



# 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](http://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 (State Water 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, composed of technical representatives with experience with nuclear plant issues, met to oversee the special studies.

## **Power Plants Affected and Compliance Dates**

Humboldt Bay Power Plant – by December 31, 2010 (in compliance)  
Potrero Power Plant – by October 1, 2011 (in compliance)  
South Bay Power Plant – by December 31, 2011 (in compliance)  
Haynes Generating Station Units 5 & 6 – by December 31, 2013 (in compliance)  
El Segundo Generating Station – by December 31, 2015 (unit 3 in compliance)  
Morro Bay Power Plant – by December 31, 2015 (in compliance)  
Scattergood Generating Station Unit 3 – by December 31, 2015  
Encina Power Station – by December 31, 2017  
Contra Costa Power Plant – by December 31, 2017 (in compliance)  
Pittsburg Power Plant – by December 31, 2017  
Moss Landing Power Plant – by December 31, 2020  
Huntington Beach Generating Station – by December 31, 2020 (units 3 and 4 in compliance)  
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, 2016  
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.

## **2015 Amendment to the Policy**

Following adoption of the Policy in 2010, the State Water Board was sued by Dynegy and four other owners and operators of power plants affected by the Policy. In October of 2014, the State Water Board settled claims involving the Policy. Pursuant to the terms of the settlement agreement, on April 7, 2015 the State Water Board adopted the amendment to the Policy changing the final compliance date for Moss Landing Power Plant from December 31, 2017 to December 31, 2020. The three year extension will provide additional time for Dynegy to comply with Track 2 requirements and assess technology controls through pilot studies. In addition, Dynegy will change operational controls at Moss Landing Power Plant by December 16, 2016 to assist in reducing overall intake flow ahead of the final compliance date.



## Fact Sheet

**For more information, please visit:**

[http://www.waterboards.ca.gov/water\\_issues/programs/ocean/cwa316/](http://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/)

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