



OPERATIONS COMMITTEE

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Agenda Report

File #: 2021-1436

Agenda Date: 2/3/2021

Agenda Item No: 2.

FROM: James D. Herberg, General Manager
Originator: Rob Thompson, Assistant General Manager

SUBJECT:

PLANT NO. 1 PRIMARY EFFLUENT PUMP STATION PUMP NO. 3 VARIABLE FREQUENCY DRIVE REPLACEMENT

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

- A. Approve a Purchase Order Contract for the purchase and installation of a replacement variable speed drive for Plant No. 1 Primary Effluent Pump Station Pump No. 3, using the U.S. Communities Master Agreement No. EV2370, to Graybar Electric, for an amount not to exceed \$113,890, including Sales Tax and Freight (FOB Destination); and
- B. Approve a contingency of \$11,389 (10%).

BACKGROUND

The Orange County Sanitation District's (Sanitation District) Primary Effluent Pump Station (PEPS) contains three 45-million gallon per day pumps that feed a portion of the secondary treatment facilities at Plant No. 1. PEPS Pump Nos. 1 and 2 are driven by electric motors with new Variable Frequency Drives (VFD) to regulate the rate of flow into the secondary treatment facilities.

RELEVANT STANDARDS

- Protect OC San assets
- 24/7/365 treatment plant reliability
- Maintain a proactive asset management program

PROBLEM

The existing PEPS Pump No. 3 VFD was installed in 1993. The 28-year-old VFD is out of service, obsolete, and no longer repairable. An operational and reliable VFD is required to manage peak wet weather flows, provide a standby pump, and mitigate the risk of a primary effluent spill.

PROPOSED SOLUTION

Staff recommends replacing PEPS Pump No. 3 VFD with a new turn-key solution from US

Communities/Graybar. The new VFD will allow the PEPS to reliably operate and will reduce risk in emergency conditions to manage peak wet weather flow events.

TIMING CONCERNS

Proceeding expeditiously to restore pump station capacity prior to an upcoming CIP project, Project No. P1-133, will improve reliability and reduce operational risks.

RAMIFICATIONS OF NOT TAKING ACTION

Not taking action will impact PEPS design capacity, reliability, and the ability to restore flow in the event of a remaining pump or VFD failure.

ADDITIONAL INFORMATION

The scope of this project covers replacement of existing Toshiba VFD unit with new VFD unit. A 10% contingency has been requested to cover any unforeseen issues with existing equipment or cabling during replacement.

CEQA

VFD replacement is categorically exempt from CEQA under the Class 1 categorical exemptions set forth in California Code of Regulations Section 15301. Section 15301 (Class 1) exempts from CEQA “the 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,” including “(b) Existing facilities of both investor and publicly-owned utilities used to provide electric power, natural gas, sewerage, or other public utility services”.

FINANCIAL CONSIDERATIONS

This request complies with authority levels of the Sanitation District’s Purchasing Ordinance. This recommendation will be funded under the Repair and Maintenance line item for Plant No. 1 Maintenance Department (Budget Fiscal Year 2020-21, Section 6, Page 92). The available funding is sufficient for this action.

<u>Date of Approval</u>	<u>Contract Amount</u>	<u>Contingency</u>
02/03/2021	\$113,890	\$11,389 (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

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