ALAMEDA COUNTY WATER DISTRICT

43885 So. Grimmer Boulevard
Fremont, CA 94538

OPERATIONS & WATER QUALITY COMMITTEE

AGENDA

Wednesday, September 2, 2020

4:15 p.m.

ACCESSIBLE PUBLIC MEETINGS: Upon request, ACWD will provide written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in public meetings. Please send a written request at least 72 hours before the meeting to the District Secretary, ACWD, 43885 S. Grimmer Blvd., Fremont, CA 94538, or to gina.markou@acwd.com stating your name, mailing address, phone number, and brief description of the requested materials and preferred alternative format or auxiliary aid or service.

MEMBERS OF THE PUBLIC MAY PARTICIPATE IN THIS MEETING VIA WEBINAR https://us02web.zoom.us/j/82466043463 OR BY CALLING ANY OF THE FOLLOWING PHONE NUMBERS: 1-669-900-9128 or 1-346-248-7799 or 1-301-715-8592 FOLLOWED BY 824 6604 3463.

MEMBERS OF THE PUBLIC MAY NOT ATTEND THIS MEETING IN PERSON. DUE TO THE COVID-19 PANDEMIC AND IN ACCORDANCE WITH GOVERNOR NEWSOM'S EXECUTIVE ORDER N-25-20 WHICH SUSPENDS PORTIONS OF THE BROWN ACT, THIS MEETING WILL BE CONDUCTED BY WEBINAR/TELECONFERENCE ONLY.

1. Update on Water Treatment Chemical Purchases
   Presenter: Mike Wickham

2. Update on Response to Recent Events
   Presenter: Jake Reed, Mike Wickham, & Dan Stevenson

3. Public Comments
Update on Water Treatment Chemical Purchases

Mike Wickham
Background

- On June 11, 2020 the Board approved the purchase orders for liquid oxygen (LOX) and carbon dioxide (CO₂).
- Prices were expected to remain constant for FY 20/21.
- Since then Praxair Inc. have increased the unit cost of both liquid oxygen and carbon dioxide.
- The contract between ACWD and Praxair Inc. was not finalized for FY 20/21 and the chemicals were re-bid.
Supply Issues with LOX and CO$_2$

- There are restrictions at the LOX manufacturing plant resulting in reduced supply
- COVID-19 and California Fires are affecting supply of LOX
- Tornado damage to manufacturing facility affecting supply of CO$_2$
- LOX and CO$_2$ prices have been constant for 5 years
- It is expected that Praxair will be able to supply the District with the required amount of LOX and CO$_2$ until a new agreement is in place
Liquid Oxygen and CO₂ IFB

- IFB posted August 10
- Bids due for the IFB by September 3
- IFB will include both LOX and CO₂
- Previous prices with Praxair Inc.
  - LOX: $.3625/ccf (100 standard cubic feet)
  - CO₂: $130/ton
- Current prices
  - LOX: $2.25/ccf
  - CO₂: $150/ton with a $175/ton add-on contingency cost
- Estimated Bid prices
  - LOX: ~$1.00/ccf
  - CO₂: ~$150/ton
Operations and Water Quality Committee

Update on Response to Recent Events

September 2, 2020
Agenda

- Recap of Recent Incidents (Kurt Arends)
- Emergency Operations Center (Jake Reed)
- Water Production Division (Mike Wickham)
- Facilities Maintenance Division (Dan Stevenson)
Recap of Incidents

- Compounding Incidents
  - Ongoing incident prior to August
    - COVID 19
      - Implement preventive measures (work from home, mask, etc)
      - Prepare / SOP for response to outbreak
      - Plan for to maintain business continuity
      - Employees children home 24x7

- August incidents (focus of this meeting)
  - State electrical grid
    - Rolling black outs
  - Thunderstorms
    - Electrical outages
    - Lightning Strikes
    - Fires
    - Poor air quality
Emergency Operations Center (EOC)

- Planning Section (Jake, Caroline, Leo)
  - Tasks
    - Maintain situational status
    - Planning
    - Coordination
Emergency Operations Center

- Maintain situational status
  - Partnerships with other government agencies
    - Fremont Fire and Police Departments
    - Alameda County Office of Emergency Services
    - California Utility Emergency Association (CUEA)
      - Example of sitstat – e-mail
    - Santa Clara Unit (SCU) Lightning Complex Incident Management Team
    - Twitter
      - Example of sitstat - Twitter.com/calfirescu
Emergency Operations Center

- Live running estimates
  - National Weather Service
    - [https://forecast.weather.gov/MapClick.php?lat=37.53294500000004&lon=-121.96162999999996#.X0gOPuhKjcs](https://forecast.weather.gov/MapClick.php?lat=37.53294500000004&lon=-121.96162999999996#.X0gOPuhKjcs)

- California Independent System Operator
  - [http://www.caiso.com/TodaysOutlook/Pages/default.aspx](http://www.caiso.com/TodaysOutlook/Pages/default.aspx)

- Graphic information system (GIS) based PG&E Rotating Outage Block Look Up
  - [https://www.arcgis.com/apps/instant/lookup/index.html?appid=04b7c901f2ff468daed74df54396d75e&find=43885%2520S%2520Grimmer%2520Blvd%2520Fremont%2520CA%2520USA](https://www.arcgis.com/apps/instant/lookup/index.html?appid=04b7c901f2ff468daed74df54396d75e&find=43885%2520S%2520Grimmer%2520Blvd%2520Fremont%2520CA%2520USA)

- GIS based CalFire fire maps
  - [https://nifc.maps.arcgis.com/apps/View/index.html?appid=69fca73a82df4fefa7c0e48b66d0899d&extent=-123.2395,36.6849,-119.5618,38.1032](https://nifc.maps.arcgis.com/apps/View/index.html?appid=69fca73a82df4fefa7c0e48b66d0899d&extent=-123.2395,36.6849,-119.5618,38.1032)

- Air Quality Index (AQI)
  - [https://www.airnow.gov/?city=Fremont&state=CA&country=USA](https://www.airnow.gov/?city=Fremont&state=CA&country=USA)
Emergency Operations Center

- Planning
  - Incident Action Plans (write and read)
    - ACWD
    - COVID example
    - CalFire
      - SCU Lightning Complex example
        https://app.box.com/embed/s/0bz1phu7rog8z016si6c/folder/117934098364?showItemFeedActions=true&showParentPath=true
  - Update and create SOPs
  - Business continuity planning
Emergency Operations Center

- Coordination
  - EOC Planning Section
    - Command and General Staff (CGS) briefs (Caroline Abellar)
      - Briefings – (As of 8/27/20) 77 briefings since activation of EOC on 3/13/20
    - GIS specialist (Linda Lai)
      - Open KMZ file
  - EOC – PIO (Sharene Gonzales)
    - Local PIOs and Joint Information Center (JIC)
  - EOC - Liaison to Alameda County (Leonard Ash)
  - EOC - Liaison to SCU Lightning Complex Incident Management Team (Dean Morshed)
  - Rapid Area Notification System (RANS)
August 16th Lightning Storm

- Several areas power and/or communications lost throughout distribution system
- Curtner Booster Station
  - Power lost
  - PLC was “fried” and replaced by called out instrument technician
  - Station offline for approx. 4.5 hours
  - Water levels inside the station rose to approx. 6” above the landing because sump pumps lost power
  - Communications lost with all sites on Distribution System SCADA for approx. 1.5 hours when power was restored due to radio constantly transmitting. Instrument tech reset radio.
- Alameda Reservoir and Chloretec system
  - Communications lost when Curtner was impacted
  - Hydrogen and Ammonia sensors were “fried”, which inhibit operation of the Chloretec
  - Ammonia feed was suspended and operators manually batched chlorine to keep the reservoir chlorine residual healthy
- Patterson Reservoir
  - On 8/16 UPS alarm at approx. 0355 am, then back on normal
  - On 8/20 UPS communications lost to reservoir due to UPS failure.
  - UPS bypassed by electricians and communications restored, UPS non-functional
- WTP-2
  - Ozone system tripped off twice. Successfully reset by operators on duty.
Rolling Blackouts and Fire Evacuation Warning

- Notified of rolling blackouts affecting several facilities including booster stations, Desal supply wells, and the Desal facility
  - Notification provided account numbers rather than physical locations
- Desal power outage was planned for 1900-2000 hrs on 8/18
  - Proactively shutdown Desal facility to avoid pressure surges and discolored water calls
  - Scheduled power outage did not occur
- Power lost at Hidden Valley and Vineyard Heights tanks, and Warren takeoff on 8/23.
- Fire evacuation warnings on 8/23 for SCU lightning complex fire included areas within our service area
  - Warning area encompassed MSJWTP, Curtner booster station, and Ohlone, Vineyard Heights, Hidden Valley and Avalon Tanks.
- Increased Distribution System Storage levels
- Coordinated operational response with DWR and SBA contractors
  - Source change on SBA to 100% Delta to facilitate response if water treatment plants were evacuated
Fire Evacuation Warning Area
Maintenance and Technical Response

Dan Stevenson
Alameda Reservoir/ Curtner Booster

- Lost Communications
- PLCs went out (3 I/O cards- spares on-hand)
  - Chlortec Unit
  - Gas Monitoring
Alameda Reservoir

- Gas Monitoring Unit
Alameda Reservoir/ Curtner Booster

- Network Modules went out (2)
Curtner Booster Station

- PLC went out (Spares on hand)