



CITY OF

NEWPORT BEACH

City Council Staff Report

January 22, 2019
Agenda Item No. 15

TO: HONORABLE MAYOR AND MEMBERS OF THE CITY COUNCIL

FROM: Mark Vukojevic, Utilities Director - 949-644-3011,
mvukojevic@newportbeachca.gov

PREPARED BY: Steffen Catron, Utilities Manager, scatron@newportbeachca.gov
PHONE: 949-644-3011

TITLE: Advanced (Water) Meter Infrastructure Project, Approval of Initial
Proof of Performance Purchase and Installation Agreement, Project
19W12

ABSTRACT:

The Utilities and Finance Departments recommend that the City move forward with an Advanced Meter Infrastructure (AMI) Project on its water meters. The proposed AMI project would install new “smart meters” which will provide automation and improved customer service and response. The departments have procured Mueller LLC as the preferred vendor through an RFP process and now recommend approval of the initial “Proof of Performance” phase of project.

RECOMMENDATION:

- a) Find this work exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15301, Class 1 (Existing Facilities) of the CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3;
- b) Approve a Purchase and Installation Agreement for the Proof of Performance Phase of the Advanced (Water) Meter Infrastructure Project with Mueller LLC for \$191,123.76; and
- c) Authorize the Mayor and City Clerk to execute the Agreement.

FUNDING REQUIREMENTS:

The current adopted budget includes sufficient funding for this \$191,123 Proof of Performance phase. It will be expensed from the Water Enterprise Fund in the City Council approved Capital Improvement Project, No. 19W12. Implementing this Proof of Performance phase does not obligate or require City Council to move forward with the full implementation. A discussion of funding and financial impacts for the full implementation is explained in the Discussion section of the report.

DISCUSSION:

The City's water system utilizes approximately 26,500 meters to measure and quantify water usage for the residential and commercial accounts in Newport Beach. The vast majority of these meters are read manually. The utility industry has transitioned to an Automated Meter Infrastructure known as AMI. AMI, also known as smart meters, is a step towards a more modernized water metering system that will help the City better manage the water system resources and provide valuable tools to the users. AMI uses a low-powered communication device (licensed radio frequency) that is integrated with a new water meter to transmit water usage information to the City's database.

The two-phased AMI project would replace or retrofit all City water meters with AMI technology. One of the benefits of AMI include allowing water customers direct access to water usage information. Specifically, after a new AMI meter is installed and a customer registers with the City's online water use portal, users can research their usage, enabling them to better understand and make informed decisions about household water use and their associated water bill. Another important feature is that AMI can detect water leaks for homeowners so leaks can be identified and repaired more quickly by the homeowner. AMI provides the City's customer service staff additional tools to be more efficient, enhance customer service and lower costs. Also, full AMI implementation would allow the City to annually save its contracted cost to read water meters.

On November 28, 2017, staff presented the AMI project concept during the City Council study session. As presented during the study session, staff recommends a preliminary contract known as a Proof of Performance phase to fully test the products, the connectivity, the customer interface and obtain feedback from staff and customers.

The City conducted a competitive Request for Proposal (RFP) procurement process and received 6 proposals. An evaluation panel arrived at the following rankings.

	STEP 1 SCORE - PROPOSALS & INTERVIEWS	STEP 2 SCORE (COST)	OVERALL SCORE	RANK
MUELLER SYSTEMS, LLC	64.40	23.18 (\$9,030,601.35)	87.58	1
ACLARA TECHNOLOGIES, LLC	61.20	22.52 (\$9,296,425.75)	83.72	2
FERGUSON WATERWORKS	60.20	20.21 (\$10,358,475.25)	80.41	3
THIRKETTLE CORPORATION	61.00	17.95 (\$11,661,230.99)	78.95	4
ZENNER PERFORMANCE METERS, INC.	38.40	30.00 (\$6,978,668.17)*	68.40	5
ALEXANDER'S CONTRACT SERVICES, INC.	27.20	N/A**	27.20	6

*Zenner Performance Meters proposed a different type of AMI solution using a mesh communication network of over 200 data repeaters and limited data communications capabilities.

** Alexander's Contract Services, Inc. proposal was not evaluated for cost because the proposal was based around an alternative solution approach that was deemed not feasible.

Mueller LLC was selected by the evaluation panel because of their experience and qualifications and held all the necessary certifications required for a project of this magnitude. Mueller's references were outstanding and strongest of all the proposers. Mueller also has a dedicated Network Operations Center ("NOC") wherein a 4-tier level support team constantly monitors their AMI network systems to optimize performance for the life of the project. This NOC provides individual customer support to City staff for all matters related to the system.

Mueller's AMI technology was also one of the most appealing factors to the panel. Their AMI solution has the capability to perform remote shut-off and pressure monitoring, which can increase efficiencies in water meter operations. Finally, Mueller proposes to partner with Vanguard for meter installations and Vanguard has been responsible for over 450 successful meter implementation projects. After Mueller was identified as the highest-qualified proposer and the most cost effective proposer from this RFP process, staff entered into negotiations with Mueller to refine the pricing and come to an agreement on legal terms and conditions. The agreement presented for City Council approval is the result of these negotiations.

The Proof of Performance phase will include the installation and testing of 4 collectors, 4 repeaters, and 250 water meters encompassing multiple metering groups including residential, commercial, and irrigation. Also, this phase includes the AMI head-end software, the Meter Data Management System software, the integration of meter data and testing the ability to integrate into the City's customer portal and the City's water billing system. The intent of this phase is to prove basic end-to-end connectivity, integration, and usability of the proposed system. It will also allow staff to quantify and address any implementation challenges and better estimate the staff time necessary for full implementation.

The implementation of the Proof of Performance phase is expected to take place this spring over the course of 60 days. The evaluation period will be up to six months. Advanced notice will be sent to the surrounding properties for the proposed collectors and repeaters. Notices will also be sent to the individual properties that will have their meters replaced. Meter replacements typically take 30 minutes with the water shut off for only 15 minutes.

The full AMI implementation costs, which includes replacement of all 26,500 meters, are estimated at approximately \$9.5 million and would be partially offset with cost savings. Later this year, staff will bring back the full AMI implementation for City Council consideration including costs, timing, benefits and funding. This will be coupled in parallel with a discussion and consideration of the upcoming Water Master Plan and the Water Rate Study. Implementing this Proof of Performance phase does not obligate or require City Council to move forward with the full implementation.

ENVIRONMENTAL REVIEW:

Staff recommends that the City Council find this work exempt from the California Environmental Quality Act (CEQA) pursuant to Sections 15301, Class 1 (Existing Facilities) of the CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, because the proposed scope of work involves an installation of software equipment to selected and existing use city-water meters and street lights for testing and data gathering purposes, in order to provide automation, improved customer service and service response time. This section allows the operation, repair, maintenance and minor alteration of existing facilities of both investor and publicly-owned utilities used to provide electric power, natural gas, sewerage, or other public utility involving negligible or no expansion of use.

NOTICING:

The agenda item has been noticed according to the Brown Act (72 hours in advance of the meeting at which the City Council considers the item).

ATTACHMENT:

Attachment A – Agreement with Mueller LLC