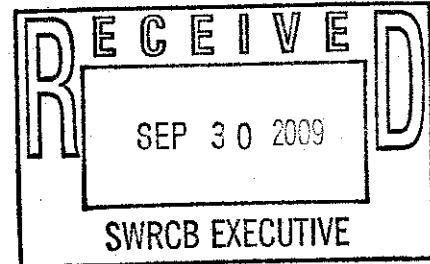




NATURAL RESOURCES DEFENSE COUNCIL

September 30, 2009

Charlie Hoppin, Chair and Board Members  
State Water Resources Control Board  
1001 I Street  
Sacramento, CA 95814  
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**Re: Comments on "Water Quality Control Policy on the use of Coastal and Estuarine Waters for Power Plants" Draft Substitute Environmental Document and Draft "Statewide Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling."**

Dear Chair Hoppin and Board Members:

On behalf of NRDC (Natural Resources Defense Council), which has 1.3 million members and activists, 250,000 of whom are Californians, we respectfully submit the following 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"). We welcome the opportunity to comment on this important issue.

We thank the State Board and staff for their dedication to this important issue. Staff has done a commendable job of coordinating with the California Energy Commission ("CEC"), the California Independent Systems Operator ("Cal ISO"), the Ocean Protection Council ("OPC") and its member agencies, and other agencies in the continued development of this policy. Other stakeholders have made many highly useful comments on this policy and we agree with many of them. We highlight only a few of those areas, but in no way intend to minimize the importance of other comments.

**Phasing out Once through Cooling is of great importance to California.**

California ocean habitats are among the most productive and diverse in the world. Major upwelling centers nourish the state's coastal waters, fueling them with nutrients from the deep. A vast range of habitats, including kelp forests, eel grass, estuarine nurseries, wetlands, rocky reefs and pinnacles, intricate hydrocorals, diverse sponges, sandy beaches, steep canyons and the margins of offshore islands, supports a remarkable variety of ocean life, including dozens of marine mammal species and about 65 species of rockfish. The ocean off California has many iconic places that are also diversity hot spots. For example, the Farallon Islands support a growing population of the almost extirpated northern fur seals, threatened Steller sea

lions, numerous other marine mammals and the largest seabird colony in the continental U.S., with thirteen different species breeding on the islands.<sup>1</sup> The ocean economy generated about \$43 billion for the state in 2000.<sup>2</sup> Uncounted in that number is the enormous contribution oceans make to our quality of life and the high value of coastal real estate. According to a report prepared by the Sea Grant Programs, seventy-seven percent of Californians live in coastal counties. California has the highest value ocean tourism and recreation sector in the nation.<sup>3</sup>

The ecological, social, and economic value of California's coast and ocean depends on restoring and maintaining healthy natural systems. The State of California, private, and public supporters have invested millions of dollars and tens of thousands of hours to protect and improve the health of our ocean ecosystems, for example, through the implementation of the Marine Life Protection Act (MLPA), which establishes marine protected areas (MPAs) throughout the state's waters<sup>4</sup>

Multiple federal and state agencies, including the U.S. Environmental Protection Agency ("U.S. EPA"), CEC, OPC, and State Lands Commission ("SLC"), have recognized that once-through cooling ("OTC") causes significant, ongoing devastation to our valuable marine resources and significant efforts to protect and restore these resources.<sup>5</sup> Coastal power plants are permitted to withdraw more than 16 billion gallons of cooling water off of the California Coast daily and kill an estimated 79 billion fish and other marine life annually.<sup>6</sup>

In a state where the foundation of our economic activity is fueled by the health of our coastal resources, and in a state leading the nation in a strong commitment to sustainable energy, there is no question that California has the right and responsibility to move past this antiquated cooling technology.<sup>7</sup> It has been over 35 years since the Clean Water Act ("CWA")

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<sup>1</sup> Farallon National Wildlife Refuge, at <http://www.fws.gov/refuges/profiles/index.cfm?id=81641> (last visited 21 Sept. 2009).

<sup>2</sup> Kildow, Judith T, Charles S. Colgan and Jason Scorse. *State of the U.S. Ocean and Coastal Economies 2009*, National Ocean Economics Program, (2009) at 25, available at, <http://www.oceaneconomics.org/download>.

<sup>3</sup> *Id.*

<sup>4</sup> See, <http://www.dfg.ca.gov/mlpa/index.asp>. The state has committed an estimated \$33 million to map its ocean floor and collect baseline data necessary for designing and monitoring the success of the MPAs.

<sup>5</sup> Clean Water Act Section 316(b); California Energy Commission *Issues and Environmental Impacts Associated with Once-Through Cooling at California's Coastal Power Plants: Staff Report*. (2005) Available at: [www.energy.ca.gov/2005publications/CEC-700-2005-013/CEC-700-2005-013.PDF](http://www.energy.ca.gov/2005publications/CEC-700-2005-013/CEC-700-2005-013.PDF). Accessed 9.29.09 ("Issues and Environmental Impacts Associated with OTC"); California State Lands Commission, *Resolution of the California State Lands Commission Regarding Once-Through Cooling in California Power Plants* (adopted April 17, 2006); California Ocean Protection Council, *Resolution Regarding the Use of Once-Through Cooling Technologies in Coastal Waters* (adopted April 20, 2006). Available at: <http://www.opc.ca.gov/2006/04/resolution-of-the-california-ocean-protection-council-regarding-the-use-of-once-through-cooling-technologies-in-coastal-waters/> Accessed 9.29.09 ("OPC Resolution").

<sup>6</sup> State Water Resources Control Board, *Scoping Document: Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling* (March 2008) p.1. ("2008 Scoping Document"). Available at:

[http://www.waterboards.ca.gov/plans\\_policies/docs/coastal\\_estuarine/scope\\_doc031808.pdf](http://www.waterboards.ca.gov/plans_policies/docs/coastal_estuarine/scope_doc031808.pdf).

<sup>7</sup> National Ocean Economics Program, *California's Ocean Economy: Report to the Resources Agency, State of California*, (July 2005), p.1. Available at: [resources.ca.gov/press\\_documents/CA\\_Ocean\\_Econ\\_Report.pdf](http://resources.ca.gov/press_documents/CA_Ocean_Econ_Report.pdf). Accessed 9.27.09. Finding that "The total GSP of California's Ocean Economy in 2000 was approximately \$42.9 billion. California's Ocean Economy directly provided approximately 408,000 jobs in 2000, and almost 700,000 jobs when

first outlined requirements for power plant cooling technology. We are long overdue for a clear, consistent statewide policy on cooling water technology that protects marine ecosystems and advances greener and more efficient energy production.

**We encourage the Board to move forward with adopting and implementing a policy with clear deadlines as soon as possible.**

The impacts of once through cooling are severe and we are highly supportive of phasing out the use of this archaic technology as quickly as possible without compromising grid reliability or integration of renewable power sources. California is committed to the highly ambitious goal of integrating 33% of its electricity from renewable sources. At least of the short term, the intermittent nature of many renewable power sources requires back-up and support from fossil generation. Some of the plants utilizing once through cooling may be highly useful in this regard. However, new cooling technology should not eliminate the usefulness of these plants and in some cases may provide opportunity for plant upgrades that (in addition to reducing make the plants more efficient, less polluting and more capable of providing ramping and other support services for renewable power.

The current policy appears to provide a schedule compliance that accommodates the needs of the grid in integrating renewable over the coming years. We strongly urge the Board to ensure that compliance is timed to provide for reliability, but allow no greater delay than is absolutely necessary.

The Draft Policy includes a provision to allow SACCWIS to review a power plant's proposed implementation plans ensure that the implementation schedule takes into account local area and grid reliability. The SACCWIS is required to report to the State Water Board with "recommendations on modifications to the implementation schedule every two years starting in 2013." The language as written is unclear and could be interpreted to require recommendations on modifications on the schedule. We urge the State Board to amend this language to make it clear that the SACCWIS should only make recommendations on modifications to the schedule if necessary for grid reliability and critical renewable integration services.

The required findings for the SACCWIS to recommend a delay in the compliance schedule are not defined, nor is the State Board's "appropriate" determination based on that recommendation defined or a procedure prescribed. We urge the State Board to include definitions in this section and to make clear that the State Board will retain decision making authority on when and if the compliance schedule is altered.

Finally, the State Board's "appropriate" determinations of the SACCWIS timeline modifications should provide opportunity for public comment. These decisions should not be made behind closed doors, and the public should have the opportunity to review and provide comment on SACCWIS and State Board recommendations.

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multiplier effects are included. It provided more than \$11.4 billion in wages and salaries in 2000, and more than \$24 billion when multiplier effects are included. The NOEP also evaluated the total value of all economic transactions within 19 coastal counties (mainland coast and four additional counties added within San Francisco Bay and the Sacramento River Delta) and identified approximately \$ 1.15 trillion of economic activity, (86% of total state economic activity), that is referred to as the "Coastal Economy." The natural resources of the coast and coastal ocean are a solid foundation for California's economy and these resources must be sustained to maintain the strength in the six sectors evaluated within the Ocean Economy and the much larger Coastal Economy."

**The Statewide Advisory Committee should be used to Streamline Permitting Processes.**

We applaud the State Board for its coordination and partnership with other involved agencies. However, it is imperative that such coordination facilitates, rather than delays, this process. Therefore, we recommend further use of the Statewide Advisory Committee on Cooling Water Intake Structures (SACCWIS) as a streamlining tool to expedite the various permitting processes before the multiple agencies involved. At the September 16, 2009 hearing, we heard testimony from industry that in some cases the compliance schedule is infeasible due to complex permitting requirements from other agencies, such as the CEC, for the plant upgrades that would be required by the Draft Policy. Because the relevant permitting agencies including the CEC, CPUC, and California Coastal Commission are members of the SACCWIS, we recommend using this group to expedite and streamline any permit requirements from multiple agencies related to this policy.

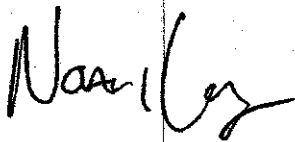
**The “wholly disproportionate” exception may provide an unnecessary loophole.**

By allowing the “wholly disproportionate” exception, the policy defers a critical, and highly contentious question to the Regional Boards. Intensive economic studies will be required and even then Regional Boards will still be left determining what the remaining “extent practical” standard will be if a facility qualifies for the exception.

This exception will be particularly difficult because of the difficulty of accurately quantifying the impacts of entrainment and impingement from an ecosystem-wide perspective is beyond the abilities of the current state of marine sciences. Further, the numerous difficulties of accurately measuring both the benefits and the costs lends itself to dispute. Despite the known value of our ocean resources, it is very difficult to fully assess the economic value of our ocean environment, including the marine living resources and the physical processes, to accurately determine the impacts of once-through cooling on these resources. Moreover, traditional benefit analysis also tends to reward facilities in degraded waterways because the benefits are more difficult to accurately calculate due to the long term degradation of the resource.

To the extent that this exemption is maintained, it should only be available for those plants where compliance would put grid reliability at risk, not because of the cost to the plant operator.

We appreciate the opportunity to comment on this important issue.



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