



# Fact Sheet

## Once-Through Cooling Policy

### What is the Role of the Water Boards?

The State Water Resources Control Board (State Water Board) and the nine Regional Water Quality Control Boards (Regional Water Boards), collectively known as the California Water Boards (Water Boards), are dedicated to a sustainable California made possible by clean water and water availability for both human uses and environmental resource protection. The State Water Board protects water quality through development and implementation of water quality control plans and policies.

### What is the OTC Policy?

On May 4, 2010, the State Water Board [adopted a policy](#) regulating the use of coastal and estuarine waters for cooling purposes at power plants in California. The Statewide Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (also known as the Once-Through Cooling Policy or OTC Policy) reduces the harmful effects on marine life in the ocean and estuaries associated with the cooling water intakes while also maintaining local and statewide electrical grid reliability.

The OTC Policy originally applied to 19 coastal power plants in California. The eight that still use OTC water include:

- Alamitos Generating Station located in Long Beach
- Diablo Canyon Nuclear Power Plant located in Avila Beach
- Harbor Generating Station located in Wilmington
- Haynes Generating Station located in Long Beach
- Huntington Beach Generating Station located in Huntington Beach
- Moss Landing Generating Station located in Moss Landing
- Ormond Beach Generating Station located in Oxnard
- Scattergood Generating Station located in El Segundo

### Why is the OTC Policy Needed?

The power plants regulated by the OTC Policy collectively withdraw billions of gallons of water every day to cool steam for generating electricity. In the process, high volumes of marine organisms are killed each year because they are either trapped against screens, called impingement, or drawn into the cooling system and exposed to pressure and high heat, called entrainment. The marine life that is killed is mainly at the base of the food chain, which can adversely affect the future of certain species and impact recreational and commercial fishing.



## **Is the OTC Policy Required by Law?**

The State Water Board is required by law to comply with federal Clean Water Act Section 316(b), which states that the location, design, construction, and capacity of cooling water intake structures must reflect the best technology available to protect aquatic life. The power plants also operate under National Pollutant Discharge Elimination System (NPDES) permits adopted by Regional Water Boards, which allow for discharges from power plants that meet sufficient water quality conditions.

## **How Do Power Plants Comply with the OTC Policy?**

Power plant owners and operators can choose how to comply with the OTC Policy's required 93 percent reduction in their OTC system's flow rate by either retiring power generating operations, repowering with non-OTC power generation, or retrofitting facilities to reduce seawater use.

Twelve of the original 19 plants have already fully complied with the OTC Policy. Eleven complied by retiring units that used once-through cooling, and one (Moss Landing Generating Station) retrofitted its facilities to reduce seawater use. Remaining owners and operators have informed the State Water Board that they intend to comply by retiring or repowering their existing OTC units by their final compliance date.

## **Are There Interim Compliance Requirements?**

Owners and operators of OTC power plants are required to offset interim impingement and entrainment impacts until final compliance with the OTC Policy is achieved. Most OTC power plant owners and operators comply with this requirement by providing funding to the Ocean Protection Council or State Coastal Conservancy to use on marine enhancement and conservation projects.

## **Does the OTC Policy Impact the Electrical Grid?**

Because the OTC Policy impacts how some power plants operate, State Water Board staff meets regularly with representatives from the agencies and entities that oversee these facilities and California's power grid, including the California Energy Commission, California Public Utilities Commission, and the California Independent System Operator.

## **Can Final Compliance Dates Be Extended?**

The State Water Board can extend final compliance dates by amending the OTC Policy to ensure the reliability of the electrical grid. The [Statewide Advisory Committee on Cooling Water Intake Structures](#) (SACCWIS), established in the OTC Policy, provides recommendations to the State Water Board on the need for final compliance date extensions. It is comprised of members from seven state agencies: the State Water Board, California Public Utilities Commission, California Energy Commission, California Independent System Operator, California Air Resources Board, California Coastal Commission, and State Lands Commission.

At its annual meetings, the SACCWIS reviews the current state of California’s electrical grid, including energy demand and availability projections, in considering whether to recommend extending final compliance dates. These meetings are open to the public. To receive notifications about SACCWIS meetings, please see the “How Can I Stay Involved?” section below.

## **When Was the OTC Policy Last Amended?**

On August 15, 2023, the State Water Board adopted an amendment that extended the compliance dates for Alamitos, Huntington Beach, and Ormond Beach generating stations by three years, from December 31, 2023, to December 31, 2026. The amendment also extended the compliance date for Scattergood Generating Station by five years, from December 31, 2024, to December 31, 2029.

Finally, the amendment included an administrative change to revise the compliance date for Diablo Canyon Nuclear Power Plant to October 31, 2030. This was a change without regulatory effect to ensure the OTC Policy is consistent with the compliance date extension that Governor Newsom approved on September 2, 2023, through Senate Bill 846.

## **How Can I Stay Involved?**

The State Water Board welcomes public and tribal participation at public meetings where the OTC Policy is considered or discussed. Any person desiring to receiving future notices announcing relevant meetings must sign-up for the email distribution list by accessing the [Email List Subscription Form website](#).

After entering an email, interested parties should scroll to the “Water Quality” section and check “Ocean Issues – Once-Through Cooling” before form submission.

Any questions about the OTC Policy can be directed to State Water Board staff, as listed under the “Questions or Comments” section on the [OTC Policy webpage](#).