



● **Board of Directors**
Engineering and Operations Committee

6/14/2022 Board Meeting

7-7

Subject

Award a \$2,257,897 contract to Leed Electric, Inc. for replacement of ozone power supply units at the Joseph Jensen Water Treatment Plant; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Ozone is used as the primary disinfectant at Metropolitan's five water treatment plants. Reliable operation of the ozonation system is essential for Metropolitan to meet drinking water regulations and address treatment challenges resulting from periodic water supply events. The existing ozone power supply units (PSUs) at the Joseph Jensen Water Treatment Plant (Jensen plant) have reached the end of their service life and need to be replaced. The procurement of the replacement PSUs was authorized through a board action in February 2020 and the units are scheduled for delivery in July 2022. A construction contract for installation of the new ozone PSUs was awarded by the Board in November 2021, but the contract was terminated in January 2022 due to contractor debarment. This action awards a new construction contract for installation of the ozone PSUs at the Jensen plant.

Details

Background

The Jensen plant was placed into service in 1972 with an initial capacity of 400 million gallons per day (mgd) and expanded to its current capacity of 750 mgd in the 1990s. Located in Granada Hills, the Jensen plant normally treats water from the West Branch of the State Water Project (SWP) and delivers it to Metropolitan's Central Pool and to exclusive service areas on the west side of the distribution system.

Metropolitan employs ozone as the primary disinfectant at each of its water treatment plants to substantially reduce the formation of disinfection byproducts for compliance with the United States Environmental Protection Agency's Disinfectants and Disinfection Byproducts Rule. Ozone pre-disinfection also controls taste-and-odor-causing compounds and algal toxins. The ozonation process involves numerous equipment items and support systems, including high voltage PSUs, ozone generators, cooling system, ozone destruct system, ozone contactors, programmable logic controllers, liquid oxygen system, and safety and water quality monitoring equipment.

The ozone generation system at the Jensen plant was originally placed into operation in 2005. Five ozone generators and five PSUs were originally installed to reliably treat up to 750 mgd. While the currently available ozone generation system components are suitable for operation in the short-term, the existing ozone PSUs and generator dielectrics have reached the end of their service life and require replacement to maintain the plant's long-term operational reliability. In February 2020, Metropolitan's Board awarded a procurement contract for four PSUs and four sets of generator dielectrics to rehabilitate the ozone generation system at the Jensen plant. Fabrication of the equipment has been completed, and delivery is scheduled for July 2022. In November 2021, Metropolitan's Board awarded a \$1,477,000 construction contract to Minako America Corporation (dba Minco Construction) for the replacement of ozone PSUs at the Jensen plant.

Following the construction contract award, staff received a notification from the State of California's Department of Industrial Relations regarding the debarment of Minco Construction. Pursuant to the Labor Code and California Code of Regulations, Minco Construction is disqualified from bidding and working on public works

projects during the debarment period, which extends through September 26, 2022. As a result, staff issued a Notice of Termination of the contract with Minco Construction, effective January 25, 2022. The project has been re-advertised following the contract termination. Staff recommends proceeding with the award of a new construction contract to replace the ozone PSUs at the Jensen plant at this time.

In accordance with the April 2020 action on the biennial budget for fiscal years 2020/21 and 2021/22, the General Manager will authorize staff to proceed with the action described herein, pending board award of the construction contract described below. Based on the current CIP expenditure forecast, funds for the work to be performed pursuant to the subject contracts during the current biennium are available within the Capital Investment Plan Appropriation for Fiscal Years 2020/21 and 2021/22 (Appropriation No. 15517). Funds required for work to be performed pursuant to the subject contract after fiscal year 2021/22 are budgeted within the Capital Investment Plan Appropriation for Fiscal Years 2022/23 and 2023/24. This project has been reviewed in accordance with Metropolitan's CIP prioritization criteria and was approved by Metropolitan's CIP evaluation team to be included in the Treatment Plant Reliability Program.

Jensen Ozone PSUs Replacement – Construction

The scope of the construction contract includes sequential removal of five PSUs and installation of four Metropolitan-furnished PSUs; installation of associated electrical power distribution equipment, instrumentation and control equipment, high voltage cables, and communication components; and modifications of the cooling water system.

In addition to the above, Metropolitan forces will install dedicated fiber-optic signal wiring and conduit from the ozone master control panel to each PSU; modify the plant's Supervisory Control and Data Acquisition system; replace ozone generator dielectrics; provide field support for equipment start-up and testing, shutdown and tie-in coordination; and salvage of PSU internal components. Finally, the PSU vendor Suez Treatment Solutions, will perform start-up and testing and will provide field assistance during equipment installation, under the existing procurement contract.

A total of \$4.76 million is required to perform the construction work, which includes the amount of the contract, and funds previously allocated following the November 2021 Board action, including \$615,000 for construction management and inspection; \$670,000 for Metropolitan force activities described above; \$120,000 for submittals review and responding to requests for information; \$230,000 for technical support during construction and commissioning activities, and preparation of record drawings by CDM Smith, Inc. under the professional service agreement previously authorized by the Board; \$460,000 for contract administration, environmental monitoring, and project management; and \$407,103 for remaining budget. **Attachment 1** provides the allocation of required funds.

Award of Construction Contract (Leed Electric, Inc.)

Specifications No. 2001A for the Jensen PSU Replacement project was advertised for bids on March 3, 2022. As shown in **Attachment 2**, one bid was received and opened on April 27, 2022. This single bid result occurred despite staff's efforts to expand bidder awareness of the project during the advertisement period, and is a similar result to the project's original bidding process that took place in 2021, in which a single bid was received. The bid from Leed Electric, Inc. (Leed Electric) in the amount of \$2,257,897 complies with the requirements of the specifications. The engineer's estimate was \$1.86 million. Staff conducted a survey among prospective bidders to investigate possible reasons for a single bid and concluded that most firms may have decided not to submit bids due to the region's current active construction market, and their committed resources on existing projects. Staff attributes the higher-than-expected bid amount to increased costs for materials, labor, and transportation. For this contract, Metropolitan established a Small Business Enterprise participation level of at least 25 percent of the bid amount. Leed Electric is an SBE firm, and thus achieves 100 percent participation. The subcontractors for this contract are listed in **Attachment 3**.

This action awards a \$2,257,897 million contract to Leed Electric, Inc. to replace the ozone PSUs at the Jensen plant.

As described above, construction management and inspection will be performed by Metropolitan staff. The total cost of construction for this project is \$7.09 million, which includes \$4.16 million for the pre-purchased equipment, \$2,257,897 for the contract, and \$670,000 for Metropolitan force work, materials, and supplies.

Engineering Services' performance metric target range for construction management and inspection of projects with construction greater than \$3 million is 9 to 12 percent. For this project, the performance metric goal for inspection is 8.7 percent of the total construction cost.

Alternatives Considered

A single bid for this project was received, and the engineer's estimate for the project was lower than the bid price. Staff considered rejecting the single bid and rebidding the project. Under this approach, it would take approximately six months to repackage the construction bid documents, perform additional contractor outreach, and return to the Board for the award of a contract. However, based on the current rising costs for materials and labor, the potential for a subsequent advertisement/bidding process to yield a lower bid price at a later date is uncertain. Additionally, this project has already experienced a six-month delay due to the termination of the original contract for this work.

Staff recommends the award of a contract at this time as this approach will allow for the timely installation of Metropolitan-furnished PSUs. The PSU equipment is currently in fabrication and is scheduled to ship next month. The recommended approach will allow for completion of the PSU replacement with minimal operational impacts since the plant is currently operating at relatively low flow rates as a result of the anticipated low SWP allocation.

Summary

This action awards a \$2,257,897 contract to Leed Electric, Inc. for replacement of ozone PSUs at the Jensen plant. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the Abstract of Bids, **Attachment 3** for the listing of Subcontractors for Low Bidder, and **Attachment 4** for the Location Map.

Project Milestone

December 2023 – Completion of ozone PSU replacement at the Jensen plant

Policy

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 51895, dated February 11, 2020, the Board awarded a contract to procure power supply units and dielectrics for Jensen's ozone generation system.

By Minute Item 51963, dated April 14, 2020, the Board appropriated a total of \$500 million for projects identified in the Capital Investment Plan for Fiscal Years 2020/21 and 2021/22.

By Minute Item 52575, dated November 9, 2021, the Board awarded a construction contract to Minco Construction for replacement of ozone power supply units at the Jensen plant; and authorized an agreement with CDM Smith Inc. for engineering services to support Jensen ozone generation rehabilitation.

By Minute Item 52778, dated April 12, 2022, the Board appropriated a total of \$600 million for projects identified in the Capital Investment Plan for Fiscal Years 2022/23 and 2023/24.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action involves operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use and no possibility of significantly impacting the physical environment. In addition, the proposed action includes the replacement and reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have the same purpose and capacity as the structure replaced. Accordingly, the proposed action qualifies under Class 1 and Class 2 Categorical Exemptions (Sections 15301 and 15302 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

CEQA determination for Option #3:

None required

Board Options

Option #1

Award a \$2,257,897 contract to Leed Electric, Inc. for replacement of ozone power supply units at the Jensen plant.

Fiscal Impact: Expenditure of \$4.76 million in capital funds. Approximately \$10,000 will be incurred in the current biennium and has been previously authorized. The remaining funds from this action are accounted for in the next biennial budget and were authorized in April 2022.

Business Analysis: This option will enhance the operational reliability of the ozone generation system at the Jensen plant.

Option #2

Reject all bids and advertise/bid the project again in 12 months when economic conditions stabilize, and perform additional contractor outreach.

Fiscal Impact: Additional costs associated with repackaging of construction bid documents and contractor outreach efforts.

Business Analysis: This option may or may not result in a lower bid price. However, it would delay the replacement of ozone PSUs at the Jensen plant and increase the risk of an unplanned outage of the ozone disinfection system.

Option #3

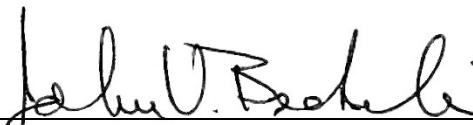
Do not proceed with the project at this time.

Fiscal Impact: Extended storage cost for pre-purchased equipment.

Business Analysis: This option would forgo an opportunity to enhance the operational reliability of the Jensen plant.

Staff Recommendation

Option #1


John V. Bednarski
Manager/Chief Engineer
Engineering Services
5/20/2022 Date


Adel Hagekhalil
General Manager
5/23/2022 Date

Attachment 1 – Allocation of Funds**Attachment 2 – Abstract of Bids****Attachment 3 – Subcontractors for Low Bidder****Attachment 4 – Location of Map**

Allocation of Funds for Jensen Ozone Generation System Rehabilitation

	Current Board
	Action ¹
	(Jun. 2022)
Labor	
Studies & Investigations	\$ -
Final Design	-
Owner Costs (Program mgmt., envir. monitoring)	460,000
Submittals Review & Record Drwgs.	120,000
Construction Inspection & Support	615,000
Metropolitan Force Construction	650,000
Materials & Supplies	20,000
Incidental Expenses	-
Professional/Technical Services	-
CDM Smith	230,000
Right-of-Way	-
Equipment Use	-
Contracts	-
Leed Electric, Inc.	2,257,897
Remaining Budget	407,103
Total	\$ 4,760,000

¹The total amount expended to date to rehabilitate the Jensen plant's ozone generation system is approximately \$1.9 million. The total estimated cost to complete the project, including the amount appropriated to date and the new construction contract described in this action, is \$11.0 million. \$4.63 million of the required total was allocated to the project after the November 2021 board action.

The Metropolitan Water District of Southern California**Abstract of Bids Received on April 27, 2022, at 2:00 P.M.****Specifications No. 2001A
Jensen Ozone Power Supply Units Replacement**

The work consists of removal of five ozone generator power supply units (PSU) and installation of four Metropolitan-furnished PSUs; removal, modification, or installation of associated electrical power distribution and control system, instrumentation and control equipment, cooling water system, high voltage cables, and control and communication modules.

Engineer's estimate: \$1,860,000

Bidder and Location	Total	SBE \$	SBE %	Met SBE ¹
Leed Electric, Inc. Santa Fe Springs, CA	\$2,257,897	\$2,257,897	100%	Yes

¹ Small Business Enterprise (SBE) participation level established at 25% for this contract.

The Metropolitan Water District of Southern California**Subcontractors****Specifications No. 2001A
Jensen Ozone Power Supply Units Replacement**

Bidder's name: Leed Electric, Inc.

Subcontractor and Location
Mehta Mechanical Company, Inc. La Palma, CA
United Riggers & Erectors, Inc. Walnut, CA

Distribution System

