REMOTE MEETING

Listen/Public Call-In Phone Number
(415) 906-4659
Conference ID: 912826854#

December 14, 2020 - 9:00 AM
Regular Meeting

Remote Access to Information and Participation

In accordance with Governor Newsom’s Executive Order No. N-33-20 declaring a State of Emergency regarding the COVID-19 outbreak and Mayor London N. Breed’s Proclamation declaring a Local Emergency issued on February 25, 2020, including the guidance for gatherings issued by the San Francisco Department of Public Health Officer, aggressive directives were issued to reduce the spread of COVID-19. On March 17, 2020, the Board of Supervisors authorized their Board and Committee meetings to convene remotely (via Microsoft Teams) and will allow remote public comment via teleconference.

Members of the public may participate by phone or may submit their comments by email to: victor.young@sfgov.org; all comments received will be made a part of the official record. Revenue Bond Oversight Committee agendas and their associated documents are available at: https://www.sfwater.org/index.aspx?page=121

As the COVID-19 disease progresses, please visit the Board’s website (www.sfbos.org) regularly to be updated on the current situation as it affects the legislative process. For more information contact Assistant Clerk Victor Young at (415) 554-7723.
Mission: The Revenue Bond Oversight Committee (RBOC) monitors 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 provides independent oversight to ensure transparency and accountability. The RBOC’s goal is to ensure that SFPUC revenue bond proceeds are spent for their intended purposes in accordance with legislative authorization and other applicable laws.

1. Call to Order, Roll Call, and Agenda Changes

Members:

Seat 1  Ettore Leale, Co-Chair
Seat 2  Tim Cronin
Seat 3  Vacant
Seat 4  Vacant
Seat 5  Vacant
Seat 6  Christina Tang, Co-Chair
Seat 7  Reuben Holober

Co-Chair Leale called the meeting to order at 9:05 a.m. On the call of the roll, Co-chairs Leale and Tang and Members Cronin and Holober were noted present. A quorum was present.

There were no agenda changes.

2. 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.

Speakers: None.

3. SFPUC: Power Enterprise Update

Mike Brown, Margaret Hannaford, and Katie Miller (SFPUC); presented information on the matter and responded to questions from the Committee. Ms. Hannaford provided an update on Wildfire Mitigation Plan requirements and strategies. Ms. Miller provided an update on the progress of Hetchy Capital Improvement Projects.

Public Comment:
   David Pilpel spoke on making staff presentations available to the public.

4. RBOC: 2019 Annual Report Update

Richard Morales (SFPUC) confirmed that the matter is scheduled for presentation before the SFPUC on December 22, 2020.

Public Comment:
   None.

No action taken.
5. **Approval of Minutes:** November 17, 2020, Meeting Minutes.

   After discussion, there were no proposed changes

   **Public Comment:**
   David Pilpel noted a possible grammatical error on his public comment for Item 6.

   **Member Holober, seconded by Co-Chair Tang, moved to approve the November 17, 2020, meeting minutes.**

   The motion **PASSED** by the following vote:

   **Ayes:** Leale, Cronin, Tang, Holober
   **Noes:** None

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

   **Upcoming Meeting Dates:** January 5, 2021

   The RBOC requested the following items be scheduled for the next RBOC meeting:

   - **RBOC:** Audit Update
   - **SFPUC:** Updates on water capital projects other than Hetch Hetchy

   **Pending Issues:**
   1. Request that SSIP Quarterly reports include information on Stormwater Management System and details on the bidding climate and possible cost increase)
   2. Request that the SFPUC provide updates on all water projects that may not be part of SSIP or WSIP
   3. **RBOC:** Acquiring consultant to examine expected performance of complete projects
   4. **SFPUC:** Staff Report: Environmental Justice
   5. **SFPUC:** Mountain Tunnel Site Tour
   6. **SFPUC:** State Federal Loan Updates
   7. **SFPUC:** Oceanside Wastewater Plant Tour

   **Public Comment:**
   David Pilpel commented on matters listed on the Pending Issues list.

   No action taken.

7. **Adjournment**

   The meeting adjourned at 10:50 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.

Approved by the RBOC: DRAFT
Wildfire Management Program

December 14, 2020
Margaret Hannaford, Division Manager HHWP
Water Enterprise

Services of the San Francisco Public Utilities Commission
Regulations

• Compliance with Senate Bill 901, Chapter 626, Sec. 42; Public Utilities Code section 8387

• Primary Objective:
  • Each local publicly owned electric utility and electrical cooperative shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of wildfire posed by those electrical lines and equipment

• 17 (elements) Requirements
Wildfire Mitigation Plan Requirements

- Plan Overview & Objectives
- Roles & Responsibilities
- Risk & Risk Drivers
- Prevention, Mitigation and Response Strategies
- Plan Metrics & Evaluation
- Independent Evaluator Report
- Approved by our Commission
- Report submitted to the CPUC, WSAB
Plan Overview & Objectives

• Minimize electrical sources of ignition
• Maintain resiliency of the electric grid
• Evaluate plan performance and effectiveness
Roles and Responsibilities

- SFPUC Commission
  - Review and approve plan

- AGM of Water
  - Primary for Plan oversight and implementation
Roles and Responsibilities

• Department Managers with the Water Enterprise
  • HHW Division Manager, Operations & Maintenance Manager, Vegetation Manager, Right of Way Manager, and Power Generation & Transmission Manager
  • NRLM Division Manager and Peninsula Area Land Manager
  • WS&T Division Manager and Distribution & Maintenance Manager
Risks and Risk Drivers

- Risks
  - Equipment failure
    - Wire down
    - 4292 Poles (non-exempt equipment)
  - Vegetation contact

- Risk Analysis
  - Equipment failure analysis
  - Industry trends
  - Employee experience
Risk and Risk Drivers

• Risk Drivers
  • Topographic factors
    • Flat terrain
    • Mountains
  • Climatological factors
    • Wind
    • Heat
    • Drought
Prevention, Mitigation, and Response Strategies

- Transmission line inspections
- Distribution line inspections
- Substation inspections
- Vegetation management
- Recloser and de-energization protocols
- Restoration of service
- Employee & public communications
- Situational awareness
Plan Metrics & Evaluation

- Reportable ignitions in the HFTD
- Vegetation clearance and inspections completed in a HFTD
- Number of times a system is de-energized within the HFTD
- Wire down in HFTD
- Wire down outside HFTD
What Are We Doing to Prevent Wildfires?

• Circuit Reclosure and De-energization
• Inspections
• Removing risk
  • Understanding our risk: LiDAR and field collection program
  • Operations: People resources, tree removal
  • Capital investment options
    • Undergrounding ($2.5 million/mile Bay Area and $3.5 million/mile upcountry)
    • Reducing our footprint
    • Reducing high risk equipment on our 4292 poles
      • Load and design studies
      • Replace high risk equipment, 6 year effort (375 poles)
What Are We Doing to Prevent Wildfires?

- Working safely
  - Understanding weather and fire conditions
  - Allowing work when safe and taking the right precautions
- SWIFT, partnership including CAL FIRE, USFS, BLM, Tuolumne County, SFPUC and private landowners. Plan and implement wildfire protection activities in and around our project area
  - Created successful firebreak in winter of 2020 that prevented significant spread of the August 2020 Moc Fire
- Public/private investment
- Increasing efforts. Specific Wildfire Management Program to fast forward our efforts
Questions?
Water Capital Programs Update for the Revenue Bond Oversight Committee
December 14, 2020

Katie Miller, Director
Water Capital Programs
Infrastructure Division
Hetch Hetchy Capital Improvement Program Status (as of September 2020)

Project Count by Phase*

- Completed: $29M (2 Projects)
- Close-Out: $60M (5 Projects)
- Construction: $30M (2 Projects)
- Multiple Phases: $111M (5 Projects)
- Planning: $177M (5 Projects)
- Bid & Award: $244M (2 Projects)
- On-Hold: $8M (1 Project)

* Excludes the three project development projects ($41M)

Expenditures

- Expended: $174M
- Remaining: $527M

32% Complete
### HCIP Program Cost Summary
(from Table 3.1)

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Expenditures to Date ($Million)</th>
<th>Current Approved Budget</th>
<th>Current Forecasted Cost</th>
<th>Cost Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Infrastructure</td>
<td>$20.37</td>
<td>$137.94</td>
<td>$131.19</td>
<td>$6.75</td>
</tr>
<tr>
<td>Construction Costs</td>
<td>$8.81</td>
<td>$74.87</td>
<td>$78.23</td>
<td>($3.36)</td>
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<tr>
<td>Program Delivery Costs</td>
<td>$10.79</td>
<td>$47.64</td>
<td>$36.29</td>
<td>$11.34</td>
</tr>
<tr>
<td>Other Costs</td>
<td>$0.77</td>
<td>$15.43</td>
<td>$16.66</td>
<td>($1.23)</td>
</tr>
<tr>
<td>Power Infrastructure</td>
<td>$51.27</td>
<td>$151.19</td>
<td>$146.43</td>
<td>$4.76</td>
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<tr>
<td>Construction Costs</td>
<td>$26.16</td>
<td>$80.79</td>
<td>$79.05</td>
<td>$1.74</td>
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<tr>
<td>Program Delivery Costs</td>
<td>$23.42</td>
<td>$57.73</td>
<td>$60.29</td>
<td>($2.56)</td>
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<tr>
<td>Other Costs)</td>
<td>$1.69</td>
<td>$12.68</td>
<td>$7.09</td>
<td>$5.58</td>
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<tr>
<td>Joint Infrastructure</td>
<td>$80.73</td>
<td>$393.81</td>
<td>$393.81</td>
<td>-</td>
</tr>
<tr>
<td>Construction Costs</td>
<td>$31.18</td>
<td>$215.69</td>
<td>$224.89</td>
<td>($9.20)</td>
</tr>
<tr>
<td>Program Delivery Costs</td>
<td>$48.31</td>
<td>$156.05</td>
<td>$144.28</td>
<td>$11.77</td>
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<tr>
<td>Other Costs</td>
<td>$1.24</td>
<td>$22.07</td>
<td>$24.64</td>
<td>($2.57)</td>
</tr>
<tr>
<td>2018 Moccasin Storm Event (Water)</td>
<td>$21.51</td>
<td>$17.92</td>
<td>$21.89</td>
<td>($3.96)</td>
</tr>
<tr>
<td>Overall HCIP</td>
<td>173.88</td>
<td>$700.86</td>
<td>$693.31</td>
<td>$7.54</td>
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</table>
### Project Schedule Performance Summary

<table>
<thead>
<tr>
<th>Infrastructure Type</th>
<th>On Schedule</th>
<th>Exceeds 2-6 Months</th>
<th>Exceeds &gt; 6 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water Infrastructure</strong></td>
<td></td>
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</tr>
<tr>
<td>Water Conveyance (Water)</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dams and Reservoirs</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Power Infrastructure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Conveyance (Power)</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powerhouse</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switchyard and Substations</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Joint Infrastructure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dams and Reservoirs (Joint)</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mountain Tunnel</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roads and Bridges (Joint)</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2018 Moccasin Storm Event</strong></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

- ★ = on schedule;  ▲ = exceeds 2-6 months;  ● = exceeds > 6 months.
The 20 Projects of the HCIP by Phase

Planning 5
- O'Shaughnessy Dam Outlet Works Phase I
- Bridge Replacement (4 - Bridges)
- SJPL Tesla Valves Replacement
- SJPL Valve and Safe Entry Improvement
- Moccasin Penstock

Bid and Award 2
- OSH Dam Access and Drainage Improvements
- Mountain Tunnel Improvement Project

Multiple Phases 3
- Holm and Other Powerhouse Projects
- Moccasin Powerhouse and GSU Rehabilitation
- 2018 March Storm Event Emergency Repairs and Interim Improvements (Water-Only Assets)

Construction 2
- Moccasin Reservoir Perimeter Security Fence
- Warnerville Substation Rehabilitation

In Closeout 5
- Lower Cherry Aqueduct
- Kirkwood Penstock
- Early Intake Switchyard Slope Hazard Mitigation
- Moccasin Facilities New Construction;
- Cherry Dam Outlet Works Rehabilitation)

Complete 2
- SJPL Rehabilitation,
- Mountain Tunnel Inspection & Repairs

On Hold 1
- Canyon Tunnel Rehabilitation
Projects in Planning - 5

- O'Shaughnessy Dam Outlet Works Phase I
- Bridge Replacement (4 - Bridges)
- SJPL Tesla Valves Replacement
- SJPL Valve and Safe Entry Improvement
- Moccasin Penstock
O'Shaughnessy Dam Outlet Works Phase I (Planning)

- AAR to be finalized next quarter
- Draft CER under review, but awaiting finalization until diving inspections completed.
- Task order for diving inspection will be initiated before end of 2020.
O’Shaughnessy Adit Access Bridge

• A dam specialist consultant being brought on board for Eleanor, since bridge is part of the dam structure itself.

• A professional services task order is being set up to support the surveying, geotechnical investigation, and hydraulic analysis at the OSH Adit Access Bridge.

Eleanor Dam Bridge
SJPL Tesla Valves Replacement (Planning)

- 2 sub-projects to purchase and install Tesla Valves.
- Project on budget and on schedule.
- 8% complete.
SJPL Valve and Safe Entry Improvement (Planning)

- In design.
- Geotechnical investigation, surveying, and potholing along the pipelines in Q1.
- Draft CER expected before end of 2020.
Moccasin Penstock (Planning)

- NTP issued in Q1 for professional services task order for inspection and structural analysis of Moccasin Penstock.
- External and internal inspection to be done.
- External inspection to be conducted in Q2.
Projects in Bid and Award - 2

- O’Shaughnessy Dam Access and Drainage Improvements
- Mountain Tunnel Improvements
O’Shaughnessy Dam Access and Drainage Improvements (Bid and Award)

- Contract advertised for construction.
- Pre-construction conference held in 2 phases, virtual then site visit, due to COVID-19
- Bids due next quarter.

Diversion Pipe at O’Shaughnessy Dam
Two bids received; opened August 27, 2020.

Michels Tunneling lowest responsible bidder, with a bid of $138,973,189; Engineer’s Estimate was $142,800,000.

Contract award to Michel’s Tunneling planned for Q2.
Projects in Multiple Phases - 3

- Holm and other Powerhouse Projects
- Moccasin Powerhouse and GSU Rehabilitation
- 2018 March Storm Event Emergency Repairs and Interim Improvements
Holm and other Powerhouse Projects (Multiple Phases)

9 of 11 subprojects of Holm and other Powerhouse Projects have been completed.

- Subproject Holm Powerhouse Rehabilitation and Kirkwood Powerhouse Oil Containment reached Substantial Completion.

- Subproject Cherry Valve House-Bypass Fill Valve for Cherry Power Tunnel
  - Delivery of valve anticipated in January.
  - Installation of valve and piping by HHWP crews in Q3.

Photo is of workers accepting equipment delivery at Holm.
Moccasin Powerhouse and GSU Rehabilitation (Multiple Phases)

Three sub-projects in multiple phases.

**Project A**
- Procurement package for GSUs advertised in July and got two bids.
- Installation of GSUs contract to advertise in Q2.

**Projects B and C** are in planning; Project B will be design-build.
SFPUC Commission approved the last of the three emergency contracts on August 25, 2020.

A California Disaster Assistance Act (CDAA) grant with Cal OES has been established and will reimburse part of the costs of damage repair.
<table>
<thead>
<tr>
<th>Projects</th>
<th>Current Approved Budget ($M)</th>
<th>Total Expenditures ($M)</th>
<th>Construction Contracts</th>
<th>Professional Services Contracts</th>
<th>SFPUC Labor &amp; Other Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Awarded ($M)</td>
<td>Expenditures ($M)</td>
<td>Awarded ($M)</td>
</tr>
<tr>
<td>Water</td>
<td>$23.3</td>
<td>$22.6</td>
<td>$14.1</td>
<td>$14.1</td>
<td>$6.8</td>
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<tr>
<td>Power</td>
<td>$2.2</td>
<td>$1.3</td>
<td>$1.1</td>
<td>$1.1</td>
<td>$0.3</td>
</tr>
<tr>
<td>Joint</td>
<td>$1.7</td>
<td>$1.6</td>
<td>$1.1</td>
<td>$1.1</td>
<td>$0.1</td>
</tr>
<tr>
<td>Operations</td>
<td>$0.4</td>
<td>$0.4</td>
<td>$0.0</td>
<td>$0.0</td>
<td>$0.0</td>
</tr>
<tr>
<td>Total</td>
<td>$27.6</td>
<td>$25.8</td>
<td>$16.3</td>
<td>$16.3</td>
<td>$7.2</td>
</tr>
</tbody>
</table>
Projects in Construction - 2

- Moccasin Reservoir Perimeter Security Fence Project
- Warnerville Substation Rehabilitation
Moccasin Reservoir Perimeter Security Fence Project (Construction)

- Contractor mobilized and started construction along Highway 49 during Q1.
- Commission approved construction cost increase to meet permit (fence color) and COVID-19 safety requirements.
- Construction is on schedule for completion in Q3.
- Photos on next two pages show how the green fence color allows the fence to blend into the scenery rather than blocking it. (These next two photos display Q2 work.)
Warnerville Substation Rehabilitation (Construction)

- Forecasted Costs increased by $9.94M in Q1 for design and construction to complete project work.

- Professional services contract being developed to provide support during construction, and will advertise in Q2.
HCIP Projects in Closeout - 5

- Early Intake Switchyard
- Slope Hazard Mitigation
- Lower Cherry Creek Aqueduct
- Cherry Dam Outlet works Rehabilitation
- Kirkwood Penstock
- Moccasin Facilities New Construction
HCIP Projects Completed - 2

SJPL Rehabilitation

Mountain Tunnel Inspection & Repairs
Canyon Tunnel Rehabilitation
QUESTIONS?