



OPERATIONS COMMITTEE

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Agenda Report

File #: 2024-3518

Agenda Date: 3/27/2024

Agenda Item No: 7.

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

SUBJECT:

CENGEN PLANT WATER PIPE REPLACEMENT AT PLANT NO. 1, PROJECT NO. FE19-02

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

- A. Receive and file the Bid Tabulation and Recommendation for CenGen Plant Water Pipe Replacement at Plant No. 1, Project No. FE19-02;
- B. Award a Construction Contract to Innovative Construction Solutions for CenGen Plant Water Pipe Replacement at Plant No. 1, Project No. FE19-02, for a total amount not to exceed \$3,385,000; and
- C. Approve a contingency of \$338,500 (10%).

BACKGROUND

The Central Generation (CenGen) Facility at Orange County Sanitation District (OC San) Plant No. 1 was constructed in 1994 to generate electricity using digester gas, while providing heat to the laboratory building, administration building, and digesters. During normal operating conditions, the CenGen Facility at Plant No. 1 supplies approximately 45% of the electricity utilized at Plant No. 1. During a utility power outage, CenGen provides standby power to various major treatment processes. CenGen requires cooling water to operate and keep the engines and ancillary processes cool.

RELEVANT STANDARDS

- Comply with California Public Contract Code Section 20103.8, award construction contract to lowest responsive, responsible bidder
- Commitment to safety & reducing risk in all operations

PROBLEM

The cooling water is highly corrosive and is causing the existing steel pipe and associated joints to develop leaks. The water leaks are currently being managed by OC San's Maintenance Division with temporary solutions such as replacing short pipe segments, installing pipe clamps, welding, or other various short-term repairs. With time, the leaks will increase in occurrence and size. If the cooling

water piping system fails, one or more engines will most likely need to be shut down, which will reduce power production at Plant No. 1. This will require excess digester gas to be flared or sent to Plant No. 2 CenGen.

PROPOSED SOLUTION

Award a construction contract for CenGen Plant Water Pipe Replacement at Plant No. 1, Project No. FE19-02. This project will replace the existing CenGen cooling water piping with fiberglass reinforced plastic piping which is resistant to corrosion.

TIMING CONCERNS

The frequency and severity of leak failures will continue to increase until replaced.

RAMIFICATIONS OF NOT TAKING ACTION

If no action is taken, there will continue to be a risk of a piping system failure due to corrosion, thus posing an ongoing risk of losing one or more central generators.

PRIOR COMMITTEE/BOARD ACTIONS

N/A

ADDITIONAL INFORMATION

OC San advertised Project No. FE19-02 for bids on September 7, 2023 and four sealed bids were received on January 18, 2024. A summary of the bid opening follows:

Engineer's Estimate	\$ 3,330,000
<u>Bidder</u>	<u>Amount of Bid</u>
Innovative Construction Solutions	\$ 3,385,000
Tharsos, Inc.	\$ 4,195,550
Mehta Mechanical Company, Inc.	\$ 4,254,000
United Riggers and Erectors, Inc.	\$ 5,607,680

The bids were evaluated in accordance with OC San's policies and procedures. A notice was sent to all bidders on February 23, 2024, informing them of the intent of OC San staff to recommend award of the Construction Contract to Innovative Construction Solutions.

Staff recommends awarding a Construction Contract to the lowest responsive and responsible bidder, Innovative Construction Solutions, for a total amount not to exceed \$3,385,000.

CEQA

The project is exempt from CEQA under the Class 1 categorical exemptions set forth in California Code of Regulations section 15301. A Notice of Exemption will be filed with the OC Clerk-Recorder after OC San Board of Directors approval of the construction contract.

FINANCIAL CONSIDERATIONS

This request complies with the authority levels of OC San's Purchasing Ordinance. This item has been budgeted (Budget Update, Fiscal Year 2023-2024, Section 8, Page 47, Small Construction Projects Program, Project No. M-FE) 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:

- FE19-02 Contract Agreement