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INTERDEPARTMENTAL COMMUNICATION

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DATE: September 2, 2022

TO: Roubik Golanian, P.E., City Manager

FROM: Mark Young, General Manager - GWP

SUBJECT: Request for Approval to Utilize the Alternative Project Delivery Method for the Grayson Power Plant (GPP) Unit 9 Continuous Emission Monitoring System (CEMS) Replacement Project

Glendale Water & Power (GWP) intends to negotiate and execute a design-build contract with Cemtek Environmental Inc. dba CEMTEK KVB-Enertec (CEMTEK) for the GPP Unit 9 CEMS Replacement Project.

The City's Alternative Project Delivery Ordinance (Glendale Municipal Code Chapter 4.13) requires City Manager and City Council approval to use an alternative project delivery method, such as the design-build method.

GWP respectfully requests your approval to utilizing the Design-Build method for contracting out the GPP's Unit 9 CEMS Replacement Project.

Project Background:

The GPP Unit 9 CEMS is a Title V air permit requirement and an integral part of the unit providing the necessary feedback to properly report emissions to regulatory agencies such as the South Coast Air Quality Management District (SCAQMD) and the Environmental Protection Agency (EPA). The CEMS helps GWP operate the unit in the most environmentally responsible way possible. It consists of five (5) flue gas analyzers, a natural gas flow rate meter, a sample transport, conditioning and calibration units and the data acquisition, reduction, and recording units. The flue gas analyzers are highly sensitive, microprocessor-based analytical devices comprised of several components used to measure and convert the concentration of specific constituents into an electrical signal.

Over the course of the past seventeen (17) years, since its commissioning in 2004, GWP, has been able to maintain the CEMS including the original analyzers through periodic preventative maintenance and the repair/replacement of a few analyzer and conditioning system components. But with the analyzers at their end-of-life, Horiba Instruments Inc. (Horiba) is discontinuing their manufacturing of the analyzers and its components, parts being in low inventory, not locally available, long lead time and/or no longer available (obsolete), GWP must address the challenges in keeping the CEMS reliable. To add to the reliability issue, the amended Rule 1135, which starts on January

1, 2024, regulates our unit permit to operate at a much lower NOx limit at 2.5 ppm, half of the current NOx limit of 5.0 ppm meaning accuracy and availability would have to go hand in hand.

The GPP Unit 9 CEMS Replacement Project will replace the flue gas analyzers, the sample transport, the conditioning and calibration units, and the data acquisition, reduction, and recording units. The existing CEMS shelter, calibration gas bottles, and associated regulators, sample line cable trays, load center and circuit breakers, and the plant data acquisition and handling system (DAHS) will be reused.

The preliminary cost estimate for the project is \$530,000.

Reasons and Justifications for the Project:

As required by Section 4.13.070 of the Glendale Municipal Code, GWP submits the following reasons and justifications for requesting approval to proceed with an alternative design-build method for the GPP Unit 9 CEMS Replacement Project.

Reason(s):

Utilizing the design-build method for the GPP Unit 9 CEMS Replacement Project is in the best interest of the City because the Project:

1. Has a high level of technical complexity;
2. Requires expertise that city staff does not have; and
3. Needs overall schedule acceleration.

Justification(s):

The Design-Build method, whereby one firm is responsible for the engineering, procurement, and construction, improves the project schedule by minimizing the project delivery time and commencing the project around the same time as the Grayson Repowering Project - Unit 9 Separation work. This is a critical consideration as the City will only have Grayson Unit 9 available while the site is being demolished and then power island(s) are constructed. Minimizing this window of time reduces the risk to the City's residents of electrical interruptions when GWP will be solely dependent on transmission imports and Grayson Unit 9. Long-lead procurement is anticipated and can begin relatively soon after the start of engineering. Coordinating the engineering and procurement efforts allows for an accelerated schedule. Use of traditional project delivery methods would result in a more extended procurement cycle with engineering to be completed before procurement and construction could begin.

In addition, the design-build method allows for a high quality design and construction that would address the complexity of the project and minimize the project risks borne by the city due to compliance requirements. The CEMS reliability is dependent on how well the system is designed and the life cycle of the equipment to be prolonged.

If you have any questions or need additional information regarding the Project or the proposed alternative project delivery method for the GPP Unit 9 CEMS Replacement project, please contact me at extension 2107, or Ms. Joan Gaerlan, Environmental Program Specialist, at extension 8955.

Thank you for your consideration.



Mark Young
General Manager – GWP



Approved

Denied

MY/JE:rc