

CASE STUDY

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Radio Frequency System



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Woodstock Rocks to Badger Meter's Big Hit of Increased Revenue and Lower Costs

By: Dave Marsh

Over a rainy summer weekend in 1969 the small town of Woodstock, New York surrendered its name to cultural history and, from then on, became synonymous with peace, love and popular music. The Woodstock Music and Art Fair was the get rich brainchild of four young men. Several forecasts predicted their event would draw an audience of 60,000, but actual attendance was much higher. They sold almost 200,000 tickets prior to the event and they hired temporary staff to sell additional tickets during the festival.

When an estimated 400,000 tie-dyed and beaded music lovers descended on the festival grounds near the town the inexperienced temporary staff was quickly overwhelmed. Fearing a riot from the crowd, growing impatient with the poor service, organizers decided to let everyone in free; a decision that resulted in the loss of an estimated \$4.2 million in potential ticket sales. Obviously, temps were not the answer.

Thirty-five years later the Town of Woodstock Water District addressed its own problem with temporary help when it upgraded its water meters to Badger Meter's technologically advanced ORION[®] Automatic Meter Reading (AMR) System. The Woodstock Water District decided to upgrade its system of 730 meters following an analysis of unaccountable water loss. Investigators located some leaks, but another reason for the discrepancy between the volume of water pumped and the volume recorded by customer meters was a reduction in accuracy of many aging water meters.

Lost revenue, higher costs and customer complaints attributed to old meters

As meters age it is common for their accuracy to degrade, which results in recording less water than is actually used. Many of Woodstock's meters were at least 15 years old and the Water District was losing revenue because inaccurate water meters prevented it from billing customers for all of the water they were using.

The productivity of the Water District staff also was an issue. Four times a year, the otherwise smooth running department became bogged down with its labor intensive and inefficient meter reading and billing operations. Each billing cycle, three temporary employees devoted an entire work week to manually read all customer meters and record water usage. But the Water District learned that using temporary employees was not the best answer.

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WOODSTOCK CASE



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"Maintaining a trained staff of temporaries became one of our biggest headaches," said Jeremy Wilber, Village Supervisor. "Our meters are located in different areas of our customers' properties and we'd have to train our temps where to find the meters. We'd train temps to read meters for us one quarter, but then when we needed them for the next quarter, they weren't available and we'd have to train new ones. That was a real problem."

Reading meters manually had become cumbersome and costly for the village. "The idea of using temporary, so-called cheaper, personnel to read meters just didn't work," said Wilber. "Our only other alternative was to divert the Water District's full-time employees from their normal jobs to read the meters. And, of course this would come at a cost to customer service."

But reading meters was only half of the problem. After the readings were manually recorded, it took two town clerks five full days each to enter the handwritten data into the software program for billing. And it was not unusual for mistakes to be made during transcription, which resulted in customer complaints and costly return visits. At a time when affordable and dependable walk-by and drive-by radio frequency (RF) meter reading solutions were available Woodstock was paying an annual price for its inefficient, obsolete system.



Ken Scott (Meter Reader); Kevin Hunter (Water/Sewer Superintendent); and Jeremy Wilbur (Supervisor)

Investing in new technology reduces operating costs

The Water District had been pleased with the long, reliable service-life of its old Badger® water meters. So when the decision was made to replace them the Water District contacted Schmidt Wholesale to supply it with a new generation of Badger water meters. The new meters would solve the water loss problem and significantly reduce operating costs by automating meter reading with ORION® drive-by meter reading RF technology.

Installation of the new ORION system began in April, 2004 after the final manual read was taken from the old meters, and was completed before the next billing cycle. It consisted of 600 ¾-inch, ten 1-inch, four 1½-inch and six 2-

inch ORION RF meters and a mobile starter kit. Other meters had adequate service life remaining and were retrofitted with ORION RF technology.

Today, with the new Badger Meter ORION System the Water District staff accurately reads meters remotely as they drive by customer locations. A task that once took a week is now completed in less than three hours. The billing system also has been dramatically streamlined. Meter readings are electronically transferred instantaneously and free of transcription errors from the ORION system to the billing

system housed on another computer. "It used to take us ten days to enter the readings into our billing system," said Pam Boyle, Municipal Bookkeeper, "but now it takes me just two seconds to transfer the data from the ORION system to my computer used for billing customers."

Today the loud music of 35 years ago is a distant memory and peace and tranquility is more the norm than loud rock bands. However, every quarter when the water meters are read and the bills are mailed, the cost savings made possible by the ORION system are music to the ears of the Town of Woodstock Water District. ■