



Los Angeles
Department of
Water & Power

RESOLUTION NO. _____

BOARD LETTER APPROVAL

A blue ink signature of Andrew C. Kendall.

ANDREW C. KENDALL
Executive Director - Power System
Construction, Maintenance, and Operations

A blue ink signature of Marcie L. Edwards.

MARCIE L. EDWARDS
General Manager

DATE: April 27, 2016

SUBJECT: Amendment No. 2 to Agreement No. 47012 for Services to Implement Maximo 7.X for Enterprise Asset Management with Total Resource Management, Inc.

SUMMARY

Maximo is an Enterprise Asset Management (EAM) application that replaced two legacy LADWP systems. EAM provides a systematic, cost effective approach to maintaining, upgrading and operating physical assets. Maximo is a platform for managing assets for refining maintenance processes to reduce overall operating and maintenance costs and to improve system reliability. The Maximo components Work Management (WM) Work and Asset Management went Live on September 18, 2015, and the Supply Chain Services (SCS) Inventory and Receiving went Live on October 13, 2015.

The purpose of Amendment No. 2 is to extend the term of Agreement No. 47012 (Agreement) for one additional year until May 18, 2018, and to increase the Agreement total by \$2.5 million, from \$12,415,000 to \$14,915,000. The Amendment is required to develop enhancements and make improvements to the current Maximo application.

Amendment No. 2 will provide the following:

- Additional safeguards to better validate data and workflow to reduce user error and increase accuracy of financial reporting for Inventory and Receiving
- Include implementation of a scheduling tool to improve efficiency and ability to plan work
- Provide additional users with data migration into Maximo
- Allow for the development of additional reports
- Provide additional training to LADWP staff

Subsequent enhancements to Maximo and the continued ongoing maintenance will be provided under a subsequent Request for Proposal contracting effort.

City Council approval is required and accordingly, attached is the City Administrative Officer (CAO) report dated April 20, 2016.

RECOMMENDATION

It is recommended that the Board of Water and Power Commissioners (Board) adopt the attached Resolution recommending City Council's approval of the execution of Amendment No. 2 to Agreement No. 47012, extending the contract term between LADWP and Total Resource Management, Inc. by one-year from May 19, 2017 to May 18, 2018, and increasing the agreement limit by \$2,500,000 from \$12,415,000 to \$14,915,000, approved as to form and legality by the City Attorney.

ALTERNATIVES CONSIDERED

The alternative to the proposed Amendment is to develop, advertise, and award a new agreement. It would be impractical and costly for LADWP to pursue a new procurement effort for two reasons. First, the time to procure a new agreement would result in lengthy delays in the implementation of the enhancements to the Maximo system identified in (UAT) and post Go-Live operations. This would lead to the extended use of less efficient work-around processes. Second, many of these enhancements were analyzed and estimated by the current vendor, including helping LADWP determine whether the issues could be deferred to post Go-Live. Obtaining a new vendor would result in a considerable learning curve and redundant work to engage another vendor in this work effort. This work requires experience with the Maximo software, the history of data migration, database mapping, and construction of application interfaces in order to make modifications to the Maximo system, which has been configured specifically for LADWP.

Without the Amendment to extend the contract term and increase the not-to-exceed funding limit, the required post Go-Live work cannot be completed. LADWP would not be able to improve efficiency through the implementation of the planning and scheduling tool, further improve asset management through the data migration of other Water and Power assets and workgroups into Maximo, obtain additional technical training, nor develop additional reports.

FINANCIAL INFORMATION

The Amendment will increase the Agreement limit as follows:

	Current Maximum	Amendment No. 1	Requested Amendment No. 2	Amended Maximum Expenditure
Original Period (3 years - 2011 - 2014)	\$ 9,915,000			

	Current Maximum	Amendment No. 1	Requested Amendment No. 2	Amended Maximum Expenditure
Amendment No. 1 (3 additional years 2014 - 2017)		\$2,500,000		\$12,415,000
Requested Amendment No. 2 (1 additional year 2017 - 2018)			\$2,500,000	\$14,915,000

The total amended maximum expenditure for this Agreement is a not-to-exceed amount of \$14,915,000. The final contract value will be based only on the actual funds expended for the development of the project.

Current expenditures through April of 2016 are projected at \$12,325,000. Approximately \$90,000 remains in the Agreement for Post Go-Live Support through June 2016.

BACKGROUND

Agreement No. 47012 was approved by the Board on May 3, 2011, for an amount not-to-exceed \$9,915,000 and a term of three years.

The three-year duration for the Agreement included an 18-month implementation period for three originally planned rollout phases (Power System, Water System, and Supply Chain Services), which was aggressive and did not include any contingency time that allowed for any possible project delays. The complexity of replacing LADWP's legacy Material Control System (MCS) and Integrated Purchasing Receiving System (IPRS), and integrating Maximo with LADWP's financial systems was significantly underestimated. The functions performed by MCS and IPRS and the interfaces to the LADWP's legacy financial systems are highly complicated. As a result, additional time and resources had to be allocated to better understand the processes and develop the necessary functionalities in Maximo that were provided by MCS and IPRS.

Project Benefits

The benefits of the Maximo application at LADWP include:

1. A unified platform of Maximo 7.X for both the Power and the Water Systems
2. Work Management (Work Orders and Cost Tracking)
3. Asset Management (Equipment Lifecycle).
4. Replacement of the legacy Mainframe Material Control System (MCS) with Maximo Inventory System
5. Replacement of the legacy Integrated Purchasing Receiving System (IPRS) with Maximo Receiving

Maximo in replacing the mainframe MCS and IPRS provides for:

1. Full integration and transparency among Inventory/Requisition/Purchase Order/Receipt/ Inspection/Delivery and Asset Management
2. Requirements for planning and inventory replenishment improvements
3. Quick access to vendor performance data such as outstanding deliveries and returns for improved vendor evaluation
4. Improved tracking of spare parts to assets
5. Real-time inventory balance information and streamlined processing by incorporating wireless data scanners to record issue, receipt and, physical inventory transactions

Maximo also performs key financial processes for LADWP inventory and financial reporting as well as Cost Difference Register (CDR) Adjustments pertaining to vouchers and receipts.

LADWP and Total Resources Management, Inc. executed Amendment No. 1 to the Agreement in May 2014, after Board and City Council approval, extending the Agreement an additional three years to May 18, 2017, and adding \$2.5 million to the Agreement cost limit for a new contract limit of \$12,415,000. The increase in funds were approved to provide for additional specified work, including training, report creation, data migration assistance, a scheduling application, development of error handling and error reporting, and TRM project management costs. Amendment No. 1 also included contingency funds for other change order items that could arise.

Subsequent to the execution of Amendment No. 1, the Financial Services Organization (FSO) determined that a significant redesign was required to the CDR Adjustment Application. The custom application developed for FSO was to replicate the functionality in MCS for processing reconciliations of inventory and non-inventory items. This change to the CDR application involved substantial rework and led to the need to add more time for SCS/FSO User Acceptance Testing (UAT). Necessary refinement and corrections to the requested requirements resulted in changes to the project schedule and additional project management costs.

Amendment No.1 contingency funds were depleted and funds that were intended for other Project purposes were redirected to fund the CDR application redesign and associated report changes to ensure accurate financial reporting of material and inventory valuation and related liability.

Project Efforts to Completion

Following the acceptance of Maximo by WM and SCS the six-month warranty started for WM in January 2016 and April 2016 for SCS.

This Amendment will increase the expenditure limit and will provide funds for deferred work, specified other work, and contingency funds for additional services needed to facilitate the proper implementation of Maximo. All work collectively will enhance

Maximo's ability to provide meaningful data to facility and asset managers and will assist them in making well informed decisions.

Upon approval of Amendment No. 2, funding the project will proceed with planning and obtaining detailed estimates for the following items:

- Services to address Maximo performance issues and implement additional modifications required by FSO, ITS, SCS and WM for post Go-Live, such as redefine requirements, redesign of interfaces, and changes in configurations, necessary for Water and Power Systems and SCS business needs (including new requirements or changes that have been specifically deferred to post Go-Live). The deferred changes include modifications to the Maximo inventory modules that would minimize processing errors; the development of the Pi Historian Interface and Prevalidation of the interfaces, which would allow Maximo to automatically generate work orders when certain conditions are met in the Power System; and changes to Maximo that would control or eliminate input errors in creating or processing of work orders at approximately \$600,000. Task Orders will be issued and negotiated by the LADWP Contract Administrator for each item that is identified under this category.
- Services that are deemed to be necessary to address unforeseen issues or problems that have arisen during the post Go-Live implementation period at approximately \$570,000. Task Orders will be issued and negotiated by the LADWP Contract Administrator for each item that is identified under this category.
- Added support and training services until LADWP has gained the necessary knowledge and skills needed to support the Maximo system at approximately \$250,000. Due to the customization and configuration changes to the out-of-the-box Maximo, additional technical training is needed to enhance LADWP's Information Technology Services' (ITS) ability to provide more effective technical support.
- Added services needed for the development of additional reports that were deferred to post Go-Live for SCS, FSO, and WM at approximately \$250,000. Only those reports that were identified as must-have at Go-Live have been developed. ITS resources post Go-Live will be fully engaged in supporting Maximo and the ability to support report development for the business organizations will be limited and will need to be augmented.
- Services for data migration of additional LADWP data (assets) into Maximo 7.X not included in the original scope at approximately \$155,000. This will allow for additional groups within LADWP to be added and migrated to Maximo.
- Configuration and implementation of a Planning and Scheduling application that integrates with Maximo 7.X, to provide LADWP with the ability to more efficiently manage personnel and resources at approximately \$250,000.
- Configuration and implementation of the Leave Time module in the WorkTech Time application needed to support the Planning and Scheduling application at approximately \$75,000.
- Project Management costs and reimbursable travel expenses associated with the additional tasks under this Amendment at approximately \$350,000.

Detailed cost estimates for the pre and post Go-Live additional requirements will be developed so that the work may be prioritized within the limits of this Amendment to meet the FSO, ITS, SCS and WM customer needs.

Additionally the Project will engage the vendor to assist the LADWP with the upgrade of the Maximo application from 7.5.0.3 to the newest version of Maximo 7.6X.

Tasks to be implemented and deliverables to be provided under this Amendment will be specified in individual Task Orders authorized in accordance with the Task Order Development provisions in the Agreement as specified in Article III, Compensation and Method of Payment, and Article V, Task Order Development and Approval.

Post Agreement Efforts

For a period of one year after the completion of the warranty period (October 2016 to October 2017), the vendor is responsible under this Agreement for the maintenance of the installed application.

The maintenance costs for the one year period included in this Agreement is approximately \$300,000.

ITS will be developing the next Request For Proposal (RFP) on further Maximo maintenance agreements, and any necessary enhancements not covered in this Agreement. Detailed estimates for future application maintenance and enhancements will be developed during the preparation of the RFP. LADWP ITS staff and section leads will also provide support functions for the daily maintenance of the system (adding and moving employees, managing security profiles), monitoring of the system, scheduling of activities, and some application and report development.

ENVIRONMENTAL DETERMINATION

In accordance with the California Environmental Quality Act (CEQA), it has been determined that the action of entering into the Agreement with TRM for services to implement Maximo 7.X for enterprise asset management, is exempt pursuant to the General Exemption described in CEQA Guidelines Section 15061 (b)(3). General Exemptions apply in situations where it can be seen with reasonable certainty that there is no possibility that the activity in question may have a significant effect on the environment.

CITY ATTORNEY

The Office of the City Attorney reviewed and approved the Agreement and Resolution as to form and legality.

ATTACHMENTS

- Procurement Summary
- Resolution
- Amendment No. 2 to Agreement No. 47012
- CAO Report