



Fact Sheet

STATE WATER RESOURCES CONTROL BOARD | 1001 I Street, Sacramento, CA 95814 | Mailing Address: P. O. Box 100, Sacramento, CA 95812-0100 | www.waterboards.ca.gov

ONCE-THROUGH COOLING POLICY PROTECTS MARINE LIFE AND INSURES ELECTRIC GRID RELIABILITY

On May 4, 2010, the State Water Resources Control Board adopted a policy regulating the use of seawater for cooling purposes at power plants in California. The Statewide Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (Policy) establishes clear standards to implement the Clean Water Act in a consistent manner and thereby reduce the harmful effects associated with the cooling water intakes on life in the ocean and estuaries.

The Law Requires It

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 operate under National Pollutant Discharge Elimination System (NPDES) permits that the State Water Board will modify to implement the Policy. The public is invited to participate in the permitting process.

Once-through Cooling Is Dangerous to Marine Life

The 19 power plants that are regulated by the Policy are collectively able to withdraw billions of gallons of water every day to cool steam for generating electricity. In the process, millions of fish, larvae, eggs, seals, sea lions, turtles, and other creatures are killed each year because they are either trapped against screens or are drawn into the cooling system where they are exposed to pressure and high heat. The marine life that is killed is mainly at the base of the food chain and that can adversely affect the future of certain species and adversely impact recreational and commercial fishing.

Power Plants Have Choices Regarding Compliance

Power plant owners/operators can choose how they plan to comply with the Policy's required 93 percent reduction in their use of seawater. Two plants have ceased operation. Most have informed the State Water Board that they are planning to modernize their plants' equipment and will switch to air cooling systems. Some have chosen to use evaporative cooling towers. Others are pursuing alternative controls, such as screening.

The Policy also provides a path for possible alternative requirements for nuclear power plants, which additionally must comply with federal safety regulations. The owners/operators of San Onofre Nuclear Generating Station and Diablo Canyon Power Plant are required to undertake special studies to investigate alternatives for their facilities to meet the Policy's requirements. A Review Committee, comprised of technical representatives with experience with nuclear plant issues, is meeting to oversee the special studies.

Power Plants Affected and Compliance Dates

Humboldt Bay Power Plant – by December 31, 2010 (this plant is now using cooling towers)
Potrero Power Plant – by October 1, 2011 (shut down)
South Bay Power Plant – by December 31, 2011 (shut down)
Haynes Generating Station Units 5 & 6 – by December 31, 2013
El Segundo Generating Station – by December 31, 2015
Morro Bay Power Plant – by December 31, 2015
Scattergood Generating Station Unit 3 – by December 31, 2015
Encina Power Station – by December 31, 2017
Contra Costa Power Plant – by December 31, 2017
Pittsburg Power Plant – by December 31, 2017
Moss Landing Power Plant – by December 31, 2017
Huntington Beach Generating Station – by December 31, 2020
Redondo Beach Generating Station – by December 31, 2020
Alamitos Generating Station – by December 31, 2020
Mandalay Generating Station – by December 31, 2020
Ormond Beach Generating Station – by December 31, 2020
San Onofre Nuclear Generating Station – by December 31, 2022
Diablo Canyon Nuclear Power Plant – by December 31, 2024
Scattergood Generating Station Units 1 & 2 – by December 31, 2024
Haynes Generating Station Units 1 & 2 – by December 31, 2029
Harbor Generating Station – by December 31, 2029
Haynes Generating Station Unit 8 – by December 31, 2029

Note: It is possible that some compliance dates may be changed in the future to ensure electric supply reliability.

A Reliable Electric Grid Is Essential

State Water Board staff met regularly during development of the Policy with representatives from the agencies and entities that oversee the power plants, including the Energy Commission, Public Utilities Commission, and the Independent System Operator, to ensure that the Policy's implementation provisions were realistic. After the Policy was adopted, the Statewide Advisory Committee on Cooling Water Intake Structures (SACCWIS) was formally convened to advise the State Water Board on the implementation of the Policy, and to ensure that implementation plans and schedules submitted by the electrical generators are realistic and will not cause disruption to the State's electrical power supply. SACCWIS will report to the State Water Board on these issues by October 1, 2011.

For more information, please visit:

http://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/