



# Agenda Report

February 10, 2020

**TO:** Honorable Mayor and City Council

**FROM:** Department of Water and Power

**SUBJECT: AUTHORIZATION TO ENTER INTO CONTRACT WITH RKI ENGINEERING LLC, FOR AN UPGRADE OF THE GLENARM POWER PLANT DATA ACQUISITION AND HANDLING SYSTEM AND LONG-TERM SYSTEM SUPPORT**

## **RECOMMENDATION:**

It is recommended that the City Council:

1. Find the proposed action to be categorically exempt under the California Environmental Quality Act ("CEQA") pursuant to Section 15301 (Existing Facilities) and that there are no features that distinguish this project from others in the exempt class and, therefore, there are no unusual circumstances;
2. Authorize the City Manager to enter into a contract, without competitive bidding pursuant to City Charter Section 1002 (F) Contracts for professional or unique services, with RKI Engineering, LLC ("RKI"), to upgrade and support the Glenarm Power Plant continuous emissions monitoring system data acquisition and handling system ("DAHS") for an amount not to exceed \$164,200, or five years, whichever occurs first with one optional extension not to exceed \$50,000 subject to the approval of the City Manager. If this option is exercised, the total contract amount would be \$214,200; and,
3. Grant the proposed contract an exemption from the Competitive Selection process pursuant to Pasadena Municipal Code Section 4.08.049(B); contracts for which the City's best interests are served.

## **BACKGROUND:**

The regulatory agencies such as United States Environmental Protection Agency ("USEPA"), California Air Resources Board, South Coast Air Quality Management District ("SCAQMD") and the Glenarm Power Plant's Title V air permit require continuous monitoring and reporting of air emissions from the City's fleet of natural gas-fueled combustion turbine generating units GT1, GT2, GT3, GT4 and GT5. Each unit must be equipped with a continuous emissions monitoring system ("CEMS") and an integrated data acquisition and handling system ("DAHS") that consists of customized software, a database server, and a programmable logic controller. The DAHS

communicates bi-directionally with the controller to collect and store data and to initiate required quality assurance and control activities. Because air regulations and permit conditions require a continually operating DAHS, this system is critical to plant operations and unit availability.

Due to the complexity of local SCAQMD Rules, there are very few DAHS vendors that provide a proven SCAQMD Rule-compliant system and staff has identified only two vendors that are utilized by municipal utilities: RKI and Cemtek KVB-Enertec ("Cemtek"). Pasadena Water and Power ("PWP") currently has DAHS systems from each of these vendors:

- As part of GT3 and GT4 repowering project, the Cemtek system was installed in 2003 to support units GT1, GT2, GT3 and GT4. The Cemtek hardware components are now obsolete and require replacement.
- For GT5, the RKI system was selected by the contractor (General Electric) when the unit was constructed in 2016.

Because there are only two proven vendors that meet the requirement of supporting at least one other municipally operated, in-basin electrical generating facility, DAHS a formal selection process was not undertaken. Both systems were evaluated and staff selected the RKI DAHS system for the following reasons:

- 1) The emissions reported by both DAHS are audited annually by the SCAQMD. In the past three years, the RKI DAHS has not had any compliance issues. During the same period, the SCAQMD issued two "Notices to Comply" to the City to correct reporting inaccuracies from the Cemtek DAHS.
- 2) The RKI DAHS System is scalable and has been expanded to include other non-regulatory but required power plant process data that can be easily retrieved using its customized reporting feature.

### ***Recommended Agreement***

The recommended agreement includes GT3 and GT4 DAHS system upgrades, including programming, configuring and connecting replacement controllers and connecting them to the existing DAHS server and chart recorder, as well as on-site installation and commissioning support. Note that the GT1 and GT2 CEMS controllers will be replaced as part of the GT2 Repair Project and are not part of this scope of work.

The DAHS must be continuously operated to support the power plant and it must be reconfigured/programmed to support regulatory and permit changes on a timely basis. As such, routine software upgrades, configuration/programming changes and troubleshooting support by the original manufacturer, RKI is required. The recommended agreement provides for ongoing support services on an as-needed basis including:

- Troubleshooting, repair, operation and maintenance support of the CEMS/DAHS, including emergency callouts

- Review and audit CEMS/DAHS data for accuracy and support electronic compliance reporting activities
- Creating and on-line submittal of USEPA quarterly Electronic Data Reports.
- Software and hardware support
- Update DAHS as needed for regulatory and permit updates
- Telephone assistance, as needed
- Assist with regulatory agency requests for information and provide support for air quality compliance issues and audits

Staff estimates the average cost of annual support services will be less than \$25,000.

RKI has provided annual DAHS support and upgrades for the B3 boiler (now retired) and its replacement, the GT5 combined cycle combustion turbine, on an as-needed basis since 1993. The total amount paid to this vendor in the last 10 years is \$144,947.06

### ***Best Interest Exemption***

The recommended agreement with RKI without competitive selection is in the City's best interest. Only two vendors have proven products utilized by municipal utilities, and PWP has experience with each. The existing RKI system on GT5 has had no recent compliance issues, whereas Cemtek has yet to satisfactorily resolve the reporting inaccuracies discovered by the SCAQMD in last year's audit. Any future reporting inaccuracies may subject PWP to increased enforcement action by the SCAQMD. Additionally, replacing the Cemtek systems with RKI systems will result in streamlined operations, maintenance and support as it will place all units on one system. The equipment and support costs are not materially different between the two systems.

### **COUNCIL POLICY CONSIDERATION:**

The proposed contract is consistent with the Public Facilities Element of the General Plan and supports the Council's goal to improve, maintain and enhance public facilities infrastructure to provide a high level of public service which adds to the quality of life in the City and increase its attractiveness through more efficient management of resources, to provide cost effective and innovative management of the City's resources, and to implement capital improvements that will maintain and rehabilitate infrastructure.

### **ENVIRONMENTAL ANALYSIS:**

The project is categorically exempt from CEQA per Section 15301 Existing Facilities (Class 1), of the State CEQA Guidelines (California Code of Regulations Title 14, Chapter 3). Class 1 consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use. Section 15301 Part (b) specifically applies this categorical exemption to existing facilities of both investor and publicly owned utilities. The project is an alteration of an existing facility involving no expansion of the existing use. There are no features that

distinguish this project from others in the exempt class and, therefore, there are no unusual circumstances.

**FISCAL IMPACT:**

The maximum cost of this action will be \$214,200, which includes the original five year contract term and one optional two-year extension, if exercised. Funding for this action will be addressed by the utilization of existing budgeted appropriations in the Power Capital and Operating Funds as follows:

- 1) \$39,200 DAHS Upgrade - Power Capital Fund 411 CIP 03236
- 2) \$175,000 Long term DAHS Support Contract - Power Operating Fund 44205490-811400

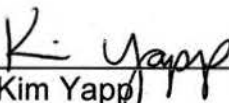
It is anticipated that \$53,700 of the costs will be spent during the current fiscal year. The remainder of the costs will be spent over the next six fiscal years if the contract extension option is exercised. The necessary funds will be included in the recommended annual operating budget for each fiscal year after the current year.

Respectfully submitted,



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