

Meeting Date (?) 09/13/2016

Subject Matter* (?) Water Meter Purchase Agreement
This must match rolling agenda entry

Department of Origin* WATER SERVICES

Submitted By* Charles Rhodes

Type of Meeting* BCD Special Regular

Classification* Public Hearing Consent Statutory Regular

Ordinance* None First Read Second Read First & Only Read

Strategic Initiative* Public Safety Service
 Economic Development Infrastructure
 Quality of Life

Agenda Item Description* Consider authorizing the purchase of meters and communication modules through Sensus USA, Inc. for the ongoing installation, implementation, and expansion of an Advanced Meter Infrastructure (AMI) system for Water Services at an amount not to exceed \$225,000.

Summary Statement*

In 2008, BTU and Water Services entered into an agreement with R.W. Beck to develop a business case for an Advanced Meter Infrastructure (AMI) system. In 2009, results of the business case were presented to the City Council and staff asked permission to issue an request for proposal (RFP) to possible AMI vendors. In 2009, proposals were taken for an AMI system from three (3) different vendors. After evaluating the proposals, staff selected Sensus as the successful vendor. In early 2010, staff asked the City Council for permission to negotiate with Sensus on a contract for the installation of the AMI system. At the February 22, 2011, City Council meeting, the City Council approved a contract with Sensus for the development, procurement, and implementation of the system.

While BTU opted to convert their entire system over to the new AMI system, Water Services planned for a phased implementation. The initial phase included all commercial water meters and 8,000 residential water meters to be replaced by City staff. The replacement of 8,000 residential meters continued Water Services proactive replacement of aging residential water meters. Water Services elected to install communication modules on a select 3,000 meters within the water service area. The water meters included larger vault meters, rural meters, hard to read residential and commercial meters, and meters for anticipated pre-pay customers. The remaining water meters (approximately 19,500) were to be read manually and billed by BTU due to the cost and unknown reliability of the module. However, the benefits of the AMI system, in conjunction with the cost of manually reading the remaining water meters, made it a viable option to continue phasing Sensus products into the City's water meter replacement program.

Of the 22,953 water meters installed in the system, 21,926 are currently AMI compatible meters; 21,137 are currently remotely read capable. Of the twenty billing cycles, eighteen are read through the AMI system and are no longer read manually by Alexander's (contracted to read meters). If inventory is available, the final two cycles should be read remotely by October 31, 2016.

From an inventory standpoint, Water Services currently has approximately 400 three-quarter inch meters and 250 communication modules left to purchase to complete the transition. At current pricing, those numbers project out to \$60,000 (covered by Water and Sewer Fund Balance). A cost reduction is possible in areas where dual port communication modules can be utilized in lieu of single port modules. A dual port module connects 2 meters to the network at a cost of \$110 versus a single port module which connects 1 meter to the network for \$95. For a dual port module to work, the meters must be within a few feet of each other. It is difficult to project the actual module to be utilized until into the replacement process (cost above is a worst case scenario). Additionally, inventory needs have been projected to allow for system growth. Based on historical numbers, \$105,000 is needed for system expansion (covered by Water Operating Fund). Finally, a 1% failure rate of infrastructure is planned over the entire system. While many of these components should be replaced under warranty if they fail, the RMA process takes time. The remaining \$60,000 dollars (covered by Water and Sewer Fund Balance) allows for surplus inventory to be available to replace items not covered under warranty and to mitigate processing time on warranty items.

Staff recommends the City Council authorize the purchase of meters and communication modules through Sensus for the ongoing installation, implementation, and expansion of an Advanced Meter Infrastructure (AMI) system for Water Services at an amount not to exceed \$225,000.

Staff Analysis & Recommendation*

Staff recommends approving the purchase of meters and communication modules through Sensus for the ongoing installation, implementation, and expansion of an Advanced Meter Infrastructure (AMI) system for Water Services. It has the ability to reduce billing and operational costs, as well as providing time of use and leak detection to customers. Revenue will be maximized by upgrading underperforming meters with more accurate meters.

Options*

(In Suggested Order of Staff Preference)

1. Authorize the expenditure of funds.
2. Modify the expenditure amount, which may require consideration at a future City Council meeting.
3. Provide direction to staff.

Funding Source*

Water and Sewer Fund Balance/Water Operating Fund (as budgeted)

Attachments

Please detail attachments and note attachments available for viewing in City Secretary's Office:
none

Dept. Head Signature

JAYSON E. BARFNECHT 08/29/16

Deputy City Manager
Signature

Hugh R. Walker

City Manager Signature



City Attorney Signature

Janis K. Hampton