



**NOTICE OF PUBLIC HEARING**  
**(Issued on December 21, 2012)**

**NOTICE OF POSTING FOR**  
**CONSIDERATION OF REVISIONS TO THE**  
**SAN FRANCISCO PUBLIC UTILITIES COMMISSION (SFPUC)**  
**WATER SYSTEM IMPROVEMENT PROGRAM (WSIP)**

**Tuesday – January 22, 2013**  
**1:30 P.M.**  
**City Hall, Room 400**  
**1 Dr. Carlton B. Goodlett Place**  
**San Francisco California**

**SUBJECT OF PUBLIC MEETING**

The San Francisco Public Utilities Commission (SFPUC) will consider revisions to the Water System Improvement Program (WSIP) at its regularly scheduled meeting on Tuesday – January 22, 2013. Those revisions will focus exclusively on the Calaveras Dam Replacement Project (CDRP).

**COMMENTS ON PROPOSED REVISIONS**

All interested parties are invited to attend the public hearing and present their views. Individuals who are unable to attend the public hearing may submit to the SFPUC written comments regarding the subject of the hearing by the time the proceedings begin on January 22, 2013. These comments will be brought to the attention of the Commission and will become part of the official public record. Written comments should be sent to:

Donna Hood, Commission Secretary  
 San Francisco Public Utilities Commission  
 525 Golden Gate Avenue (13th Floor)  
 San Francisco, CA 94102

**BACKGROUND**

The Wholesale Regional Water System Security and Reliability Act (Water Code § 73500 *et seq.*) requires that the SFPUC provides notification of certain program changes. Specifically, the SFPUC is required to provide an advance 30-day written notice if the SFPUC is to consider the adoption of program changes that would delay WSIP projects and/or result in the construction of different projects.

The SFPUC last adopted schedule and cost revisions to the WSIP on June 12, 2012 and October 9, 2012, respectively. Those changes focused on a limited number of projects as follows:

**Edwin M. Lee**  
 Mayor

**Art Torres**  
 President

**Vince Courtney**  
 Vice President

**Ann Moller Caen**  
 Commissioner

**Francesca Viotor**  
 Commissioner

**Anson Moran**  
 Commissioner

**Harlan L. Kelly, Jr.**  
 General Manager



#### Projects with Schedule Changes Adopted on June 12, 2012

- New Irvington Tunnel
- Bay Division Pipeline (BDPL) Reliability Upgrade – Pipeline
- Pulgas Balancing – Modification of the Existing Dechloramination Facility

#### Projects with Cost Changes Adopted on October 9, 2012

- San Joaquin Pipeline (SJPL) System
- Tesla Treatment Facility
- Vegetation Restoration of WSIP Construction Sites (new project)
- Program Management

This notice includes schedule and cost changes to the CDRP only. If adopted, the revised schedule for the CDRP will delay the overall completion of the WSIP from the currently approved completion date of July 29, 2016 to August 29, 2018. However, we will discontinue all program-level resources as planned in July 2016 and complete the CDRP using its own project resources.

Despite the significant cost increase on the CDRP, the program as a whole is still currently forecasted to be delivered within the WSIP currently approved budget of \$4,585,556,260. This is because we are able to absorb the cost increase using the construction contingency remaining in the project and the funds still available in the WSIP Program Management Reserve. The SFPUC is taking a number of steps to identify and achieve cost efficiencies in an effort to complete the WSIP without exceeding the program's approved budget. However, with the peak of construction activities behind us and only the more complex projects remaining, major issues like the one described herein have started to arise, making the goal of delivering the program on budget not unachievable but certainly much more challenging.

#### **CHANGE DESCRIPTION**

The CDRP is currently in construction and as of November 25, 2012, the project was 30 percent complete. The construction Notice to Proceed (NTP) was issued on August 15, 2011. The original contract duration is 1,460 consecutive calendar days and the original contract value is \$259,571,850. To date, approved changes orders have added 69 days and \$19,022,881 to the original duration and value of the contract.

In mid-June 2012, the construction contractor for the CDRP encountered unexpected geologic conditions during excavation to the slope on the left side of the valley (when looking downstream from the existing dam) that could potentially contribute to instability of the left abutment and spillway area of the new dam as designed. Extensive supplemental exploration work, which included 26 geotechnical borings and numerous exploratory trenches, were conducted during the summer to better characterize the nature of the features discovered and their potential impacts on slope stability. Based on these additional geotechnical investigations, a large ancient landslide was found to underlie the northern half of this excavation slope. Several smaller geologic features, two of which were later confirmed to be landslides and one which has been identified as a geologic feature of interest for further evaluation, were also found in the vicinity. All of these geologic features had been undetected during the geotechnical investigations conducted in the project's design phase.

The Project Team, including City staff and consultants of the Construction Management Team led by Black & Veatch, Design Team led by URS (the CDRP Engineer of Record), and the Calaveras Technical Advisory Panel, has been working expeditiously and collaboratively to develop solutions to address these unexpected differing site conditions with the objective of minimizing future risks while balancing current schedule and cost impacts.

Based on extensive analysis and review by some of the foremost industry experts in geology, dam engineering and construction, it was determined that the original design slope of 1.3 horizontal to 1 vertical overall slope (1.3H:1V slope) in the left excavation cut slope above the future spillway (known as Observation Hill) needed to be re-designed. As part of the revised design, the entire slope is being laid back (flattened) to a 2H:1V overall slope in order to ensure the long-term stability of this high slope above the future dam and spillway. The full layback of Observation Hill to a flatter slope will result in the need to dispose of approximately 3 million cubic yards of additional material.

The changes described above will result in significant schedule and cost impacts. Specifically, additional time will be needed to excavate and shore up the unstable ground and to compensate for a critical seasonal/annual shutdown window in a subsequent year. Additional costs will be incurred to excavate and dispose of the additional material and to double-handle some of the material needed for construction of the dam, as well as the need to mitigate the environmental impacts at disposal sites and keep project resources in place longer.

A summary of the schedule and budget changes proposed for the CDRP is provided below.

**Proposed CDRP Schedule Changes**

<b>Project Milestone</b>	<b>Current Approved Schedule</b>	<b>Proposed Schedule</b>	<b>Variance (Months)</b>
Construction Substantial Completion (Beneficial Use of New Dam)	July 23,2015	September 3, 2017	25
Construction Final Completion (Finish Date of Construction Phase)	January 29, 2016*	December 2, 2017	22
Project Completion (Finish Date of Closeout Phase)	July 29, 2016	August 31,2018	25

\* Includes 3 months of float in the current approved project schedule

**Proposed CDRP Budget Changes**

<b>Phase/Project</b>	<b>Current Approved Budget</b>	<b>Proposed Budget</b>	<b>Variance (\$)</b>
Construction Phase	\$314,512,844	\$431,512,844	\$117,000,000
Other Phases	\$101,125,000	\$101,125,000	\$0
Project Total	\$415,637,844	\$532,637,844	\$117,000,000

All of the additional budget requested herein is being allocated to the construction phase, which will allow work on the project to continue while the SFPUC negotiates a formal change order for the differing site conditions on Observation Hill. Once that change order is finalized, the WSIP Team will seek approval from the Commission for a second project revision that will reflect the terms of the negotiated change order and will incorporate the additional soft costs and construction contingency required to complete the project. At that time we will be able to better determine whether the overall program cost will exceed the currently approved WSIP budget.