



OPERATIONS COMMITTEE

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Agenda Report

File #: 2024-3489

Agenda Date: 3/6/2024

Agenda Item No: 3.

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

SUBJECT:

OVERHAUL ON THREE TURBOCHARGERS AT CENTRAL GENERATION ENGINES AT PLANT NO. 2

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

- A. Approve a Sole Source Purchase Order to Cooper Machinery Services for a complete rebuild of three turbochargers for the Central Generation Engines at Plant No. 2 for a total amount not to exceed \$225,000, including applicable taxes and freight; and
- B. Approve a contingency of \$22,500 (10%).

BACKGROUND

The Orange County Sanitation District (OC San) uses five engines at the Central Generation station at Plant No. 2 to convert biogas to electricity and heat to support the plant recycling process. These generator engines provide necessary power for process area Distribution Centers and also provide backup power in the event Southern California Edison loses power. These engines comply with SCAQMD requirements and meet all regulatory operational permits.

RELEVANT STANDARDS

- 24/7/365 treatment plant reliability
- Use all practical and effective means for resource recovery
- Maintain a proactive asset management program
- Operate and maintain facilities to minimize impacts on surrounding communities, including odor, noise, and lighting

PROBLEM

Currently, three engine turbochargers need refurbishment, two engines are currently not available for operation, and one turbocharger unit is a spare. With the two engines not available, Plant No. 2 is vulnerable to power upsets and power distribution instability which is detrimental to Plant No. 2 process operations.

PROPOSED SOLUTION

The three turbochargers require a complete rebuild by the Original Equipment Manufacturer (OEM), Cooper Machinery Services. Once returned, two units will be re-installed and returned to normal plant operations and the third unit will be used as a ready warehouse spare part.

TIMING CONCERNS

The absence of backup engines can reduce redundancy and reliability, increasing the likelihood of operational disruptions and flaring of biogas.

RAMIFICATIONS OF NOT TAKING ACTION

Not rebuilding turbochargers will reduce engine availability and will require OC San to import power or operate on 3rd level generators; and could also potentially result in flaring of biogas, unnecessarily.

PRIOR COMMITTEE/BOARD ACTIONS

August 2017 - General Manager approved purchases and additions to the pre-approved OEM Sole Source list on the General Manager’s quarterly approved purchases agenda report.

ADDITIONAL INFORMATION

Cooper Machinery Services is the OEM and is the authorized service provider within OC San’s geographical region. A 10% contingency is requested in the event of pricing changes due to tariffs, inflationary concerns, delays in order placement, or other unforeseeable changes.

CEQA

N/A

FINANCIAL CONSIDERATIONS

This request complies with authority levels of OC San’s Purchasing Ordinance. This recommendation will be funded under the Plant No. 1 and Plant No. 2 Maintenance Department, Budget Update 2023-2024, Page 39. The available funding is sufficient for this action.

<u>Date of Approval</u>	<u>Contract Amount</u>	<u>Contingency</u>
03/06/2024	\$225,000	\$22,500 (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

RZ:ls