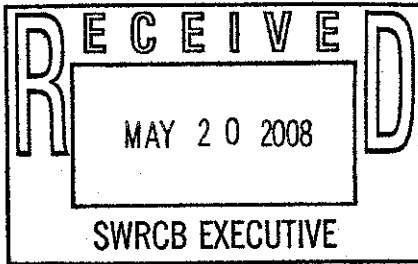


BAMx comments, May 20, 2008



**Once-Thru Cooling Scoping Document
BAMx Comments**

The following are comments offered by the members of BAMx¹ on the State Water Resources Control Board's (Board) *Scoping Document: Water Quality Control Policy on the Use of Coastal and Estuarine Waters* (Scoping Document), dated March 2008, and associated supporting document, *Electric Grid Reliability Impacts from Regulation of Once-through Cooling in California* (Reliability Study) prepared by Jones and Stokes, dated April 2008. The Scoping Document is intended to provide the public with a preliminary proposal for the adoption of a state policy, which is described in Appendix A of the Scoping Document, to implement the Clean Water Act section 316 (b) that controls the harmful effects of once through cooling (OTC) from power plants.

While the Scoping Document stated that the Board will consider comments following the scoping meetings in modifying the draft policy and preparing a substitute environmental document, the BAMx members find at this time that there is insufficient information and basis provided to support the proposed implementation and compliance schedules provided in Appendix A of the Scoping Document. The preliminary policy's compliance schedules are premised on the electric industry responding within the proposed timelines such that there would be no impact to electric reliability in California. The basis for the Board's preliminary compliance schedule is based on conclusions from the Reliability Study prepared by Jones and Stokes. BAMx members find that this report is deficient for the purposes intended. We cannot tell the extent to which additional reporting on the results of studies already completed might provide enough information. It is clear that the current Jones and Stokes summary Reliability Report is not sufficient to draw the conclusions reached in the Scoping Document and the preliminary OTC Policy stated in Appendix A of that document. With respect to the Reliability Study, the Scoping Document stated:

"Preliminary results of the study indicate that while the State Water Board's pending OTC policy does have potential to negatively affect electric reliability, proper planning can compensate for any plant retirements and prevent reliability problems, provided the industry has sufficient time to respond." ... *page 74.*

"However, the vast majority of the transmission upgrades identified in the Electric Grid Reliability study required to compensate for the OTC plant retirements are relative modest, requiring only 1-3 years to construct and place in-service." ... *page 74.*

"Though transmission system upgrades are identified as the least-cost alternative for replacing OTC retirements, doing so presents its own challenges because many upgrades would be needed out of state." ... *pages 74 and 80.*

¹ BAMx, the Bay Area Municipal Transmission group, consisting of Alameda Power & Telecom, City of Palo Alto Utilities, and City of Santa Clara, Silicon Valley Power.

As the Reliability Study's conclusions forms the fundamental foundation for the Board's proposed OTC Policy and implementation schedule, we urge the Board to provide additional details on its investigations to date. At a minimum provide responses to the following questions, clarifications and comments on that study. Such responses and additional detailed information on the study work to date needs to be provided to the electric industry and made public such that the BAMx members would be in a position to be able to consider supporting the Board proposed OTC Policy.

Reliability Study²

Although we agree with your decision to defer to the CAISO for a more a definitive study of reliability impacts from OTC policy decisions, we do not believe that broad stakeholder process will be conducive to achieving your goals of providing timely information so that the electric industry has time to respond.

You should provide more details on what the studies indicate and consider steps to provide more information quickly as the CAISO process continues to develop a more comprehensive approach that would provide more details.

Chapter 4 of the report discusses the assumptions used in completing the studies that are based upon public sources readily available to other parties. You may wish to discuss in more detail the use of an OPF (Optimal Power Flow) tool for the purposes of the study since we do not believe the "more definitive" studies to be completed by the CAISO envision utilizing such a tool. Page 42 of the report includes the following statement:

"The model then attempted to determine how best these line overloads, low voltage violations, etc., might be fixed, whether through transmission upgrades or new lines or through use of in-area generation, and produces cost estimates for each "fix" option."

The above statement indicates that the model dynamically determines the optimal amount generation and transmission required under a given scenario. However, the description of the nine (9) scenarios suggests that the amount of generation was "fixed" deterministically by retiring/replacing certain amount of OTC generation, which contradicts with the above statement. Please explain.

Page 3 of the report states that

"Removing all 21,000 MW of current OTC generation would also reduce generation reserve margins to unacceptable level, requiring addition of about 4,000 MW of new generation in the Western U.S. and additional transmission capacity to access that generation, at an estimated cost range of \$3 billion to as much as \$11 billion, depending on the type and location of new generation, and the type of transmission upgrades constructed to access the new generation."

² *Electric Grid Reliability Impacts from Regulation of Once-Through Cooling in California*, April 2008.

It would be quite instructive to understand the assumptions regarding location and the type of the generation outside California as well as the description of transmission upgrades required to access that generation.

Although the report provides substantial information on the capability of the tools utilized, it provides very little information on some of the critical assumptions made to complete the studies. We were not able to find a detailed description on the capital costs and operating characteristics of the simple cycle gas turbines and combined cycle power plants that were assumed to be installed in some scenarios.

Chapter 4 discussion of the studies completed does not really report on the results by Local Areas. It just describes the process. Although the report emphasizes the studies are not detailed enough for making investment decisions by stakeholders, if more detailed information was provided as to the results, others would be better able to judge whether the studies are sufficient to have the Board base policy decisions on the results. As the report states, the cost of transmission solutions can vary widely. The reconductoring of lines and the installation of reactive devices is much less expensive than building new lines. The ability to use the cheaper fixes is highly dependent upon the characteristics of the Local Area being studied and the extent to which the less expensive "fixes" have been already utilized.

Although Table 4-5 (Transmission Upgrade Costs) provides some information as to specific transmission projects, it is not clear what transmission deficiencies those projects are expected to remedy. Some projects listed as an addition to a Local Reliability Area (LRA) are clearly not within the LRA. The reason for such classification is unclear. For instance, Table 4.5 lists a 62 mi transmission line from Helms PP to Gregg Substation as a Greater Bay Area (GBA) resource; neither of those substations is within the GBA. We understand that Table 4.5 presents the "in-state" transmission upgrades, with a total cost of \$135.1 million, needed in Case 2. The report also states that:

"The more severe scenario of Case 4 (all OTC units retiring including the nuclear units), showed that costs could range from about \$314 million to as much as \$995 million, depending upon the type of transmission projects employed to compensate for any retirements."

However, there are no comparable tables that present the transmission upgrades required under other scenarios, such as Case 4.

The BAMx members appreciate the opportunity to provide these comments and urge the Board to provide additional information on the studies completed to date and respond to these comments.