



OPERATIONS COMMITTEE

Administration Building
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Agenda Report

File #: 2023-2912

Agenda Date: 4/26/2023

Agenda Item No: 10.

FROM: Robert Thompson, General Manager
Originator: Riaz Moinuddin, Director of Operations & Maintenance

SUBJECT:

MSP VFD #7 ISOLATION TRANSFORMER REPLACEMENT AT PLANT NO. 2

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

- A. Approve a Sole Source Purchase Order Contract to OneSource Distributors, Inc. to replace the No. 7 Main Sewage Pump Variable Frequency Drive isolation transformer for a total amount not to exceed \$255,925 plus applicable sales tax and freight; and
- B. Approve a contingency of \$25,593 (10%).

BACKGROUND

Orange County Sanitation District's (OC San) Plant No. 2 headworks facility is designed with seven Main Sewage Pumps (MSP). Each MSP has a Variable Frequency Drive (VFD) that controls the speed of the MSP to maximize efficiency of the pumping operation. The VFDs are Rockwell Automation medium voltage VFDs and are fed by 12KV feeder that is transformed down to 4.16KV. The step-down transformer is a critical sub-component to operate the MSP VFDs.

RELEVANT STANDARDS

- Maintain a proactive asset management program
- Maintain a culture of improving efficiency to reduce the cost to provide the current service level or standard

PROBLEM

The Plant No. 2 MSP #7 VFD isolation transformer was found inoperable due to an internal electrical fault causing failure to the VFD unit. MSP #7 is one of four pumps on the reclaimable side and is no longer operable.

PROPOSED SOLUTION

Approve a Sole Source Purchase Order to the Original Equipment Manufacturer (OEM) to replace the isolation transformer.

TIMING CONCERNS

The isolation transformer has a long lead time. Estimated delivery time is 25 weeks for the vendor to provide a replacement transformer.

RAMIFICATIONS OF NOT TAKING ACTION

Main Sewage Pumps are critical equipment. One MSP on the reclaimable water side of Headworks will not be available, resulting in diminished flow capacity of approximately 75 MGD which may potentially be needed during the next wet weather period.

PRIOR COMMITTEE/BOARD ACTIONS

N/A

ADDITIONAL INFORMATION

OneSource is the Board of Directors approved OEM for VFD parts and repairs.

CEQA

N/A

FINANCIAL CONSIDERATIONS

This request complies with authority levels of OC San's Purchasing Ordinance. This recommendation will be funded under the Repairs and Maintenance line item for Division 880, Plant No. 2 Maintenance (Adopted Budget, FY 2022-23 & 2023-24, Section 6, Page 96) and the available funding is sufficient for this action.

<u>Date of Approval</u>	<u>Contract Amount</u>	<u>Contingency</u>
04/26/2023	\$255,925	\$25,593 (10%)

ATTACHMENT

The following attachment(s) may be viewed on-line at the OC San website (www.ocsan.gov) with the complete agenda package:

N/A