California Regional Water Quality Control Board
Central Coast Region

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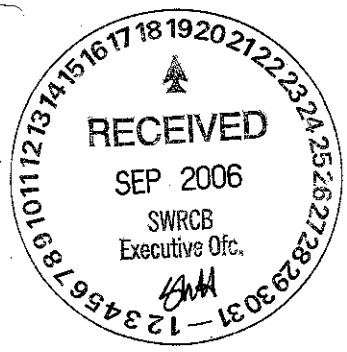
Linda S. Adams.
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

316 (b)
Once Through Cooling
Deadline: 9/25/06 5pm



September 15, 2006

Dominic Gregorio
State Water Resources Control Board
(via e-mail)

Dominic:

SUBJECT: COMMENTS ON DRAFT STATE WATER BOARD POLICY REGARDING ONCE-THROUGH COOLING

This letter presents our comments on State Water Board staff's draft once-through cooling water policy. We appreciate your efforts to draft the policy and agree that a statewide policy is necessary. However, the draft policy is fundamentally flawed and not achievable, as discussed below.

As we discussed during the August 2006 power plant assessment course in Moss Landing, there are no intake technologies that will reduce entrainment by 60% (or anything close to that) for once-through cooling systems in the marine environment. Therefore, the current draft policy is not achievable. The only way to significantly reduce entrainment at these facilities is to reduce flow (which may correspondingly reduce power generation) or convert the facilities to closed cooling systems. In most cases for existing facilities, land use regulations, air pollution issues, noise, visual impacts, availability of fresh water (for fresh water towers), and costs restrict conversion to a closed cooling system. These are major obstacles for existing power plants and can only be overcome in a small percentage of situations. Flow reductions can reduce entrainment. In some cases, such as the proposed upgrades for Morro Bay, replacing outdated pump systems with multiple or variable-speed pumps can reduce intake without a corresponding reduction in generating capacity. However, if "baseline" is defined to mean design flows or peak flows, rather than average historical flows, facilities could easily obtain credit for non-existent flow reductions by overbuilding the intake systems. If baseline is based on a historical average, than reducing flows will not achieve a 60% reduction. The draft policy, if adopted, would not benefit the environment.

The state policy should not duplicate the complexity and flaws of the federal 316(b) Phase II regulations, which may be modified as a result of the *Surfrider* case. Rather than referring to the federal regulations, as revised July 1, 2005, a better approach is to require compliance with all federal requirements that are more stringent than the state

policy.[1] We suggest you keep the State Water Board policy simple, direct, and realistic. The State Water Board policy should clearly authorize the Water Boards to require the best technology available to reduce entrainment and impingement at existing facilities, and allow the use of habitat mitigation or restoration where such technologies are not available. The policy should specifically allow the Water Boards to use Habitat Production Foregone to scale impacts and mitigation, and allow the standard approach to mitigation prioritization (on-site, in-kind; off-site, in-kind; off-site, out of kind).

Also, the State Water Board should cooperate with other agencies and the Ocean Protection Council to charge power plants a realistic fee (or work with the Legislature to impose a fee) for the cooling water (state resources) they use. This fund would be used exclusively for physical protection and restoration of the marine environment (and not to hire Water Board or other agency staff, or otherwise support agencies, under any circumstances).

Requiring repowered facilities ("New Power Plants") to comply with the Phase I regulations may provide a significant disincentive to modernizing aging power plants. For entrainment, the Phase I regulations require closed cooling, a 90% reduction in entrainment or a site-specific variance. Modernizing aging power plants often produces a net environmental benefit which state policy should not discourage. If repowering will require a site-specific variance that is indistinguishable from the existing facility requirements, then rejecting EPA's definition of "existing facility" is pointless. Since *Riverkeeper, Inc. v. U.S. E.P.A.* (2d Cir. 2004) 358 F.3d 174 did not address whether permitting agencies could require restoration as a condition for a variance for a new facility under 40 CFR § 125.85, the state policy should explicitly require New Power Plants to undertake restoration measures to compensate for any entrainment or impingement reduction less than 90%.

If you have questions, please call Michael Thomas at 805-542-4623.

Sincerely,

Michael Thomas

for Roger W. Briggs
Executive Officer

[1] The Phase I regulations, "as revised July 1, 2005," still include the restoration provisions that *Riverkeeper* invalidated.