A photograph of a nuclear power plant at sunset. The sky is a mix of orange, yellow, and purple. The plant's structures, including cooling towers and piping, are silhouetted against the bright sky. A body of water in the foreground reflects the colors of the sunset and the plant's structures. The overall scene is a blend of industrial and natural beauty.

Amendment to the Once-Through Cooling (OTC)
Policy to Revise the Compliance Schedules for
Alamitos, Huntington Beach, Ormond Beach, and
Scattergood Generating Stations, and Diablo Canyon
Nuclear Power Plant

Item 7

August 15, 2023

Jonathan Dolan

Environmental Scientist
Division of Water Quality
State Water Resources Control Board

Summary of Amendment – Regulatory Revisions

- Extend the compliance dates for the following facilities by three years, from December 31, 2023, to December 31, 2026, to address system-wide grid reliability needs and support the Strategic Reserve:
 - Alamitos Generating Station Units 3, 4, and 5
 - Huntington Beach Generating Station Unit 2
 - Ormond Beach Generating Station Units 1 and 2
- Extend the compliance date for the following facility by five years, from December 31, 2024, to December 31, 2029, to address local grid reliability needs in the Los Angeles area:
 - Scattergood Generating Station Units 1 and 2

Summary of Proposed Amendment – Administrative Revisions

- Revise the compliance dates of Diablo Canyon Nuclear Power Plant Units 1 and 2 to October 31, 2030, to ensure the OTC Policy is consistent with the compliance dates established in Water Code section 13193.5 via SB 846.
- Specify annual Statewide Advisory Committee on Cooling Water Intake Structures (SACCWIS) reporting to the State Water Board at least through 2026.

Justification for Proposed Amendment

(CAISO Balancing
Authority Area –
Alamitos, Huntington Beach,
and Ormond Beach)

- An **updated grid reliability analysis** determined the need for additional capacity up to 10,000 Megawatts (MW) in summer 2025.
 - Additional capacity needed due to increased demand; delays in the development of previously authorized procurement; extreme events; and coinciding extreme events.
- The **Electricity Supply Strategic Reliability Reserve (Strategic Reserve)** was created to bolster grid reliability until new resources are online.
 - Allows the Department of Water Resources to contract with facilities planned for retirement, including OTC facilities.
 - The State Water Board must still consider extending compliance dates for OTC facilities selected for the Strategic Reserve.
 - Alamitos, Huntington Beach, and Ormond Beach would provide up to 2,854 MW to the Strategic Reserve.

Justification for Proposed Amendment

(LADWP Balancing
Authority Area -
Scattergood)

- The **Green New Deal** requires 100% zero-carbon energy for the LADWP by 2045.
 - This plan requires new local generation and transmission resources to support local reliability.
 - The Green New Deal affected the LADWP's previous plans to repower Scattergood with non-OTC, fossil-fueled capacity.
- The LADWP conducted a **Local Capacity Technical Study** and determined the need for Scattergood's existing capacity until new resources and transmission are online in 2029.

Comments on the Proposed Amendment

- 12 written comments received during public comment period (January 31 to March 17, 2023).
- 20 oral comments received at a public hearing on March 7, 2023.
- Revised Staff Report and responses to comments released on July 26, 2023.



Comments on OTC Policy Implementation

- Comment: Facilities must retire by their compliance dates, or facilities must comply with the OTC Policy by installing Best Technology Available (BTA).
 - Response:
 - Compliance options available to owners and operators include retirement, repowering, and retrofitting.
 - Retirement is the path of compliance chosen by most owners and operators.
 - LADWP retired Scattergood Unit 3 and plans to repower Units 1 and 2.
 - Affected facilities are still compliant with the OTC Policy.

Comments on Grid Reliability

- Comment: Most commenters support the need for grid reliability.
- Comment: Facilities should not be limited to participation in the Strategic Reserve.
 - Response: The State Water Board shall afford significant weight to unanimous recommendations of the energy agencies.
- Comment: Original compliance dates were developed to account for grid reliability.
 - Response: The OTC Policy acknowledges compliance date extensions may be necessary to support grid reliability.



Comments on Grid Reliability (continued)

- Comment: Further extensions should be barred, and recent amendments show a pattern of granting extensions. In addition, future OTC operations should be considered violations of the Clean Water Act.
 - Response:
 - 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.
 - Recent amendments based on recommendations of the SACCWIS in response to extenuating circumstances.
- Comment: The SACCWIS should address energy efficiency and clean energy procurement that replaces OTC capacity.
 - Response: SACCWIS is responsible for recommending compliance date revisions necessary for grid reliability; assessments of grid reliability are typically comprehensive.



Comments on Water Quality and Mitigation

- Comment: Public and environmental health should not be secondary considerations.
 - Response: The facilities will continue to be subject to applicable NPDES permit and other regulatory requirements.
- Comment: Current interim mitigation payments are inadequate, and payments should be directed to local projects.
 - Response: The State Water Board is currently developing updates to the interim mitigation program and will host public listening sessions in October to receive public input.
- Comment: The State Water Board is relying on mitigation and restoration as a substitute for BTA.
 - Response: The OTC Policy does not authorize compliance with CWA section 316(b) via restoration.

Additional Updates for Scattergood, Haynes, and Harbor Generating Stations

- LADWP must take several steps to repower Scattergood, Haynes, and Harbor OTC units with non-OTC units by December 31, 2029.
- More detailed information on semi-annual milestones and progress toward meeting those milestones will help assess progress toward meeting the 2029 final compliance date.
- Change Sheet #1 adds a new directive to the proposed Resolution directing the Executive Director to issue an order requiring LADWP provide semi-annual milestones and regular progress reports.

Proposed Additions to the Resolution

Insert a new Finding 27 as follows and renumber subsequent findings:

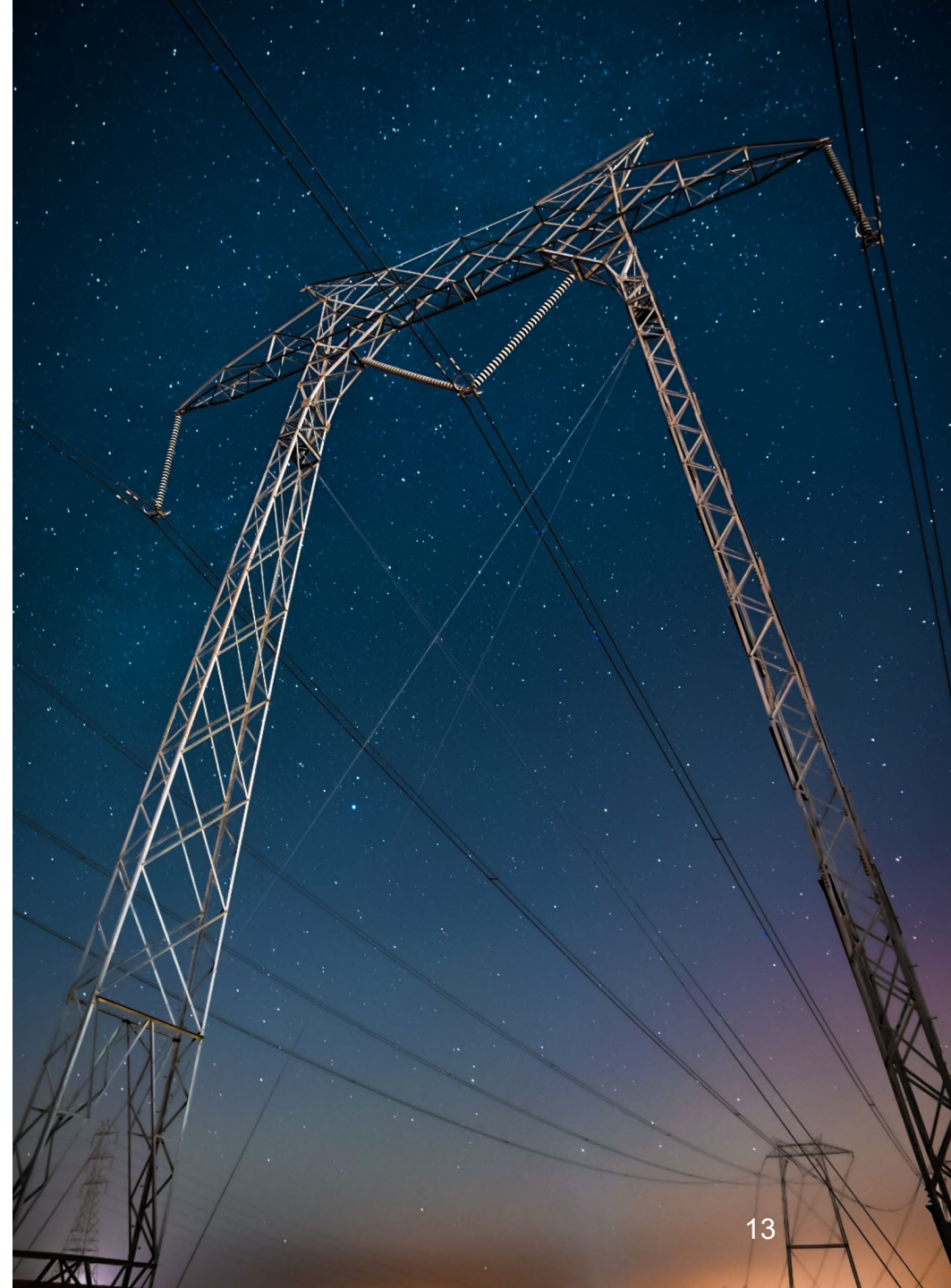
27. The LADWP must take several steps to repower and end use of once-through cooling at Scattergood prior to December 31, 2029, such as obtaining permits, bidding and awarding contracts, construction to repower units at Scattergood, and construction to upgrade transmission lines. The LADWP must also take steps to repower units at Haynes and Harbor generating stations, their other remaining facilities using OTC, prior to December 31, 2029. The LADWP currently submits an annual grid reliability report to the State Water Board for consideration by SACCWIS. More detailed information on semi-annual milestones necessary to attain final compliance with the OTC Policy for Scattergood, Haynes, and Harbor generating stations will aid the State Water Board and SACCWIS in understanding and tracking progress toward final compliance with the OTC Policy.

Insert a new Directive 3 as follows and renumber subsequent directives:

3. Directs the Executive Director to issue an order pursuant to Water Code section 13383 as soon as feasible requiring the LADWP to identify in writing semi-annual milestones necessary to attain final compliance with the OTC Policy for all three of its facilities (Scattergood Units 1 and 2, Harbor Unit 5, and Haynes Units 1, 2, and 8) by their OTC Policy compliance date (December 31, 2029), report at least annually in writing with information demonstrating the LADWP's progress towards attaining the milestones and compliance by January 31 of each year, and present the information in conjunction with the annual SACCWIS report annually at noticed State Water Board meetings.

Comments on Diablo Canyon

- Comment: Revising Diablo Canyon's compliance date is not a change without regulatory effect because the Legislature does not have the authority to take this action.
 - Response:
 - Diablo Canyon's compliance date was amended by the Legislature and passed into law when SB 846 was signed by Governor Newsom on Sep. 2, 2022.
 - The proposed amendment updates Diablo's compliance dates to avoid confusion and ensure the OTC Policy is accurate.
- Comment: The State Water Board should complete BTA analysis and require installation of BTA at Diablo Canyon.
 - Response: It is not practicable to design and construct alternatives for Diablo Canyon to achieve final compliance with the OTC Policy prior to October 31, 2030.



Environmental Justice Considerations

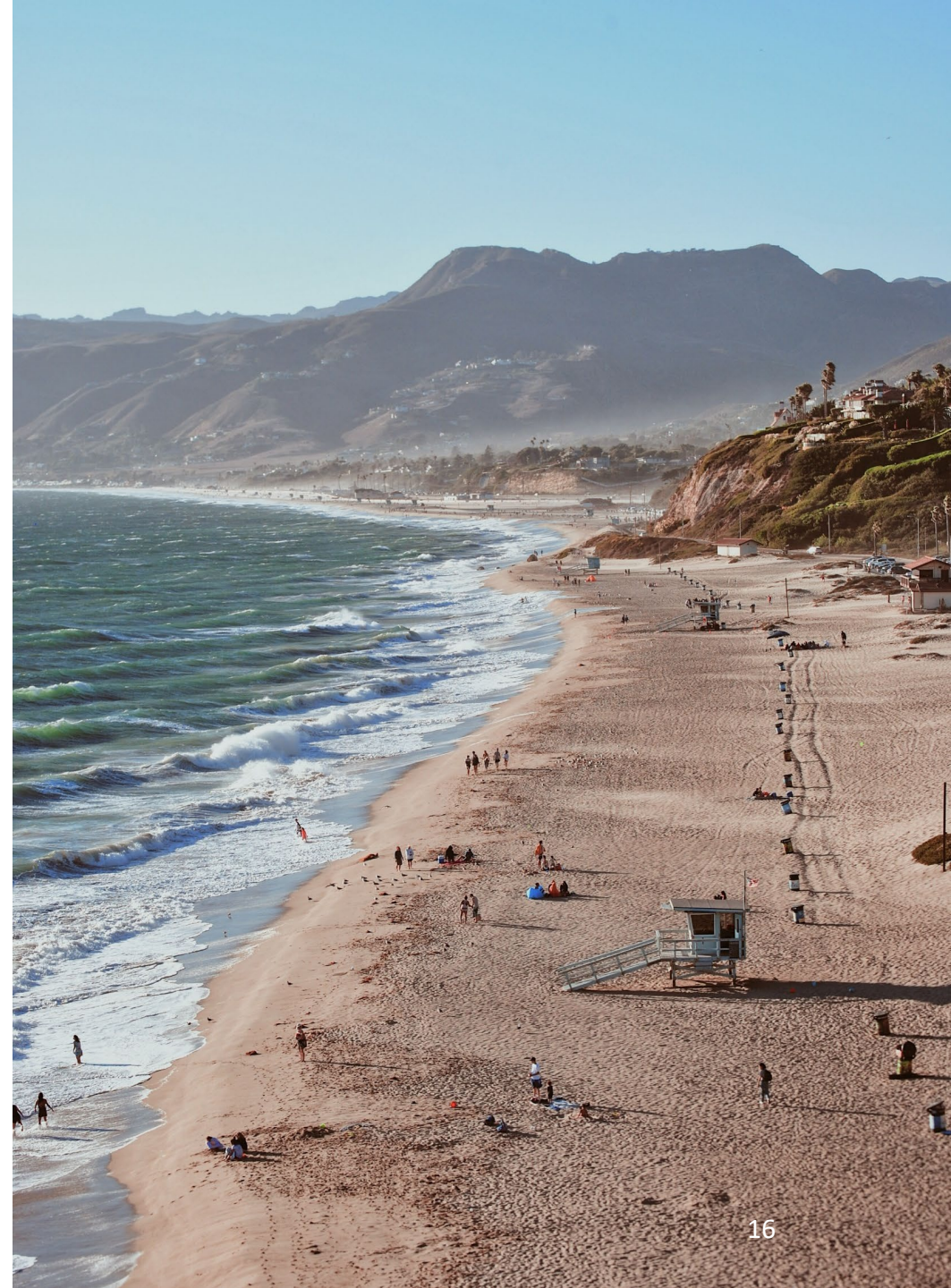
- The State Water Board has implemented measures within its authority through the OTC Policy to address water quality and marine life impacts related to operation of OTC power plants.
- The OTC facilities are located on or near unceded historic territories of some California Native American Tribes, as well as the populated disadvantaged community in Oxnard near Ormond Beach.
- In accordance with AB 2108, State Water Board staff conducted outreach with representatives of the following groups to identify water quality impacts associated with the amendment and identify opportunities for public engagement in the amendment process:
 - The Chumash and Gabrieleño (Tongva) Tribes
 - The disadvantaged community near Ormond Beach

Environmental Justice Considerations (continued)

- Comment: OTC facilities contribute to low air-quality in disadvantaged communities.
 - Response:
 - The California Air Resources Board and the local air quality management districts are responsible for permitting activities, which are intended to be protective of human health.

Staff Recommendation

- Adopt the resolution with Change Sheet #1 to:
 - Extend Alamitos', Huntington Beach's, and Ormond Beach's compliance dates from December 31, 2023, to December 31, 2026;
 - Extend Scattergood's compliance date from December 31, 2024, to December 31, 2029;
 - Direct the Executive Director to issue an order requiring LADWP to report on progress toward attaining compliance with the OTC Policy;
 - Revise Diablo Canyon's compliance dates to comport with its new compliance date per SB 846; and
 - Specify the SACCWIS will meet annually at least through 2026 and will reconvene as needed beyond 2026.



Questions?

Project contacts:

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



Image from
Monterey Bay
Aquarium