



# Agenda Report

January 10, 2022

**TO:** Honorable Mayor and City Council

**FROM:** Water and Power Department

**SUBJECT: AUTHORIZATION TO ENTER INTO A CONTRACT WITH GROOME INDUSTRIAL SERVICES, LLC. FOR THE LABOR AND MATERIALS TO REPLACE GT3 AND GT4 CO AND SCR CATALYST**

## **RECOMMENDATION:**

It is recommended that the City Council:

1. Find that the proposed action is exempt from the California Environmental Quality Act ("CEQA") pursuant to State CEQA Guidelines Section 15301, Existing Facilities; and Section 15302, Replacement or Reconstruction; and that there are no features that distinguish this project from others in the exempt class and, therefore, there are no unusual circumstances; and
2. Accept the bid dated December 1, 2021, submitted by Groome Industrial Services, LLC. ("Groome") in response to Specifications for the labor and materials to Replace Gas Turbine 3 ("GT3") and Gas Turbine 4 ("GT4") Carbon Monoxide ("CO") and Selective Catalytic Reduction ("SCR") Catalyst; reject all other bids; and authorize the Interim City Manager, or her designee, to enter into a contract with Groome for an amount not to exceed \$1,760,000, which includes a base contract amount of \$1,600,000 and a 10% contingency of \$160,000 to provide for any unforeseen change orders.

## **BACKGROUND:**

The City of Pasadena ("City") owns and operates its electric generation facility ("Glenarm Power Plant") located east of Fair Oaks Avenue, west of the State Route 110 Freeway and south of Glenarm Street in Pasadena. The Glenarm Power Plant consists of five natural gas-fired electric generating units with a total capacity of approximately 200 Megawatts ("MW") and can produce electricity within ten minutes of start-up. These units provide the vital support necessary to maintain the reliability of the electric system in Pasadena.

The City imports power from outside resources using the transmission system provided by the California Independent System Operator ("CAISO"). Historically, the City's peak electric demand is over 300 MW. The City's maximum import capability is only 280 MW, which is further reduced during times of maintenance, repairs, or forced outages of the transmission system or the City's internal electric distribution system.

During times of transmission system constraints, the Glenarm Power Plant supplements imported power to avoid rolling blackouts and maintain public health and safety. Additionally, the quick-start capability of the units provides valuable backup capacity to support the integration of intermittent renewable energy resources such as solar and wind. Given the significant amount of these resources in the state's electric grid, CAISO requires a pre-determined amount of backup capacity from each utility. As a result, the capacity of the Glenarm Power Plant commands the highest market premium as an energy resource in the greater Los Angeles area.

The Glenarm Power Plant's GT3 and GT4 electric generating units are each capable of providing 42 MWs to the City's electric system. These units began operation in 2003. Each of the generating units is equipped with a horizontal flow system that reduces the CO and nitrogen oxides ("NOx") emissions in the exhaust stream. The system uses separate catalyst materials for removal of CO and NOx emissions. This system and the catalysts work together to reduce the emissions to meet or exceed the South Coast Air Quality Management District ("SCAQMD") permit requirements. The catalyst materials' performance or capability to reduce emissions declines primarily due to total operating hours and impurities on the catalyst. Eventually, the performance declines to a point where it cannot meet the SCAQMD permit emission requirements and it will require replacement of the catalyst.

In 2018, the City hired an engineering firm to test, evaluate, and report on the condition of the existing catalyst materials. The results of the report showed that the catalyst systems for GT3 and GT4 had approximately three to four years of remaining life and would require replacement to maintain its emission reduction capability. In addition, beginning January 1, 2024, the SCAQMD will require gas turbines such as GT3 and GT4 to lower their NOx emissions from 5.0 to 2.5 parts per million by volume. For these reasons, the existing catalysts must be replaced by the City in the near future and before January 1, 2024 to continue to meet SCAQMD requirements.

On August 26, 2021, a Notice Inviting Bids to Replace GT3 and GT4 CO and SCR Catalyst Specification was published in the Pasadena Journal and Pasadena Press paper as well as posted on PlanetBids. The posting generated notices to vendors previously registered with the City for this particular commodity class. A total of 58 vendors downloaded the Specifications, of which none were local firms. Staff is not aware of any local vendors who are capable of performing these services. A total of 3 bids were received by the bid closing date of December 1, 2021. Groome met the specifications outlined in the bid document and was determined to be the lowest, responsive, and responsible bidder as shown in Table 1.

**Table 1**

Vendor	Location	Bid Amount
Groome Industrial Services, LLC.	Fairfield, NJ	\$1,600,000
TTS Construction Corporation	Lodi, CA	\$2,062,000
ARB, Inc.	Lake Forest, CA	\$2,201,891

Over the last 5 years, the City has awarded no contracts to Groome. The vendor will be required to post performance and material bonds, pay prevailing/union wages, adhere to a 5% retention, and be liable for liquidated damages as outlined in the contract.

It is recommended that the City Council accept the bid dated December 1, 2021 submitted by Groome in response to specifications for the labor and materials to Replace GT3 and GT4 CO and SCR Catalyst Specification; reject all other bids received; and authorize the City Manager to enter into a contract not to exceed \$1,760,000, which includes the base contract amount of \$1,600,000 and a 10% contingency of \$160,000 to provide for any necessary change orders.

**COUNCIL POLICY CONSIDERATION:**

The proposed contract supports the City Council Strategic Planning Goal to improve, maintain, and enhance public facilities and infrastructure. It also supports the Public Facilities Element of the General Plan by maintaining public facilities to enhance the quality of life of the community.

**ENVIRONMENTAL ANALYSIS:**

The nature of the work performed by Groome qualifies for a categorical exemption from CEQA in accordance with Title 14, Chapter 3, Article 19, Section 15301 (Existing Facilities). Section 15301 allows for the categorical exemption from CEQA for repair work on existing publically-owned facilities used to provide electric power that will not result in an increase in capacity or an expansion of existing use. The replacement of GT3 and GT4 CO and SCR catalyst adheres to these guidelines. The proposed action is also categorically exempt pursuant to Section 15302, which exempts from CEQA the replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced.

**FISCAL IMPACT:**

The maximum cost of this action will be \$1,760,000, which includes a base contract amount and a 10% contingency to provide for any unforeseen change orders. Funding for this action will be addressed by the utilization of existing appropriations in the Power Capital Fund 411, Capital Improvement Program 3186 (GT-3 and GT-4 Upgrades and Replacements). It is expected that \$1,600,000 will be spent in fiscal year 2023.

The approval of this action will have no impact to other operational programs or capital projects.

Respectfully submitted,



---

GURCHARAN S. BAWA  
General Manager  
Water and Power Department

Prepared by:



---

ROBERT BOTKIN  
Principal Engineer

Approved by:

  
CYNTHIA J. KURTZ  
Interim City Manager