July 12, 2012

The Honorable Michael Gardner, Chairman
California Seismic Safety Commission
1755 Creekside Oaks Drive, Suite 100
Sacramento, CA 95833-3637

Dr. Ron Chapman, MD, MPH, Director
California Department of Public Health
P.O. Box 997377, MS 0500
Sacramento, CA 95899-7377

Subject: Wholesale Regional Water System Security and Reliability Act
Notice of Changes to Water System Improvement Program

Dear Commissioner Gardner and Dr. Chapman:

Pursuant to the reporting requirements of the Wholesale Regional Water System Security and Reliability Act, the San Francisco Public Utilities Commission (SFPUC) respectfully submits this Change Notice, describing changes adopted by the SFPUC Commission (Commission) on June 12, 2012 to the schedule of three projects in the Water System Improvement Program (WSIP).

The SFPUC has continued to make great progress towards the implementation of the WSIP since the Commission last adopted revisions to the program in July 2011. In the 11-month period between July 1, 2011 and June 1, 2012, completion of the overall program increased from 42% to 62%. As of June 1, 2012, planning activities are essentially complete, whereas environmental, design and construction efforts are 91%, 95% and 57% complete, respectively. During the past year, reliability of the Hetch Hetchy Regional Water System increased following completion of construction activities on 7 regional and 2 local projects.

On May 11, 2012, the SFPUC notified the Bay Area Water Supply & Conservation Agency (BAWSCA) that the Commission would be considering changes to the WSIP at a public hearing on June 12, 2012. We also asked BAWSCA to forward the notification to the 26 wholesale agencies it represents and as requested, BAWSCA confirmed the notification was forwarded. This notification was made to comply with the change notice requirements of the Wholesale Regional Water System Security and Reliability Act. In addition, the Notice of Public Hearing and all supporting documents submitted to BAWSCA were posted on the SFPUC Website. A copy of the notice is attached to this letter.

On June 12, 2012, following a 30-day review period, the Commission adopted a revised project schedule and budget for the three following projects:
• New Irvington Tunnel (NIT)
• Bay Division Pipeline (BDPL) Reliability Upgrade – Pipeline (or BDPL No. 5)
• Pulgas Balancing – Modification to the Existing Dechloramination Facility

The schedule and budget revisions are described in the attached SFPUC Agenda Item. Also included is a copy of a June 5, 2012 letter by BAWSCA which provides comments on these latest WSIP revisions.

The approved schedule and budget for all other projects remain the same. Also, no scope revisions were made to WSIP projects and no projects were deleted or added to the program as part of these latest revisions approved by the Commission.

The project controlling the schedule of the overall WSIP remains the Calaveras Dam Replacement project. Challenging and potentially differing geological conditions have been encountered on this project during the past month. These newly discovered site conditions are currently being assessed and any resulting schedule impacts will be discussed in the WSIP Annual Report to be submitted to State agencies by September 1, 2012.

Please do not hesitate to contact me at (415) 554-1600 if you have questions or need additional information.

Sincerely,

Ed Harrington
General Manager
San Francisco Public Utilities Commission

Attachment: Notice of Public Hearing issued on May 11, 2012
Agenda Item No. 9 of June 12, 2012 SFPUC public meeting
(including SFPUC Resolution No. 12-0099)
June 5, 2012 letter from BAWSCA (Comments on Proposed Revisions to WSIP)
Notice of Changes to WSIP
July 12, 2012

cc: (w/ attachment)
    The Honorable Anson B. Moran - President, SFPUC Commission
    The Honorable Art Torres - Vice President, SFPUC Commission
    The Honorable Vince Courtney - Commissioner, SFPUC Commission
    The Honorable Ann Moller Caen – Commissioner, SFPUC Commission
    The Honorable Francesca Vietor - Commissioner, SFPUC Commission
    Arthur Jensen - Chief Executive Officer and General Manager, BAWSCA
    Bruce Burton – Chief of Northern California Drinking Water Field Operations Branch, Center
    for Environmental Health, California Department of Public Health
    Betty Graham - San Francisco District Engineer, Drinking Water Field Operations Branch,
    California Department of Public Health
    Richard (Dick) McCarthy – Executive Director, California Seismic Safety Commission
    Fred Turner – Structural Engineer, California Seismic Safety Commission

(w/o attachment)
    The Honorable Assembly Member Ricardo Lara, Chair
    California State Assembly - Joint Legislative Audit Committee
    The Honorable Senator Robert Dutton, Vice-Chair
    California State Senate - Joint Legislative Audit Committee
    Stefan Cajina, Chief of North Coastal Region, Drinking Water Field Operations Branch,
    California Department of Public Health
    Barbara Pierce - Chair, BAWSCA
    Irene O’Connell - Vice Chair, BAWSCA
    Member Agencies - BAWSCA
NOTICE OF PUBLIC HEARING
(Issued on May 11, 2012)

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

Tuesday - June 12, 2012
1:30 P.M.
City Hall, Room 400
1 Dr. Carlton B. Goodlett Place
San Francisco California

SUBJECT OF PUBLIC MEETING

San Francisco Water Power Sewer is posting “Revisions to the Water System Improvement Program (WSIP)” referred to as the May 2012 Revised WSIP. The San Francisco Public Utilities Commission (SFPUC) will hold a public hearing as part of its regularly scheduled meeting on Tuesday - June 12, 2012 for the purpose of considering proposed revisions to the WSIP.

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, by the time the proceedings begin on June 12, 2012, written comments regarding the subject of the hearing. 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
1155 Market Street (11th Floor)
San Francisco, CA 94103

BACKGROUND

The Wholesale Regional Water System Security and Reliability Act (Water Code § 73500 et seq.) requires that San Francisco Water Power Sewer provides notification of certain program changes. Specifically, San Francisco Water Power Sewer 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.

Edwin M. Lee
Mayor
Anson, Moran
President
Art Torres
Vice President
Ann Muller Caan
Commissioner
Francesca M. Serafino
Commissioner
Vince Courtney
Commissioner
Ed Harrington
General Manager
The SFPUC last adopted revisions to the WSIP, including revised program scope, schedule and budget on July 12, 2011. This notice includes schedule changes recently approved for the New Irvington Tunnel (NIT) project and the Bay Division Pipeline Reliability Upgrade project – BDPL No. 5 Pipeline (BDPL5 Pipeline). Also, the SFPUC commission will be considering a time extension for the Pulgas Balancing – Modification of the Existing Dechlorination Facility Project. It should be noted that the overall program cost and completion date are unchanged and remain $4.6 billion and July 29, 2016 respectively.

The 2011 approved Project Completion date for the NIT project is October 31, 2014 with a proposed Project Completion date of January 21, 2016, resulting in a 447-day extension. The 2011 approved Project Completion date for the BDPL5 Pipeline project is March 5, 2013 with a proposed Project Completion date of October 1, 2013, resulting in a 210-day extension. The 2011 approved Project Completion date for the Pulgas Balancing – Modification of the Existing Dechlorination Facility project is May 30, 2012 with a proposed Project Completion date of November 13, 2012, resulting in a 167-day extension.

CHANGE DESCRIPTION

New Irvington Tunnel

The NIT project is currently in construction. The construction Notice to Proceed (NTP) was issued on August 26, 2010. The original contract duration was 1390 consecutive calendar days. On December 13, 2011, the SFPUC Commission approved cumulative time extension of 400 calendar days, for a total revised contract duration of 1790 consecutive. The additional time was granted to the contractor due to following items:

- Differing site condition, including excessive hard rock material and excessive ground water inflow that was not fully listed in the contract documents,
- Gassy tunnel conditions, and
- Tunnel excavation delays due to probe hole drilling and grouting for ground water seepage control

In addition to extending construction phase duration by 400 days, the WSIP management team is proposing an allocation of the standard 6 months duration for the project closeout, resulting in a 447-day extension as reflected in the table below:

<table>
<thead>
<tr>
<th>New Irvington Tunnel</th>
<th>2011 Approved</th>
<th>Proposed</th>
<th>Variance at Completion (Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Start</td>
<td>Finish</td>
<td>Start</td>
</tr>
<tr>
<td>Planning</td>
<td>19-Dec-01</td>
<td>7-Oct-05</td>
<td>19-Dec-01</td>
</tr>
<tr>
<td>Environmental</td>
<td>25-Aug-04</td>
<td>7-Mar-11</td>
<td>25-Aug-04</td>
</tr>
<tr>
<td>Design</td>
<td>11-Oct-05</td>
<td>12-Jan-10</td>
<td>11-Oct-05</td>
</tr>
<tr>
<td>Bid &amp; Award</td>
<td>5-Jan-09</td>
<td>21-Jul-10</td>
<td>5-Jan-09</td>
</tr>
<tr>
<td>Construction</td>
<td>31-Mar-09</td>
<td>15-Jun-14</td>
<td>31-Mar-09</td>
</tr>
<tr>
<td>Closeout</td>
<td>16-Jun-14</td>
<td>31-Oct-14</td>
<td>21-Jul-15</td>
</tr>
</tbody>
</table>
Bay Division Pipeline Reliability Upgrade

The BDPL No. 5 Project originally consisted of two major construction contracts: BDPL No. 5 East Bay reaches and BDPL No. 5 Peninsula reaches. Due to a discovery of an archeological burial site after the contracts were advertised, the segment of BDPL No. 5 at Cordilleras Creek has to be deleted from the BDPL No. 5 Peninsula reaches construction contract and bid separately to construct a new tunnel instead of an open-cut pipeline under the environmentally sensitive portion of the alignment. The Notice to Proceed (NTP) for this third contract was issued on February 1, 2012 with construction duration of 365 days. This third contract has pushed the project's construction completion and closeout 177 days and 210 days, respectively, beyond the project's 2011 baseline schedule as reflected in the table below:

<table>
<thead>
<tr>
<th>BOPL Reliability Upgrade PIPELINE</th>
<th>2011 Approved Start</th>
<th>2011 Approved Finish</th>
<th>Proposed Start</th>
<th>Proposed Finish</th>
<th>Variance at Completion (Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
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<td>31-May-06</td>
<td>19-Dec-01</td>
<td>31-May-06</td>
<td>0</td>
</tr>
<tr>
<td>Environmental</td>
<td>18-Nov-04</td>
<td>12-Feb-10</td>
<td>18-Nov-04</td>
<td>12-Feb-10</td>
<td>0</td>
</tr>
<tr>
<td>Design</td>
<td>3-Jan-06</td>
<td>17-Aug-09</td>
<td>3-Jan-06</td>
<td>17-Aug-09</td>
<td>0</td>
</tr>
<tr>
<td>Bid &amp; Award</td>
<td>22-Apr-09</td>
<td>9-Mar-10</td>
<td>22-Apr-09</td>
<td>9-Mar-10</td>
<td>0</td>
</tr>
<tr>
<td>Construction</td>
<td>4-Jan-10</td>
<td>7-Sep-12</td>
<td>29-Oct-09</td>
<td>3-Mar-13</td>
<td>177</td>
</tr>
<tr>
<td>Closeout</td>
<td>8-Feb-12</td>
<td>5-Mar-13</td>
<td>4-Mar-13</td>
<td>1-Oct-13</td>
<td>210</td>
</tr>
</tbody>
</table>

Pulgas Balancing – Modification of the Existing Dechloramination Facility

The Pulgas Balancing – Modification of the Existing Dechloramination Facility Project is currently in construction. The construction Notice to Proceed (NTP) was issued on September 22, 2010. The original contract duration was 360 consecutive calendar days and had 176 days contingency in the construction phase. The SFPUC commission will be considering a cumulative time extension of 405 calendar days, for a total revised contract duration of 765 consecutive calendar days. The additional time is being requested due to the following items:

- Differing as-built conditions requiring realignment of some piping
- Design modifications to meet established performance criteria
- Equipment delivery delays due to excessive flooding in Thailand, location of some of the equipment suppliers
- Outstanding issues with contractor’s compliance with Office labor Standard Enforcement requirements

In addition to extending construction phase duration by 229 days, the WSIP management team is proposing an allocation of 4 months duration for the project closeout, resulting in a net 167-day extension as reflected in the table below:
### Water System Improvement Program (WSIP)

**Notice of Public Hearing – June 12, 2012**

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<table>
<thead>
<tr>
<th>Pulgas Balancing</th>
<th>2011 Approved</th>
<th>Proposed</th>
<th>Variance at Completion (Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mod of Exit</td>
<td>Start</td>
<td>Finish</td>
<td>Start</td>
</tr>
<tr>
<td>Decilex Facility</td>
<td>2-Apr-07</td>
<td>17-Mar-09</td>
<td>2-Apr-07</td>
</tr>
<tr>
<td>Planning</td>
<td>19-Nov-07</td>
<td>4-Mar-10</td>
<td>19-Nov-07</td>
</tr>
<tr>
<td>Environmental</td>
<td>2-Jan-09</td>
<td>12-Mar-10</td>
<td>2-Jan-09</td>
</tr>
<tr>
<td>Design</td>
<td>29-Jan-10</td>
<td>22-Sep-10</td>
<td>29-Jan-10</td>
</tr>
<tr>
<td>Bid &amp; Award</td>
<td>22-Sep-10</td>
<td>30-Nov-11</td>
<td>22-Sep-10</td>
</tr>
<tr>
<td>Construction</td>
<td>1-Dec-11</td>
<td>30-May-12</td>
<td>17-Jul-12</td>
</tr>
</tbody>
</table>
Construction Modification: Regular Calendar  
Project Manager: Julie L. Labonte

**WSIP Baseline Revision 2012**

Summary of Proposed Commission Action: Approve revisions to the schedule and cost of three projects being delivered as part of the of the Water System Improvement Program (WSIP): New Irvington Tunnel (NIT) project, the Bay Division Pipeline Reliability Upgrade - Pipeline (“BDPL No. 5”) project, and the Pulgas Balancing - Modification of the Existing Dechlorination Facility (“Pulgas Dechlorination”) project; 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 schedule and cost revisions are as follows:

<table>
<thead>
<tr>
<th>Project</th>
<th>2011 Approved</th>
<th>2012 Proposed</th>
<th>Variance (Day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIT</td>
<td>10/31/14</td>
<td>01/21/16</td>
<td>447</td>
</tr>
<tr>
<td>BDPL No. 5</td>
<td>03/05/13</td>
<td>10/01/13</td>
<td>210</td>
</tr>
<tr>
<td>Pulgas Dechlorination</td>
<td>05/30/12</td>
<td>03/20/13</td>
<td>294</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project</th>
<th>2011 Approved</th>
<th>2012 Proposed</th>
<th>Variance ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIT</td>
<td>$313,424,513</td>
<td>$319,924,513</td>
<td>$6,500,000</td>
</tr>
<tr>
<td>BDPL No. 5</td>
<td>$221,290,899</td>
<td>$221,922,899</td>
<td>$632,000</td>
</tr>
<tr>
<td>Pulgas Dechlorination</td>
<td>$5,790,114</td>
<td>$6,145,114</td>
<td>$355,000</td>
</tr>
</tbody>
</table>

As of the end of April 2012, the construction of the NIT, BDPL No. 5 and Pulgas Chlorination projects is 51%, 90% and 94%, respectively.
Background & Description of Scope of Work:

Program Scope and Status

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.

The WSIP includes a total of 81 projects which are divided into two sub­programs – 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 April 28, 2012 the status of the 81 WSIP projects is as follows:

- Only 7 projects have yet to reach construction;
- Of the 7 projects in pre-construction, 3 are in the bid and award phase and are therefore only a few months away from starting construction;
- Construction is ongoing on 19 projects worth over $2.5 billion; and
- Construction has been completed on 55 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 budget of the WSIP on November 29, 2005, February 26, 2008, July 28, 2009 and July 12, 2011.

The revisions last adopted by the Commission on July 12, 2011 involved the following:

- No projects were deleted or added to program. Only a few changes were made to the scope of 4 regional projects.
- The most significant change was the extension of the overall program completion date from December 4, 2015 to July 29, 2016.
- The proposed WSIP budget remained unchanged at $4,585,556,260. The net savings of project-level budget changes resulted in the ability to establish a Program Management Reserve of $161,431,097.

Requirements of California Water Code

The Wholesale Regional Water System Security and Reliability Act (California Water Code § 73500 et seq.) requires the SFPUC to annually report progress on the WSIP, including identifying any project that is behind schedule and a plan and timeline to make up the delay or revise the schedule. It also requires that the SFPUC provides 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 May 11, 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 NIT, BDPL No. 5 and Pulgas Chloramination projects.

If the Commission does approve changes that would delay WSIP projects and/or result in the construction of different projects, the California Water Code 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 cost 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.

All project revisions presented herein are consistent with each project’s latest available cost and schedule forecasts. These forecasts include all construction change orders (approved, pending and proposed), as well as construction trends.

The program revisions requested herein do not involve any scope changes and do not include any project addition or deletion. Also, it should be noted that the project-specific revisions proposed herein will not change the WISP’s overall cost and completion date. The overall program budget and completion date will remain the same at $4,585,556,260 and July 29, 2016, respectively. The project-level cost increase will be covered by the funds available in the WISP Program Management Reserve, which as of April 28, 2012 has a remaining balance of $144,459,649.

Through this item, SFPUC staff is seeking Commission approval for the following revisions to the schedule and cost of the NIT, BDPL No. 5 and Pulgas Dechloramination projects.

(1) NEW IRVINGTON TUNNEL (NIT) PROJECT
As of the end of April 2012, construction of the 18,300 feet NIT is 51 percent complete.

Schedule
A Notice to Proceed (NTP) for construction of the project was issued on August 26, 2010. The original contract duration was 1,390 consecutive calendar days. On December 13, 2011, per Resolution No. 1-0192, the Commission authorized the General Manager to consider, and if appropriate to approve modification to the NIT construction contract, with cumulative time extensions not to exceed 400 total additional consecutive calendar days. As of the end of April 2012, the contractor has been granted 236 of the 400 days as part of approved change orders. Contract extensions were approved for the following reasons:

- Delays associated with differing site conditions such as harder rock encountered in the excavation than documented in the contract, and a soil nail wall failure and repairs due to unanticipated poor material for soil nail anchorages;
- Delays associated with the reclassification of the tunnel from Potentially Gassy to Fully Gassy by the California Occupations Safety and Health Administration (Cal-OSHA), and the need to revise the tunnel ventilation system to four tunnel headings and institute full-time monitoring for gas; and
• Delays associated with required probe hole drilling and grouting for groundwater seepage control in the tunnel excavation headings.

Considering that more than half the allowable 400 days have been granted already, and given the likelihood of more differing site conditions and schedule impacts due to continued operations under gassy tunnel conditions, it is anticipated that all cumulative extensions at the end of the construction contract may approach 400 days.

The construction phase of the revised project schedule proposed herein includes all 400 additional days pre-approved by the Commission. The revised schedule also provides 6 months for the closeout phase, whereas the currently approved schedule only allows 4.5 months. The following table shows the proposed schedule changes to the project’s major phases:

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>2011 Approved</th>
<th>2012 Proposed</th>
<th>Variance at Completion (Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Start</td>
<td>Finish</td>
<td>Start</td>
</tr>
<tr>
<td>Planning</td>
<td>12/19/01</td>
<td>10/07/05</td>
<td>12/19/01</td>
</tr>
<tr>
<td>Environmental</td>
<td>08/25/04</td>
<td>03/07/11</td>
<td>08/25/04</td>
</tr>
<tr>
<td>Design</td>
<td>10/11/05</td>
<td>01/12/10</td>
<td>10/11/05</td>
</tr>
<tr>
<td>Bid &amp; Award</td>
<td>12/05/09</td>
<td>07/21/10</td>
<td>12/05/09</td>
</tr>
<tr>
<td>Construction</td>
<td>07/21/10</td>
<td>06/15/14</td>
<td>08/25/10</td>
</tr>
<tr>
<td>Closeout</td>
<td>06/16/14</td>
<td>10/31/14</td>
<td>07/21/15</td>
</tr>
</tbody>
</table>

**Budget**

The schedule extension mentioned above will result in additional costs for the project. Namely, project management and construction management resources must be extended to support the project through its completion, resulting in increased delivery costs. The construction adjustments that had to be made to address the very challenging and unforeseen site conditions and Cal-OSHA’s reclassification of the tunnel, have significantly increased the project’s construction costs. The proposed budget revisions take into account the costs negotiated to date with the contractor as part of approved change orders associated with performing work under Fully Gassy conditions.

The following table shows the proposed budget changes to the project’s major cost categories:

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>2011 Approved</th>
<th>2012 Proposed</th>
<th>Variance ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery</td>
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<td>1,800,000</td>
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<tr>
<td>Construction</td>
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<td>$4,700,000</td>
</tr>
<tr>
<td>Other</td>
<td>$2,464,350</td>
<td>$2,464,350</td>
<td>$0</td>
</tr>
<tr>
<td>Total</td>
<td>$313,424,513</td>
<td>$319,924,513</td>
<td>$6,500,000</td>
</tr>
</tbody>
</table>
The BDPL Reliability Upgrade – Pipeline project originally consisted of two major construction contracts: BDPL No. 5 East Bay Reaches and BDPL No. 5 Peninsula Reaches. As of the end of April 2012, construction on the BDPL No. 5 East Bay Reaches has been completed, while construction on the BDPL No. 5 Peninsula Reaches is 88 percent complete.

Following the discovery of an extensive archaeological burial site in the vicinity of Cordilleras Creek in the Peninsula during construction, a 1,400-feet segment of BDPL No. 5 was deleted from the BDPL No. 5 Peninsula Reaches construction contract. It was determined to be more efficient, expeditious and cost effective to build a micro-tunnel under this environmentally sensitive segment of the BDPL No. 5 and to perform the work under a separate contract.

**Schedule**

The NTP for the BDPL No. 5 Cordilleras Micro-Tunnel contract was issued on February 1, 2012 and the contract has a construction duration of 365 days.

Although construction on both original contracts will complete within the currently approved schedule, the addition of a third contract to address the area impacted by the archaeological discovery near Cordilleras Creek has delayed completion of the project’s construction and closeout phases 177 days and 210 days respectively, as reflected in the table below:

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>2011 Approved</th>
<th>2012 Proposed</th>
<th>Variance at Completion (Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Start</td>
<td>Finish</td>
<td>Start</td>
</tr>
<tr>
<td>Planning</td>
<td>12/19/01</td>
<td>05/31/06</td>
<td>12/19/01</td>
</tr>
<tr>
<td>Environmental</td>
<td>12/18/04</td>
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<tr>
<td>Design</td>
<td>01/03/06</td>
<td>08/17/09</td>
<td>01/03/06</td>
</tr>
<tr>
<td>Bid &amp; Award</td>
<td>04/22/09</td>
<td>03/09/10</td>
<td>04/22/09</td>
</tr>
<tr>
<td>Construction</td>
<td>01/04/10</td>
<td>09/07/12</td>
<td>10/29/09</td>
</tr>
<tr>
<td>Closeout</td>
<td>02/08/12</td>
<td>03/05/13</td>
<td>03/04/13</td>
</tr>
</tbody>
</table>

**Budget**

On October 11, 2011, per Resolution 11-0172, the Commission approved a $13,918,197 increase in the construction contingency budget for the for BDPL No. 5 East Bay Reaches contract, and by doing so also approved a $13,918,197 increase in the approved 2011 project budget. The additional budget contingency was needed as a result of unforeseen site conditions associated with existing infrastructure, additional restoration of impacted properties required along the pipeline alignment, treatment and disposal of contaminated groundwater found within the right-of-way, and various environmental mitigation requirements.
The revised budget proposed herein is $632,000 greater than the latest approved project budget approved, which includes the $13,918,197 increase in construction contingency. The additional increase consists primarily of the costs associated with the extension of project management and construction management resources needed to support the BDPL No. 5 Cordilleras Micro-Tunnel contract.

The following table shows the proposed budget changes to the project’s major cost categories. Keep in mind that the “2011 Approved” budget figures shown below include the increase in construction contingency approved by the Commission on October 11, 2011.

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>2011 Approved</th>
<th>2012 Proposed</th>
<th>Variance ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery</td>
<td>$59,662,246</td>
<td>$62,865,246</td>
<td>$3,203,000</td>
</tr>
<tr>
<td>Construction</td>
<td>$157,063,297</td>
<td>$154,492,297</td>
<td>-2,571,000</td>
</tr>
<tr>
<td>Other</td>
<td>$4,565,356</td>
<td>$4,565,356</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>$221,290,899</td>
<td>$221,922,899</td>
<td>$632,000</td>
</tr>
</tbody>
</table>

(3) PULGAS BALANCING – MODIFICATION OF THE EXISTING DECHLORAMINATION FACILITY (“PULGAS DECHLORAMINATION”) PROJECT

As of the end of April 2012, construction of the dechloramination improvements at the Pulgas Balancing Reservoir is 94 percent completed.

**Schedule**

A NTP for construction of the project was issued on September 22, 2010. The original contract duration was 360 consecutive calendar days. Non-recoverable delays beyond the project’s currently approved completion date are forecasted for the following reasons:

- Differing as-built conditions requiring realignment of some piping;
- Required design modifications to meet established facility performance criteria;
- Equipment delivery delays due to flooding events in Thailand, which is the location of some of the equipment suppliers; and
- Outstanding issues with contractor’s compliance with Office Labor Standard Enforcement requirements. It should be noted that the original construction contractor on this project defaulted on its contractual obligations after the start of construction activities and had to be replaced. The transition of construction activities to a new contractor was completed successfully.

In addition to extending construction phase duration by 355 days, an allocation of 4 months for the closeout phase is being proposed, resulting in a net 294-day extension to the project completion date as reflected in the table below:
**Project Phase**

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>2011 Approved</th>
<th>2012 Proposed</th>
<th>Variance at Completion (Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Start</td>
<td>Finish</td>
<td>Start</td>
</tr>
<tr>
<td>Planning</td>
<td>04/02/07</td>
<td>03/17/09</td>
<td>04/02/07</td>
</tr>
<tr>
<td>Environmental</td>
<td>11/19/07</td>
<td>03/04/10</td>
<td>11/19/07</td>
</tr>
<tr>
<td>Design</td>
<td>01/02/09</td>
<td>03/12/10</td>
<td>01/02/09</td>
</tr>
<tr>
<td>Bid &amp; Award</td>
<td>01/29/109</td>
<td>09/22/10</td>
<td>01/29/109</td>
</tr>
<tr>
<td>Construction</td>
<td>09/22/10</td>
<td>11/30/11</td>
<td>09/22/10</td>
</tr>
<tr>
<td>Closeout</td>
<td>12/01/11</td>
<td>05/30/12</td>
<td>11/20/12</td>
</tr>
</tbody>
</table>

**Budget**

The schedule extension mentioned above results in additional costs for the project. Namely, project management and construction management resources must be extended to support the project through its completion, resulting in increased delivery costs. The construction adjustments that had to be made to address the differing site conditions and design modifications also increased the project's construction costs.

The following table shows the proposed budget changes to the project's major cost categories:

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>2011 Approved</th>
<th>2012 Proposed</th>
<th>Variance ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery</td>
<td>$2,051,016</td>
<td>$2,126,016</td>
<td>$75,000</td>
</tr>
<tr>
<td>Construction</td>
<td>$3,534,098</td>
<td>$3,814,098</td>
<td>$280,000</td>
</tr>
<tr>
<td>Other</td>
<td>$205,000</td>
<td>$205,000</td>
<td>$0</td>
</tr>
<tr>
<td>Total</td>
<td>$5,790,114</td>
<td>$6,145,114</td>
<td>$355,000</td>
</tr>
</tbody>
</table>

**Result of Inaction:**

A delay in approving this modification will impact the SFPUC's obligation to comply with the Wholesale Regional Water System Security and Reliability Act (California Water Code § 73500 et seq.).

**Budget & Costs:**

The overall WSIP budget will remain the same at $4,585,556,260 and funding is available in the WSIP Program Management Reserve to cover the following proposed project budget increases:

**NIT**

2011 Approved Cost: $313,424,513
2012 Proposed Cost: $319,924,513
Proposed Budget Increase: $6,500,000

**BDPL No. 5**

2011 Approved Cost: $221,290,899
2012 Proposed Cost: $221,922,899
Proposed Budget Increase: $632,000

**Pulgas Dechloramination**

2011 Approved Cost: $5,790,114
2012 Proposed Cost: $6,145,114
Proposed Budget Increase: $355,000
<table>
<thead>
<tr>
<th>Schedule:</th>
<th>The overall WSIP schedule will remain the same with a final completion date of July 29, 2016.</th>
</tr>
</thead>
</table>
| NIT | 2011 Approved Project Completion Date: October 31, 2014  
2012 Proposed Project Completion Date: January 21, 2016  
Proposed Time Extension: 447 consecutive calendar days |
| BDPL No. 5 | 2011 Approved Project Completion Date: March 5, 2013  
2012 Proposed Project Completion Date: October 1, 2013  
Proposed Time Extension: 210 consecutive calendar days |
| Pulgas Dechloramination | 2011 Approved Project Completion Date: May 30, 2012  
2012 Proposed Project Completion Date: March 20, 2013  
Proposed Time Extension: 294 consecutive calendar days |
| Compliance With Chapter 14b: Local Business Enterprise And Non-Discrimination In Contracting Ordinance: | Not applicable. |
| Recommendation: | SFPUC staff recommends that the Commission adopt the attached resolution. |
| Attachment: | 1. SFPUC Resolution |
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, 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; 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, The Project files, including the PEIR and SFPUC Resolution No. 08-0200, 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, The Commission has reviewed and considered the information contained in the PEIR and the findings contained in SFPUC Resolution No. 08-0200 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 Project; and

WHEREAS, The SFPUC has completed environmental review of the majority of the individual WSIP projects, and is proceeding to complete the environmental review process for the remainder of the projects, as authorized by and in accordance with CEQA; and
June 5, 2012

The Hon. Anson Moran, President
San Francisco Public Utilities Commission
1155 Market Street, 11th Floor
San Francisco, CA 94103

SUBJECT: Comments on Proposed Revisions to Water System Improvement Program

Dear President Moran:

On May 11, 2012, the San Francisco Public Utilities Commission (SFPUC) notified the Bay Area Water Supply and Conservation Agency (BAWSCA) that it would be considering proposed changes to the Water System Improvement Program (WSIP). The documents supporting the proposed revisions to the WSIP have been reviewed by BAWSCA.

The proposed revisions would extend the schedule for three WSIP projects: New Irvington Tunnel, Bay Division Pipeline Reliability Upgrade - Pipeline, and Pulgas Balancing - Modification of the Existing Dechloramination Facility. Since no scope changes are proposed, BAWSCA's review focused on the schedule and budget questions below:

Schedule: Has the completion date for the WSIP been extended and if so, why? With the schedule extensions being proposed, are the project completions being further compressed into the final years of the WSIP?

BAWSCA's Findings: The proposed schedule revisions affect the three individual projects only and will not extend the overall completion date of the WSIP. In each of these cases, the schedule extensions reflect changes that have become necessary to accommodate difficult site conditions and/or challenges that have occurred during construction. While the 15 month proposed delay for New Irvington Tunnel will compress that project's overall completion into the final years of WSIP construction, based on information provided by the SFPUC, these delays are necessary and have been minimized where possible. For the Bay Division Pipeline project, additional actions have been taken in the construction that has occurred to date to remove any impact on the critical shutdown schedule. The delay on the Pulgas Balancing project will not significantly impact the other remaining WSIP projects or schedule.

BAWSCA Recommendation: BAWSCA recommends that the Commission adopt the proposed schedule revisions.

Budget: What is the impact of the proposed schedule revisions on the individual project budgets and overall WSIP budget as last adopted?

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BAWSCA’s Findings: The most recent WSIP Quarterly Report (WSIP Regional Projects Q3 FY 2011-12 Report) showed a forecast cost at completion of $4,583M, or $2M under the approved budget for the overall WSIP. The Q3 forecast did include the anticipated 15 month delay for New Irvington Tunnel and a forecasted cost increase of $0.44M, or 1.4% over the approved project budget. The Q3 Report did forecast costs in excess of the adopted budgets for both the Peninsula Pipeline and the Pugas Balancing projects of $2.7M and $0.2M respectively; however it is not possible to determine if these cost forecasts reflect the potential budget impacts of the proposed schedule delays. It is BAWSCA’s understanding that the budget impacts of the proposed revisions will be provided to the Commission as part of the public hearing meeting materials.

BAWSCA’s Recommendation: While the law does not require SFPUC to report the budgetary impacts of proposed schedule and scope changes, this information is critically important to the customers of the SFPUC who are required to pay two-thirds of the cost of the WSIP. This information should be available to the public and the Commission as part of the evaluation process of any proposed change to the WSIP. BAWSCA recommends that the Commission direct staff to include the budgetary impacts as part of any future AB 1823 Notice of Change process for the WSIP.

This Notice of Change process has differed from previous efforts as it is more streamlined and focused on just those changes necessary rather than a full-blown “re-baselining” of the entire WSIP, as has been done in the past. BAWSCA supports this new direction as it will bring forward recommended changes in an expedited manner as soon as the SFPUC staff believes they are necessary for the continued progress in implementing the WSIP.

BAWSCA continues to support the SFPUC’s efforts to implement the WSIP on time and on budget for the protection of the 2.5 million residents and associated businesses that rely on the San Francisco Regional Water System for a reliable supply of high quality water. If we can provide any support at the State level regarding this new approach for the Notice of Change process, please contact Nicole Sandkulla at the BAWSCA office.

Sincerely,

Arthur R. Jensen
Chief Executive Officer/General Manager

cc: E. Harrington, SFPUC General Manager
Julie Labonte, SFPUC, Director, Water System Improvement Program
Nicole Sandkulla, BAWSCA Water Resources Planning Manager
BAWSCA Board of Directors
BAWSCA Water Management Representatives