



# CALIFORNIA OCEAN PROTECTION COUNCIL

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Steve Westly, *State Controller*  
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Sheila Kuehl, *State Senator, Ex officio Member*  
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## **Resolution of the California Ocean Protection Council Regarding the Use of Once-Through Cooling Technologies in Coastal Waters**

*Adopted April 20, 2006*

*WHEREAS*, the California Ocean Protection Act mandates that the Ocean Protection Council (OPC) coordinate and improve the protection of California's ocean and coastal resources; and the Governor's Ocean Action Plan calls for the OPC to play a leadership role in managing and protecting California's oceans, bays, estuaries and coastal wetlands, including integration of coastal water quality programs to increase their effectiveness; and

*WHEREAS*, California currently has 21 coastal power plants that use once-through cooling technology to operate their plants, many of which are located on bays and estuaries, and these plants are collectively permitted to withdraw nearly 17 billion gallons of water per day; and

*WHEREAS*, the OPC is committed to maintaining energy reliability in California, and also recognizes the need to improve coastal and estuarine water quality and protect species diversity and abundance; and

*WHEREAS*, the U.S. Environmental Protection Agency (U.S. EPA) has determined, after a thorough review of the rulemaking record for implementation of section 316(b) of the Clean Water Act, that there are multiple types of undesirable and unacceptable environmental impacts associated with once-through cooling technology; and

*WHEREAS*, The U.S. EPA has found these types of impacts to include entrainment and impingement; reductions of threatened and endangered species; damage to critical aquatic organisms, including important elements of the food chain; diminishment of a population's compensatory reserve; losses to populations including reductions of indigenous species populations, commercial fisheries stocks, and recreational fisheries; and stresses to overall communities and ecosystems as evidenced by reductions in diversity or other changes in system structure and function; and

*WHEREAS*, a recent report by the California Energy Commission found that, of the 21 Californian coastal power plants that use once-through cooling, only seven have recent studies of entrainment impacts that meet current scientific standards; and all these studies have found that adverse impacts occur due to entrainment of aquatic organisms; impingement and entrainment result in changes to community structure; thermal impacts from the discharge of cooling water may be significant, particularly in enclosed water bodies; and the possible cumulative impacts of entrainment and impingement are currently unknown; and

*WHEREAS*, the 2005 Integrated Energy and Policy Report to the California Legislature recommended the OPC work with other agencies to improve assessment of the ecological impacts of once-through cooling and to develop a better approach to implementing best technology available; and

*WHEREAS*, on April 17, 2006, the California State Lands Commission passed a resolution urging the California Energy Commission and the State Water Resources Control Board to develop and implement policies that eliminate the impacts of once-through cooling on the environment; and

*WHEREAS*, staff members of State Water Resources Control Board, California Energy Commission (CEC), California Coastal Commission, and Ocean Protection Council have met and found it extremely helpful to coordinate roles due to the complex nature of coastal power plant permitting.

*NOW, THEREFORE*, the California Ocean Protection Council hereby:

*RESOLVES* that, in agreement with U.S. EPA findings, the environmental impacts from once-through cooling technologies for coastal power plants can be significant, and resolves to urge the State Water Resources Control Board to implement Section 316(b) and more stringent state requirements requiring reductions in entrainment and impingement at existing coastal power plants and encourages the State to implement the most protective controls to achieve a 90-95 percent reduction in impacts; and

*FURTHER RESOLVES* to encourage the State Water Resources Control Board's formation of a technical review group to ensure the required technical expertise is available to review each power plant's data collection proposals, analyses and impact reductions and fairly implement statewide data collection standards needed to comply with section 316(b); and

*FURTHER RESOLVES* to establish an interagency coordinating committee composed of staffs from the Water Boards, California Energy Commission, the Public Utilities Commission, California Coastal Commission, and others to integrate agency actions and coordinate regulatory authorities; and

*FURTHER RESOLVES* to fund a 6-month study that will analyze each of the existing coastal plant's conversion to alternative cooling technologies or installation of best technology available; and

*FURTHER RESOLVES* to work with the Water Boards, California Energy Commission, the Public Utilities Commission, California Coastal Commission, and others to investigate possible non-regulatory incentives that can accelerate desirable conversions of once-through cooling technologies, in addition to regulatory programs that can reduce the impact of once-through cooling technologies.