5/4/10 Board Meeting
Once Through Cooling
Deadline: 4/13/10 by 12 noon

COASTAL ENVIRONMENTAL RIGHTS FOUNDATION

April 13, 2010

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State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Via Electronic Mail
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RE: Opposition to Policy on Use of Coastal and Estuarine Waters for Power Plant Cooling
The Policy and SED Do Not Comply with the Clean Water Act or CEQA

Dear Chair Hoppin and Board Members:

Please accept this letter on behalf of the Coastal Environmental Rights Foundation (CERF) urging the State Water Resources Control Board ("State Board") to **deny** the proposed (revised) Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling ("Policy"). CERF is a nonprofit environmental organization founded by surfers in North San Diego County and active throughout California's coastal communities. CERF was established to aggressively advocate, including through litigation, for the protection and enhancement of coastal natural resources and the quality of life for coastal residents.

CERF joins the coalition letter submitted on behalf of California Coastkeeper Alliance and other organizations. This letter is submitted to supplement the coalition letter with more specific comments below.

I. The OTC Policy Will Not Achieve Best Technology Available as Mandated by the CWA

The proposed Policy, as revised, does even less to meet the mandates of Clean Water Act section 316(b) than the previous iteration of the Policy. As stated in our previous comment letter, dry cooling technology should be considered the best technology available (BTA) as opposed to closed-cycle wet cooling.

The genesis for establishment of closed cycle wet cooling as BTA rests with the Federal EPA's assertion that Clean Water Act section 316(b) only applies to facilities that utilize cooling water intake structures, and because a dry-cooled plant would not require an intake structure, Congress could not have contemplated elimination of intake structures altogether without saying so in the statute. This rationale fails to take into consideration California law, specifically Water Code section 13142.5.

If regulators first apply section 316(b)'s plain meaning, California's existing OTC power plants do not meet BTA (regardless of whether BTA is closed cycle wet or dry cooling). Therefore, the OTC plants must be significantly retrofitted or entirely repowered. In either of these scenarios, State law can be interpreted to mandate dry-cooling as BTA. California Water Code section 13142.5 (annotated for clarity) states:

> For each [1] new or expanded coastal powerplant or [2] other industrial installation using seawater for cooling, heating, or industrial processing -- the best available site, design, technology, and mitigation measures feasible shall be used to minimize the intake and mortality of all forms of marine life.

Therefore, once the 316(b) analysis requires an essentially new coastal power plant to be built, State law requires that best available technology (BAT) be used to minimize intake and mortality of marine life. The statute is not drafted such that the BAT can only include cooling water intake structures.

So, while a straightforward reading of Federal Clean Water Act 316(b) might arguably require closed cycle wet cooling, once construction of a new plant is triggered, Water Code section 13142.5(b) requires dry cooling at BAT.

II. Encina Power Station: An Illustration of the Policy's Ineffectiveness and Inaccurate Baseline

In addition to the Policy's utter failure to impose BTA, a 93 percent reduction in design intake flow rate certainly dooms the Policy to meaningless implementation and misses the point of achieving BTA entirely. Design flow is not a measure of existing baseline–nor are 2005 flow rates as listed in the Policy's accompanying Substitute Environmental Document (SED).

Though Encina Power Station (Encina) will be moving to dry-cooled technology (BTA) for three of its five generating units, it serves as an important example of the Policy's futility. The SED lists the Encina average flows from 2000 to 2005 at 621 million gallons per day (MGD), while its design flow is 857 MGD.(SED, p. 33, Table 2)

The table below shows the daily flows for EPS submitted to the Regional Board pursuant to Encina's NPDES permit.[1]

DATE	Combined Discharge (million gallons per day)
6/1/2009	228.6
6/2/2009	372.1
6/3/2009	443.5
6/4/2009	439.6
6/5/2009	293.8
6/6/2009	293.8
6/7/2009	263.8
6/8/2009	144
6/9/2009	39.9
6/10/2009	0
6/11/2009	12.4
6/12/2009	0
6/13/2009	0
6/14/2009	0
6/15/2009	0
6/16/2009	0
6/17/2009	0
6/18/2009	47.3
6/19/2009	232.3
6/20/2009	144
6/21/2009	144
6/22/2009	144
6/23/2009	111.9
6/24/2009	7.6
6/25/2009	0
6/26/2009	0
6/27/2009	410.5
6/28/2009	341.8
6/29/2009	667.1
6/30/2009	565.4
Average Daily Flow	**178.3**

Thus, in June 2009, a summer month in which energy usage is typically highest, average flow for Encina was 178.6 MGD of an allowable 857 MGD. This amounts to an ***80 percent reduction*** in

[1] Pursuant to Order No. R9-2006-0043 (NPDES No. CA0001350). section VII. Paragraph B.2, submitted July 29, 2009.

flow. Many power plants with already reduced flows will therefore resort to doing little if nothing to meet BTA if the current Policy is implemented.

Therefore, an attempt to decrease **actual** flows 93 percent should not be based on design flow, as many of the power plants–including Encina–are not operating at design flow. Thus, the true baseline is more appropriately the baseline suggested by environmental groups in the California Coastkeeper Alliance Letter (ie. generational flow by unit).

III. The Policy Still Fails to Address Desalination

Though our previous comment letter pointed out the lack of applicability to desalination plants in the previous iteration of the Policy, the new version of the Policy continues to overlook the very technology that could surpass OTC in its destruction of marine life. The State Board also recently declined to review the San Diego Regional Board's failure to review the largest proposed desalination plant in the western hemisphere under Water Code section 13142.5. Thus, reiteration of our previous comments is apparently necessary.

Desalination is an entirely new industry *with exactly the same impacts as OTC* which will proliferate almost within the same footprints of the very plants we are seeking to now address. The quantities of source water to be taken in for desalination are as boundless as our thirst for fresh water, and as such, it would be an absolute travesty to pass a policy that does not address on a meaningful level the **absurdity of allowing desalination facilities to piggy-back on outgoing OTC technologies**. CERF recommends the State Board OTC Policy be supplemented to include the following restrictions:

1 No seawater desalination facility shall be approved co-located with a once-through cooled power plant unless it is shown by the applicant that, upon cessation of the need for OTC infrastructure for energy generation, alternative seawater intake structures (i.e. sub-seafloor) would be viable at the facility's optimum fresh water production design requirements.

2 The Best Technology Available for seawater intake for desalination is sub-surface.

3 California Water Code section 13142.5(b) requires that new desalination facilities be sized appropriately and located in areas of the state where sub-seafloor intakes are viable.

4 The analysis of BTA in the *Riverkeeper II* decision is analogous to establishment of BTA for desalination facilities under Water Code section 13142.5(b), meaning that because the standard is technology driven, consideration of environmental impacts is not required prior to establishment of appropriate technological requirements.

IV. Conclusion

Thank you for your consideration of CERF's comments in the development of this important Policy. We urge your rejection of the Policy in its current form, as it must yet undergo even greater revision now in order to achieve even minimal compliance with the CWA and CEQA, or to effectuate the policy underlying section 316(b) and the California Water Code section 13142.5(b).

Sincerely,

Coastal Environmental Rights Foundation

Marco A. Gonzalez
Legal Director