AGENDA ITEM
Public Utilities Commission
City and County of San Francisco

DEPARTMENT Infrastructure
AGENDA NO. 11
MEETING DATE January 22, 2013

Construction Modification: Regular Calendar
Project Manager: Daniel L. Wade

Schedule and Cost Revisions to Calaveras Dam Replacement Project

| Proposed Commission Actions: | Proposed Action #1: Adopt California Environmental Quality Act (CEQA) findings contained in Addendum No. 1 to the Final Environmental Impact Report (EIR) for the proposed modifications to the Calaveras Dam Replacement Project (CDRP), and approve CDRP modifications (see attachments).
|  | Proposed Action #2: Approve revisions to the schedule and budget of the CDRP being delivered as part of the Water System Improvement Program (WSIP), and direct staff to send a Notice of Change Report to the California Department of Public Health and the California Seismic Safety Commission in compliance with California Water Code Section 73502(d) (3) and California Assembly Bills 1823 and 2437. The proposed project schedule and budget revisions are as follows:

<table>
<thead>
<tr>
<th>Revision</th>
<th>Current Approved</th>
<th>Proposed</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule</td>
<td>July 29, 2016</td>
<td>August 31, 2018</td>
<td>25 months</td>
</tr>
<tr>
<td>Budget</td>
<td>$415,637,844</td>
<td>$532,637,844</td>
<td>$117,000,000</td>
</tr>
</tbody>
</table>

Proposed Action #3: Approve an increase in the construction cost contingency for Water Enterprise, WSIP funded Construction Contract No. WD-2551, Calaveras Dam Replacement Project, in the amount up to $117,000,000, and an increase in the contract duration of up to 761 consecutive calendar days; and Authorize the General Manager to approve future modifications to the contract for a total revised contract amount up to $402,529,035 and for a total revised contract duration up to 2,290 consecutive calendar days.

Proposed Action #4: Approve a funding reallocation in the amount of $117,000,000 from CUW395, Program Management Reserve Project to

APPROVAL: Donna Hood

COMMISSION SECRETARY
Donna Hood
the CUW37401, Calaveras Dam Replacement Project.

<table>
<thead>
<tr>
<th>Background &amp; Description of Scope of Work:</th>
<th>Program Scope and Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>The WSIP is a multi-billion dollar, multi-year program to upgrade the San Francisco Public Utilities Commission’s (SFPUC) drinking water system. The program will deliver capital improvements that enhance the SFPUC’s ability to provide reliable, affordable, high quality drinking water to its 26 wholesale customers and regional retail customers in Alameda, Santa Clara and San Mateo Counties, and to 800,000 retail customers in the City and County of San Francisco, in an environmentally sustainable manner. The WSIP is structured to cost-effectively meet water quality requirements, improve seismic and delivery reliability, and meet water supply reliability goals.</td>
<td></td>
</tr>
</tbody>
</table>

The WSIP includes a total of 81 projects which are divided into two sub-programs – Local and Regional. The 35 WSIP local projects are located within the city limits of San Francisco and only benefit city residents. These projects, which are typically smaller in size, include improvements to existing in-city distribution pipelines, storage reservoirs/tanks, pump stations and miscellaneous facilities. The 46 WSIP regional projects are typically much larger and are located mostly outside San Francisco limits. These projects include a wide variety of improvements such as upgrades to and the addition of new storage (dams and reservoirs), transmission (pipelines, tunnels and pump stations) and treatment facilities spread over 7 different counties (Tuolumne, Stanislaus, San Joaquin, Alameda, Santa Clara, San Mateo and San Francisco).

As of November 25, 2012 the status of the 81 WSIP projects is as follows:

- Only five (5) projects have yet to reach construction;
- Of the 5 projects in pre-construction, 2 are in the bid and award phase and, therefore, are only a few months away from starting construction;
- Construction is ongoing on 17 projects worth over $2.6 billion; and
- Construction has been completed on 59 projects, which represents two-thirds of WSIP’s 81 projects.

Previous WSIP Approvals

On May 28, 2002, per Resolution No. 02-0101, the Commission approved the Long-Term Strategic Plan for Capital Improvements, the Long-Range Financial Plan and the Capital Improvement Program and Appendices. These reports established the original framework of the WSIP, which at the time was referred to as the Capital Improvement Program (CIP).

On February 8, 2005, after a number of Commission workshops in late-2004/early-2005, agreement was reached on specific Level of Service (LOS) goals for the WSIP and the program description to be considered
as part of the WSIP Programmatic Environmental Impact Report (PEIR). These LOS goals, which were formally adopted by the Commission with the PEIR on October 30, 2008, resulted in very significant changes to the scope of the program.

As the scope of individual projects was refined as part of the planning and design process, and as projects transitioned into construction, the Commission approved revisions to the scope, schedule and/or budget of the WSIP on November 29, 2005, February 26, 2008, July 28, 2009, July 12, 2011, June 12, 2012, and October 9, 2012.

The revisions adopted by the Commission in 2012 involved changes to a limited number of projects and the consolidation of project cost savings totaling $161,431,087 into a Program Management Reserve.

**Requirements of California Water Code**

The Wholesale Regional Water System Security and Reliability Act (California Water Code § 73500 et seq.) requires the SFPUC to provide written notification to the Bay Area Wholesale Customers of certain program changes. The notice must be issued no less than 30 days prior to the date of the meeting when the Commission is to consider adopting program changes that would delay WSIP projects and/or result in the construction of different projects.

On December 21, 2012, the SFPUC notified the Bay Area Wholesale Customers through the Bay Area Water Supply & Conservation Agency (BAWSCA) in writing that this Commission would be considering schedule revisions to the CDRP.

If the Commission approves changes that would delay WSIP projects and/or result in the construction of different projects, Water Code Section 73502(c) (3) also requires that the SFPUC send a Notice of Change Report to the California Department of Public Health and the California Seismic Safety Commission.

**Proposed WSIP Changes**

WSIP procedures require that all project teams revise their schedule and cost forecasts on a monthly basis. The WSIP Management Team review and track these forecasts closely. When it is apparent that large forecasted variances cannot be mitigated, revisions to the projects’ approved schedule and/or budget need to be considered. These revisions, which capture the latest project information available, allow the WSIP Management Team to establish more realistic project baselines against which to measure performance.

The program revision requested here only includes schedule and budget changes to the CDRP. 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, all program-level resources will be discontinued as planned in July 2016 and the CDRP
will be completed independently using only CDRP resources.

Despite the significant cost increase on the CDRP, the program as a whole is still currently forecasted to be delivered within the WSIP’s currently approved budget of $4,585,556,260. This is because we are able to absorb the construction cost increase described here by using the construction contingency remaining in the project and the funds still available in the WSIP Program Management Reserve, which has a current remaining balance of $117,000,000.

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. Although the peak of construction activities is behind us, with only the more complex projects remaining, major issues like the one described here have started to arise, making the goal of delivering the program on budget still achievable, however significantly more challenging.

Through this item, SFPUC staff is seeking Commission approval for the following revisions to the schedule and budget of the CDRP.

**Proposed Changes to the Calaveras Dam Replacement Project**

The CDRP is currently in construction and as of November 25, 2012, the project was 30 percent complete.

In mid-June 2012, the construction contractor for the CDRP encountered unexpected geologic conditions during excavation of 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 potential geologic feature of interest for further evaluation, were also found in the vicinity. All of these geologic features had previously been undetected during the geotechnical investigations conducted during the project’s design phase.

The Project Team, which includes 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, have been working expeditiously and collaboratively to develop solutions to address these unexpected differing site conditions with the objective of minimizing future risk exposure 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 1.3 horizontal to 1 vertical (1.3H:1V) overall grade specified for
the original design cut slope in the left excavation above the future spillway (known as Observation Hill) needs to be re-designed. The
revised design calls for the entire slope to be laid back (flattened) to a
2H:1V overall grade 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.

**Schedule**

A Notice to Proceed (NTP) for construction was issued on August 15,
2011. The original contract duration was 1,460 consecutive calendar
days. As of November 25, 2012, approved changes orders have added
69 days to the original duration of the contract, for a total revised
contract duration of 1,529 calendar days. This item requests
authorization to approve up to an additional 761 calendar days (or 25
months). The proposed revision would increase the total contract
duration to 2,290 consecutive calendar days, resulting in the following
revised schedule:

<table>
<thead>
<tr>
<th>Project milestone</th>
<th>Current approved schedule</th>
<th>Proposed schedule</th>
<th>Variance (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Substantial Completion (Beneficial Use of New Dam)</td>
<td>July 23, 2015</td>
<td>September 3, 2017</td>
<td>25</td>
</tr>
<tr>
<td>Construction Final Completion (Finish Date of Construction Phase)</td>
<td>January 29, 2016*</td>
<td>December 2, 2017</td>
<td>22</td>
</tr>
<tr>
<td>Project Completion (Finish Date of Closeout Phase)</td>
<td>July 29, 2016</td>
<td>August 31, 2018</td>
<td>25</td>
</tr>
</tbody>
</table>

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

**Budget**

The original contract value is $259,571,850. To date, approved changes
orders have added $19,022,881 to the original value of the contract.

The schedule extension and additional construction work summarized
above will result in additional costs for the project. All of the additional
budget requested here will be 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 in Observation Hill. Once the negotiation of that change order is finalized, the Project 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.

<table>
<thead>
<tr>
<th>Phase/Project</th>
<th>Current Approved Budget</th>
<th>Proposed Budget</th>
<th>Variance ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Phase</td>
<td>$314,512,844</td>
<td>$431,512,844</td>
<td>$117,000,000</td>
</tr>
<tr>
<td>Other Phases</td>
<td>$101,125,000</td>
<td>$101,125,000</td>
<td>$0</td>
</tr>
<tr>
<td>Project Total</td>
<td>$415,637,844</td>
<td>$532,637,844</td>
<td>$117,000,000</td>
</tr>
</tbody>
</table>

WD-2551 Construction Contract

Contract work is being performed under Construction Contract WD-2551.

Sections 6.22(H)(1) and 6.22(H)(2) of the Administrative Code require that any cumulative increases in contract price or contract duration in excess of 10% of the original contract price or duration be approved by the Commission.

Due to the unexpected geologic conditions encountered during the excavation of the Observation Hill and other unforeseen conditions that were not anticipated during the planning and design of the project, the project team has identified a number of potential change orders and trends that will require additional modifications beyond the existing contract limits. To avoid potential delays in implementing and performing necessary change order work, the project team is seeking the approval of additional cost contingency and increase in the contract duration to cover future contract modifications determined by the project construction management team to be necessary to complete the work.

**Requested Changes to the Pre-Approved Contract Contingency:**

Additional contingencies in the amount up to $117,000,000 and 761 consecutive calendar days are being requested due to unexpected geologic field conditions and other unforeseen conditions.

**Contract Modifications to Date:**

The original contract amount and duration were $259,571,850, and 1,460 consecutive calendar days, respectively. There have been approved contract modifications to date in the amount of $19,022,882 (7.3% of the original contract amount), which increased the total contract value to $278,594,732; and for an extension of 69 consecutive calendar days, which increased the total contract duration to 1,529 calendar days.

**Change Orders and Trends**

The change orders and trends for Construction Contract WD-2551 –
Calaveras Dam Replacement Project are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved Change Orders (COs):</td>
<td>$19,022,882</td>
</tr>
<tr>
<td>Pending Change Orders (COs):</td>
<td>$1,037,000</td>
</tr>
<tr>
<td>Potential Change Orders (COs):</td>
<td>$3,391,223</td>
</tr>
<tr>
<td>Trends (COs):</td>
<td>$119,506,080</td>
</tr>
<tr>
<td>Remaining Contingency Not Used</td>
<td>$6,934,303</td>
</tr>
</tbody>
</table>

| Total Pending and Potential Change Orders plus Trends less Remaining Contingency | $117,000,000 |

Approved COs are changes that have received all required approvals; Pending COs are changes approved by the SFPUC that have yet to be authorized by the City Controller's Office; Potential COs are changes still being negotiated with the Contractor; and Trends are issues likely to result in future change orders but that have yet to be officially submitted and entered into the WSIP Construction Management Information System (CMIS) as a Proposed Change Order (PCO) or Change Order Request (COR).

The total forecasted value of the work associated with significant change orders, trends and risks are primarily related to the unexpected geologic conditions at Observation Hill, but also includes other items such as projected foundation grouting overruns, concrete temperature placement controls required by the State of CA Division of Safety of Dams (DSOD), extra foundation dewatering costs due to over-excavation required by DSOD, additional erosion control measures required to meet permit conditions, and a number of smaller items.

In addition to the original 10% construction contingency of $25,957,185, the amount of additional contingency requested here is $117,000,000 to cover the current forecasted pending and potential change orders plus trends, less $6,934,303 of remaining contingency not used to date.

With the additional contingency requested here, the General Manager may authorize change order(s) up to a total revised contract amount of $402,529,035.

### Environmental Review

A Final Programmatic Environmental Impact Report was prepared for the WSIP (“PEIR”) and certified by the Planning Commission on October 30, 2008 by Motion No. 17734, and thereafter, this Commission approved the WSIP and adopted findings and a Mitigation Monitoring and Reporting Program (MMRP), as required by CEQA. On January 27, 2011, the San Francisco Planning Commission certified the EIR for the CDRP, which tiered off of the WSIP-PEIR, and on the same date, per Resolution No. 11-0015, this Commission adopted CEQA findings, including a statement of overriding considerations, and a MMRP for the CDRP, and approved the award of Contract No. WD-2551, Calaveras Dam Replacement Project (CDRP). On December 13, 2012, the San Francisco Planning Department issued Addendum No. 1 to the CDRP.
EIR, to address changes in the project described above (CDRP Modifications). Addendum No. 1 concluded that the CDRP Modifications are within the scope of the project analyzed in the CDRP EIR and will not result in any new significant impacts or a substantial increase in the severity of previously identified significant effects that alter the conclusions reached in the CDRP EIR, and no further environmental review beyond the CDRP EIR is required to approve the CDRP modifications identified in the Addendum.

Result of Inaction:
A delay in approving all four actions proposed in this Agenda will impact the SFPUC’s obligation to comply with the Wholesale Regional Water System Security and Reliability Act (California Water Code § 73500 et seq.) and it will impact the SFPUC’s ability to keep moving forward with the construction of the CDRP, which is critical to the City’s long-term water supply plan.

Budget & Costs:
The overall WSIP budget is currently forecast to remain the same at $4,585,556,260 and funding is available in the WSIP Program Management Reserve under Project CUW 395 to cover the project budget increases requested herein:

**CDRP Overall Project Level**
Current Approved Project Budget: $415,637,844
Proposed Project Budget: $532,637,844
Proposed Budget Increase: $117,000,000

**Construction Contract WD-2551**
Original Contract Amount: $259,571,850
Contract Change Orders Approved to Date: $19,022,882
Total Revised Contract Amount: $278,594,732
Approved 10% Contract Contingency: $25,957,185
Additional Contract Contingency Requested: $117,000,000
Total Revised Contract Amount Limit Requested: $402,529,935

Schedule:
The overall WSIP schedule will be extended with a final completion date of August 31, 2018.

**CDRP Overall Project Level**
Current Approved Project Completion Date: July 29, 2016
Proposed Project Completion Date: August 31, 2018
Proposed Time Extension: 25 months

**Construction Contract WD-2551**
Notice-to-Proceed Date: August 15, 2011
Original Contract Final Completion Date: August 13, 2015
Approved Contract Final Completion Date: October 21, 2015
Original Contract Duration: 1,460 consecutive calendar days (48 months)
<table>
<thead>
<tr>
<th><strong>Total Approved Contract Extension Duration:</strong></th>
<th>69 consecutive calendar days (2 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proposed Contract Final Completion Date:</strong></td>
<td>November 20, 2017</td>
</tr>
<tr>
<td><strong>Proposed Contract Extension Duration:</strong></td>
<td>761 consecutive calendar days (25 months)</td>
</tr>
<tr>
<td><strong>Total Revised Contract Duration Requested:</strong></td>
<td>2,290 consecutive calendar days (76 months)</td>
</tr>
</tbody>
</table>

| **Compliance With Chapter 14b: Local Business Enterprise And Non-Discrimination In Contracting Ordinance:** | Human Rights Commission (HRC) subcontracting goal of 5% Local Business Enterprise (LBE) participation was originally established for this construction contract. Dragados-USA, Inc./Flatiron West, Inc./Sukut Construction, Inc., Joint Venture committed to a 7.41% LBE participation goal at the time of bid. |

<table>
<thead>
<tr>
<th><strong>Recommendation:</strong></th>
<th>SFPUC staff recommends that the Commission adopt the attached resolution.</th>
</tr>
</thead>
</table>
| **Attachments:**    | 1. SFPUC Resolution  
                     2. Addendum No. 1                                                                 |
WHEREAS, On May 28, 2002, per Resolution No. 02-0101, this Commission approved a Long-Term Strategic Plan for Capital Improvements, a Long-Range Financial Plan and a Capital Improvement Program (CIP); and

WHEREAS, On November 5, 2002, San Francisco residents voted to approve Proposition A (Water System Improvement Revenue Bonds and Imposition of Surcharge on Retail Water Customers), a revenue bond measure to fund the CIP approved by the Commission on May 28, 2002; and

WHEREAS, On February 26, 2003, pursuant to the requirements of California Assembly Bill (AB) 1823, the San Francisco Public Utilities Commission (SFPUC) submitted to the California Department of Health Services (now the California Department of Public Health) a report outlining the projects, schedule and implementation plan for the CIP; and

WHEREAS, On November 29, 2005 this Commission approved project-level changes to the CIP and by doing so endorsed the revised scope, schedule and budget of individual projects and renamed the program the Water System Improvement Program ("December 2005 WSIP"); and

WHEREAS, On February 26, 2008 this Commission approved project-level changes to the WSIP and by doing so endorsed the revised scope, schedule and budget of individual projects ("December 2007 Revised WSIP"); and

WHEREAS, On July 28, 2009, this Commission approved project-level changes to the WSIP and by doing so endorsed the revised scope, schedule and budget of individual projects ("June 2009 Revised WSIP"); and

WHEREAS, On July 12, 2011, this Commission approved project-level changes to the WSIP and by doing so endorsed the revised scope, schedule and budget of individual projects ("June 2011 Revised WSIP"); and

WHEREAS, On June 12, 2012, this Commission approved budget and schedule changes for three individual WSIP projects – New Irvington Tunnel, Bay Division Pipeline (BDPL) Reliability Upgrade – Pipeline ("BDPL No. 5") and Pulgas Balancing – Modification of the Existing Dechloramination Facility; and

WHEREAS, On October 9, 2012, this Commission approved budget changes for four individual WSIP projects – San Joaquin Pipeline (SJPL) System, Tesla Treatment Facility, Vegetation Restoration of WSIP Construction Sites (new project), and Program Management; and

WHEREAS, Revisions to the schedule and budget of the Calaveras Dam Replacement Project (CDRP) are needed as a result of the unexpected geologic conditions observed during excavation of the slope on the left side of the valley that could potentially contribute to instability of the left abutment and spillway area of the new dam as designed; these revisions would involve extending the project schedule by up to 25 months, thus revising the project completion date from July 29, 2016 to August 31, 2018, and increasing the project budget by up to $117,000,000, thus revising the total project budget from $415,637,844 to $532,637,844; and
WHEREAS, A Final Programmatic Environmental Impact Report was prepared for the WSIP ("PEIR") and certified by the Planning Commission on October 30, 2008 by Motion No. 17734, and thereafter, this Commission approved the WSIP and adopted findings and a Mitigation Monitoring and Reporting Program (MMRP), as required by the California Environmental Quality Act (CEQA) on October 30, 2008 per Resolution No. 08-0200, which findings are incorporated in this Resolution by this reference; and

WHEREAS, On January 27, 2011, the San Francisco Planning Commission certified the EIR for the CDRP (Project Number CUW37401), which tiers off of the WSIP PEIR, and on the same date, per Resolution No. 11-0015, this Commission adopted CEQA findings, including a statement of overriding considerations, and a MMRP for the CDRP; which findings are incorporated herein by this reference, and approved the CDRP; and

WHEREAS, On December 13, 2012, the San Francisco Planning Department issued the attached Addendum No. 1 to the CDRP EIR, which concluded that proposed modifications to the design of the CDRP (CDRP Modifications), necessitated by the discovery of unexpected geologic features observed during excavation of the new dam's left abutment, are within the scope of the project analyzed in the CDRP EIR and will not result in any new significant impacts or a substantial increase in the severity of previously identified significant impacts that alter the conclusions reached in the CDRP EIR; Addendum No. 1 is incorporated in this Resolution by this reference; and

WHEREAS, The PEIR and SFPUC Resolution No. 08-0200, the CDRP and Resolution No. 11-0015, and Addendum No. 1 to the CDRP EIR have been made available for review by the SFPUC and the public, and those files are part of the record before this Commission; and

WHEREAS, This Commission has reviewed and considered the information contained in the PEIR, CDRP EIR and Addendum No. 1, the findings contained in SFPUC Resolutions No. 08-0200 and No. 11-0015, and all written and oral information provided by the Planning Department, the public, relevant public agencies, SFPUC and other experts and the administrative files for the CDRP Modifications; and

WHEREAS, On May 24 2011, per Resolution No. 11-0077, this Commission approved the award of Contract No. WD-2551, Calaveras Dam Replacement Project to Dragados-USA, Inc./Flatiron West, Inc./Sukut Construction, Inc., Joint Venture; and

WHEREAS, The construction contract Notice-To-Proceed date was August 15, 2011; and

WHEREAS, The original contract amount was for $259,571,850 and the original contract duration was 1,460 consecutive calendar days; and

WHEREAS, Section 6.22(H)(1) of the Administrative Code requires that any cumulative increases in contract price in excess of 10% of the original contract price be approved by the Commission; and

WHEREAS, Section 6.22(H)(2) of the Administrative Code requires that any cumulative extensions of time in excess of 10% of the original contract duration be approved by the Commission; and

WHEREAS, Cost modifications approved to date for this construction contract amount to $19,022,881, pending change orders amount to $1,037,000, potential change orders amount to $3,391,223, trends amount to $119,506,080, and a balance of $6,934,303 remains in the project’s 10% construction contingency; and

WHEREAS, These pending and potential change orders, trends and remaining 10%
contingency, if converted to approved change orders, would exceed the pre-approved 10% construction cost contingency; and

WHEREAS, An increase in the construction cost contingency in the amount of $117,000,000 and a time extension of up to 761 consecutive calendar days are requested, subject to the General Manager's subsequent authorization of modifications, if appropriate; and

WHEREAS, Human Rights Commission (HRC) subcontracting goal of 5% Local Business Enterprise (LBE) participation was originally established for this construction contract; and

WHEREAS, The Contractor committed to a 7.41% LBE participation, as submitted at the time of bid; and

WHEREAS, Funding is currently available in the remaining WSIP Program Management Reserve Project under CUW395, and currently on reserve with the Budget and Finance Committee of the San Francisco Board of Supervisors; and

WHEREAS, Water Code Section 73502(d)(2) requires that the City provide written notice, not less than 30 days prior to the date of a meeting of the City Agency responsible for management of the Bay Area Regional Water System, that a change in the program is to be considered; and

WHEREAS, On December 21, 2012, the SFPUC notified the Bay Area Wholesale Customers through the Bay Area Water Supply & Conservation Agency (BAWSCA) in writing that this Commission would be considering changes to the WSIP at a public hearing on January 22, 2013; and

WHEREAS, During the 30-day public review period, the WSIP Director discussed with representatives of the BAWSCA the proposed changes to the CDRP; now, therefore, be it

RESOLVED, That this Commission has reviewed and considered the CEQA Findings and statement of overriding considerations that it previously adopted for the WSIP and CDRP, and reviewed and considered the CEQA Findings contained in Addendum No.1 and hereby adopts these additional CEQA Findings as its own. The SFPUC additionally finds that (1) implementation of the CDRP Modifications as set forth in Addendum No. 1 does not require major revisions in the CDRP EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; (2) no substantial changes have occurred with respect to the circumstances under which the project analyzed in the CDRP EIR will be undertaken, which would require major revisions to the CDRP EIR due to the involvement of new significant environmental effects, or a substantial increase in the severity of effects identified in the CDRP EIR; and (3) no new information of substantial importance to the project analyzed in the CDRP EIR has become available that would indicate that (i) the CDRP Modifications will have significant effects not discussed in the CDRP EIR; (ii) significant environmental effects will be substantially more severe; (iii) mitigation measures or alternatives found not feasible, which would reduce one or more significant effects, have become feasible; or (iv) mitigation measures or alternatives, which are considerably different from those in the CDRP EIR will substantially reduce one or more significant effects on the environment; and be it

FURTHER RESOLVED, That this Commission hereby endorses the schedule and budget changes for Project CUW37401: Calaveras Dam Replacement Project described herein; and be it

FURTHER RESOLVED, That this Commission hereby approves an increase to the existing contract cost contingency of up to the amount of $117,000,000, and approves a potential increase in the contract duration of up to 761 consecutive calendar days for the Water Enterprise, WSIP funded Construction Contract WD-2551 – Calaveras Dam Replacement Project, for a total
cost contingency amount of up to $142,957,185; and a potential extension in the contract total duration of up to 761 consecutive calendar days; and be it

FURTHER RESOLVED, That this Commission hereby authorizes the General Manager to consider, and if appropriate, to approve any future modifications to the construction contract amount for up to $402,529,035 and to the contract duration for up to 2,290 consecutive calendar days; and be it

FURTHER RESOLVED, That this Commission hereby approves the reallocation of funding in the amount of $117,000,000 from CUW395, Program Management Reserve Project to CUW 37401, Calaveras Dam Replacement Project; and be it

FURTHER RESOLVED, That this Commission hereby directs staff to send a Notice of Change Report to the California Department of Public Health and the California Seismic Safety Commission in compliance with Water Code Section 73502(d)(3) and to inform those agencies that an updated schedule for completion of the CDRP will be submitted upon completion of negotiation of the change order and Commission approval of any further revisions to the CDRP, or other WSIP projects; and be it

FURTHER RESOLVED, That this Commission adopts the five recommendations contained in the January 16, 2013 letter from the Bay Area Water Supply and Conservation Agency to the Commission President.

I hereby certify that the foregoing resolution was adopted by the Public Utilities Commission at its meeting of January 22, 2013.

[Signature]
Secretary, Public Utilities Commission
ATTACHMENT 2

CALAVERAS DAM REPLACEMENT PROJECT

CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS CONTAINED IN ADDENDUM NO. 1 TO THE FINAL ENVIRONMENTAL IMPACT REPORT

SAN FRANCISCO PUBLIC UTILITIES COMMISSION

1. On January 27, 2011, the San Francisco Planning Commission by Motion No. 18261 certified the Final Environmental Impact Report (FEIR) for the Calaveras Dam Replacement Project (CDRP). On January 27, 2011, the San Francisco Public Utilities Commission (SFPUC) by Resolution No. 11-0015 and on March 15, 2011, the Board of Supervisors by Board File No. 110187 adopted CEQA Findings, including a Statement of Overriding Considerations and a Mitigation Monitoring and Reporting Program in support of approval of the CDRP, which Findings are incorporated in this resolution by this reference.

2. On December 13, 2012, the San Francisco Planning Department issued Addendum No. 1 for the CDRP to address project modifications due to geotechnical hazards related to a previously unknown landslide feature in the left dam abutment for the new dam. These modifications would affect the excavation and disposal of material associated with construction of the left dam abutment and spillway and would increase the total volume of materials required to be excavated, handled and disposed of for the project by approximately 3 million cubic yards, would increase the project footprint by 29.1 acres due to use of five new disposal sites (Disposal Sites A/D, F, G, H, and I), and would increase the duration of construction by three (3) years. These project modifications are hereinafter referred to as the modified CDRP. Addendum No. 1 concludes that the modified CDRP is within the scope of the project analyzed in the FEIR and will not result in any new significant impacts or a substantial increase in the severity of previously identified significant effects that alter the conclusions reached in the FEIR. Addendum No. 1 and any supporting documents have been made available to the SFPUC and the public, are on file with the San Francisco Planning Department, and Addendum No. 1 is incorporated in this resolution by this reference. Hereafter in this resolution, the reference to the FEIR includes Addendum No. 1.

3. The SFPUC has reviewed and considered the CEQA Findings and Statement of Overriding Considerations that were previously adopted, and reviewed and considered the CEQA Findings contained in Addendum No. 1, and hereby adopts these additional CEQA Findings as its own and approves implementation of the modified CDRP. The SFPUC additionally finds that (1) implementation of the modified CDRP as set forth in Addendum No. 1 does not require major revisions in the FEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects, (2) no substantial changes have occurred with respect to the circumstances under which the project analyzed in the FEIR will be undertaken that would require major revisions to the FEIR due to the involvement of new significant environmental effects, or a substantial increase in the severity of effects identified in the FEIR, and (3) no new information of substantial importance to the project analyzed in the FEIR has become available which would indicate that (i) the modified CDRP will have significant effects not discussed in the FEIR; (ii) significant environmental effects will be substantially more severe; (iii) mitigation measures or alternatives found not feasible which would reduce one or more significant effects have become feasible; or (iv) mitigation measures or alternatives which are considerably different from those in the FEIR will substantially reduce one or more significant effects on the environment.
Schedule and Cost Revisions to Calaveras Dam Replacement Project

January 22, 2013
Julie L. Labonte, WSIP Director
Infrastructure Division
1. Adopt CEQA findings in Addendum No. 1 and approve project modifications

2. Approve revisions to Calaveras Dam Replacement Project (CDRP)

<table>
<thead>
<tr>
<th>Revisions</th>
<th>Current Approved</th>
<th>Proposed</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule</td>
<td>July 29, 2016</td>
<td>August 31, 2018</td>
<td>25 Months</td>
</tr>
<tr>
<td>Budget</td>
<td>$415,637,844</td>
<td>$532,637,844</td>
<td>$117,000,000</td>
</tr>
</tbody>
</table>
3. Approve increase in construction contingency for CDRP contract
   • Increase duration by 761 days (25 months)
   • Increase value by $117,000,000

4. Approve reallocation of $117,000,000 from Program Management Reserve to CDRP
Program Status

• Overall Program completion: 72%

• Status of 81 WSIP Projects:
  • Pre-construction: 5 ($317M)
  • Construction Ongoing: 17 ($2,593M)
  • Construction Completed: 59 ($802M)

• Balance in Program Management Reserve: $117M
Schedule

- Completion of CDRP delayed until August 2018
- All other projects to be completed and program structure to be discontinued by July 2016
- Projects with greatest schedule risks
  - Upper Alameda Creek Filter Gallery
  - Regional Groundwater Storage and Recovery
  - Peninsula Pipelines Seismic Upgrade
  - HTWTP Long-Term Improvements
### Cost

- **Additional hard cost on CDRP estimated at $117M (= Program Management Reserve)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pending Change Orders</td>
<td>$1,037,000</td>
</tr>
<tr>
<td>2. Potential Change Orders</td>
<td>$3,391,223</td>
</tr>
<tr>
<td>3. Trends</td>
<td>$119,506,080</td>
</tr>
<tr>
<td>4. Remaining Contingency</td>
<td>$6,934,303</td>
</tr>
<tr>
<td><strong>Additional Budget Required</strong></td>
<td><strong>$117,000,000</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expression</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1 + 2 + 3) – 4</td>
<td>$117,000,000</td>
</tr>
</tbody>
</table>

- **Other costs in 2nd CDRP revision**
  - More hard cost for negotiated change order (if needed)
  - Soft costs (including environmental mitigation)
  - Additional construction contingency
Potential Cost Savings

- Low construction bids on active projects
- Closeout of projects with remaining balances
- Reduction of construction contingency on active projects with high completion rate and low risks
- Reduction of soft cost at program, regional and project levels

Transfer all project savings into Program Management Reserve
Next Steps

- Seek Board of Supervisors Finance Committee approval for release of funds from Program Management Reserve
- Issue unilateral change order to CDRP Contractor to continue work
- Negotiate change order with CDRP Contractor
- Seek Commission approval for required revisions to active projects (including 2nd revision of CDRP)
- Issue Notice of Change Report to the State