



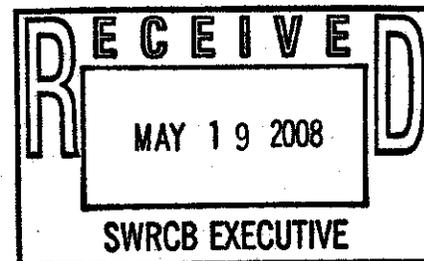
Public Comment  
Once Through Cooling  
Deadline: 5/20/08 by 12 p.m.

**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE

Southwest Region  
501 West Ocean Boulevard, Suite 4200  
Long Beach, California 90802- 4213

MAY 19 2008

Ms. Jeanine Townsend  
Clerk to the Board  
State Water Resources Control Board  
1001 I Street, 24<sup>th</sup> Floor  
Sacramento, California 95814



Dear Ms. Townsend:

NOAA's National Marine Fisheries Service (NMFS) appreciates the opportunity to comment on the State Water Resources Control Board's (SWRCB) March 2008 Scoping Document: Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (Scoping Document). The Scoping Document presents a draft state policy with the goal of controlling the harmful effects of once-through cooling (entrainment and impingement of marine and estuarine organisms) caused by coastal and estuarine power plants. NMFS is providing the following comments pursuant to our responsibilities under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), the Fish and Wildlife Coordination Act, the Endangered Species Act (ESA), and the Marine Mammal Protection Act (MMPA).

The Scoping Document estimates that these 21 power plants withdraw up to 17 billion gallons of water for once-through cooling per day. They impinge up to 9 million and entrain 79 billion fish and other organisms on an annual basis. NMFS has determined that the once-through cooling associated with coastal and estuarine power plants would adversely affect a variety of marine resources including essential fish habitat (EFH), as defined under the MSA. Impacts to salmonids listed under the ESA have also been noted at two of the power plants in San Francisco Bay, the Pittsburg and Contra Costa power plants. In addition, entrainment of marine mammals and sea turtles, which are protected under the MMPA and ESA, has been documented at numerous coastal facilities.

NMFS supports the draft state policy as presented in the scoping document. It is a well developed and thorough policy that should protect marine and estuarine life while providing a sufficient pathway for the affected facilities to upgrade their operations. Impacts to electrical grid reliability are not expected as a result of this policy according to an April 2008 report prepared for the California Ocean Protection Council and the SWRCB (Jones and Stokes 2008). Most of the power plants that are subject to the draft policy are expected to upgrade their once-through cooling systems to closed-cycle cooling towers. Of the 21 affected coastal and estuarine power plants, two are closed and three to four more plants are already planning to convert to dry cooling systems. Upgrading the cooling system (to closed-cycle cooling) has been determined to be



technically and logistically feasible at 12 of the 15 remaining coastal power plants (Tetra Tech 2008). This upgrade may not be feasible at the El Segundo, Redondo Beach and Ormond Beach power plants. These 12 conversions would eliminate the vast majority of the entrainment and impingement impacts. If an alternative water supply (such as recycled municipal wastewater) is used as the make-up water in the closed-cycle tower, then impacts to EFH and other marine resources from the water intake systems can be eliminated.

NMFS also supports the consideration of the impacts to marine mammals and sea turtles from once-through cooling in the draft state policy. Currently, 13 coastal power plants have applied for marine mammal small take permits under the MMPA and seven have applied for sea turtle incidental take permits under the ESA. NMFS is in the process of considering these permit applications, and encourages continued cooperation with the SWCRB to ensure that decisions on these permit applications are consistent with and complimentary to the final statewide policy.

NMFS believes the proposed policy may be strengthened in one aspect. Specifically, NMFS recommends that compensatory mitigation be required for any impacts to aquatic resources remaining after a facility has upgraded their cooling system to closed-cycle wet cooling, if the facility continues to draw their make-up water from ambient sources. Facilities which utilize reclaimed municipal wastewater as their make-up supply, or which upgrade their cooling system to dry cooling, will not have impacts to the aquatic environment requiring mitigation. If requirement 2.C(3), which calls for habitat restoration efforts as an interim measure (scaled using the habitat production foregone methodology), is approved, then this proposed addition should not be necessary. However, if 2.C(3) is not included in the final policy, then impacts to EFH and other marine resources from these facilities should be mitigated.

In closing, NMFS wishes to reiterate our support for the draft policy as presented in the scoping document. We greatly appreciate the SWRCB taking this important step to minimize the impacts from once-through cooling to designated beneficial uses including EFH, ESA listed salmonids, marine mammals, sea turtles, and other marine resources. This draft policy is the result of several years of discussions and development and represents a feasible and logical step forward. If there are any questions regarding this letter please contact Joe Dillon of my staff at (707) 575-6093 or via email at: [Joseph.J.Dillon@noaa.gov](mailto:Joseph.J.Dillon@noaa.gov).

Sincerely,



Robert S. Hoffman  
Assistant Regional Administrator  
for Habitat Conservation Division

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References

Jones and Stokes. 2008. Electric Grid Reliability Impacts from Once-Through Cooling in California. April 2008. (J&S 041808) Sacramento, CA. 64 p.

Tetra Tech 2008. California's Coastal Power Plants: Alternative Cooling System Analysis. February 2008. Golden, CO. 120 p. + appendices.