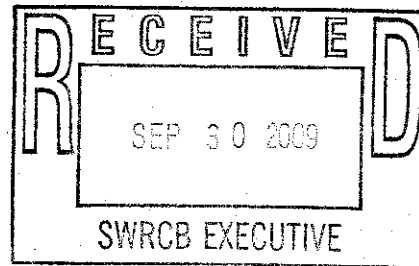




September 30, 2009

Charlie Hoppin, Chair and Board Members  
State Water Resources Control Board  
1001 I Street  
Sacramento, CA 95814  
Via Email: [commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov)



**Re: Comments on "Water Quality Control Policy on the use of Coastal and Estuarine Waters for Power Plants" Draft Substitute Environmental Document.**

Dear Chair Hoppin and Board Members:

Please accept these supplemental comments on behalf of San Diego Coastkeeper, a local non-profit working to protect San Diego County's bays, beaches, watersheds and ocean for the people and wildlife that depend on them, and Surfrider Foundation, a non-profit grassroots organization dedicated to the protection and enjoyment of our world's oceans, waves and beaches. San Diego Coastkeeper and Surfrider join in the California Coastkeeper Alliance (CCKA) comments on the State Water Resources Control Board ("State Board") and California Environmental Protection Agency Draft Substitute Environmental Document for the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling ("Draft SED") and the draft Statewide Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling ("Draft Policy"). Our comments are meant to supplement the CCKA comment letter and highlight some issues relevant to our region.

**Compliance Alternatives: Intake Flows Must Be Minimized to Only Those Flows Directly Related To Energy Production**

As detailed extensively by CCKA, the definition of intake flow rate and reference to design flow is highly problematic. Compliance Alternative Track 1 of the Draft Policy requires 93 percent reduction of "design intake flow rate." However, such a reduction would allow for artificially increased flow rates and would not meet the State Board's intended 93 percent reduction goal. Draft Policy, 2.A.(1). For those power plants with reduced actual flows, such as Encina Power Station (EPS), the "design intake flow rate" would be much higher than actual historical flows. For instance, in June 2009, EPS flows averaged 178 million gallons per day (MGD).<sup>1</sup> In fact, EPS had zero flow for nine days in June, while it is designed to draw in 857 MGD.<sup>2</sup>

<sup>1</sup> Order No. R9-2006-0043 (NPDES No. CA0001350). section VII. Paragraph, B.2, June 2009 discharge monitoring report for the Encina Power Station.

<sup>2</sup> Draft Supplemental Environmental Document (SED), p. 31.



EPS Design versus Actual Flow Calculations			
	Intake Flow Rate	Percent Reduction	Final Flow
Design	857	93	60
Actual <sup>3</sup>	178	93	13

Assuming an actual 178 MG daily flow, a 93 percent reduction in design intake flow (857 MGD) would actually only result in a 66 percent reduction from 178 MGD. For Track 2, the comparable level of reduction in flow rate is within 10 percent of Track 1, resulting in only a 63 percent reduction from actual flows.<sup>4</sup> Thus, clarifying that intake flow rate is only the actual flow rate directly related to energy production instead of design intake flow rate is of critical importance.

As highlighted in the California Coastkeeper Alliance comment letter, the definition of intake flow rate itself should be clarified to mean "instantaneous rate at which water is withdrawn through the intake structure, expressed as gallons per minute per kilowatt hour generated." Further, if actual flows as baseline for reduction are calculated after Policy adoption, power plants may artificially increase flows. Because intake flows have steadily declined at most power plants in recent years, any baseline calculation should reflect actual historical flows for the previous 5-year period directly related to energy production. Making this change, and removing the reference to "design" intake flow rate would ensure the State Board's Policy comes as close as possible to achieving its intended purpose of 93 percent reduction in flows.

#### **Immediate and Interim Requirements: Intake Flows Not Directly Related to Power-Generating Activities Should Not be Allowed**

Under the Draft Policy, power plants will be required to cease intake flows unless the power plant is "directly engaging in power-generating activities or critical system maintenance..." Draft Policy, 2.C.(2). As undefined, the "critical system maintenance" exception creates an opportunity for significant intake flows completely unrelated to power-generation. Several desalination plants are proposed throughout the state, and more will surely follow.<sup>5</sup> Part of the temptation to co-locate a desalination facility with an OTC power plant is the ability to divert flows from the power plant intake without having to address the resultant entrainment and impingement as the water is diverted from the discharge.

However, this incentivizes prolonged and/or increased power plant flows for the benefit of the desalination plant. The Regional Board in San Diego recently approved a plan in which the desalination plant is the main driver for intake flows with no Clean Water Act section 316(b) implication for the power

<sup>3</sup> Actual Flow Rate in June 2009.

<sup>4</sup> Track 2 allows a comparable level of flow reduction as Track 1. This comparable level is within 10 percent. Draft Policy, 2.A.(2).

<sup>5</sup> [http://archives.slc.ca.gov/Meeting\\_Summaries/2008\\_Documents/08-22-08/ITEMS\\_AND\\_EXHIBITS/R55ExhD.pdf](http://archives.slc.ca.gov/Meeting_Summaries/2008_Documents/08-22-08/ITEMS_AND_EXHIBITS/R55ExhD.pdf)



plant as the conduit for such flows. A best technology available evaluation pursuant to the Clean Water Act was also not required for the desalination plant, as section 316(b) does not directly apply to desalination plants. In San Diego, this has resulted in a permitted intake of 304 MGD to produce only 50 MGD of potable water, for 365 days per year.<sup>6</sup>

Although we appreciate the State Board's intention of addressing desalination plants through a subsequent policy, this does not address the current problem facing Regional Boards or the reality of co-located desalination plants being permitted today. SED, p. 53-54. In the interim period during which the State Board develops a desalination policy under state law, the possibility of circumventing the federal Clean Water Act through state permitting of co-located desalination plants must be foreclosed. "Critical system maintenance" must be defined to only include activities that are necessary for maintenance of a power plant's physical machinery. Further, a power plant owner must not be able to show "a reduced minimum flow is necessary for operations" for the benefit of a co-located desalination plant. Draft Policy, 2.C.(2). Any "necessary" flow must be directly related to energy generation.

#### **The State Board Should Develop a Policy on Co-located and Independent Desalination Plants**

In light of current and prospective plans to build desalination plants throughout the state, and the real possibility that desalination plant flows will exceed power plant flows, the State Board must act now to develop and implement a policy concerning these facilities.<sup>7</sup> The State Board will soon find itself in the same predicament it is facing with existing power plants—the difficulty in implementing a technology-forcing statute once a desalination facility has already been built. The largest desalination plant in the Western Hemisphere is moving forward in the City of Carlsbad, recently approved by the Regional Board in San Diego. This co-located plant and the Regional Board's fragmented approval process set a terrible precedent for future Regional Boards. In order to prevent proliferation of this process while a state-wide desalination policy is developed, the State Board should, at a minimum:

- 1) Preclude permitting of such co-located desalination plants if they would perpetuate OTC longer than the expected lifetime of the power plant (i.e. outlive the power plant under the Draft Policy);  
or
- 2) Apply a new facility best technology available test under Clean Water Act section 316(b) to the desalination plant intake in so far it proposes to co-locate with an OTC power plant; or
- 3) Apply a Water Code section 13142.5(b) best technology available test that assumes baseline operating conditions for a co-located power plant are zero flow from the power plant.

<sup>6</sup> [http://www.waterboards.ca.gov/sandiego/board\\_decisions/adopted\\_orders/2009/R9\\_2009\\_0038\\_rev1.pdf](http://www.waterboards.ca.gov/sandiego/board_decisions/adopted_orders/2009/R9_2009_0038_rev1.pdf)

<sup>7</sup> State Lands Commission: "should the [Carlsbad] desalination facility be successful, many more such facilities could be proposed and, in the long run, entrainment and impingement impacts from these facilities could surpass those of power plants." August 22, 2008 Staff Report, p. 11; available at [http://archives.slc.ca.gov/Meeting\\_Summaries/2008\\_Documents/08-22-08/ITEMS\\_AND\\_EXHIBITS/R55.pdf](http://archives.slc.ca.gov/Meeting_Summaries/2008_Documents/08-22-08/ITEMS_AND_EXHIBITS/R55.pdf)



**Conclusion**

Thank you for your consideration of our supplemental comments. We appreciate the State Board's efforts in proceeding with the Draft Policy and phasing out of the destructive OTC technology. We look forward to continued involvement in the State Board's approval process.

Sincerely,

*Gabriel Solmer*

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*Joe Geever*

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CA Policy Coordinator