Mission: The purpose of the Revenue Bond Oversight Committee (RBOC) is to monitor the expenditure of revenue bond proceeds related to the repair, replacement, upgrade and expansion of the SFPUC’s water, power and sewer infrastructure. The RBOC’s goal is to ensure that specific SFPUC revenue bond proceeds are spent appropriately and according to authorization and applicable laws. The RBOC provides oversight to ensure transparency and accountability in connection with expenditure of the proceeds. The public is welcome to attend RBOC meetings and provide input.

1. Call to Order and Roll Call

   Seat 1  Holly Kaufman (Holdover status)
   Seat 2  Kevin Cheng, Chair (Holdover status)
   Seat 3  Robert Leshner
   Seat 4  Tim Cronin
   Seat 5  Dari Barzel
   Seat 6  Christina Tang, Vice Chair
   Seat 7  Jadie Wasilco

   Chair Cheng called the meeting to order at 9:07 a.m. On the call of the roll, Chair Cheng, Members Barzel, Kaufman, Leshner, and Wasilco were noted present. Vice Chair Tang and Member Cronin were noted not present. There was a quorum.

2. Agenda Changes

   New Member Robert Leshner introduced himself to the Committee.

3. Public Comment: Members of the public may address the Revenue Bond Oversight Committee (RBOC) on matters that are within the RBOC’s jurisdiction but are not on today’s agenda.

   Public Comment. Speakers: There were none.

4. San Francisco Public Utilities Commission (SFPUC) Staff Report: Water System Improvement Program (WSIP) Updates
Dan Wade, WSIP Director (SFPUC); provided an update on the Water System Improvement Program, including the following: program status; recent accomplishments; Alameda Creek Recapture project (report to be released on November 30, 2016); Calaveras Dam Replacement project; placement of first lift of clay core; completion of intake tower; fish passage facilities at Alameda Creek Division Dam project; regional groundwater storage and recovery projects; bioregional habitat restoration projects, including hydroseeding; active and completed regional construction contracts; change orders and trends; risks and forecasted changes versus contingency. Mike Brown (SFPUC); provided information and responded to questions and answers throughout the discussion.

Public Comment. Speakers: None.

5. **Presentation of SFPUC Bond Sale Update**

Richard Morales, Debt Manager, and Mike Brown (SFPUC); presented on wastewater bond sale results and water revenue refunding bonds sale results, including the following: water and wastewater credit ratings, favorable market conditions, successful bond sale, green bonds certification, press coverage, historically low rates, bond pricing, and debt service savings.

Public Comment. Speakers: None.

6. **Annual Report Preparation**

Committee members are to send any edits to the Clerk. A working draft will be compiled and included in the packet material for the December 12, 2016, Revenue Bond Oversight Committee meeting agenda.

Public Comment. Speakers: None.

7. **Announcements, Comments, Questions, and Future Agenda Items**

Upcoming meeting to include a presentation on the capital budget overview, including funding for all projects, and the wastewater side to be presented by Eric Sandler and Karen Kubick.

The Committee requested the following updates to the next SSIP presentation: include SSIP binder; lessons learned from WSIP being applied to SSIP; how do green projects integrate with other projects; where are the assets? how old are assets? what are the lessons learned on green projects? what are the community benefit requirements? and what is the jobs report for SSIP on local hiring?

Chair Cheng requested Dan Wade present (January 2017) on a high-level overview of the initial budget and rebaselining, including overtime, contingencies that exceeded forecasts, risk register, and reporting requirements.
Public Comment. Speakers: None.

8. Adjournment

There being no further business, the meeting adjourned at 10:56 a.m.

N.B. The Minutes of this meeting set forth all actions taken by the Revenue Bond Oversight Committee on the matters stated but not necessarily in the chronological sequence in which the matters were taken up.
Agenda Item Information

Each item on the agenda may include: 1) Department or Agency cover letter and/or report; 2) Public correspondence; 3) Other explanatory documents. For more information concerning agendas, minutes, and meeting information, such as these documents, please contact RBOC Clerk, City Hall, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA 94102 – (415) 554-5184.

Audio recordings of the meeting of the Revenue Bond Oversight Committee are available at: http://sanfrancisco.granicus.com/ViewPublisher.php?view_id=97

For information concerning San Francisco Public Utilities Commission please contact by e-mail RBOC@sfgov.org or by calling (415) 554-5184.

Meeting Procedures

Public Comment will be taken before or during the Committee’s consideration of each agenda item. Speakers may address the Committee for up to three minutes on that item. During General Public Comment, members of the public may address the Committee on matters that are within the Committee’s jurisdiction and are not on the agenda.

Procedures do not permit: 1) persons in the audience to vocally express support or opposition to statements by Commissioners by other persons testifying; 2) ringing and use of cell phones, pagers, and similar sound-producing electronic devices; 3) bringing in or displaying signs in the meeting room; and 4) standing in the meeting room.

The ringing of and use of cell phones, pagers and similar sound-producing electronic devices are prohibited at this meeting. Please be advised that the Chair may order the removal from the meeting room of any person(s) responsible for the ringing or use of a cell phone, pager, or other similar sound-producing electronic devices.

LANGUAGE INTERPRETERS: Requests must be received at least 48 hours in advance of the meeting to help ensure availability. Contact Peggy Nevin at (415) 554-5184. AVISO EN ESPAÑOL: La solicitud para un traductor debe recibirse antes de mediodía de el viernes anterior a la reunion. Llame a Derek Evans (415) 554-5184. PAUNAWA: Ang mga kahilingan ay kailangang matanggap sa loob ng 48 oras bagong miting upang matiyak na matutugunan ang mga hiling. Mangyaring tumawag kay sa (415) 554-5184.

Disability Access

Revenue Bond Oversight Committee meetings are held at the Public Utilities Commission, 525 Golden Gate Avenue, San Francisco, CA. The hearing rooms at the Public Utilities Commission are specified on the agenda and are wheelchair accessible. To request sign language interpreters, readers, large print agendas or other accommodations, please call (415) 554-5184. Requests made at least 48 hours in advance of the meeting will help to ensure availability.

翻譯 必須在會議前最少四十八小時提出要求
請電 (415) 554-7719
Know Your Rights Under the Sunshine Ordinance

Government’s duty is to serve the public, reaching its decisions in full view of the public. Commissions, boards, councils, and other agencies of the City and County exist to conduct the people’s business. This ordinance assures that deliberations are conducted before the people and that City operations are open to the people’s review.

For more information on your rights under the Sunshine Ordinance (San Francisco Administrative Code, Chapter 67) or to report a violation of the ordinance, contact by mail: Sunshine Ordinance Task Force, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA 94102; phone at (415) 554-7724; fax at (415) 554-7854; or by email at sotf@sfgov.org.

Citizens may obtain a free copy of the Sunshine Ordinance by printing San Francisco Administrative Code, Chapter 67, at http://www.sfbos.org/sunshine.

Lobbyist Registration and Reporting Requirements

Individuals and entities that influence or attempt to influence local legislative or administrative action may be required by the San Francisco Lobbyist Ordinance [SF Campaign & Governmental Conduct Code, Section 2.100, et. seq.] to register and report lobbying activity. For more information about the Lobbyist Ordinance, please contact the Ethics Commission at: 25 Van Ness Avenue, Suite 220, San Francisco, CA 94102; telephone (415) 581-3100; fax (415) 252-3112; website www.sfgov.org/ethics.
WSIP Update
Revenue Bond Oversight Committee

November 7, 2016
Daniel L. Wade, WSIP Director
Infrastructure
WSIP Program Status

- Regional: **92.4%**
- Local: **99.8%**
- Overall WSIP: **93.1%**
Recent Accomplishments

• Reached Final Construction Completion on one project:
  • Harry Tracy Water Treatment Plant Long-Term Improvements

• Reached Final Project Closeout on two projects:
  • Bay Tunnel
  • Peninsula Pipelines Seismic Upgrade

• Initiated WSIP Closeout Projects for the four WSIP regions

• Completed 199 of 208 system shutdowns and hot taps

• Safety record exemplary based on 8.5 million hours; lost time incidents rate is lower than half the industry average

• Recent Awards: ASCE 2016 San Francisco Section – Outstanding Construction Project of the Year Award (New Irvington Tunnel); Water & Wastes Digest’s 2016 Top Project Award (Peninsula Pipelines Seismic Upgrades)
Alameda Creek Recapture (Rendering)
Calaveras Dam Replacement

- Left Abutment (Observation Hill)
- Existing Dam (Cofferdam)
- Disposal Site
- Bluestone Building
- Intake Tower
- Electrical Building
- Upper Spillway Chute
- New Dam Axis
- Lower Spillway Chute
- 78” Pipeline
- Stilling Basin
- Right Abutment
- Borrow Area B
- Disposal Site
- Active Treatment System
- Calaveras Dam Replacement
Placement of First Lift of Clay Core
Completion of Intake Tower
Alameda Creek Diversion Dam in Operation – December 1931
Overview - Primary Features

- **FISH LADDER**
- **PV POWER SUPPLY**
- **ELECTRICAL AND EQUIPMENT BUILDINGS**
- **PROPANE POWER SUPPLY**
- **EXISTING DIVERSION STRUCTURE**
- **EXISTING DIVERSION TUNNEL**
- **FISH SCREENS AND INTAKE**
- **CONVEYANCE CONDUITS**
Fish Screens

Retractable Cylindrical Screens – automated with rotating drums and stationary brush arms
Sediment & Debris Management Features

- SLUICEWAY NO. 1
- SLUICEWAY NO. 2
- SLUICEWAY NO. 3
- SCREEN CHANNEL
- TRAINING WALL
- DEBRIS RACK
Operations – Bypass

FLOW UP TO 30 CFS
Operations – Diversion

ACDT

FLOW FROM 30 TO 400 CFS
Operations – Diversion

FLOW FROM 400 CFS +
Operations – Sluicing

Flow From 100 CFS +

Sluiceway No. 1

Sluiceway No. 2

Sluiceway No. 3

Control Gates
Construction – June 2016
Regional Groundwater Storage & Recovery
BHR - Hydroseeding
Note: CDRP data not shown
WSIP Active & Completed including BHR
Regional Construction Contracts
Percentage of Projected Changes vs. Awarded Amount
September 2016

Forecasted Changes Amount = $518.8M 29%

- Approved Change Orders $445,197,938 25%
- Pending Change Orders $4,419,220 0%
- Potential Change Orders $8,012,966 0%
- Trends $61,203,163 3%

Original Contract Value $1,817,947,047 100%
WSIP Active & Completed including BHR

Change Order Reason
Approved Change Orders
September 2016

Total Approved CO
$445.2 M 24%

Total less CDRP
$180.9 M 12%
Change Order + Trends (September 2016)

Note: Including BHR

- August to Sept var -($3.7M)
- June to Sept var $2M
WSIP Active & Completed including BHR
Forecasted Changes VS Contingency
September 2016

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>FORECASTED CHANGES</td>
<td>$516,395,327</td>
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<tr>
<td>FORECASTED CHANGES + RISK 80%</td>
<td>$551,769,243</td>
</tr>
</tbody>
</table>

- **Risks 80%**: $32,935,956
- **Trends**: $61,203,163
- **Pending**: $4,419,220
- **Potential**: $8,012,966
- **Approved**: $445,197,938
- **Approved Construction Contingency**: $531,993,831
- **Director’s Reserve**: $5,000,000
Wastewater Revenue Bond Sale

- Par amount: $308.4M
  - Series A: $240.5M (green bonds)
    → Funds SSIP Projects
  - Series B: $67.8M
    → Funds local R&R
- Borrowing term
  - Final maturity: 30 years
  - Average: 21 years
- Sale date: May 10, 2016
Wastewater Credit Ratings

- S&P upgrade to AA
- Moody's affirmed Aa3
- Reasons cited:
  - Strong and competent operational & financial management
  - Prudent rate-setting
  - Effective long-range fiscal planning
- First SFPUC upgrade in 6 years
- Upgrade lowers debt service
  - $1M for every $100M in bonds
• 20-year AAA MMD rate on May 10 was 2.25%
• Since 1996, 20-year AAA MMD rate has been below 2.25% 29 days (or 0.6% of the time)
Successful Sale

- Strong response from multiple bidders
- Top 3 bids from each series

**Series A**

<table>
<thead>
<tr>
<th>Firm</th>
<th>TIC</th>
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<tbody>
<tr>
<td>1 JP Morgan</td>
<td>3.213%</td>
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<tr>
<td>2 Morgan Stanley</td>
<td>3.220</td>
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<tr>
<td>3 Citigroup</td>
<td>3.228</td>
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</table>

**Series B**

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<th>TIC</th>
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<td>1 JP Morgan</td>
<td>3.213%</td>
</tr>
<tr>
<td>2 Morgan Stanley</td>
<td>3.215</td>
</tr>
<tr>
<td>3 BAML</td>
<td>3.220</td>
</tr>
</tbody>
</table>

- Lowest TIC of any past SFPUC bond sales
- 23 investors; 3 investors with orders of $40M+
Green Bonds Certification

- Designation used to fund environmentally beneficial projects
  - New sector in municipal bond market
  - 2015 Power Bonds sale—funded HH generation projects
  - Does not provide better pricing—could change as market/investor demand grows

- First Green Bonds with “Climate Bonds Initiative” certification under new standards for water/wastewater projects
  - Certifies projects that help meet climate change adaptation/mitigation
  - Received independent, expert opinion that SSIP meets new standards
  - Provides investors with science-based criteria for purchasing Green Bonds

- Establishes SFPUC as a leader in fast-growing Green Bonds sector
Considerable Press Coverage


"There is great demand for environmentally related securities...to finance critical projects for combatting climate change. The [SFPUC's bonds]...are a step toward meeting this market need." John Chiang, California State Treasurer, Ceres

"San Francisco PUC is showing leadership by example to the US municipal bond market with the forthcoming issuance of a certified water bond...They are to be congratulated."
- Justine Leigh-Bell, Climate Bonds Initiative, Bond Buyer
Questions
Water Revenue Refunding Bonds Sale Results

November 7, 2016
Richard Morales
Debt Manager
Water Revenue Refunding Bonds

- Par amount: $893.8M
- Average borrowing term: 13.3 years
- Sale date: October 6, 2016
- Refunded outstanding WSIP and Non-WSIP Bonds
Water Credit Ratings

- Ratings Affirmed:
  - S&P AA-
  - Moody's Aa3

- Reasons cited:
  - Strong and competent operational & financial management
  - Prudent rate-setting
  - Effective long-range fiscal planning
  - Low debt service coverage cited as credit weakness

<table>
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<tr>
<th>S&amp;P</th>
<th>Moody's</th>
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<td>A</td>
<td>A2</td>
</tr>
<tr>
<td>A-</td>
<td>A3</td>
</tr>
</tbody>
</table>
Marketing the Bonds

- Local media campaign
  - Digital—SFGate, Bloomberg, Yahoo Finance
  - Radio—KCBS, Sing Tao Chinese Radio

- Institutional investor outreach
  - Online investor presentation
  - In-person meetings
  - One-on-one calls
Historically Low Rates

- 25-Year MMD* rate on Oct 6th was 2.40%
- Since 1990, 25-year MMD rate has been below 2.40% just 1.5% of the time

*Municipal bond market index
Pricing the Bonds

- Rising U.S. treasury yields
- Historically high levels of supply
  - Weekly issuance volume largest since 2010
- Two-day pricing period
  - Oct 5th—retail order period
    - $154M orders 188 investors
  - Oct 6th—institutional order period
    - $1B+ orders 30 investors
- True Interest Cost (TIC)—2.85%
Debt Service Savings

- Gross savings: $136M
- Net PV savings: $107M
- Percent savings: 11.52%
- Benefits both Retail and Wholesale Customers
Questions