do the same with the ORION system. "We're very happy with Badger and

don't at all mind taking the time to let others know how we feel and how the equipment helps meet the needs of our community."

Jennings had many other good things to say about Badger Meter, TRACE, and ORION. "I would absolutely recommend Badger to others in a position similar to mine," he said. "As a company, Badger Meter has always been willing to lead the way and take risks others were unwilling to take. This is why it was on the market early with its TRACE system."

"The Badger people really focus on making their products as good as they possibly can, which definitely makes my job easier. We've only had the ORION system for a short time, but I think it is heads-and-shoulders above anything else on the market today." ■