



CITY OF GLENDALE, CALIFORNIA REPORT TO THE CITY COUNCIL

AGENDA ITEM

Report: Utilization of the Alternative Project Delivery Method for the Water Advance Meter Infrastructure (AMI) System Replacement Project

1. Resolution authorizing the Acting General Manager of Glendale Water and Power, or his designee, to utilize the Alternative Project Delivery Method for the Water Advance Meter Infrastructure (AMI) System Replacement Project, adopting the Request for Proposals No. 4017, for the Water AMI System Replacement Project, and directing the City Clerk to advertise for proposals.

COUNCIL ACTION

Item Type: Action Item

Approved for May 6, 2025 **calendar**

EXECUTIVE SUMMARY

Glendale Water and Power (GWP) is seeking Council approval to replace the existing Water Advanced Metering Infrastructure (AMI) system with a more reliable and technologically advanced solution. The current system is experiencing significant failures, with approximately one-third of the communication devices (endpoints) no longer reporting water usage data. As a result, GWP has been manually reading these failed meters leading to increased operational and maintenance costs for the City.

To address this issue, GWP has prepared a Request for Proposals (RFP) that outlines the project specifications while allowing flexibility in vendor responses. By using the Alternate Project Delivery method, it ensures that GWP can secure the most advanced and cost-effective AMI solution available, while maintaining compliance with procurement requirements and conducting a fair evaluation of all proposals.

The total estimated cost for the project ranges from \$20M to \$26M, with an annual software licensing and data hosting cost of approximately \$100,000 to \$200,000. Investing in a modern AMI system will enhance reliability, reduce manual labor costs, and improve service efficiency for Glendale residents.

RECOMMENDATION

Approve a Resolution authorizing the Acting General Manager of GWP to utilize the Alternative Project Delivery Method for the Water AMI System Replacement Project, approve and adopt the RFP for same and direct the City Clerk to advertise the RFP.

BACKGROUND

In 2008, GWP issued an RFP to install an AMI system. Originally, Itron, who provided integrated end-to-end AMI solutions, partnered with Utility Partners of America,

a utility solutions installer/contractor, to install the new AMI system for the original conversion to AMI. Installation of AMI for electric and water meters began in early 2010, shortly after GWP received a \$20 million grant from the U.S Department of Energy. GWP selected Itron, Inc. to supply the necessary materials and professional services through a rigorous RFP process. On September 19, 2011, GWP became the first electric and water utility to replace 100% of its electric and water meters with the new AMI technology.

GWP staff and customers have benefitted from the current AMI systems. Specifically, the hourly water data has provided a multitude of operational and customer benefits, including the ability for customers to access and monitor their water usage data in near real-time.

The current Water AMI system uses first generation Itron endpoints, which are the units that attach to the water meters and transmit the water use to the data collection units. Over the first ten years, the Water AMI system has substantially met performance goals.

Over a decade ago, it was expected that the AMI endpoints would last 15 years. As with many cutting-edge systems, there have been unexpected issues. These first-generation endpoints were initially tested in dry installations in basements in the mid-west and over time they proved to be unreliable in areas with meter box applications, like Glendale. As the endpoints failed, the manufacturer continued to provide replacement equipment at no cost. However, the vendor is no-longer manufacturing this older technology and is unable to replace failed components.

Currently, one-third of the endpoints are not communicating with the 33 CCUs (water collectors) in the field and have been removed. As a result, GWP must manually read meters that lack a functioning endpoint. This has led to increased maintenance and operational costs for the City. Additionally, customers are unable to access their near real-time water usage data thereby limiting their ability to monitor and manage consumption effectively.

ANALYSIS

The implementation of an AMI System Replacement Project involves a variety of tasks and objectives, including but not limited to:

- a. Design and provide detailed site plans for GWP to construct an AMI network capable of communicating with 100% of GWP water services.
- b. Replace all meter transmitters (endpoints, smartpoints, ERTs, MIUs).
- c. Replace all water meters.
- d. Ensure meter boxes and lids are conducive to two-way AMI network communications.
- e. Evaluate existing Armorcast lids to determine a need for replacement or modification.
- f. Installation of new servers and software.
- g. Configuration of new system integrations.
- h. Provide access to near real-time data that can notify of abnormal water usage.

- i. Provide system notifications and alerts for operational oversight and customer water consumption within defined parameters.
- j. Reduced water loss/non-revenue water through system alerts and notifications.
- k. Improve water conservation/water accountability.
- l. Reduce long-term operating costs.
- m. Ensure forward and backward compatibility of system for an operational period of no less than 20 years.
- n. Provide a comprehensive meter and endpoint replacement plan prior to end of useful life.

The replacement of approximately 35,000 AMI water meters, associated endpoints, and backhaul communication devices, along with the implementation of new cloud-based software technology, will require integration with the existing Tropos Mesh Network and back-office applications. The project also includes construction for the replacement, installation, and disposal of water meters and endpoints.

The total estimated cost for the entire project is between \$20M and \$26M, with the final cost to be refined upon receipt of project proposals. Additionally, annual costs for software licensing and system maintenance will vary based on the selected solution but are expected to range between \$100,000 and \$200,000. The project's estimated completion date is June 2027.

On March 27, 2025, the Acting General Manager of GWP obtained the City Manager's approval for the herein procurement of this project as required by Glendale Municipal Code (GMC) Section 4.13.070 and is attached as Exhibit A. This method has been identified as the preferred approach for the AMI replacement project due to its ability to decrease costs, accelerate the overall schedule and improve project efficiency.

If the project were to be divided into separate bid processes for meter and software selection and installation, costs would be expected to increase by 20-25%. Additionally, the City would incur further expenses related to:

- Multiple bid processes requiring additional City staff time and resources.
- Delays in project implementation, increasing operational costs.
- Storage of materials during the second bidding process.
- Increased costs for managing coordination between the selected vendor and installer, as the City would need to oversee two separate contracts.
- Increased vendor mobilization cost.

These additional costs, though difficult to quantify precisely, are estimated to exceed \$2M. By proceeding with the recommended delivery method, the City can ensure a more cost-effective, efficient, and timely implementation of the new AMI system. Similar efforts have recently been undertaken in the City of Chino, Coachella Water District, Jurupa Community Services District Water, City of Santa Monica, City of Camarillo and City of Lompoc to ensure greater flexibility of options for the system

and improved coordination between the vendor providing the AMI Software, Meters and Technology and the Contractor installing the meters and setting up the system, ultimately realizing an overall cost savings.

GMC Section 4.13.020, Subsection P provides that when Council authorizes the use of the alternative project delivery method for one or more reasons under GMC Section 4.13.070, as set forth in Exhibit A, Council is deemed to have determined that the use of the alternative project delivery method and award of one or more contracts without the need for competitive bidding is in the best interests of the City for the procurement of the proposed project and as dispenses with competitive bidding in order to procure the proposed project by an alternative project delivery method.

STAKEHOLDERS/OUTREACH

GWP will conduct customer outreach as part of this effort that will include direct mail (letters and reminder postcards), bill inserts, website updates and door hangers before meter replacement. Customers will also be notified 72 hours ahead of meter replacement.

FISCAL IMPACT

The estimated costs for the Water AMI System Replacement Project are between \$20M and \$26M, of which approx. \$9.9M is available in the FY 2024-25 budget. This project is expected to begin next fiscal year.

Therefore, staff will budget the remaining appropriation for this project via the annual budget process.

Existing Appropriation		
Amount	Account String	Funding Source
\$9,961,401	51200-5930-0020-W14712	Water Depreciation Fund

ENVIRONMENTAL REVIEW (CEQA/NEPA)

The action requested herein which is the authorization of the alternative project delivery method and the issuance of the RFP is not a “project” for the purposes of California Environmental Quality Act (CEQA). Additionally, the contemplated AMI replacement project, should it be approved, is categorically exempt from the requirements of CEQA as replacement or reconstruction of existing utility systems under California Code of Regulations, Title 14, Chapter 3, Section 15302(c).

CAMPAIGN DISCLOSURE

Not applicable.

ALTERNATIVES TO STAFF RECOMMENDATION

- 1) Choose to not approve the proposed action and, instead, direct GWP to abandon the Water AMI System and return to manual meter reading. This will result in an increase to GWP Customer Service staffing levels by ten meter reader positions, training newly hired staff, and the procurement of hand-held meter reading devices.
- 2) Consider any other alternative not proposed by staff.

ADMINISTRATIVE ACTION

Submitted by:

Scott K. Mellon, Acting General Manager - Glendale Water and Power

Prepared by:

Chisom Obegolu, Assistant General Manager - Water

Approved by:

Roubik R. Golanian, P.E., City Manager

EXHIBITS/ATTACHMENTS

Exhibit A: Memo dated and approved on March 27, 2025 by the City Manager for the Design-Build of the Water Advanced Meter Infrastructure (AMI) System Replacement Project (Alternative Project Delivery Method).