Municipality recommends Siemens to City of Cleburne

The City of Cleburne is located in the heart of Texas approximately 50 miles southwest of Dallas, Texas. The town of 30,000 is proud of its Civil War roots as a military camp for Johnson County soldiers marching off to war. In fact, the town was named in honor of General Patrick R. Cleburne and became a permanent settlement in 1867.

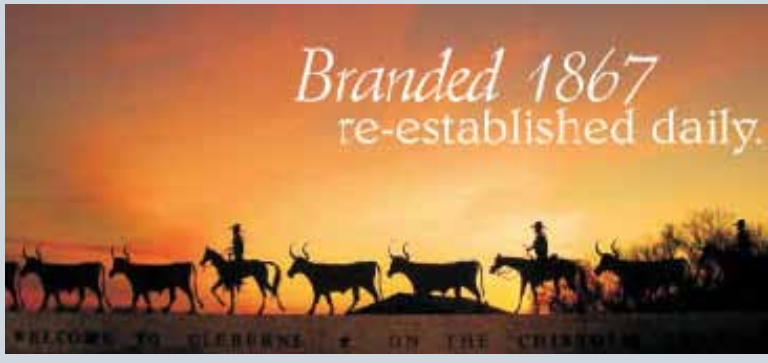
Client background
The City's water meters had become inaccurate and unable to record all of the water flowing through it, which is normal as water meters age. Essentially, the city was losing revenue by pre-paying for much of its citizens' water usage and was not recovering the cost due to inaccurate readings.

Client objectives
Driven by extensive water losses, the City of Cleburne began exploring their options for water meter improvements. Kim Galvin, Budget/Special Projects Director for the City of Cleburne, received a valuable reference from her contacts at the City of Conroe. The City of Conroe recommended Siemens Industry, Inc., based on their 2008 water meter project experience with the Siemens Houston branch led by Chad Nobles, Account Executive.

Siemens solutions
To gather accurate data, Siemens pulled and tested a random sample of meters to see what they were reading. Based on those accuracy tests from the representative sample and the historical usage data, it is projected that the City should see $550,000 in the first year from increased revenue by implementing the automatic meter reading replacement and retrofit of over 11,700 meters.

Additionally, the entire energy and water conservation project will produce about $260,000 per year on average of operational savings from the various conservation measures, most of which will come from the Automatic Meter Reading system.

Nobles presented the Cleburne City Council with the concept of a performance contract solution that would not only allow the city to install the most advanced technology available for water meters and meter readings, but to also benefit from several more energy efficient utility upgrades. The performance contract takes advantage of energy savings and increased revenue to pay for the capital improvements. The total contract for $9.26 million covered several projects including comprehensive lighting upgrades, building water fixture retrofits, HVAC efficiency improvements, water and wastewater plant improvements, energy management system installation, and city-wide water meter installation along with an advanced automatic water meter reading system.



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Siemens assisted the City in securing a 10-year contract of low interest, LoanSTAR funding from the State Energy Conservation Office. Nobles worked with the City Council to show them how to secure the maximum amount of loan money by conducting presentations at every stage of the process. This included a preliminary study, extensive energy audit, potential feasibility for project proposals, and financing options.

The newly installed water meter system employs radio waves to provide automatic readings. Each water meter emits a signal via a radio antenna that is captured by either an on-board laptop or hand-held computer during a drive-by with a city vehicle or the meters will be automatically read using a fixed based network that encompasses towers scattered around town that collect the data on a daily basis and report back to the Utility Billing departments desktop computer. Both methods decrease the time in which the meters are read, but the fixed base network will provide additional data so that the City can provide a higher level of customer service to its residents.

In addition to the water meters and normal HVAC and lighting retrofits, Siemens tackled another high energy usage within the City – the wastewater treatment plant. Being the largest energy consuming facility in the city, Siemens proposed changes in several areas in an effort to reduce energy consumption, reduce operating costs, and increase plant capacity. Coarse bubble aeration systems were replaced with fine bubble aeration systems and a new high efficiency Siemens Turblex blower, complete with dissolved oxygen controls, were installed.

Client results

The projected annual energy and utility savings include 2.6 million kWh of electricity, 226,000 cubic feet of natural gas, and 561,000 gallons of water. Based on the guaranteed energy savings along with the increased city revenue for accurate utility readings, it is projected that the project will pay for itself within 13 years.

Although normally increased water billings would cause a plethora of complaints from the citizens, the City of Cleburne has been pleasantly surprised with how well the community has responded to the advanced water meter project. Galvin attributes much of the success of the water meter project to Siemens' project manager, its sub-contractors, and an unusually wet season. She explains, "The sub-contractor Siemens hired to install the water meters was phenomenal. They explained the need for new installations and accurate readings to the customers as they were on-site, and Rick Corn, [Siemens' project manager] was down here almost every day to make sure everything was working as it should. It could have been a very bad situation [with complaints] and it wasn't." The combination of maintaining billing at regular scheduled times and the extra attention paid to the end customer contributed to the success of the project.

Galvin summarized her experience with Siemens by stating, "They were professional and as expeditious as possible." Even when there were problems with subcontractors on a portion of the project, Siemens quickly secured an alternate firm and, she declares, "... everything has worked like clockwork. Siemens has been gracious and honest and the City of Cleburne is very pleased."

The total project guarantees an annual savings along with increased revenues of $830,000 per year over 13 years.

Siemens Industry, Inc.
Building Technologies
1000 Deerfield Parkway
Buffalo Grove, IL 60089

(847) 215-1000

www.usa.siemens.com/buildingtechnologies

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