



Diablo Canyon Threatens to Gut California’s “Once Through Cooling” Policy

Background PG&E efforts to undermine State Marine Environment Protection Policy

In 2010, California enacted a new policy intended to address the water and marine environmental protection problems posed by the antiquated once through cooling systems of power plants up and down the California coast. The new Once Through Cooling policy required that all coastal power plants have in place replacement cooling systems that conserved water and protected the marine environment by 2015.

Only the nuclear industry was able to lobby for an exemption from the Schwarzenegger Administration: San Onofre and Diablo Canyon were granted an exemption that allowed them to have until 2015 to provide argumentation for *if and how* they could comply with the policy. Unless the State Water Resources Board (Water Board) accepted a permanent exclusion from the policy, under the law, PG&E Diablo must replace its current once through cooling systems with cooling towers by 2024 (the date at which the first of the two reactors reaches its current license limit). The Water Board was charged with overseeing this process and set up a special inter-agency, utility, NGO working group/committee (Committee) to conduct the policy review.

The Committee and the Bechtel Report

With PG&E footing the bill, Bechtel lobbied the Committee to hire Bechtel to provide an “independent” third party review of the issue for the committee (an unfortunate choice given that Bechtel has chalked up billions of dollars of mutual business interests with PG&E over the years—including joint work at Diablo and on other nuclear projects for the utility in the state). The Bechtel Report, which was conducted over some two years, was to provide the basis for a final recommendation from the special Committee by the end of 2013, so as to give the Water Board a basis for decision-making before its deadline. The draft Bechtel Report was released in September 2013. It was quite remarkable in its complete misrepresentation of the situation and its transparent effort to argue that cooling towers were too expensive and too complicated to site at Diablo and that mesh screens could be installed as an alternative for a fraction of the cost. In response, Friends of the Earth (FOE) commissioned and released a full-scale, expert critique of the Bechtel Report done jointly by Powers Engineering/Pisces Conservation, LTD (Powers). The Powers Report was released in November 2013, and the Committee held a special session on the findings of the Powers Report, which concluded that:

- Bechtel had created a staggering and indefensible proposal for building cooling towers that included the need to dig up a nearby mountain (excavating more earth than was required to build the Panama Canal) which included an Indian burial ground, and which would also require a dedicated desalination plant (on the list of most controversial facilities under consideration in CA) and overall would come with a 10-12 Billion dollar price tag! (more incidentally than the reactors cost). FOE argued that the Bechtel proposal was a “red herring”—intended to make the committee think that cooling towers were impractical if not impossible.
- As a counter, Bechtel proposed a mesh screen technology, which they themselves indicated would not significantly decrease the fish kills caused by intake and outflow, but that they said would cost in the realm of tens or perhaps hundreds of millions of dollars. However, Powers had already crushed such a proposal for the Indian Point nuclear power plant and eviscerated that aspect of their proposal.



- The Powers Report showed that: mesh screens did not work; that cooling towers could be built on the current Diablo Canyon site (parking lot); that they could use salt water (thus no desalinization necessary); and that they could be constructed within the \$2 billion range that the committee had been lead to assume was a reasonable price tag by other consultants.

Status of Current Water Board Review and Decision

Having eviscerated the Bechtel September 2013 report, the Committee has instructed Bechtel to go back and provide a new analysis based on constructing the cooling towers on the site according to the design that Powers had proposed. A draft is due in early July 2014, after which there will be a comment period, and a final Bechtel draft is due by July 23. The Committee will then consider its options and send a regulator letter to the Water Board in September. The Water Board will take up the Once Through Cooling issue at a workshop in November and a final decision will be made in December of 2014.

It is anticipate that this new Bechtel review will, once again, seek to undermine constructing cooling towers at the site. In preparation, Friends Of the Earth has asked Powers to prepare a further analysis, which will provide independent opinion on how to comply with the Once Through Cooling policy and will include direct proposal for the Board. Depending on how things are looking with the regulators on the special committee, Friends Of the Earth will either present the new Powers report to the committee, or more directly to the Board.

What's at Stake?

- Diablo Canyon alone causes some 80% of the damage done to the marine environment from all of the California coastal power plants combined. If Diablo Canyon is exempted, *the Once Through Cooling policy has effectively been gutted and a major state marine protection initiative will be dead.*
- Diablo Canyon's antiquated once through cooling system draws in an estimated 2.5 billion gallons of water per day and discharges that water back into the ocean some 20 degrees Fahrenheit hotter. In the course of this intake and outflow, *it is estimated that annually the reactors' cooling system sucks in more than one billion fish in early life stages—most all die.*
- Very simply, defense of the Once Through Cooling policy and the inclusion of Diablo in the policy is one of the most important, most effective, and most obvious things that citizens concerned about the marine environment can do in these next few months
- For the World Business Academy, this is about protecting the marine environment but also about assuring that Diablo is given the same treatment as all other plants—and that power and money does not win out over protection of the environment and public health.

What You Can Do

Look for an email from the World Business Academy with instructions on how you can send letters to directors of the state Water Board, asking them to preserve the state's OTC policy – and to prevent PG&E efforts to undermine the State Marine Environment Protection policy on behalf of the Diablo Canyon nuclear power plant.