

**COUNCIL ACTION FORM**

**SUBJECT:**        **WATER METER AUTOMATIC METER READING SYSTEM**

**BACKGROUND:**

The City has been purchasing Elster AMCO mechanical water meters with mechanical pulse generator registers as part of a multi-year contract. This has been the standard meter purchased for residential and small commercial accounts for many years. These meters are read manually by entering the meter reading (displayed remotely on the outside of the property) into a hand-held device carried by the City's meter readers.

In January 2013, Elster AMCO informed the City that they would stop producing the mechanical meters and registers by mid-year 2013. The last order taken by Elster AMCO for these type meters was in March 2013. Because Elster AMCO was the last meter manufacturer producing this type of meter register, a replacement meter reading technology needed to be selected.

An Automated Meter Reading/Advanced Metering Infrastructure (AMR/AMI) process improvement team was formed consisting of eight members representing a cross-section of all involved departments. The team was tasked to recommend a long-term replacement system for both water and electric meters, as well as to determine a short-term solution for reading water meters that serves the needs of both the Water and Electric Utilities and also be sure that it fits within the adopted CIP and Water Fund rate structure.

The team analyzed technical information provided by vendors and interviewed various utilities currently using six of the most commonly used AMR/AMI systems available. A survey was conducted of internal users of the billing system and of 300 external customers with 79 responses received. This survey process helped provide a broad picture of all parties' needs and wants and helped the team to know what benefits an AMR/AMI system will provide to our customers.

After comparing the various alternatives against a list of weighted criteria, the AMR/AMI Team recommended the AMR Walk-by technology as the short-term solution, with a requirement that it be provided by a vendor that can transition to an AMI Mesh (unlicensed) system in the future as the long-term solution.

Based on this conclusion, staff developed a Request for Proposals (RFP) to procure an AMR Walk-by system as a replacement for the obsolete mechanical register system. RFPs were submitted to four vendors and the City received two responses. **The response that best met all the necessary criteria was submitted by Itron, Inc. to**

provide the AMR portion for the project. Meters will be provided through Itron by Badger Meter and Elster AMCO.

The City Council is being asked to give approval for procurement of an AMR Walk-by system including hardware, software, meters, and installation services for a complete system, and to approve a contract for the purchase of this system. This contract includes a provision whereby it may be renewed annually for five years, as well as an escalation provision which ties the annual increase to the Producer Price Index.

The estimated cost for the first year of the AMR project is as follows:

Water Meters Equipped with AMR (Radio Read)	\$ 250,500
Reading Equipment, Software, Maintenance Agreement	\$ 53,584
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Total First Year Cost	\$ 304,084

Historically, water meter replacements have been funded out of the operating budget. The FY 14/15 adjusted operating budget includes \$268,000 to perform 1,000 routine meter replacements and to purchase 400 meters for new construction installations. At that pace, however, it would take more than 20 years to complete the change out of the meter reading system. To accomplish the change out in a shorter time frame, additional funds were included in the Capital Improvements Plan. The approved FY 14/15 CIP includes \$417,000 to begin the AMR conversion as the first year of a projected seven-year replacement of the obsolete mechanical register system. The expected cost of the project over the course of seven years is \$3,752,000. Costs for the project are thus reflected in both the Capital Improvements Plan and the operating budget for Water Meter activity.

**ALTERNATIVES:**

1. Authorize procurement of an AMR Walk-by system including hardware, software, meters, installation, and maintenance services for a complete system and award year one of a multi-year agreement to Itron, Inc., of Liberty Lake, WA, in an amount not to exceed \$304,084. Future annual renewals will be authorized by Council, dependent on the appropriation of funds and the successful execution of the prior year's agreement.
2. Do not issue a contract for purchase of an AMR Walk-by system at this time. This would negatively impact the water meter replacement program and installation of meters for new construction, since the City can no longer purchase new meter registers that operate on the existing legacy meter reading system.

**MANAGER'S RECOMMENDED ACTION:**

The current water meter technology used by the City has become obsolete and is no longer available in the market place. The AMR/AMI Process Improvement Team thoroughly vetted all currently available metering technologies for both water and electric metering to arrive at a recommendation that will support both the short- and long-term goals for both utilities well into the future. Staff has negotiated a multi-year agreement with Itron, Inc., which includes meter reading hardware and software, water meters, and annual support and maintenance for equipment to provide a complete AMR Walk-by meter reading system.

**Therefore, it is the recommendation of the City Manager that the City council adopt Alternative No. 1, thereby authorizing procurement of an AMR Walk-by system including hardware, software, meters and installation and maintenance services for a complete system and issuing a contract for purchase of the system from Itron, Inc., of Liberty Lake, WA, in an amount not to exceed \$304,084.**