

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

From: "Matthew Heberger" <mheberger@pacinst.org>
To: <commentletters@waterboards.ca.gov>
Date: Tuesday, April 13, 2010 11:00 AM
Subject: Comment Letter - OTC

To whom it may concern:

I congratulate the Water Board on the release of a thoughtful plan for phasing out the worst impacts of once-through cooling at the state's power plants.

After reviewing the Substitute Environmental Document, I had a few questions and concerns.

1) The Water Board should note the rationale and legal backing for preparing a Substitute Environmental Document rather than a full Environmental Impact Review. I worry that failing to perform a more robust analysis may allow opponents to slow the implementation of the program.

2) Power plant owners may decide that it is more feasible or economical to use freshwater in their cooling towers, which is in much more widespread use and has a much better track record. The SED cites a California Energy Commission Study from 2007, the "Performance, Cost, and Environmental Effects of Saltwater Cooling Towers". This report only identifies 25 plants around the world where saltwater, or more commonly, brackish water is used in cooling towers.

It is conceivable that power plant owners will turn to groundwater. This could cause harm by drawing down coastal aquifers, increasing saltwater intrusion, and impacting owners of municipal and irrigation wells. What makes this a likely scenario is that groundwater is essentially unregulated in California: any property owner can drill a well and extract as much water as they are able, regardless of the impact that it has on their neighbors or on nature. Water supplies in most coastal regions are already stretched to the breaking point, and this would place further stress coastal aquifers.

3) Plants that use saltwater cooling towers would discharge water that is extra salty, as some of the water is evaporated, leaving the salts behind. Managing this stream of hypersaline water poses challenges, similar to those at desalination plants, which have been opposed by many in California. I believe that these impacts can be mitigated by designing an appropriate outfall or diffuser. However, there is no discussion of this in the water board's environmental document. As this has caused lengthy and contentious debate around proposed desalination plants, I feel that this potential impact must be addressed.

4) Plants may use chemicals to control scaling or corrosion, which will be discharged to the environment. The Water Board does not discuss the potential impacts of these chemicals, or how these impacts can be mitigated.

In summary, I applaud the Water Board for drafting policies that will protect the coastal environment. However, switching to other cooling technologies might lead to other water or environmental impacts, and a more thorough analysis of these is needed.

Sincerely,
Matthew Heberger
Richmond, California

