



OPERATIONS COMMITTEE

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Agenda Report

File #: 2024-4012

Agenda Date: 12/18/2024

Agenda Item No: 17.

FROM: Robert Thompson, General Manager
Originator: Mike Dorman, Director of Engineering

SUBJECT:

ENGINE AND GENERATOR OVERHAULS AT PLANT NO. 1 AND 2, PROJECT NO. J-135B

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

Approve a contingency increase of \$711,765 to the existing Sole Source Service Contract with Cooper Machinery Services LLC for Engine and Generator Overhauls at Plant Nos. 1 and 2, Project No. J-135B, as part of Central Generation Engine Overhauls at Plant Nos. 1 and 2, Project No. J-135, for a new total contingency of \$5,284,985 (18%).

BACKGROUND

In the early 1990s, Orange County Sanitation District (OC San) installed eight internal combustion engines manufactured by Cooper Bessemer at the Central Generation (CenGen) facilities at Plant Nos. 1 and 2 to generate electricity using digester gas. During normal operating conditions, CenGen facilities supply approximately 60% of the electricity at Plant No. 1 and 95% of the electricity at Plant No. 2.

In July 2022, a Sole Source Service Contract was awarded to Cooper Machinery Services LLC for Engine and Generator Overhauls at Plant No. 1 and 2, Project No. J-135B. The work under this contract overhauls four engines and refurbishes five generators.

RELEVANT STANDARDS

- Maintain a proactive asset management program
- Comply with environmental permit requirements
- Use all practical and effective means for resource recovery

PROBLEM

The original contract called for the overhaul of four engines, with all parts disassembled and inspected, however, only specific parts were to be replaced based on their estimated remaining useful life. During the overhaul of the first two engines, additional components outside the original scope were found needing replacement or repair. While the original contract did include one new set of pistons and one camshaft re-lobe, these parts are needed for each engine. Change orders have

already been issued to cover the complete overhaul of two of the four engines. While the remaining contingency funds are sufficient to cover the third engine, it is expected to be insufficient to cover the cost of the fourth and final engine under this contract.

PROPOSED SOLUTION

Approve a contingency increase to the existing Sole Source Service Contract to cover additional costs associated with completing the overhaul of the fourth engine and potential future unforeseen change orders.

TIMING CONCERNS

The third engine overhaul began in September 2024, and the fourth is planned for July 2025. Delaying this action would delay the overhaul of the fourth engine.

RAMIFICATIONS OF NOT TAKING ACTION

If the contract contingency is not increased, the remaining contingency would be divided between the third and fourth engines to maximize the overhaul efforts. Priority would be given to fully overhauling the third engine, which may leave the fourth engine short of being fully functional. Incomplete overhauls could reduce system reliability and may result in potential SCAQMD permit violations.

PRIOR COMMITTEE/BOARD ACTIONS

April 2023 - Approved the addition of funds to include generator overhauls as part of the construction contract with Cooper Machinery Services LLC for the Engine and Generator Overhauls at Plant Nos.1 and 2, Contract No. J-135B, in the amount of \$1,637,117 (5.6%), for a total construction contingency of \$4,573,220 (15.6%).

July 2022 - Awarded a Sole Source Service Contract to Cooper Machinery Services LLC for Engine and Generator Overhauls at Plant No.1 and 2, Project No. J-135B, for a total amount of not to exceed \$29,361,029; and approved a contingency of \$2,936,103 (10%).

ADDITIONAL INFORMATION

The contingency increase authorized in April 2023 was to rewind three generators, which was not included in the original contract. A portion of the original contingency was used to rewind the first two generators.

CEQA

The project is exempt from CEQA under the Class 1 categorical exemptions set forth in California Code of Regulations Section 15301.

FINANCIAL CONSIDERATIONS

This request complies with the authority levels of OC San's Purchasing Ordinance. This item has been budgeted (Budget FY 2024-25 and 2025-26, Section 8, Page 43, Central Generation Engine

Overhauls at Plant No. 1 and 2, Project No. J-135) and the budget is sufficient for the recommended action.

ATTACHMENT

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

- Presentation