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

DEC 6 2005 F/SWR4:WBC

Board Members
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

Dear Board Members:

NOAA's National Marine Fisheries Service (NMFS) appreciates the opportunity to provide comments on whether the State Water Resources Control Board (State Water Board) should develop a statewide policy to implement federal Clean Water Act §316(b) regulations on cooling water intake structures. NMFS's interest in this matter stems from our responsibilities to manage, conserve, and protect marine and coastal resources pursuant to the Endangered Species Act (ESA), Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), Marine Mammal Protection Act (MMPA), and the Fish and Wildlife Coordination Act (FWCA).

The Environmental Protection Agency issued the final rule for Phase II facilities (existing electric generating facilities using at least 50 million gallons per day of cooling water) on July 9, 2004. The environmental effects of cooling water intake structures can be summarized into three categories: 1) entrainment, 2) impingement, and 3) thermal effects. Entrainment occurs when small organisms, eggs, and larvae are drawn through the screens with the intake water. Impingement occurs when organisms are trapped against intake screen by the force of the intake water. Thermal effects arise from discharged water that is typically at least 20 degrees Fahrenheit (F) warmer than the ambient source water.

The Phase II rule determined that impingement and entrainment results in losses of early life stages of fish and shellfish, reductions in forages species, and decreased recreational and commercial landings. This can lead to disruptions in aquatic food webs and alterations in species composition and biodiversity. Thermal plumes may modify benthic communities and elicit behavioral or physiological responses. Many of these effects occur within nearshore marine and estuarine habitat, which are typically the most productive habitat for fishery resources.

Pursuant to our statutory responsibilities, NMFS believes these effects would adversely affect Essential Fish Habitat (EFH) for various Federally managed species in the Pacific Groundfish, Coastal Pelagics, and Pacific Salmon Fishery Management Plans, as defined

by MSFCMA. Pursuant to ESA, NMFS believes that once-through cooling has the potential to affect listed species. Similarly, there is the potential for marine mammal take as defined by MMPA. Lastly, pursuant to FWCA, NMFS believes the use of once-through cooling may significantly modify affected waterbodies.

The Phase II requires the Environmental Protection Agency (EPA) to ensure that the location, design, construction, and capacity of power plant cooling water intake structures reflect the Best Technology Available (BTA) to prevent aquatic organisms from being killed or injured by impingement or entrainment. The regulations require that these facilities reduce fish and shellfish impingement mortality by 80 %to 90% from uncontrolled levels. Facilities located on oceans, estuaries, the Great Lakes, and rivers that use more than 5% of the rivers mean annual flow are required to reduce their entrainment of fish and shellfish by 60% to 90% from uncontrolled levels. In California, the Regional Water Quality Control Boards (Regional Boards) have been delegated the responsibility for implementation of the new regulations. The new requirements apply to 21 coastal power facilities affecting California. Thirteen of these of these are located along the Southern California Bight between Pt. Conception and the Mexican Border.

Given the potential for significant environmental effects associated with cooling water intake structures, NMFS encourages the State Water Board to develop an appropriate statewide policy to assist the Regional Boards with implementation of CWA §316(b) regulations. Specifically, NMFS believes the State Water Board should provide guidance on calculating baselines upon which the performance standards of entrainment and impingement reductions are measured. In addition, guidance on appropriate methodologies for Comprehensive Demonstration Study requirements should be developed to promote consistency, uniform study protocols, sound science, and participation by NMFS and other appropriate Federal and state agencies. Given the potential for cumulative impacts, the State Water Board should also encourage appropriate cumulative impact analyses, especially for areas with multiple impacts to near-shore environments such as high concentrations of discharge structures and intake facilities in San Francisco and the Southern California Bight. The determination of BTA is also an issue that would benefit by statewide guidance including standard analysis requirements (e.g. types of technology) and permissible assumptions. As BTA is not a static term, the State should establish a reevaluation schedule (e.g. every 5 years) to accommodate new advances in BTA. Lastly, guidance would be appropriate for those situations where restoration is identified as BTA. Consistent project monitoring requirements and success criteria should be incorporated into each of these restoration efforts. These projects should be coordinated with NMFS and other appropriate Federal and state agencies.

NMFS appreciates the opportunity to provide comment on this important issue and encourages the State Water Board and Regional Boards to continue their collaboration with NMFS and other interested parties. We would appreciate the opportunity to provide further input during the policy development process. If you have any questions related to

these comments, please contact Bryant Chesney at 562-980-4037 or Bryant.Chesney@noaa.gov.

Sincerely,

Rodney R. McInnis
Regional Administrator

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