

## Agenda Report

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

**SUBJECT:**

ON-CALL PREVENTATIVE MAINTENANCE SERVICES FOR ELECTRICAL EQUIPMENT (MP-278)

**GENERAL MANAGER'S RECOMMENDATION**

RECOMMENDATION: Recommend to the Board of Directors to:

- A. Approve a Contract to provide on-call electrical maintenance services, Specification No. S-2019-1006BD-R, with Hampton Tedder Technical Services for a one-year period effective November 1, 2019 through October 31, 2020, for an amount not to exceed \$1,657,950, and approve four, one-year renewal options; and
- B. Approve a contingency of \$82,898 (5%).

**BACKGROUND**

The Orange County Sanitation District (Sanitation District) maintains large electrical distribution systems at the treatment plants and pump stations. The National Fire Protection Association (NFPA) 70B Standard, Recommended Practice for Electrical Equipment Maintenance, recommends testing and maintenance requirements to reduce hazards to life and property that can result from failure or malfunction of industrial-type electrical systems and equipment. The Sanitation District's electrical distribution equipment, systems, and components must be operational within applicable NFPA 70B standards and manufacturer's tolerances to avoid breakdown. Breakdowns can be costly failures and may result in major disruptions. The Sanitation District's electrical equipment must be field inspected, maintained, and calibrated at regular intervals to ensure reliability and safety.

**RELEVANT STANDARDS**

- Protect Orange County Sanitation District assets
- 24/7/365 treatment plant reliability
- Maintain a proactive asset management program

**PROBLEM**

There has been a significant increase in the number of pieces of electrical distribution equipment installed by CIP projects that require significant labor effort to test, calibrate, and maintain. The electrical equipment includes protective relays and circuit breakers.

## PROPOSED SOLUTION

Sanitation District staff recommends contracting with Hampton Tedder Technical Services as the lowest responsive and responsible bidder for on-call services to perform electrical equipment preventive maintenance activities per NFPA 70B requirements. NFPA 70B details standardized preventive maintenance for electrical, electronic, and communication systems equipment to prevent equipment failures and worker injuries.

## TIMING CONCERNS

Proceeding as soon as possible is desired to ensure that electrical equipment reliability and availability is maintained at a high level within the power distribution systems.

## RAMIFICATIONS OF NOT TAKING ACTION

Not taking action will mean greater risk of downtime and potential breakdowns or failures of electrical equipment.

## PRIOR COMMITTEE/BOARD ACTIONS

N/A

## ADDITIONAL INFORMATION

The proper maintenance of the Sanitation District's electrical assets helps avoid unplanned downtime and ensure continuous operations of our water treatment facility. To accomplish this task properly, there is a need for additional resources. An inventory summary for the Sanitation District's key electrical equipment is listed below:

Electrical Equipment Type	Plant 1	Plant 2	Pump Station	Total
Motor Control Centers	90	107	23	220
Switchgears	49	70	6	125
Variable Frequency Drives	160	134	42	336
Large Oil-Filled Transformers	53	72	0	115
Generators	12	19	9	40
Large Uninterruptible Power Supply	23	12	18	53
Battery Systems	21	17	0	38

The Sanitation District advertised for bids on May 16, 2019. Two sealed bids were received on June 18, 2019. The bids were evaluated in accordance with the Sanitation District's policies and procedures. Staff recommends awarding a service contract to the lowest responsive and responsible bidder, Hampton Tedder Technical Services, for on-call services to perform electrical equipment preventive maintenance activities. This contract can address up to approximately 150 electrical preventive maintenance tasks per year to help staff better maintain all its electrical assets and ensure

their reliability.

The summary information on the bid opening is as follows:

Bidder	Amount of Bid
Hampton Tedder Technical Services	\$1,657,950
HALCO Testing Services	\$1,876,500

## CEQA

N/A

## FINANCIAL CONSIDERATIONS

This request complies with authority levels of the Sanitation District's Purchasing Ordinance. This recommendation would be funded under the Repairs and Maintenance line item for Operations and Maintenance Department (Budget Update Fiscal Year 2019-20, Page 47), and the available funding is sufficient for this action.

<u>Date of Approval</u>	<u>Contract Amount</u>	<u>Contingency</u>
09/04/2019	\$1,657,950	\$82,898 (5%)

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## ATTACHMENT

*The following attachment(s) may be viewed on-line at the OCSD website ([www.ocsd.com](http://www.ocsd.com)) with the complete agenda package:*

- Service Contract for Spec. No. S-2019-1006BD-R

RM:ab:ac