



California Regional Water Quality Control Board

Los Angeles Region



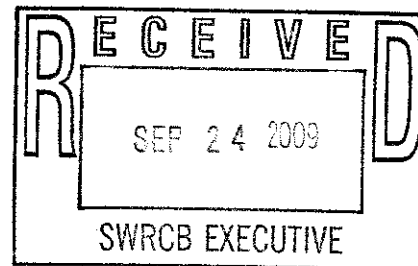
Linda S. Adams
Cal/EPA Secretary

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Arnold Schwarzenegger
Governor

Public Hearing (9/16/09)
Once Through Cooling
Deadline: 9/30/09 by 12 noon

TO: Ms. Jeanine Townsend
Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814



FROM: Tracy J. Egoscue
Executive Officer

DATE: September 22, 2009

SUBJECT: COMMENTS ON PROPOSED WATER QUALITY CONTROL POLICY ON THE USE OF COASTAL AND ESTUARINE WATERS FOR POWER PLANT COOLING

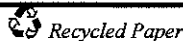
We have reviewed the proposed policy on the use of coastal and estuarine waters for power plant cooling. The tremendous losses of fish and other aquatic organisms associated with impingement and entrainment at the eight coastal power plants within our jurisdiction are of great concern to the Los Angeles Regional Board. We appreciate the considerable amount of time and effort that State Board staff has devoted to development of the draft proposal to protect marine and estuarine life from the impacts associated with once-through cooling at power plants.

We support the overall goal of the policy, which would require the owner/operator of an existing power plant to reduce the intake flow rate at each power-generating unit, at a minimum, to a level commensurate with what can be attained by a closed-cycle wet cooling system. We agree that such a measure is necessary to reduce the harmful effects on marine and estuarine life associated with cooling water intake structures and once-through cooling. However, we would like to offer some comments on specific issues in the proposed policy.

Compliance Alternatives

Track 1 of the draft policy proposes technology based requirements to significantly reduce impingement and entrainment impacts, presumably via a shift from once-through cooling to closed-cycle wet cooling. Although closed-cycle wet cooling would reduce these impacts by an estimated 93% compared to once-through cooling, it appears that dry cooling would be even more effective. We believe that the proposed policy should discuss the rationale for designating

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closed-cycle wet cooling as the Best Technology Available. We also would recommend that the draft policy contain provisions for implementation of dry cooling where circumstances warrant this approach (e.g., for a re-powered facility).

The proposed policy allows the owner or operator of an existing power plant to demonstrate compliance with the policy via Track 2 (i.e., via operational and/or structural controls) if they can demonstrate to the satisfaction of the Regional Board that compliance with Track 1 is not feasible. Compliance with Track 2 requires reduction of impingement and entrainment within 10% of the level achievable under Track 1 (i.e., 83% reduction under Track 2, compared to 93% under Track 1). We recommend elimination of the Track 2 compliance alternative due to the lower level of environmental protection provided by this option and also because we do not believe that technology is available to allow power plants to adequately reduce entrainment losses via operational or structural controls. In addition, since the policy does not define or discuss the factors that the Regional Board's should use to determine that Track 1 is not feasible, it is unclear how this decision would be made and unlikely that there would be statewide consistency.

Mitigation/Restoration

The proposed policy requires the owner or operator of an existing power plant to implement measures to mitigate the interim impingement and entrainment impacts resulting from cooling water intake structures for the period commencing five years after the effective date of the proposed policy and continuing up to and until the owner or operator achieves final compliance. We agree with the requirement for mitigation or restoration to offset interim impacts until power plants achieve full compliance with the proposed policy. However, we would recommend that mitigation for interim impingement and entrainment impacts should be required starting with the effective date of adoption of the proposed policy, rather than providing a five-year grace period.

The policy does not define or discuss how the level of impacts and required mitigation should be calculated, what types of mitigation should be required (e.g., in-kind mitigation versus general habitat restoration), or how to monitor and evaluate the success and effectiveness of mitigation projects. We would recommend that State Board develop guidance on these issues to assist the Regional Boards and promote statewide consistency.

Wholly Disproportionate Demonstration

The owner or operator of any existing fossil-fueled power plant with generating units with a heat rate of 8500 British Thermal Units per kilowatt-hour or less may request that the Regional Board establish less stringent requirements than those specified in Tracks 1 or 2, if the Regional Board determines that the costs to comply with Track 1 or Track 2 are wholly disproportionate to the environmental benefits to be gained. Apparently only the State's two nuclear power plants (Diablo Canyon and San Onofre) and three of the fossil fuel power plants (Moss Landing, Haynes and Harbor) would qualify for application of this provision.

We strongly recommend elimination of the Wholly Disproportional Demonstration provision from the proposed policy. This provision simply provides a loophole for non-compliance with the required impingement and entrainment reductions if these particular power plants can demonstrate that compliance is too costly. Since the policy does not define or discuss the factors that the Regional Board's should use to determine that the costs are wholly disproportionate to the benefits or how to quantify environmental benefits, it is unclear how this decision would be made. In addition, since the Los Angeles Regional Board does not possess the expertise required to conduct or review cost-benefit analyses, we would need assistance to accomplish this difficult task for the Haynes and Harbor power plants if this provision is retained in the policy.

Thank you for this opportunity to comment on the proposed policy on the use of coastal and estuarine waters for power plant cooling. We look forward to continuing to work with State Board staff and other interested parties on this important issue. If you have any questions, please contact Michael Lyons at (213) 576-6718, as he is the staff person most familiar with these issues.