

Savings from New Water Meters Fund

Energy-Efficient Upgrades

As the water meters of the city of **Tyler, Texas** (83,700), aged, they became more inaccurate, almost always in the customer's favor. As a result, the city was losing approximately \$2.2 million a year in reduced water revenue. The city decided to replace its water meters with units that transmit information with radio signals. Additional revenues from these much more accurate units are being used to replace the utility's heating, ventilation, and air conditioning units and install energy-efficient lighting in the city facilities and in traffic signals.

Leadership/staffing

A private company contracted with the utility to oversee the installation of the new meters. As part of its agreement with the utility, the company replaces all defective water meters.

Timeline

The replacement of the meters was expected to take 14 months but was completed in just 10 months. All 31,000 meters in the city had been replaced by July 2004.

Budget/funding

Replacing the meters cost \$15 million and was financed through a revenue bond issue. The bond will be paid back over 10 years through the increased utility revenue, which is guaranteed at \$1.7 million but projected at \$2.2 million, which does not include additional revenues from future growth of the system or increases in rates.

The city tests 1 percent of its new meters annually. If the accuracy of these meters is below an established standard, the contractor compensates the city for loss of revenue.

Program description

Approximately four to six months before replacing the meters, the utility embarked on an extensive publicity campaign to inform residents of its plans and the reasons for replacing the old meters. The campaign continued throughout the replacement process. When the utility made presentations to city council, it issued press releases and invited television stations to cover the presentations as it demonstrated the replacement process and the new meters. The new meters were installed outside each property, without requiring access to houses and businesses.

Because they are more accurate, the new meters raised water bills by an average of \$3 per month for residential customers and \$6 per month for business customers. When a few customers complained that their rates were higher because the new meters were inaccurate, utility personnel visited the customers' homes with a temporary, testing meter that the city knew met all standards of accuracy. The city attached the temporary meter to a garden hose, turned off all other water in the building, and ran 1,000 gallons of water through the garden hose. In every case both meters—the one newly installed in the customer's building and the testing meter—showed identical readings.

Customers were also informed that damage to yard piping that occurred within two feet of the meter would be repaired if requests were made within two weeks of installation. Customers were responsible for all other piping damage.

The utility is using some of the additional revenues to replace heating, ventilation, and air-conditioning units with more energy-efficient equipment. The funds are also being used to retrofit the lighting in 29 city facilities; the new fixtures will improve energy efficiency by 25 percent. The city is also upgrading 3,700 incandescent traffic signal fixtures with light-emitting diode fixtures, which use 90 percent less energy.

Results

In addition to the \$2.2 million projected to be recovered from the enhanced accuracy of the new meters, the utility is saving \$150,000 each year from the

reduction in the number of personnel needed to read the meters because the new meters emit radio signals that can be read by trucks driving down the street. Only 2–3 percent of the utility’s 31,000 customers have called in a complaint about the new meters.

Contact

Gregory Morgan
Operations Manager

Tyler Water Utilities
P.O. Box 2039
Tyler, TX 75710

Phone: 903/531-1234

Fax: 903/531-1259

E-mail: gmorgan@tylertexas.com

Web site: <http://www.cityoftyler.org/Default.aspx?tabid=349>