

Agenda Report

July 8, 2013

TO: Honorable Mayor and City Council

FROM: Water and Power Department

SUBJECT: AUTHORIZATION TO ENTER INTO A CONTRACT WITH GE PACKAGED POWER, INC. FOR AN AMOUNT NOT TO EXCEED \$2,082,544 TO PROVIDE LABOR AND MATERIALS FOR REPAIR AND MAINTENANCE SERVICES ON GAS TURBINE 4

RECOMMENDATION:

It is recommended that the City Council:

1. Find that the project is exempt from CEQA review pursuant to State CEQA Guidelines Section 15302(c) replacement or reconstruction of existing utility systems and/or facilities involving negligible or no expansion of capacity;
2. Accept the bid dated April 9, 2013, from GE Packaged Power, Inc., in response to Specifications LD-13-3 for gas turbine maintenance service on Gas Turbine 4; reject all other bids; and authorize the City Manager to enter into a contract with GE Packaged Power Inc., for an amount not to exceed \$503,794;
3. Authorize the City Manager to increase the contract with GE Packaged Power, Inc. by:
 - a. Up to \$300,000 as needed to complete any additional repairs that may be recommended by contractor after teardown and inspection of the gas turbine; and
 - b. An additional \$1,278,750 for the optional installation and use of a loaned engine for installation in the GT-4 unit as the original engine is being repaired.

BACKGROUND:

The Pasadena Department of Water and Power ("PWP") owns and operates Gas Turbine 4 ("GT-4"), a GE LM6000 combustion turbine, at its Glenarm Facility. GT- 4 was placed in service in 2003. The original equipment manufacturer, GE, periodically issues service bulletins to inform owners and operators on latest improvements, repairs, and upgrades to its GE machines as a support for continuous operation of the unit. The proposed contract is to implement service bulletin work on GT-4. In January 2013, during an inspection of GT-4, premature wear of the spline (engine shaft) was uncovered. Coincidentally, this same issue is included on the latest service bulletins. The repairs and modifications identified in these

service bulletins will increase unit reliability by reducing the number of forced outages, optimizing unit performance, and increasing the overall life of the unit. In addition, the City of Pasadena's ("City") insurance carrier for the engine cites compliance with the service bulletins as one of the more favorable management practices. Addressing the spline wear now is necessary to avoid a lengthy forced outage and the associated fines levied by the California Independent System Operators ("ISO") in the event the spline on the engine fails unexpectedly.

Specifications for the subject project were issued on March 14, 2013 in accordance with Section 4.08.070 of the Pasadena Municipal Code.

A Notice Inviting Bids to Provide Labor and Materials for Gas turbine maintenance services in accordance with Specifications LD-13-3 was published in the Pasadena Journal and posted on the City's web page. Bid packets were obtained by 14 contractors, 2 of which submitted responsive bids for the project. Following advertising, bids were opened on April 9, 2013, and are as follows:

<u>Contractor</u>	<u>Bid Amount</u>
GE Packaged Power, Inc. (Houston, TX)	457,994
IHI California Inc. (New York, NY)	842,243

GE Packaged Power, Inc. was the lowest responsive bidder that met all of the requirements of the Specifications, and is recommended to receive the contract. The proposed contract complies with the Competitive Bidding and Purchasing Ordinance P.M.C. 4.08 and the rules and regulations promulgated there under.

The scope of the work included in Specifications LD-13-3 requires a disassembly and inspection of the engine. During this process, the contractor will assess engine components for wear beyond the serviceable limits and provide recommendations. Staff recommends that Council authorize the City Manager to increase the contract for an additional amount of \$300,000 in the event that the additional work exceeds the 10% contingency amount. This action will prevent delays and allow the maintenance to proceed unabated.

GT-4 is an essential part of the City's electrical distribution system. Having GT-4 in service is integral to maintaining system stability and will reduce the possibility of power outages during the summer months. During these months, there are constraints on the capacity for importing electricity and the city's electrical distribution. To mitigate these impacts, staff has requested a quote from GE for the use of a loaned engine which would be installed into the GT-4 unit. The use of the loaned engine would limit the loss of capacity during the repair period and reduce the reliability risks posed by the current outage of Gas Turbine 2 due to fire damage, as well as the increased frequency of forced outages on Broadway 3 due to tube failures and other component failures related to age. In addition, the loaned engine avoids the need to purchase in the energy market additional generation capacity which will meet the requirements by the California Independent System Operator (CAISO) for PWP to demonstrate that it has sufficient resources to meet the City's energy needs. This is referred to as Resource Adequacy (RA). Staff has estimated the cost of RA for the month of July to be \$106,250. The lease engine cost breakdown is as follows:

Cost/Week	Duration (X10)	Installation	One Time Fee	Transportation	Total
\$122,085	\$1,220,850	\$16,400	\$31,500	\$10,000	\$1,278,750

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; and to provide a high level of public service which adds to the quality of life in the City and increases its attractiveness through more efficient management of resources.

ENVIRONMENTAL ANALYSIS:

The proposed contract is exempt from CEQA pursuant to the State CEQA Guidelines Section 15302 (Replacement or Reconstruction), which exempts the replacement and/or reconstruction of existing facilities or structures including utility systems and/or facilities involving negligible or no expansion of capacity. The proposed work will provide needed repairs or new construction necessary to maintain existing electrical infrastructure and operational flexibility.

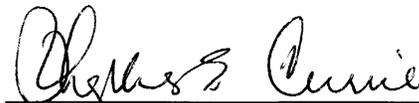
FISCAL IMPACT:

The cost of this action will be up to \$2,082,544 as shown in the table below. Funding will be addressed by the utilization of existing budgeted appropriations in the Power Capital Fund 411, Capital Improvement Program CIP 3186 (GT-3 and GT-4 Renewals, Replacement and Improvements), accounts 8101-411-841200-0345-23364-04 and 8114-411-841200-0345-23364-04. It is anticipated that the project will be completed in FY2014.

Total Expenditure in 2014	
Base Contract Amount	\$457,994
10% Contingency on base contract	\$45,800
Additional amount for extended repairs	\$300,000
Optional Lease Engine	\$1,278,750
Total Fiscal Impact	\$2,082,544

There is no anticipated impact to other operational programs or capital projects as a result of this action.

Respectfully submitted,



PHYLLIS E. CURRIE

General Manager

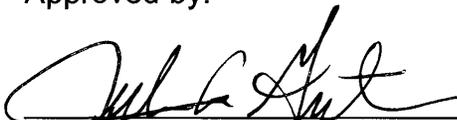
Water and Power Department

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