



Item 8

Amendment to the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling to Extend the Compliance Schedule for the Redondo Beach Generating Station

Public Hearing and Consideration of Adoption

Jonathan Dolan
Environmental Scientist
State Water Resources Control Board

October 19, 2021

Outline

- State Water Board presentation
 - Background and Summary of Amendment
 - Comments Received and Revisions
 - Staff Recommendation
- Presentations or statements by:
 - California Public Utilities Commission (CPUC)
 - California Independent System Operator (CAISO)



Background – 1 of 3

- 2020 OTC Policy Amendment
 - Bridge projected shortfalls starting in summer 2021 while procurement comes online
 - Adopted by the State Water Board on September 1, 2020
- August 2020 Blackouts
 - August 14-15, 2020: West-wide heatwave triggers rotating but controlled blackouts in portions of CA
- The State Water Board recognized potential need to reevaluate forecasting models



Background – 2 of 3

- Following August 2020 Blackouts, the CPUC, CAISO, and CEC:
 - Investigated the root causes of the blackouts based on Governor Newsom's direction
 - CPUC initiated R.20-11-003
 - CPUC, CAISO, and CEC conducted a stack analysis that shows projected shortfalls in summer 2022 and uncertainties in 2023, based on conditions that led to August 2020 blackouts



Stack Analysis Results

Surplus and Shortfall for September 2022 Total Resource Stack as Compared to Load for Hour-Ending 8 p.m. PDT Plus 15% and 17.5% Planning Reserve Margin (Megawatts)

		15% PRM	17.5% PRM
[1]	Existing and expected online resource stack	(1,430)	(2,563)
[2]	Estimated CPUC expedited procurement	1,500	1,500
[3]	Sub-total with only expedited procurement	70	(1,063)
[4]	Redondo Beach Units 5, 6, and 8 (RB)	834	834
[5]	Total with expedited procurement and RB	904	(229)

Note: A surplus is shown in black font and a shortfall is shown in red font within parenthesis

- Under the 17.5% interim effective PRM, the projected shortfall in summer 2022 is 1,063 MW without Redondo Beach's capacity
- Multiple variables create uncertainties about grid reliability in 2023
- Informed by these findings, the SACCWIS recommended extending Redondo Beach's compliance date by two years on March 26, 2021

Background – 3 of 3

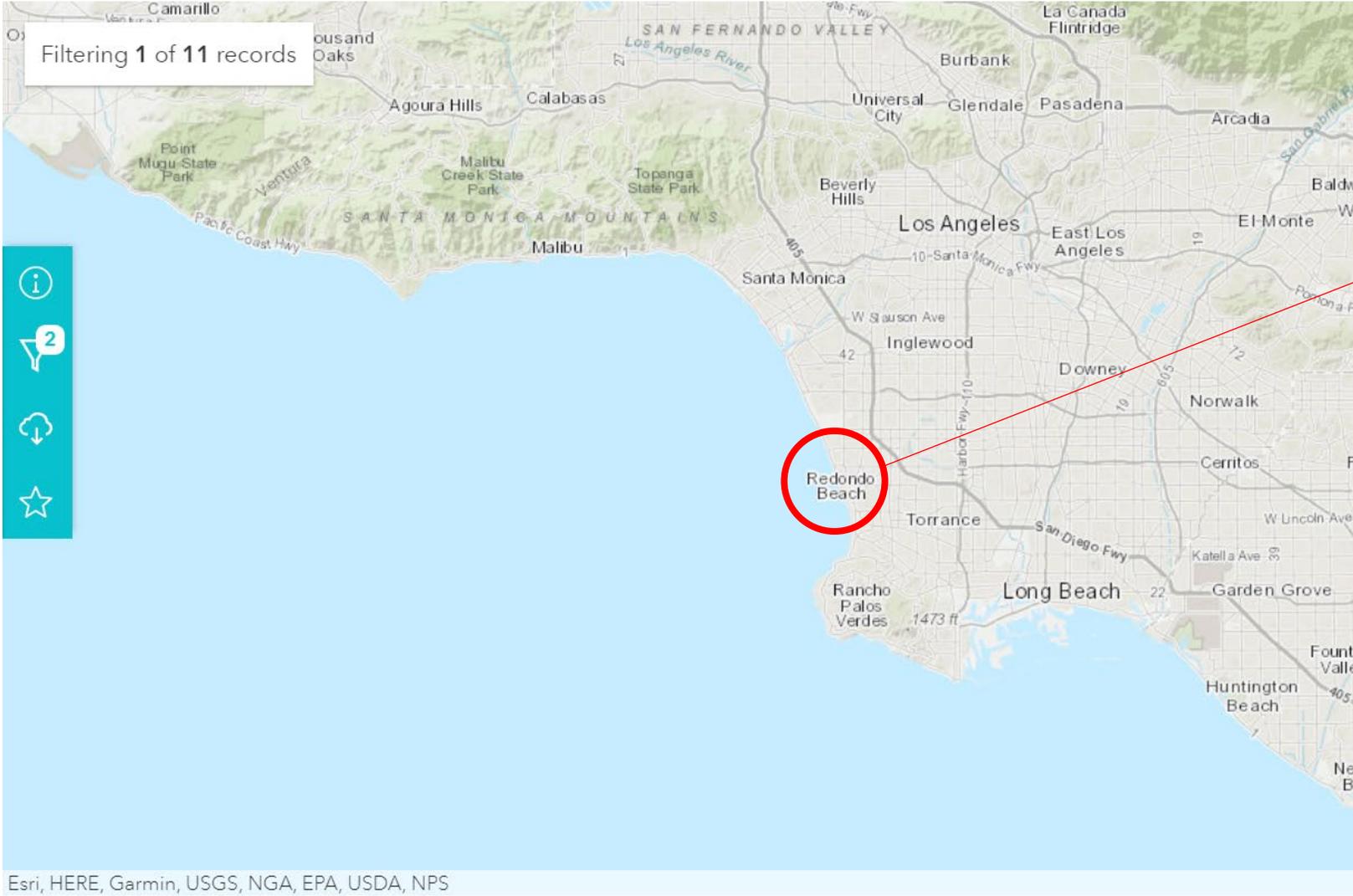
- New information received after June 2021 release of draft Amendment and Staff Report
 - CPUC D.21-06-035
 - Governor's Emergency Proclamation
 - CAISO Resource Adequacy Reports
 - CEC's 2022 Summer Stack Analysis
 - Both Planning Reserve Margin scenarios under this analysis indicate Redondo Beach's capacity is needed

Summary of Proposed Amendment

Extend the compliance date for Redondo Beach Generating Station Units 5, 6, and 8 by two years, from December 31, 2021, to December 31, 2023, to address system-wide grid reliability needs.



Image by Jaimie Tuchman Getty Images



Filtering 1 of 11 records



Source: Dailybreeze



Comments on the Proposed Amendment

- 99 timely comments received
- Revised Staff Report and responses to comments released on September 17, 2021



Comments on OTC Policy Implementation

- OTC Policy Compliance
 - Alternative paths for compliance
 - Owners and operators select the compliance approach; facility retirement is not required by the OTC Policy
 - The OTC Policy includes process for extending compliance dates to ensure electrical power needs essential for the welfare of the citizens of the State are met
 - SACCWIS is responsible for recommending compliance date revisions necessary for grid reliability



Comments on Grid Reliability

- Role in Grid Reliability and Frequency of Operation
 - Operate like a “peaker”
 - SACCWIS’ preferred alternative was unanimously supported by the CPUC, CEC, and CAISO in March 2021
 - Provide available energy capacity as new resources come online



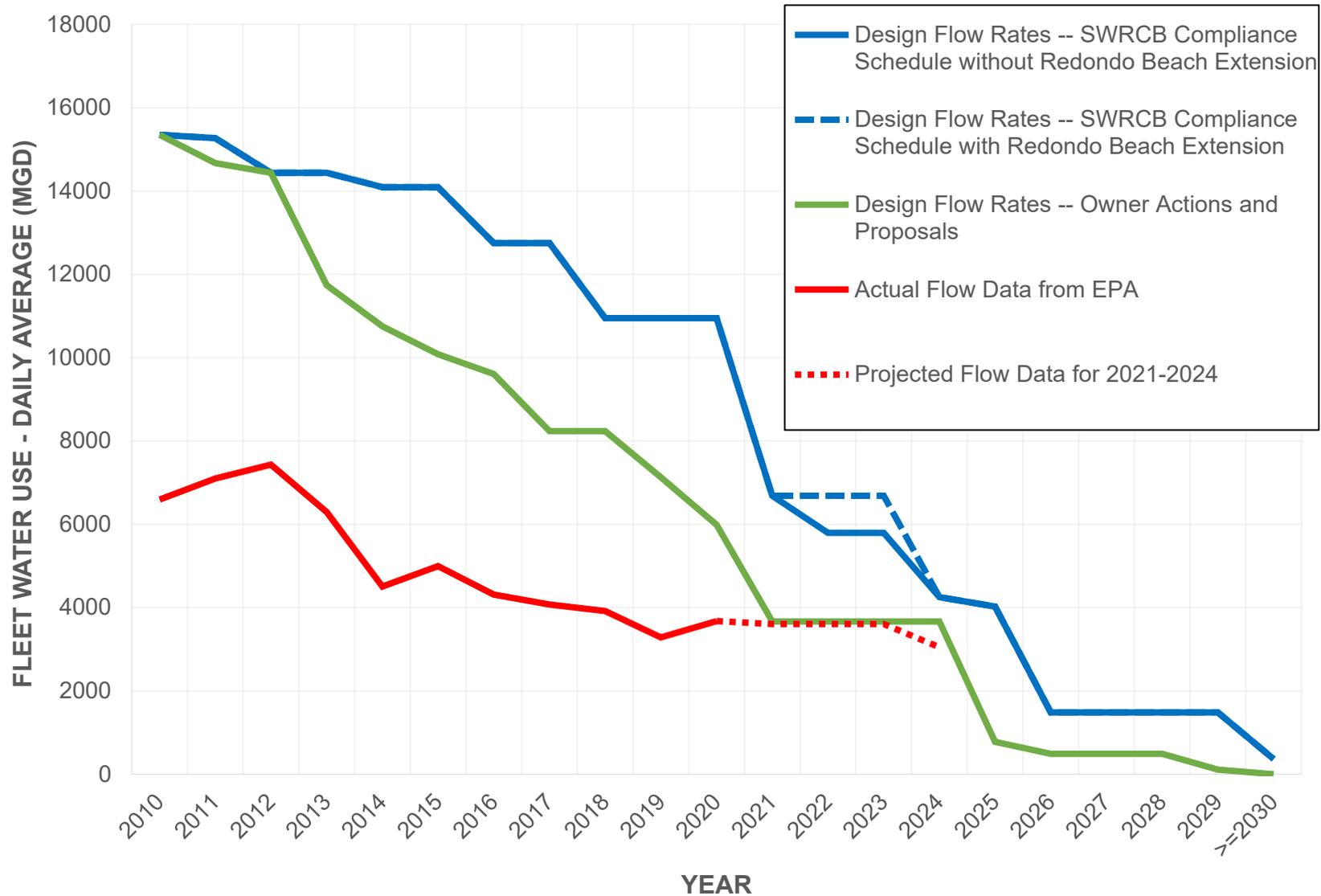
Image by Daily Breeze and Press Telegram

Comments on Water Quality and Mitigation

- Impacts to Water Quality and Marine Life
 - Continuing interim mitigation requirements to mitigate for impingement and entrainment
 - Continuing compliance with the applicable NPDES permit and other regulatory documents, which are overseen by the Los Angeles Regional Water Board



Impacts of Compliance Date Extension



Comments on Wetlands and Land Use

- Onsite Wetlands
 - No known unpermitted dewatering events in the past year, but potential delay to restoration
 - California Natural Resources Agency grant money terminated
 - Even with proposed extension, Redondo Beach's owner and operator must comply with applicable permits, laws, and regulations



Comments on Air Quality (1 of 2)

- Role of the California Air Resources Board (CARB) and the South Coast Air Quality Management District (South Coast AQMD):
 - The CARB identifies air permitting constraints related to OTC Policy implementation and acts as a liaison with California's air districts.
 - The South Coast AQMD is the stationary source permitting authority for Redondo Beach.
- Facility has a valid Title V permit from South Coast AQMD through February 4, 2024. Redondo Beach can continue to operate as long as they maintain compliance with their permit and any other applicable requirements.

Comments on Air Quality (2 of 2)

- Air Quality Impacts
 - Public health concerns, such as:
 - High population density
 - Particulate matter
 - Black smoke events



Image by Daily Breeze

Comments on CEQA

- California Environmental Quality Act
 - No new impacts beyond what was considered during the development of the OTC Policy in 2010



AES Proposed Environmental Benefits Payments

- \$1.5 million in additional voluntary watershed and wetland improvements proposed by AES
- Unrelated to any CEQA requirement or to the OTC Policy's Interim Mitigation provisions
- Not relevant to State Water Board consideration of the compliance date extension for grid reliability



Staff Recommendation

Adopt the resolution to extend Redondo Beach's OTC Policy compliance date for two years, from December 31, 2021, to December 31, 2023.



Questions?

Project contacts:

- Kat Walsh
Katherine.Walsh@waterboards.ca.gov
- Jonathan Dolan
Jonathan.Dolan@waterboards.ca.gov



Image from
Monterey Bay
Aquarium