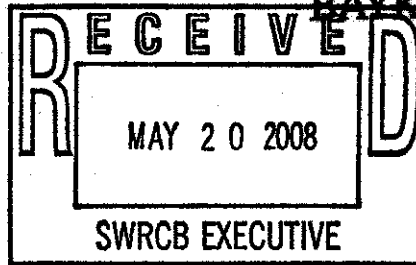




BAYKEEPER.



May 20, 2008

State Water Resources Control Board
c/o Jeanine Townsend, Clerk to the Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Sent via electronic mail to <mailto:commentletters@waterboards.ca.gov>

RE: State Board's Proposed Policy for Once-Through Cooled Power Plants

Dear Chair Doduc and Members of the Board:

On behalf of San Francisco Baykeeper ("Baykeeper"), thank you for considering these comments on the preliminary draft Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling ("draft policy") publicly noticed by the State Water Quality Control Board ("State Board") on March 21, 2008. Please note that these comments are not intended to be comprehensive but rather to share our concerns about how the policy may apply to power plants in the San Francisco Bay area. Accordingly, we support and hereby incorporate by reference comments concurrently submitted by the California Coastkeeper Alliance.

Baykeeper, a member-based nonprofit organization dedicated to protecting water quality in the San Francisco Bay and Delta, strongly supports the State Board's efforts to develop a statewide policy to address the harmful effects of once-through cooling ("OTC") water intake structures on marine and estuarine life. We commend the State Board for recognizing its mandate to implement section 316(b) of the Clean Water Act and for committing to an impressive multi-agency approach to implementation, which we hope will result in a more expeditious phasing out of the dated and costly OTC technology.

The San Francisco Bay Area is home to three power plants that use OTC and that are owned by Mirant Delta LLC ("Mirant"): the Potrero plant in San Francisco, the Pittsburg plant in Pittsburg, and the Contra Costa plant near Antioch. Baykeeper is concerned about the impacts of all three of these plants, but the continued operation of the Pittsburg and Contra Costa plants is particularly troubling in light the recent declines in delta smelt and salmon populations. The intakes for these plants are located near the confluence of the Sacramento and San Joaquin Rivers, an area that provides important habitat for delta smelt and through which migrating Chinook and Coho salmon must pass.

The Water Boards should not wait until this policy is finalized to reissue NPDES permits for the Pittsburg and Contra Costa plants that require compliance with section 316(b). We understand that a State Board policy will not likely be adopted until the end of 2008 or early 2009. After the policy is adopted, it could take up to a year for



Pollution hotline: 1-800 KEEP BAY
www.baykeeper.org

785 Market Street, Suite 850
San Francisco, CA 94103
Tel (415) 856-0444
Fax (415) 856-0443

the Regional Boards to reissue NPDES permits for these plants and then an unknown amount of time for the plants to comply with section 316(b)'s mandate that cooling water intakes reflect the best technology available ("BTA"), and any more stringent standards that the Water Boards deem necessary.¹ All told, it could be several years before the plants actually take actions to substantially reduce impingement and entrainment. In the meantime, the plants will continue to impinge and entrain many organisms and have a yet unknown, but likely substantial, effect on the continuing decline of key Delta species.

The State Board's policy should not exempt power plants based on their Capacity Utilization Rates. We strongly support this draft policy's lack of an exemption for power plants based on their Capacity Utilization Rates ("CURs"). The legality of such an exemption has been called into question by the Second Circuit decision in *Riverkeeper, Inc. v. U.S. EPA*². Moreover, the policy rationale for an exemption is suspect as a plant's capacity utilization rate bears no clear relationship to the magnitude of a plant's impacts on the marine environment. For example, a plant with a low CUR may still use more water than one with a higher CUR, depending on each plant's total generating capacity and flow to power generation ratio. Additionally, CURs are variable and, in the absence of a regulatory cap on flows, plants' CUR may vary significantly in the future.

Any CUR-based exemption is likely to be taken advantage of by many plants, even if the plants' environmental impacts are substantial. In 2006, Proposals for Information Collection ("PICs") were prepared for both the Contra Costa and Pittsburg plants as required by EPA's now-suspended rule, which did not require reductions in entrainment for plants operating below a 15% CUR.³ Both PICs concluded that the 15% exemption applied to the plants despite the fact that the CURs for both plants are significantly above 15% for the previous five years (from 2000 through 2005). The PICs for both plants rely only on data from 2003 through 2005 to conclude that the CUR is below 15% and, therefore, the entrainment standard does not apply.⁴ If the State Board policy allows for an exemption based on CUR, we believe that many plants will find creative ways to qualify for that exemption, thereby frustrating this Board's attempts to reduce the impacts of once-through cooling on California's marine resources.

Best Technology Available should be applied to the intake for each unit, and not the plant as a whole. In the draft policy, State Board staff recommends that BTA be "reductions in flow and intake velocity, at a minimum, to a level commensurate with that which can be attained by a closed cycle cooling system."⁵ The policy should further

¹ 33 U.S.C. §1326(b).

² *Riverkeeper, Inc. v. U.S. EPA*, 475 F.3d 83 (2d Cir. 2007), cert. granted 2008 U.S. LEXIS 3144, 76 U.S.L.W. 3554 (U.S. Apr. 14, 2008).

³ Clean Water Act Proposal for Information Collection for Mirant's Contra Costa Power Plant, prepared for the Central Valley Regional Water Quality Control Board by Tenera Environmental and EPRIA Solutions (April 2006) (hereinafter "Contra Costa Power Plant PIC"). Clean Water Act Proposal for Information Collection for Mirant's Contra Costa Power Plant, prepared for the San Francisco Bay Regional Water Quality Control Board by Tenera Environmental and EPRIA Solutions (July 2006) (hereinafter "Pittsburg Power Plant PIC").

⁴ Pittsburg Power Plant PIC at 2-13. Contra Costa Power Plant PIC at ?

⁵ Draft policy at 36.

clarify that BTA, as implemented through flow and velocity reductions, should be applied to the intake for each unit. This will prevent reductions in flow attributable to the closure of old units or the construction of new units using alternative cooling technology from being used to demonstrate compliance with BTA.

At least two of the PICs reviewed by Baykeeper proposed to use the retirement of old once-through cooled units to meet the impingement and entrainment standards of EPA's now-rescinded rule, even though the retired units do not use the same intake as the active units. For example, the PIC for Contra Costa states that the retirement of units 1 through 5 can be credited towards impingement reductions because the design velocity of these units is greater than the still-active units 6 and 7.⁶ Similarly, the PIC for the Pittsburg plant proposes to use the closure of units 1 through 4 to meet the impingement performance standards applied to units 5 and 6.⁷

The PICs for Contra Costa and Pittsburg also proposed to count the presence of non-once through cooled units towards baseline reductions in impingement and entrainment. Unit 7 at the Pittsburg plant uses closed-cycle cooling. The PIC assumes that unit 7 would have required 568 MGD of cooling water, which would increase total flow at the facility to 1,599 MGD. "[T]hus," concludes the PIC, "use of closed cycle cooling for unit 7 has reduced flow by 35.6% (568/1599.1)."⁸ The Contra Costa plant's PIC also attempts to credit the future construction of unit 8, which was to use closed-cycle cooling, towards baseline reductions in impingement.⁹

The position that retiring inactive units and/or constructing new units that do not use OTC is equivalent to retrofitting old units is flawed and inconsistent with the plain language of section 316(b), which requires that "cooling water intake structures reflect the best technology available."¹⁰ Under this scheme, a power plant's compliance with section 316(b) and applicable state law becomes dependent on the plant's ratio of units that use OTC versus those that do not, which is a consideration that bears no relationship to technology or the individual units' impacts. As succinctly stated the National Marine Fisheries Service's comments on the Contra Costa PIC, "[b]y that logic, all a company has to do is build new units such as Unit 8 to meet their required percent reduction standard," but "the actual impact to the source water body would never change."¹¹ We are concerned that unless the State Board's policy provides clarification, some plants will continue to avoid the technology-based requirements of 316(b) with creative arguments such as those made in the Contra Costa and Pittsburg PICs.

⁶ Contra Costa Power Plant PIC at 3-6.

⁷ Pittsburg Power Plant PIC at 3-6.

⁸ Pittsburg Power Plant PIC at 3-5.

⁹ Contra Costa Power Plant PIC at 3-5.

¹⁰ 33 U.S.C. §13126(b) (emphasis added).

¹¹ Letter from Michael E. Aceituno, Sacramento Area Supervisor, National Marine Fisheries Service, to Jon Ericson, Water Resources Control Engineer, Central Valley Regional Water Quality Control Board, regarding comments on Mirant's Proposal for Information Collection (June 30, 2006).

Seasonal changes in organism distribution should be considered in defining baseline. Section 316(b) requires that cooling water intakes reflect the BTA for minimizing adverse environmental impacts. A variety of factors affect the magnitude of a particular plant's impacts on the marine environment, including the seasonal distribution of organisms and the current populations of key species. For example, the impacts of the Contra Costa and Pittsburg power plants on the Bay-Delta ecosystem are likely much greater during the months in which delta smelt and Chinook are in the area as the populations of those species are low enough that even relatively small takes could affect the entire population. While both plants are outfitted with variable frequency drive pumps, most of their output coincides with the February to July period when larval stages for protected species, such as the Delta smelt, are most abundant.¹² In short, the population of many important species – such as the delta smelt – vary seasonally, so annual flow alone is not necessarily a good indicator of impacts.

If the draft policy allows for interim restoration measures, any actions undertaken by the plant owner to comply with laws other than section 316(b) should not necessarily be credited. While it is currently unclear exactly how appropriate mitigation will be determined, we urge the State Board not to accept mitigation measures required by other regulatory agencies in implementing their own statutory mandates in lieu of imposing their own measures. Because of the plants' impacts on aquatic life, many plants – including the Contra Costa and Pittsburg plants – are required to undertake mitigation measures to ensure their compliance with laws such as the California Endangered Species Act, the federal Endangered Species Act, and the Magnuson-Stevens Fishery Conservation and Magnuson Act. In determining what mitigation measures are appropriate to implement Clean Water Act section 316(b) and the Porter-Cologne Water Quality Control Act, the State Board should carefully consider how the objectives of those statutes are similar or different than those of other statutes which also require the plants to undertake mitigation measures.

* * *

Thank you for consideration of these comments. We look forward to reviewing a draft policy shortly.

Sincerely,



Amy Chastain

¹² In 2006, "70 percent of the Unit 6 and Unit 7 net output [at the Contra Costa plant] coincided with the February to July period," and "80 percent of the Unit 5 and 6 net output [at the Pittsburg plant] coincided with the February to July period." *California's Coastal Power Plants: Alternative Cooling System Analysis*, B-5 and L-5, prepared for California Ocean Protection Council by Tetra Tech, Inc. (February 2008).