Public Safety Power Shutoff

Board of Directors
June 25, 2019
Agenda

- PSPS Description
- Impact to District facilities
- District preparation for a PSPS
- Next steps
Background

- CPUC De-energization Resolution in 2018
  - Rules for de-energization
  - Customer notification and outreach plans
- District is a party to the rulemaking process
  - Water and wastewater utilities have elevated status as “Public Safety Partners”
PSPS Triggers

A Red Flag Warning declared by the National Weather Service

Low humidity levels, generally 20% and below

Forecasted sustained winds generally above 25 mph and wind gusts in excess of approximately 45 mph, depending on location and site-specific conditions such as temperature, terrain and local climate

Condition of dry fuel on the ground and live vegetation (moisture content)

On-the-ground, real-time observations from PG&E’s Wildfire Safety Operations Center and field observations from PG&E crews
# Power Restoration

- PSPS event could last several days

<table>
<thead>
<tr>
<th>WEATHER ALL CLEAR</th>
<th>PATROL &amp; INSPECT</th>
<th>ISOLATE &amp; REPAIR DAMAGE</th>
<th>RESTORE POWER</th>
<th>NOTIFY CUSTOMERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>After the extreme weather has passed and it’s safe to do so, our crews begin patrols and inspections.</td>
<td>Crews visually inspect every mile of the lines to look for potential weather-related damage to the lines, poles and towers. This is done by vehicle, foot and air.</td>
<td>Where damage is found, crews work to isolate the area so other parts of the system can be restored. Crews work safely and as quickly as possible to make repairs.</td>
<td>Once it is safe to energize, a call is made to the PG&amp;E Control Center to complete the energization process. Power is then restored to customers.</td>
<td>Customers are notified that power has been restored.</td>
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## Expansion of PG&E’s PSPS

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
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</thead>
<tbody>
<tr>
<td><strong>Distribution</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>circuit miles</td>
<td>7,100 (Tier 3 HFTD areas)</td>
<td>25,200 (Tier 2 and Tier 3 HFTD areas)</td>
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<td></td>
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<tr>
<td><strong>Transmission</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>circuit miles</td>
<td>370 (70 kV and below)</td>
<td>5,500 (500 kV and below)</td>
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<tr>
<td></td>
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<tr>
<td><strong>Customers</strong></td>
<td>570,000 customers potentially impacted by PSPS events</td>
<td>5.4 million customers potentially impacted by PSPS events</td>
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</table>
Impact to District Facilities

- 59 PG&E circuits in service area
- Over 200 District facilities in the East Bay
- 24 upcountry facilities
- Any facility could be impacted if there is a transmission line outage
- Evaluated the impact of a multi-day outage
Backup Power at District Facilities

• Sufficient backup power at
  – Water treatment plants
  – Some pumping plants
  – Administration building and yards
  – Wastewater facilities

• Recycled water irrigation service could be interrupted

• District has 33 portable pumps and generators

• Additional backup generators needed
Pre-deploying Portable Equipment
Preparing for a PSPS

- Maximize distribution reservoir storage
- Participate in community meetings
- Conducted tabletop exercise
- Develop public messaging
  - Customer Pipeline, social media, EBMUD webpage, fact sheets
  - Encourage customers to minimize discretionary water use
- Reviewed public notification plan
Next Steps

- Continue community outreach
- Continue coordination with PG&E and participation in CPUC rulemaking process
- Rental agreement for Board consideration
- If agreement is authorized, begin deploying portable equipment in mid-July
Questions
Bay-Delta Water Quality Control Plan Update Voluntary Agreement

Board of Directors
June 25, 2019
Overview

- Fisheries Highlights
- Bay Delta WQCP Update
- Unimpaired Flow Approach
- Voluntary Agreements
- Statewide Process
Fisheries Highlights

- Post-JSA annual return average 9,920
- Achieved 97% of CVPIA Doubling Goal
- Significant contribution to ocean fisheries
- Approximately $70 million spent for JSA implementation over 20 years
State Board began process in March 2009
  - Establish water quality control measures and flow requirements to provide reasonable protection of beneficial uses

Phase I - San Joaquin Objectives (Adopted 12/2018)

Phase II - Sacramento Basin Objectives
  - Mokelumne River is part of Phase II

Phase III - Implementation through Proceeding

Phase IV - Flow Objectives for other Tributaries
• SWRCB solution centers around an unimpaired flow standard to provide inflow to the Delta

• Framework, allows for Voluntary Agreements (VA) as a mechanism to meet desired outcomes

• Mokelumne Stakeholders have been negotiating with CDFW and CNRA on a Proposed VA that includes both flow and non-flow measures

• VAs are 15 year agreements
SWRCB Unimpaired Flow Alternative results in significant impacts to Mokelumne fishery, operations and water supply reliability

- Significant reductions in total system carryover storage
- Increased risk to cold water pool
- Doubles number of years of EBMUD customer rationing >15%
- Reductions in deliveries to all users on the river
- Increases EBMUD reliance on CVP supplies (18 years to 39 years)
Camanche Res End-of-October Storage:
Example of Temperature Risk

150 TAF in Camanche Res at the end of Oct is equivalent to 28 TAF of Cold Water Pool.
The freq which Cam is below 150TAF is the same as freq being below 28TAF in cold water.
Mokelumne VA Proposal

- Includes flow & non-flow measures
- Approx. $60 million over 15 years
- Measures to improve juvenile habitat availability
- Builds upon gains achieved in JSA
- Protects water quality and supply for customers and environment
Mokelumne VA Flow Measures

- Additional amounts above JSA
- Spring releases to provide water for floodplain
- Fall releases for attraction pulses
- Key off ramps to protect water supply and water quality (temperatures)

<table>
<thead>
<tr>
<th>Water Year Type</th>
<th>Additional Volumes</th>
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<tbody>
<tr>
<td>Normal &amp; Above (wet)</td>
<td>45,000 acre feet</td>
</tr>
<tr>
<td>Below Normal</td>
<td>20,000 acre feet</td>
</tr>
<tr>
<td>Dry</td>
<td>10,000 acre feet</td>
</tr>
<tr>
<td>Critically Dry</td>
<td>NA</td>
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Mokelumne VA Non-Flow Measures

- Juvenile Habitat
- Migration Habitat and Hatchery
- Gravel Enhancement
- Research and Monitoring Program
• Participation in Valley-Wide VA
  – Nearly 50 entities working on agreement including EBMUD
  – Multiple work teams including Governance & Science, Policy, Plenary and Legal

• Environmental group outreach

• Adequacy of VA proposal versus SWRCB approach
Bay-Delta Voluntary Agreement Resolution

- Supports participation in state voluntary agreement
- Highlights success of 1998 Joint Settlement Agreement on Mokelumne River
- Upholds environmental stewardship of Mokelumne River and Bay-Delta
- Advocates for assurances and equity in flow and non-flow contributions
Water Outage Map

Board of Directors

June 25, 2019
When repairs are made in your neighborhood, you may want to flush your home faucets. Once water service is restored, turn on your front hose bib – the outdoor faucet at the front of the house – until the water runs clear. Also run cold water from the faucets inside your home for 1–3 minutes until clear. Read more about what to do when EBMUD crews are in your neighborhood.

CUSTOMER ALERTS

OAKLAND - WILLIAM STREET

Service issues
Due to a service lateral replacement, water service is disrupted in Oakland for customers on William Street.

Traffic impact(s)
There are no traffic impacts.

Repair status
The estimated time for completion of repairs is 4:30 PM on Wednesday, August 29th.

Last updated: Wed, Aug 29, 2018 3:12 PM

WALNUT CREEK - WALKER AVENUE

Service issues
Due to an emergency repair, water service is disrupted in Walnut Creek on portions of: Walker Avenue, Caminar Way, Eckley Lane, El Camino Corto, Fraser Drive, Nob Hill Drive, Oakdene Court, Shady Glen Road, View Lane and Walnut Boulevard.

Repair status
The estimated time for completion of repairs is 4:00 pm.

Last updated: Wed, Aug 29, 2018 12:12 PM
New Water Outage Map

• Map shows locations of unplanned maintenance that results in a water outage
• Each outage includes
  ✓ Impacted streets
  ✓ Number of customers affected
  ✓ Traffic impacts, if any
  ✓ Estimated time when water service will be restored
• Map goes live on Wednesday, June 26th
• Planned outages are communicated separately
faucet at the front of the house – until the water runs clear. Also run cold water from the faucets inside your home for 1–3 minutes until clear. Read about what to do when EBMUD crews are in your neighborhood.

**LEGEND:**
- Active Public Alerts
- EBMUD boundary

**Active Public Alerts**

**Active Alert:** RICHMOND - FASCINATION CIRCLE

- **Issue:** Due to emergency repairs, water service is disrupted for 33 customers on Fascination Circle and Devil's Drop Court.
- **Traffic Impact:** None
- **Repair Status:** Water restoration is estimated for 8:00 pm on Monday, June 10, 2019.
- **Comments:** Impacted customers include 1361 Fascination Circle to 1396 Fascination Circle and 700 Devil's Drop Court to 744 Devil's Drop Court.
- **City:** RICHMOND

**Zoom to**
Future Updates

- Include all outages
- Pushing traffic impacts to applications like Waze
- Notifying customers via phone, email or text
Demonstration

- Production Data
- Test Data