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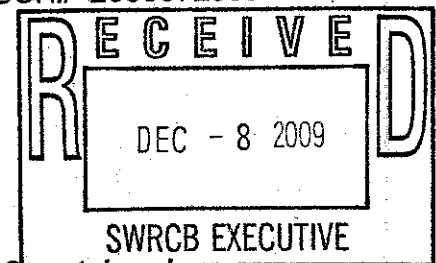
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September 29, 2009

SCH# 2009072066

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, California 95814



**Subject: Proposed Water Quality Control Policy on the Use of Coastal and
Estuarine Waters for Power Plant Cooling**

Dear Ms. Townsend:

Staff of the California State Lands Commission (CSLC) has received the above referenced Policy and the Draft Substitute Environmental Document. The State Water Resources Control Board is the Lead Agency under the California Environmental Quality Act (CEQA). For those existing power plants using once-through cooling that will be required to come into compliance with the Policy, the CSLC will be a trustee agency and a responsible agency under CEQA and the Public Trust Doctrine.

We offer the following information as background regarding the Commission's jurisdiction and interest in the Board's proposed statewide policy on once-through cooling. The State acquired sovereign ownership of all tidelands and submerged lands and beds of navigable waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all the people of the State for statewide Public Trust purposes, which include waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. The landward boundaries of the State's sovereign interests in areas that are subject to tidal action are generally based upon the ordinary high water marks of these waterways as they last naturally existed. In non-tidal navigable waterways, the State holds a fee ownership in the bed of the waterway between the two ordinary low water marks as they last naturally existed. The areas of the non-tidal navigable waterway between the ordinary high water marks and ordinary low water marks are subject to the Public Trust Easement. These State sovereign interests are under the jurisdiction of the Commission. Any development activities involving State-owned sovereign lands requires a lease from the Commission.

We also want to acknowledge and commend the substantive effort made by Board staff with respect to revising the Policy. This effort included regular meetings with staff from the energy agencies, the Coastal Commission, the Air Resources Board, and us to develop an implementation schedule that would protect marine life while maintaining grid reliability.

While we concur with the general principles of the Policy, we are offering the following refinements.

Page A-3, Section 2.A. - Compliance Alternatives

- Subsection (1) - Under Track 1, compliance is required for each unit of the existing power plant. If compliance cannot be achieved using Track 1, Track 2 is provided as an alternative. However, under Track 2, compliance is determined based on the whole facility. We suggest that compliance for both Tracks 1 and 2 be required on a unit basis.
 - We also suggest that "feasible" be further defined in the Policy as technical feasibility.
- Under Track 2 the owner or operator must reduce impingement mortality and entrainment to a level comparable to what would be achieved under Track 1. A "comparable level" is defined as within 10 percent of what would be achieved under Track 1. An explanation of how the 10 percent basis was determined should be provided, perhaps as a footnote to the Policy.
- Since there is a difference in reduced impingement mortality and entrainment between Tracks 1 and 2, we suggest that if an owner or operator selects Track 2, they should be required to provide mitigation, as provided under section 2.C.(3)(a)(b)(c) of the Policy, for the difference.

Page A-3, Section 2.C. - Immediate and Interim Requirements

Under subsection (3), it is stated that if the owner or operator has not achieved compliance within five years of the effective date of the Policy, they must implement measures to mitigate the interim impingement and entrainment impacts. The cumulative effect of the many preceding years of impingement mortality and entrainment coupled with an additional five years of continued impacts is substantial. We therefore suggest that the five-year period be reduced to two years.

Page A-5, Section 3.D. - Implementation Provisions

Under subsection (3), we suggest that the composition of the "review committee" that will oversee the special studies be expanded to include two (2) or more independent scientific experts.

Page A-8, Section 4.A. – Wholly Disproportionate Demonstration

- While we support requiring that the owner or operator of an existing power plant bear the burden of providing detailed, site-specific data to the Regional Water Board in support of a request to implement requirements that are less stringent than those in Tracks 1 and 2, we suggest that these data be subjected to independent third party scientific review.
- Subsection (2)(a) – As we have commented previously (letter dated May 16, 2008), we are concerned about the use of the Habitat Production Foregone (HPF) method for estimating impingement mortality and entrainment.

On January 15 and 16, 2008, a Research Results Symposium on "Understanding the Environmental Effects of Once-Through Cooling" was held at UC Davis. Some of the comments made at the symposium included acknowledgment of the uncertainty and error surrounding estimates of needed inputs into the model including larval survival rates, fecundity, population, etc.; the fact that the HPF method is very difficult to calculate for pelagic species; and that since the amount of restoration needed is driven by the species, if the species is not habitat limited, that species will not benefit from the restoration. We request that you maintain an open mind regarding other methods. As noted by Dr. Elizabeth Strange at the symposium, what really may be needed is an estimate of the number of fish per unit area per unit of time, e.g., the rate of change, rather than an estimate of the number of fish per unit area at a single point in time, which is what the HPF method provides. Regardless of the method of determining losses, a monitoring component with identified performance standards to determine the ecological benefits of the restoration must be included as part of any habitat restoration proposal.

Should the HPF method be used, we suggest consideration of a restoration ratio greater than 1:1. In terrestrial systems, it is acknowledged that due to the amount of time required for new habitat to become "functional", ratios are established at something greater than 1:1 to compensate for the habitat lost over that time. A larger ratio is also necessary because of the frequent shortfall of habitat value in restoration projects. Therefore, with respect to impingement mortality and entrainment losses, the restoration requirement should account for the time lag from the beginning of the restoration action until benefits begin to accrue, the maximum life span of the restoration benefits, and the point of maximum benefit. Additionally, the restoration ratio selected needs to account for the fact that the eggs and larvae entrained by OTC facilities are part of the larger food web that sustains numerous aquatic species. Therefore, the loss of eggs and larvae not only impacts the species whose eggs and larvae are entrained, but also those species that rely on them as a food source.

- Subsection (3) – The analysis of air emission impacts should include an analysis of the generation of greenhouse gases (GHG).

Jeanine Townsend, Clerk to the Board
September 29, 2009
Page 4

Page A-9, Section 4.C.

We support the requirement to fully mitigate the impacts of impingement mortality and entrainment when requirements less stringent than those under Tracks 1 and 2 are approved by the Regional Water Board and implemented by the owner or operator of an existing power plant.

Page A-9, Section 5 – Track 2 Monitoring Provisions

- Subsection A.(1)(a) – Rather than prepare current studies, this subsection allows the use of prior studies as documentation for current impacts. Should the Regional Water Board choose to allow prior studies, those studies should be subjected to third party independent scientific review.
- Subsection A.(1)(a) – We suggest incorporating the language used on page A-10, subsection B.(1)(b) which requires that sampling be designed to account for variation in oceanographic conditions, larval abundance, and larval behavior such that abundance estimates are reasonably accurate.

Page A-10, Subsection B.(1)

As with the baseline impingement study, if prior studies are used to establish current impacts, those data should be subjected to independent third party scientific review.

As previously noted, we appreciate being given the opportunity to participate in a working group dedicated to the development of an implementation schedule that preserves marine life while ensuring grid reliability. Should you have any questions regarding our comments, please do not hesitate to contact Ms. Marina Brand at (916) 574-1814. Please contact Judy Brown at (916) 574-1868 for questions regarding the Commission's leasing jurisdiction.

Sincerely,



PAUL D. THAYER
Executive Officer

cc: Marina Brand
Judy Brown
Barbara Dugal