



Agenda Report

June 1, 2015

TO: Honorable Mayor and City Council

THROUGH: Municipal Services Committee (May 26, 2015)

FROM: Water and Power Department

SUBJECT: APPROVE AN INCREASE OF \$1,500,000 FOR THE PROJECT CONTINGENCY FOR MAJOR CONTRACTS RELATED TO THE GLENARM REPOWERING PROJECT, THEREBY INCREASING THE NOT-TO-EXCEED AMOUNT FROM \$2,500,000 TO \$4,000,000, AND AUTHORIZE THE CITY MANAGER TO AMEND AND/OR APPROVE CHANGE ORDERS FOR SUCH CONTRACTS IN AMOUNTS UP TO \$4,000,000.

RECOMMENDATION:

It is recommended that the City Council:

1. Find that the Glenarm Repowering Project was subject to adequate environmental review as part of the Glenarm Repowering Project Final Environmental Impact Report Findings adopted by the City Council on April 8, 2013, and there are no changed circumstances or new information that would trigger further environmental review.
2. Approve the increase of \$1,500,000 for the project contingency for the major contracts listed in Exhibit 1 related to and approved for the Glenarm Repowering Project, thereby bringing the project contingency to a total not-to-exceed amount of \$4,000,000.
3. Authorize the City Manager to amend and/or approve change orders for major contracts related to the Glenarm Repowering Project in amounts up to \$4,000,000.

EXECUTIVE SUMMARY:

On March 16, 2009, the City Council adopted the energy Integrated Resource Plan ("IRP"), a 20-year plan for Pasadena Water & Power ("PWP") to deliver reliable and environmentally responsible electricity at competitive rates. One of the key recommendations of the energy IRP was the replacement of the existing steam unit B-3 with a new combined cycle unit of an equivalent capacity of 71MWs. The energy IRP was updated on March 5, 2012 and it retained this recommendation. The installation of the new combined cycle electric generating unit ("GT-5") is the main component of the Glenarm Repowering Project ("Repowering Project").

The Repowering Project is on schedule and within the amended budget. The targets for Local Workforce Participation and Pasadena-First-Buy Local have been exceeded. The site preparation (removal of underground concrete structures, pipelines and contaminated soil; re-routing of a major storm drain; and backfill, compaction and grading of the excavated areas) was completed in November 2014. GT-5 construction activities are currently in full swing. Foundation work for most of the equipment is completed, several major pieces of equipment have been installed, the majority of the underground cables to connect GT-5 have been installed, and delivery of the remaining major equipment is on schedule. The project schedule does not have much slack going forward. During the course of construction, several contractual issues related to scope, cost and schedule have arisen but staff has been able to resolve them amicably.

On September 29, 2014, the City Council approved a budget increase of \$5,000,000 from \$131,904,183 to \$136,904,183 for the Repowering Project. At the same time, the City Council approved a project contingency for a pool of six major contractors and authorized the City Manager to amend and/or approve change orders for such contracts up to \$2.5 million. Approximately \$1 million out the \$2.5 million project contingency has been expended, mostly to cover cost of removal and disposal of underground structures and contaminated soil in excess of previously known/estimated quantities. Additionally, the construction contractor work scope increased due to changes in design by the power island equipment supplier after the construction bid was issued. The additional potential change orders for this pool of contractors are expected to consume the remaining \$1.5 million in the project contingency.

Out of the existing \$136,904,183 budget, commitments for \$131,450,224 have already been made through contracts, project contingency and staff expenses, leaving an uncommitted balance amount of \$5,453,959. Since the project is presently 58% complete and one year away from completion, staff estimates that an additional \$1,500,000 should be provided to supplement the previously approved project contingency to cover unforeseen expenses. The City Council approval of this additional contingency in advance of need would help staff keep the project on schedule should out-of-scope work be needed. If approved, this would leave a balance of \$3,953,959 (\$5,453,959- \$1,500,000) in uncommitted funds within the existing budget (Table 1 in the background section).

BACKGROUND:

Following the approval of the IRP, the City Council approved contract awards for Power Engineer's Inc. to provide owner's engineering services, Worley Parsons to provide air permitting services, PCR Corp. to provide CEQA Study and EIR preparation, GE Package Power ("GE") to furnish and deliver power island equipment, Stantec Consulting Services Inc. ("Stantec"), formerly known as ProU, to provide project and construction management services, and ARB Inc. ("ARB") to provide the Balance of Plant ("BOP") design and construction. These are the six major contracts in the Repowering Project.

Table 1 below provides the summary of the repowering project budget as of April 30, 2015.

Table 1 – Repowering Project Budget Summary

Currently Approved Budget			\$136,904,183
Approved Contracts and Committed Expenditures			
Contractors/expenses	Base Contract	Contingency	Total Contract
Power Engineers, Inc.	\$3,000,000	-	\$3,000,000
Worley Parsons	\$310,500	\$20,000	\$330,500
PCR Services Corp.	\$211,997	\$21,110	\$233,107
GE Package Power	\$60,494,529	\$1,376,000	\$61,870,529
Stantec	\$3,004,000	\$300,000	\$3,304,000
ARB, Inc.	\$55,661,973	-	\$55,661,973
Sub Total Major Contracts	\$122,682,999	\$1,717,110	\$124,400,109
PWP & Other Dept. PO's	\$1,576,617		\$1,576,617
So Cal Gas Company	\$1,288,545	\$128,855	\$1,417,400
Art Funding	\$80,000		\$80,000
Local Hire Consultant	\$84,999		\$84,999
AQMD	\$87,790		\$87,790
PWP Staff Cost	\$1,892,400		\$1,892,400
Sub Total Other Contracts and Miscellaneous	\$5,010,351	\$128,855	\$5,139,206
Project Contingency for Repowering Project Major Contracts		\$2,500,000	\$2,500,000
Minus savings from closed contracts/PO's			(\$589,091)
Project Sub Total	\$127,693,350	\$4,345,965	\$131,450,224
Uncommitted Budget Contingency Balance			\$5,453,959
Proposed Additional Project Contingency			\$1,500,000
Remaining Uncommitted Budget Contingency			\$ 3,953,959

As of April 30, 2015, \$988,951 has been expended from the approved project contingency of \$2.5 million. The major portion of the change orders associated with this amount is related to the increased quantities of underground structures and contaminated soil beyond the base amount specified in the specifications.

The approved and potential change order amounts in the ARB contract are approaching the \$2.5 million project contingency allowance as shown on Exhibit 1. The increased scope of work for the ARB contract is mainly related to installation of gas fuel compressor containment and fire protection system; installation of new sound attenuation requirements for various GE equipment; work associated with the change in

size, configuration, and design of GE equipment; work associated with change in codes after the contract was awarded; and design change and addition to BOP system. The staff became aware of these changes recently as GE finalized its design of various equipment. GE is the supplier of the major equipment. These changes are not included in the specifications on which the BOP contractors bid. Contractually, GE has the right to make changes in its product design and add improvements to products and services at any time to meet performance, emission, and noise guarantees.

Exhibit 1 shows the expenditure summary for the \$2.5 million project contingency as of April 30, 2015. Exhibits 2 & 3 show the breakdown of the ARB and GE change orders as of April 30, 2015. On Exhibits 2 & 3, there are change orders that are referred to as "pass-through" change orders. The "pass through" change orders included work requested by ARB from GE and vice-versa. Since GE and ARB have no signed contract directly with each other at the time the work is scheduled to commence, the City issued a change order to both parties to facilitate the work and avoid delays. In the "pass through" transactions, the City issued a change order to one contractor to increase its contract amount and at the same time issued another change order for the same amount to the other contractor to decrease its contract amount.

The requested amount of \$1.5 million is in addition to the previously approved \$2.5 million project contingency. Upon approval, this will bring the total project contingency to \$4 million. The \$1.5 million requested amount will cover the following:

- Any unforeseen work by ARB that would exceed the \$2.5 million project contingency;
- Any unforeseen work for the other major contractors that would exceed the approved contingency in their respective base contracts;
- Unexpected project delays which would result in additional labor and extended overheads to ARB or GE depending on who is responsible for the delay. Although there are liquidated damage provisions in the respective ARB and GE contracts from which the City can recover costs, the parties would need to execute a change order upfront to start any out of scope work. There are still major component designs that are not completed which will potentially affect the completion schedule; and,
- Uncertainties that may be encountered in the commissioning, startup, and acceptance testing. These uncertainties include failure and malfunction of equipment, potential issues with control system optimization and software, extended trouble shooting and corrective actions, missing and/or procurement of spare parts, protracted and repeat testing. These uncertainties would potentially require ARB, GE, and Stantec to work extended or weekend hours which are not in their base scope.

The project is still scheduled to be completed in May 2016. As of April 15, 2015, 53.7% of the budget has been spent or invoiced. The project is approximately 58% complete as of April 30, 2015. Below is the progress status of the major contractors in the Repowering Project.

Power Engineers – Power Engineers is currently reviewing submittals and responding to Request for Information submitted by ARB. This is expected to continue until September 2015. As of April 15, 2015, the budget is 92.4% expended.

Worley Parsons – Worley Parsons completed its contract to secure the air permit. There is no more anticipated work unless Worley is needed for consulting services during emission testing to resolve any air permit problems. As of April 15, 2015, the budget is 92.9% expended.

PCR Corp. – PCR completed its contract to certify the EIR. However, there is an outstanding claim for extra work. Staff offered the remaining contract balance of \$5,370 as the full and final payment to settle the claim.

General Electric – GE has completed the design of power island equipment and has completed 75% delivery of equipment. GE is currently providing all the Technical Advisers (“TA”) for the equipment installation and will also provide the TA’s for commissioning, start up, and testing. As of April 15, 2015, the base contract and contract approved change orders are 70.8% and 13.4% expended respectively.

Stantec Consulting Services – Stantec continually provides the project management, construction management, document and schedule control services for the project. As of April 15, 2015, the base contract and contract approved change orders are 25.7% and 0% expended respectively.

ARB Inc. – ARB is now 60% complete on the detailed design. The demolition is 95% complete with the exception of site backfill. The re-routing of the existing storm drain is 100% complete. State street closure work is 80% complete with the permanent gate installation remaining. The work in progress includes installation of underground piping, electrical systems, equipment foundations; building GT-5 power island equipment and BOP; interconnection of 17.2 KV and 34.5 KV circuits to PWP’s electric system; building the new control room, and start up and commissioning. As of April 15, 2015, the base contract is 32.1% expended and has utilized 40% of the project contingency.

Southern California Gas Company - The Gas Metering Upgrade by the Southern California Gas Company is in the design stage and the installation is projected to be completed by November 2015.

COUNCIL POLICY CONSIDERATION:

This authorization supports the City Council’s strategic goals to improve, maintain, and enhance public facilities and infrastructure, to increase conservation and sustainability,

and maintain fiscal responsibility and stability. This authorization also supports PWP's energy efficiency and renewable portfolio standard goals, as well as the major strategic planning targets identified in the Energy IRP.

ENVIRONMENTAL ANALYSIS:

On April 8, 2013, the City Council certified the Final EIR for the Repowering Project, made environmental findings, adopted a Mitigation Monitoring and Reporting Program and a Statement of Overriding Considerations, and granted the land use approvals for the Repowering Project. The actions proposed herein are a subsequent discretionary step required to implement the Project studied in the EIR. Pursuant to State CEQA Guidelines Section 15162, there are no changed circumstances or new information which would trigger further additional environmental review.

FISCAL IMPACT:

The cost of this action will be \$1,500,000. Funding for this action will be addressed by the utilization of existing budgeted appropriations in the Power Fund Capital Improvement Program, CIP #3194 – Local Generation Repowering Project Phase II. This amount will be funded with the remaining project budget balance not committed through contracts, staff expenses, or previously approved contingencies. It is anticipated that this amount will be spent in FY 2016.

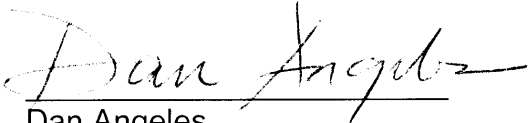
There is no impact to other operational programs or capital projects as a result of this action.

Respectfully submitted,



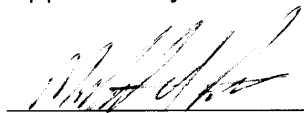
PHYLLIS E. CURRIE
General Manager
Water and Power

Prepared by:



Dan Angeles
Principal Engineer

Approved by:



MICHAEL J. BECK
City Manager