

Presentation to the State Water Resources Control Board on Item 8

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California Public
Utilities Commission

Overview of Comments

- **CPUC is one of seven organizations represented on the SACCWIS.**
 - This presentation is on behalf of the CPUC, CAISO, and CEC, not the SACCWIS.
- **Speaking to Section 6 of the Final Staff Report (System-Wide Grid Reliability Concerns and Need for Redondo Beach Generating Station's Operation Through 2023).**
- **Support Water Board staff's preferred approach, as discussed in staff presentation.**
- **Extensions are in the public interest and are necessary to “bridge the gap” until new resources are online.**

SACCWIS Recommendation

The SACCWIS recommends the State Water Board amend the OTC Policy to extend the compliance date of Redondo Beach Units 5, 6, and 8 for two years from December 31, 2021, to December 31, 2023.

The extension would help meet system reliability needs for September 2022 at hour ending 8 p.m. PDT as demonstrated by the system-wide grid shortfalls in the 2022 stack analysis. The second year of the extension is necessary to address the uncertainty in the 2023 resource supply and the CEC's forecasted 500 MW increase in demand between 2022 and 2023.

Furthermore, a two-year extension would minimize the regulatory risk of returning to the State Water Board should the power generated by Redondo Beach be needed in 2023. Should it be determined that there is no need for Redondo Beach in 2023, the unit may retire earlier than its compliance date deadline.

Timeline of Events

- **November 2019:** CPUC Decision (D). 19-11-026 requires 3,300 MW of procurement and recommends extension of Alamitos and Huntington Beach for 3 years, Redondo for 2 years, and Ormond for 1 year as a “bridge” during procurement.
- **January 2020:** SACCWIS recommends extension of Alamitos, Huntington Beach, and Ormond for 3 years and Redondo for 1 year.
- **August 2020:** Load shed events on August 14 and 15, during West-wide heat event.
- **September 2020:** SWRCB approves extensions according to SACCWIS recommendation.
- **January 2021:** Release of Final Root Cause Analysis on Mid-August 2020 Extreme Heat Wave.
- **February-March 2021:** CPUC D. 21-02-028 and D.21-03-056 direct emergency procurement for summer 2021 and 2022
- **March 2021:** SACCWIS notes system grid reliability need; recommends extension of Redondo Beach for 2 more years.
- **May 2021:** Informational presentation of SACCWIS recommendation to SWRCB
- **June 2021:** CPUC D.21-06-035 requires 11,500 MW of new capacity and states that extension of Redondo would help ensure reliability until the additional capacity comes online.

Timeline of Events (con't)

- **Late June 2021:** CPUC president and chair of the CEC send a letter to the president of the CAISO highlighting challenges to system conditions, including significantly reduced hydroelectric production due to worsening drought conditions.
- **July 2021:**
 - Governor Gavin Newsom issues an emergency proclamation to expedite clean energy projects and relieve demand on the electrical grid.
 - CAISO receives Resource Adequacy system reports that demonstrate a 400 MW deficiency in September 2021.
- **September 2021:** CEC adopts its 2022 Summer Supply Stack Analysis, which further explores potential implications should the ongoing drought and extreme heat events persist into summer 2022 (as NOAA models predict). Results indicate potential energy shortfalls may be as high as 4,350 MW, before counting Redondo Beach's Net Qualifying Capacity of 834 MW.

Final Root Cause Analysis: Findings

- The climate change-induced extreme heat wave across the western United States resulted in demand for electricity exceeding existing electricity resource adequacy (RA) and planning targets.
 - 1-in-30-year August weather event for California (based off 35 years of data).
- In transitioning to a reliable, clean, and affordable resource mix, resource planning targets have not kept pace to ensure sufficient resources that can be relied upon to meet demand in the early evening hours. This made balancing demand and supply more challenging during the extreme heat wave.
 - Rotating outages both occurred after the period of peak demand, during the “net demand peak,” which is the peak demand after subtracting solar and wind generation resources.
- Some practices in the day-ahead energy market exacerbated the supply challenges under highly stressed conditions.
 - Under-scheduling of load, a previous market enhancement that obscured the effects of under-scheduling of load, and convergence bidding issues all contributed.

Jun.-Oct. 2022 Resource Stack at 8 PM

