



California Regional Water Quality Control Board

Los Angeles Region

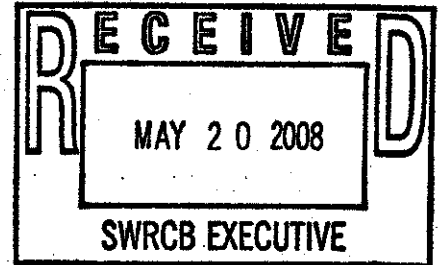


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FROM: Tracy J. Egoscue
Executive Officer

DATE: May 20, 2008

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

Los Angeles Regional Board staff has reviewed the scoping document containing a proposed statewide policy to implement section 316(b) of the Clean Water Act regarding the use of coastal and estuarine waters for power plant cooling. Staff supports the intent of the proposed policy, which would require existing power plants either to eliminate current reliance upon once-through cooling systems and shift to the use of closed-cycle cooling systems or reduce impingement and entrainment losses by 90 percent or greater of the reduction that would be achieved through the use of closed-cycle cooling systems.

In light of the many threats to oceanic and estuarine resources from overfishing, habitat loss and degradation of water quality and other factors, it seems unreasonable to continue to accept the huge losses of adult, juvenile, larvae and eggs of many species of fish and invertebrates resulting from impingement and entrainment associated with once-through cooling. This issue is especially critical to the Los Angeles Regional Board, since 8 of the 19 currently operating California power plants relying upon once-through cooling are located in Region 4, and 3 of these plants are located within Santa Monica Bay, a degraded waterbody that is being restored as part of the National Estuary Program.

We have the following comments on the scoping document:

Page 12 Entrainment and Impingement

The document states that "The biological impacts of OTC may not be adequately known since modern quantitative studies are difficult and costly." Although it is true that such studies are

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difficult and costly, we believe that the main impediment to assessing the biological impacts of OTC is the difficulty in trying to translate losses of individual organisms from impingement and entrainment into actual impacts at the species population and ecosystem levels. Many models have been developed to try to evaluate these impacts, but the complexity of these systems makes it difficult to produce reliable assessments.

Page 16 Cumulative Impacts

The document states that "A study performed by MBC and Tenera in 2005 estimated that, for 12 coastal power plants in the Southern California Bight, there is an overall cumulative entrainment mortality of 1.4 percent." We would suggest expanding upon this statement to clarify its intent, as we can think of different ways to interpret it without better context.

The document states that "Considering only recreational fish species, impingement was somewhere between 8-30 percent of the number of fish caught in the Southern California Bight." We would suggest more documentation to support this statement, if it is accurate. It might be more effective to list key recreational species individually and compare the numbers impinged to the numbers caught (e.g., xx white croakers were impinged in 2005, representing x% of the number taken by sportfishermen). Care should be taken to compare fish of similar size ranges (i.e., if the majority of fish impinged are smaller than those taken by sportfishermen, the comparison would be less meaningful).

Page 46, Restoration as an Interim Measure, Paragraph 3

The paragraph begins "It is clear that restoration to comply with CWA 316(b) is not BTA. Restoration of habitat, however, is valuable and should be encouraged as an offset during the interim until BTA is fully complied with." Previously, on Page 24, bullet one reads "as it had in RiverKeeper I, the court again ruled that the restoration provisions in the Phase II rule were plainly inconsistent with section 316(b) and its technology forcing principle." Proposed restoration as an interim measure may be in conflict with court's decision as they ruled that restoration was inconsistent with 316(b).

Page 59, Individual Power Plant Reviews, Cooling Towers and Water Discharges

The policy, in the above referenced section, includes an evaluation of each facility and provides a determination regarding the suitability of the facility for closed cycle wet cooling. If the facility implements the stipulated remedy and reduces the flow of once through cooling water, the compliance determination should be based on the reduction in harmful effects of once through cooling water intake structures on marine and estuarine life.

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The individual power plant review suggests a mechanism for each of the plants to comply with the policy. The individual facility may have proposed other alternative measures that will result in compliance with the policy. We would recommend that other alternative measures be fully evaluated as to their ability to comply with the requirements of this policy.

Based on the selected compliance mechanism, it is our recommendation to establish interim steps including target tasks that must be proposed and completed by each power plant. This will in some cases provide baseline data and potentially interim progress reports as the facilities work towards policy compliance.

Page 84 Compliance Alternatives

The document states "Track 1. An existing power plant must reduce intake flow and intake velocity, at a minimum, to a level commensurate with that which can be attained by a closed-cycle cooling system." If a closed-cycle cooling system would eliminate intake flows, as we expect, then modifying phrase "at a minimum" does not seem necessary.

The document states that "A reduction in environmental impacts under Track 2 will achieve a comparable level if both impingement mortality and entrainment of all life stages of marine life are reduced to 90 percent or greater of the reduction that would be achieved under Track 1, using closed cycle wet cooling." The document should clarify how this 90% reduction should be calculated (e.g., on a cumulative impingement or entrainment rate, or on a species by species level).

Page 85 Interim Requirements

The document requires habitat restoration efforts to offset losses from entrainment and impingement occurring between the effective date of the policy and the final compliance date. We support this concept, but it would be helpful if the policy contained guidance as to what would constitute acceptable restoration offsets (e.g., would in-kind restoration be required or would general habitat improvements be sufficient) and how these should be calculated and evaluated.

Thank you for this opportunity to comment on this scoping document and proposed water quality control policy. We look forward to continuing to work with your staff in the development and implementation of this policy. If you have any questions about our specific comments, please contact Michael Lyons at (213) 576-6718 or David Hung at (213) 576-6616.

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