

Agenda Report

September 29, 2014

TO: Honorable Mayor and City Council

THROUGH: Municipal Services Committee (September 23, 2014)

FROM: Water and Power Department

SUBJECT: APPROVE A PROJECT CONTINGENCY AMOUNT OF \$2,500,000 FOR EXISTING CONTRACTS RELATED TO THE LOCAL GENERATION REPOWERING PROJECT - PHASE II ("CIP 3194") AND AUTHORIZE THE CITY MANAGER TO AMEND AND/OR APPROVE CHANGE ORDERS FOR SUCH CONTRACTS IN AMOUNTS NOT TO EXCEED THE PROJECT CONTINGENCY AMOUNT; INCREASE THE BUDGET BY \$5,000,000; APPROVE AN ADDITIONAL APPROPRIATION OF \$10,000,000 TO CIP 3194 FOR FISCAL YEAR 2015 TO BE PROVIDED FROM A \$5,000,000 APPROPRIATION FROM THE LIGHT AND POWER FUND BALANCE AND THE TRANSFER OF \$5,000,000 OF PREVIOUSLY APPROVED APPROPRIATIONS FROM VARIOUS LIGHT AND POWER FUND CAPITAL IMPROVEMENT PROJECTS TO CIP 3194.

RECOMMENDATION:

It is recommended that the City Council:

1. Find that, on April 8, 2013, the City Council made findings pursuant to the California Environmental Quality Act ("CEQA") and certified the Environmental Impact Report ("EIR") for the Glenarm Repowering Project, adopted a Statement of Overriding Considerations, and approved the Repowering Project, and there are no changed circumstances or new information that would trigger further environmental review;
2. Approve a project contingency of \$2,500,000 for the existing contracts listed in Table -1 of the Exhibit – 1 related to and approved for CIP 3194;
3. Authorize the City Manager to amend and/or approve change orders for existing contracts listed in Table -1 of the Exhibit - 1 related to CIP 3194 in an amount not to exceed \$2,500,000;
4. Approve an increase in the budget for the Local Generation Repowering Capital Project #3194 by \$5,000,000 from \$131,904,183 to \$136,904,183. The increase will be financed by a planned Letter of Credit and subsequent bond issuance; and

5. Approve a journal voucher increasing the FY 2015 appropriations for the Local Generation Repowering Capital Project #3194 by \$10,000,000 as follows:
- a. \$5,000,000 from the Light and Power Fund Balance
 - b. \$5,000,000 by reducing existing appropriations for the following projects as shown below:

<u>CIP Description</u>	<u>Amounts to be Unappropriated</u>
• CIP 3180 – Power Production Facility Improvements	\$ 48,042
• CIP 3149 – B-3 SCR Catalyst Replacement	\$ 550,000
• CIP 3186 – GT-3/GT-4 Renewal, Replacement & Improvements	\$ 625,807
• CIP 3182 – GT-1/GT-2 Renewal, Replacement & Improvements	\$3,776,151
Total	\$5,000,000

Additional detail is shown in Exhibit 2 – Table 1.

MUNICIPAL SERVICES COMMITTEE RECOMMENDATION:

On September 23, 2014, the Municipal Services Committee by majority vote, recommended that the City Council approve the staff recommendations.

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 Local Generation Repowering Project – Phase II, CIP3194 (“Repowering Project”). The project is on schedule with GT-5 expected to be commercially operational by May/June of 2016.

Of the existing budget of \$131,904,183, commitments for \$127,697,205 have already been made through contracts and staff expenses, leaving an uncommitted balance amount of \$4,206,978. The existing budget included a contingency of approximately \$9.4 million but it has been largely used due to a considerably higher than expected amount for the Balance of the Plant (“BOP”) contract. Staff estimates future expenses in the amount of \$6,206,978 and believes an additional \$3,000,000 should be provided for as a contingency for unforeseen expenses, for a total of \$9,206,978 (Table 1). Given the uncommitted balance of \$4,206,978 in the current budget, an additional \$5,000,000 is needed to meet the future funding requirement of \$9,206,978. This will increase the overall budget from \$131,904,183 to \$136,904,183.

As noted in recommendations 2 and 3, staff recommends that \$2,500,000 be approved as a project wide contingency for specific contracts listed in Exhibit 1 - table 1 and that the City Manager be authorized to approve use of these funds as necessary for contract amendments and/or change orders. This will be in place of assigning specific contingency amounts to these individual contracts.

The proposed revisions result from higher than anticipated costs for the BOP contract, natural gas pipeline and meter upgrade, distribution system upgrades for transmission system reliability, PWP labor and material and commissioning related activities. Table below provides a summary of budget and expenses.

Table -1 – Summary of current and proposed budget

Currently Approved Budget		\$131,904,183
Currently Committed Expenditures (contracts, staff costs and Art Funding)		\$127,697,205
Uncommitted remaining balance (\$131,904,183 - \$127,697,205)		\$4,206,978
Future Estimated Costs and Contingency		
Natural gas pipeline/meter upgrades	\$6,206,978	\$2,200,000
Other misc. contracts, PO's, & Admin (Exhibit 1 - Table 2)		\$1,506,978
Project Contingency for Existing Contracts (Exhibit 1-Table 1)		\$2,500,000
Budget contingency		\$3,000,000
Sub Total		\$ 9,206,978
Additional Budget Needed (Currently Committed Expenditures + Future Estimated Costs and Contingency – Currently Approved Budget)		\$ 5,000,000
Proposed New Budget (Approved Budget + Additional Budget needed)		\$136,904,183

The budget increase of \$5,000,000 will be obtained by transferring an equivalent amount from the currently approved and appropriated PWP capital improvement projects listed under the Fiscal Impact section and in Exhibit 2 -Table 1. To offset the transfer, the existing projects will either be reduced in scope, deferred, or eliminated resulting in no net increase in the overall PWP's Capital Improvement Projects budget.

Appropriations for the FY 2015 workplan needs to increase by approximately \$10.0 million mainly due to scheduled work by the BOP contractor which will require higher payments than originally budgeted; Southern California Gas Company's estimate being higher than expected for natural gas supply metering upgrade, early disbursement for the Art funding, increased PWP labor and material cost, and the addition of new cost items (local hire, legal fees, & public outreach). The appropriation for \$10.0 million is achieved by transferring \$5.0 million from the currently appropriated CIPs listed in Exhibit - 2 Table -1 and a new appropriation of \$5.0 million for GT5 Repowering Project CIP 3194.

BACKGROUND:

The Repowering Project requires multiple specialties and therefore has multiple contracts. Unforeseen changes in the scope of work while building a complex power plant on a brownfield site are not uncommon. Typically, contracts include a contingency amount of 5 – 10 percent of the base contract to cover unknown conditions discovered during the execution of the project. Thus the contingency amount is encumbered as a part of the budget and appropriation for the project. While executing contracts for the Repowering Project, the scope of work may expand due to changes in codes and regulations, design criteria, level of analysis, construction requirements, quantity of contamination and underground structures and other unforeseen circumstances. The contingency amounts are used to pay for necessary and unanticipated work needed to complete the project without interruption.

During execution of a contract, when an unknown condition is encountered, staff evaluates the need for additional work. If found necessary, staff approves the additional work and payment from the approved contingency amount in a timely manner so that the work continues without interruption. As work proceeds, the contingency amounts of some contracts are discovered to be overestimated while others underestimated. Staff does not have the authority to transfer the contingency amount from the contracts that are likely to use lesser contingency to those contracts that need higher contingency amounts. When it becomes clear that a particular contract would cost more than the approved contract amount, the staff generally seeks the City Council approval for an additional base contract amount, contingency and in most cases additional budget and appropriation – even though the collective project contracts may be well within budget.

To minimize the possibility for such situations in this project, staff is recommending contingency at the project level rather than the contract level. Under the direction of the City Manager, this approach would allow the staff to optimize contingency expenses for the Repowering Project within the approved project budget. The recommended contingency amount of \$2,500,000 would be applied, as necessary, to the existing approved contracts listed in Exhibit 1 - Table 1. For those contracts listed in Exhibit 1 - Table 1 where a contract specific contingency is already included, these amounts will be used prior to providing for any amounts from the project contingency account. A new account number will be created for tracking expenses from the project contingency. The staff will include in its monthly report to the Municipal Services Committee information on expenditures from this project contingency amount.

To cover the future estimated expenses and budgetary contingency, an additional budget of \$5,000,000 is requested at this time for CIP 3194, bringing the total budget of the Local Generation Repowering Project – Phase II to \$136,904,183. This increase of \$5,000,000 will be funded by transfers within the appropriated Power Fund Capital Improvement Plan projects listed in Exhibit 2 - Table1. Therefore, there is no net addition to the Power Fund Capital budget. No funding would be provided by the General Fund.

The following Table 2 provides a summary of approved budget, past, and expected future contracts and expenses, and proposed new budget or appropriations.

Table 2 – Repowering Project Budget Summary

Currently Approved Budget			\$131,904,183
Approved Major Contracts and Committed Expenditures			
Contractors/expenses	Base Contract	Contingency	Total Contract
Power Engineers	\$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
Process Unlimited International	\$3,004,000	\$300,000	\$3,304,000
ARB, Inc.	\$55,661,973	-	\$55,661,973
Other Contracts, P.O's and Art Funding (1% construction)	\$1,321,217		\$1,321,217
PWP Labor and Material Cost	\$1,892,400		\$1,892,400
Local Hire Consultant	\$83,479		\$83,479
Sub Total	\$125,980,095	\$1,717,110	\$127,697,205
Uncommitted remaining balance (\$131,904,183 - \$127,697,205) = \$4,206,978			
Future Estimated Costs and Contingency			
Natural gas pipeline/meter upgrades		\$0,206,978	\$2,200,000
Other misc. contracts, PO's, & Admin (Exhibit 1 - Table 2)			\$1,506,978
Project Contingency for Existing Contracts (Exhibit 1-Table 1)			\$2,500,000
Budget contingency			\$3,000,000
Sub Total			\$ 9,206,978
Total Approved Major Contracts, Committed Expenditures, and Future Estimated Costs and Contingency			\$136,904,183
Additional Budget Needed (Approved Major Contracts + Committed Expenditures + Future Estimated Costs – Currently Approved Budget)			\$ 5,000,000
Proposed New Budget (Approved Budget + Additional Appropriations)			\$136,904,183

The BOP contractor has substantially excavated the GT-5 Repowering Project site and to date has encountered more than contracted quantities for concrete, asphalt and contaminated materials in the amount of about \$421,000. The scope of electric work is reduced by \$216,000 approximately. Therefore, a net amount payable to the BOP contractor is \$205,000 approximately which would be paid out of the proposed project contingency of \$2,500,000.

The natural gas pipeline/meter upgrade was originally estimated for \$1.0 million and included in the original budget contingency amount. The increase in the natural gas pipeline/meter upgrade estimate is due to the Gas Company's requirement to install a more modern meter and the special facilities charges imposed for the upgrade.

Currently, the staff is developing the scope of work for the natural gas pipeline/meter upgrade. Recently, Southern California Edison changed their position and informed PWP that distribution system upgrades may be needed to avoid adverse effect on their transmission system. The local hire consultant was not included in the original budget and is needed to ensure contractor compliance with local hiring and local participation requirement of the Project Labor Agreement. The PWP labor and material cost for this project is expected to exceed initial estimate. The other miscellaneous contracts, purchase orders and administrative costs include the estimated cost of future work and materials that PWP will procure to successfully complete the project.

Future contracts will be awarded, as in past, based on the City's purchasing policy. MSC will be updated about all expenditures on monthly basis as it has been done presently.

COUNCIL POLICY CONSIDERATION:

This authorization supports the City Councils 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 fiscal impact resulting from appropriating additional \$10,000,000 to the Local Generation Repowering Project and unappropriating \$5,000,000 from selected Light and Power Fund Capital Improvement Projects is \$5,000,000 as shown in the table below. Funding for this action will be addressed by utilization of proceeds from the planned Letter of Credit and subsequent bond issuance.

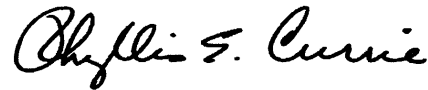
Fiscal Impact Summary

3194 - Local Generation Repowering Project - Phase II	
Total Actuals and Projected through FY 2015	\$98,052,430
Minus Appropriations Through FY 2015	\$88,052,430
Total additional appropriations for CIP 3194	\$10,000,000
<u>Unappropriations from other CIP Projects</u>	
3180 - Power Production Facility Improvements	(\$48,042)
3149 - B-3 SCR Catalyst Replacement	(\$550,000)
3186 - GT-3 and GT-4 Renewals, Replacements, and Improvements	(\$625,807)
3182 - GT1 & GT2 Renewals, Replacement, and Improvements	(\$3,776,151)
Total Unappropriated from other CIP Projects	(\$5,000,000)
Net appropriations requested	\$5,000,000

With this action, the funding for the Local Generation Repowering Project will be revised as follows:

Proposed Funding for the Repowering Project	Original Projection	Revised Projection
Equity Fund	\$20,000,000	\$20,000,000
Debt (Electric Revenue Bond Issuance)		
a. 2013A Bonds	\$55,000,000	\$55,000,000
b. Planned Letter of Credit and subsequent Bond issuance	\$56,904,183	\$61,904,183
Total	\$131,904,183	\$136,904,183

Respectfully submitted,



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General Manager
Water and Power

Prepared by:



Dan Angeles
Principal Engineer

Approved by:



MICHAEL J. BECK
City Manager

EXHIBIT-1

Table 1 - Existing Glenarm Repowering Project contracts eligible to use project contingency amount

Contracts No.	Contractors	Work Description	Contract Amount (Not to Exceed)
20,118	Power Engineer's Inc.	Provide owner engineering services	\$3,000,000
20,119	Worley Parsons, Inc.	Provide air permitting services	\$330,500
20,208	PCR Services Corp	Provide CEQA study and prepare EIR	\$233,107
21,472	GE Packaged Power, Inc.	Furnish & deliver power island equipment	\$61,870,529
21,637	Process Unlimited International Inc.	Provide project and construction management	\$3,304,000
21,842	ARB Inc.	Provide BOP design and construction	\$55,661,973

Table 2 –Cost Breakdown for Miscellaneous Contracts, Purchase Order and Administrative Cost

Misc. Contracts, Purchase Order and Admin Cost	Estimated Cost	Remarks
Geotech	\$25,000	
Legal Fees	\$100,000	
CalARP Program Revision	\$25,000	
PWP Labor and Material Cost	\$566,242	
PSLF Model	\$10,000	
Post Completion Noise Survey	\$50,000	
Distribution /Transmission System Upgrades	\$500,000	Potentially required by Southern California Edison
Polisher Rental	\$50,000	
Local Hire/Buy Local Misc Exp.	\$5,375	
Air Permitting Consultant	\$25,000	
Acceptance Testing Consultant	\$25,000	
Public Outreach	\$25,000	
PCR Outstanding Claim	\$100,000	
Sub Total	\$1,506,977	

EXHIBIT - 2

Table 1: DETAIL OF PROPOSED FY 2015 CIP BUDGET AMENDMENTS

CIP#	Description	Appropriations Available for FY 2015	Planned expenditure through FY 2015	Remaining appropriations through FY 2015	FY 2015 Proposed Amendment		Adjusted Appropriations Through FY 2015	Impact on the Project	
					Additions	Reductions			
3194	Local Generation Repowering Project - Phase II	\$88,052,430		\$88,052,430	\$5,000,000		\$93,052,430		
3180	Power Production Facility Improvements	\$870,243	\$120,000	\$750,243		(\$48,042)	\$822,201	No material impact	
3149	B-3 SCR Catalyst Replacement	\$550,000		\$550,000		(\$550,000)	\$0	Recent testing showed satisfactory performance of the SCR catalyst which may not require replacement prior to B-3 retirement in FY 2017	
3186	GT-3 and GT-4 Renewals, Replacements, and Improvements	\$715,807	\$90,000	\$625,807		(\$625,807)	\$90,000	No material impact	
3182	GT1 & GT2 Renewals, Replacement, & Improvements	\$3,926,151	\$150,000	\$3,776,151		(\$3,776,151)	\$150,000	Major upgrade will be deferred to FY 2016/17 depending on the decision to repair GT2.	
Sub Total		\$94,114,631			\$5,000,000	(\$5,000,000)	\$94,114,631		
					Zero net change				

Zero Net Change in appropriations through FY 2015

Table 2: DETAIL OF PROPOSED FY 2015 CIP APPROPRIATIONS FOR GT-5 REPOWERING PROJECT - LOCAL GENERATION REPOWERING PROJECT - PHASE II

Revised Plan			
Fiscal Year	Appropriation	Actual Spent up to FY 2014 and Revised Workplans for FY 2015-17	Cumulative Remaining Appropriations
Up to FY 2013	\$37,952,430	\$4,160,697	\$33,791,733
FY 2014	\$35,900,000	\$23,748,455	\$45,943,278
FY 2015	\$14,200,000	\$70,143,278	(\$10,000,000)
FY 2016		\$30,108,766	
FY 2017		\$8,742,987	
Total	\$88,052,430	\$136,904,183	

Note: FY 2015 Workplan is proposed to be revised to \$70,143,278 from existing Workplan of \$55,008,226. Through FY 2015 \$60,143,278 has been appropriated (remaining appropriation FY 2014 - \$45,943,278 + appropriation for FY 2015 - \$14,200,000). Therefore, an additional appropriation of \$10,000,000 is requested.