

Orange County Sanitation District



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Agenda Report Details (With Text)

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Title: PLANT NO. 1 CENTRAL GENERATION UPS SYSTEM REPLACEMENT
Sponsors: Rob Thompson
Indexes:
Code sections:
Attachments: 1. Agenda Report, 2. File Summary

Date	Ver.	Action By	Action	Result
11/4/2020	1	OPERATIONS COMMITTEE		

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

SUBJECT:

PLANT NO. 1 CENTRAL GENERATION UPS SYSTEM REPLACEMENT

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

- A. Approve a Purchase Order Contract for the purchase and installation of a replacement uninterruptible power supply system for Plant No. 1 Central Generation, using the U.S. Communities Master Agreement No. EV2370, to Graybar Electric, for an amount not to exceed \$102,325, plus applicable sales tax and freight; and
- B. Approve a contingency of \$20,465 (20%).

BACKGROUND

The Orange County Sanitation District's (Sanitation District) Reclamation Plant No. 1 is powered by Southern California Edison and the Plant No. 1 Central Generation (CenGen) operating in parallel. The control and computer systems that manage the engines, power transfer systems, and process systems at CenGen are powered with an uninterrupted power supply (UPS) to prevent short-duration power interruption that cause system instability. Power system instability causes plant wide equipment shutdowns.

RELEVANT STANDARDS

- Protect Orange County Sanitation District assets

- 24/7/365 treatment plant reliability
- Maintain a proactive asset management program

PROBLEM

The existing CenGen UPS system was installed under Project No. J-19-1 in 1993. This UPS system is at the end of its useful life and prone to battery failures. System components are obsolete, so replacement parts are difficult to locate and procure. The system may be down for extended periods when failures occur while parts are located and procured.

PROPOSED SOLUTION

Staff recommends replacing the existing CenGen UPS and batteries with a new turnkey solution from U.S. Communities/Graybar. The new UPS system will reduce operational risk and improve maintainability of the system.

TIMING CONCERNS

The Headworks Rehabilitation and Expansion Project No. P1-105 will replace the CenGen UPS in 2027 when a new power building is built and commissioned. The existing UPS cannot provide reliable service through 2027.

RAMIFICATIONS OF NOT TAKING ACTION

Not acting will impact the Plant No.1 power stability. In addition, the Continuous Emission Monitoring System for the CenGen engines will be impacted risking Air Quality Management District permit compliance.

PRIOR COMMITTEE/BOARD ACTIONS

N/A

ADDITIONAL INFORMATION

The scope of this project covers replacement of existing UPS units, batteries, and external bypass switches with new UPS units, batteries, and bypass switches. A 20% contingency is requested to cover any unforeseen issues during replacement and/or potential contactor delays caused by schedule conflicts involving taking critical equipment offline.

CEQA

UPS 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>
11/04/2020	\$102,325	\$20,465 (20%)

ATTACHMENT

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

N/A

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