Public Comment
Once Through Cooling
Deadline: 5/20/08 by 12 p.m.

May 20, 2008

Jeanine Townsend Clerk to the Board State Water Resources Control Board 1001 I Street, 24th Floor Sacramento, CA 95814 MAY 2 0 2008

SWRCB EXECUTIVE

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AES Southland 690 North Studebaker Road Long Beach, CA 90803 tel 562 493 7891 fax 562 493 7320

Re: Comments to 316(b) Scoping Document (March 2008)

Dear Ms. Townsend:

AES Southland (AES) appreciates the opportunity to provide comments on the State Water Resource Control Board's (Water Board) March 2008 Report entitled "Scoping Document: Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (Scoping Document). We participated in the scoping workshops held in San Pedro and Sacramento and based on the request of the Chair of the Water Board, we are focusing our comments towards feasible solutions that will meet the objectives of the Water Board and still allow existing generation to operate to meet the reliability needs of the state. While we remain concerned about the reliability impacts of the implementation of 316(b) as outlined in the Scoping Document, we understand that the Water Board is aware of the reliability concerns and that the final rule will consider the impacts to reliability. We are committed to working with the Water Board and the Task Force towards that important objective.

Low Capacity Units - The Water Board Scoping Document in 2006 allowed for an exemption for units with a capacity utilization factor below 15% consistent with the Federal 316(b) Phase II rule. The current Scoping Document now requires that these units not only comply, but they must comply first. The Scoping Document does not address the justification for moving away from the Federal guidance on exemption. AES believes that the lower capacity units should be exempt, but at a minimum, AES does not agree that the units with the lowest capacity factors should be required to comply first, especially if the only path available is through retrofit or retiring. The stated objective of the water board is to protect marine life and it makes sense that the units with the higher impingement and entrainment impact should comply first.

Solution - AES understands that the water board staff is proposing to use the design flow of each intake structure as the baseline from which reductions must be achieved and we support this approach. If the lower capacity units will be subject to the Water Board policy, we support this idea and believe that some of the low capacity power plants can achieve the reductions that the water board is seeking and allow units to continue to operate. Generally, we believe that the path to compliance for the majority of these units is through eventual repowering, but rebuilding these power plants will take time. Forcing all low capacity units in the state to either immediately retrofit or be replaced through new capacity will result in a tremendous cost to ratepayers for an incredibly small incremental benefit. We believe that Track 2 should allow for this option.

Sufficiency and Incorporation of Data - The Water Board has not presented any quantitative technical information to describe the nature of fishery improvements that would be achieved by the proposed policy. The Scoping Document indicates that "biological impacts of OTC may not be adequately known since modern quantitative studies are difficult and costly." A recent analysis of cooling water system effects on California's nearshore fisheries determined that a large-scale conversion to closed-cycle cooling may result in no measurable benefit to California fish populations¹. Multiple investigations into nearshore fish populations in Southern California have demonstrated that population sizes fluctuate independently of power plant operations, and population trends are better explained by changes in oceanographic conditions, commercial/recreational fishing pressure, or both. There are also several errors and inconsistencies throughout the document, including multiple "design flow" estimates for many facilities in Tables 1, 11, and 19, missing footnotes or endnotes, and missing references.

¹ Electric Power Research Institute. 2007. Assessment of Cooling Water Intake Structure Impacts to California Coastal Fisheries. EPRI, Palo Alto, CA. 132 pp.

Solution - In January 2008, final IM&E Characterization Study reports were submitted for all three AES generating stations; two reports are available at the Los Angeles Regional Water Quality Control Board website, and one is available at the Santa Ana Regional Water Quality Control Board web site. The studies performed at all three sites represent some of the most comprehensive, quantitative IM&E studies ever performed in California, and included weekly impingement sampling, biweekly entrainment sampling, and monthly source water sampling. Other regulated entities also submitted 316(b) IM&E Characterization Studies, which provided the Water Board with results from modern, quantitative studies. In addition, most of these reports included detailed impact assessments that provide context for interpretation of impingement and entrainment data. Lastly, the Electric Power Research Institute (EPRI) submitted a report to the SWRCB in December 2007 entitled "Assessment of Once-through Cooling System Impacts to California Coastal Fish and Fisheries" that has not been included by the staff as a part of the scoping process. We request that the Water Board review the comprehensive data and reports prior to formulating the policy.

Economic Impacts - AES is concerned that the economic implications of this proposed policy have not been adequately considered. AES believes that most existing facilities with lower capacity utilization rates will not choose to retrofit due to economic reasons or because it is not feasible. As proposed, the State policy will force companies to tear down existing plants and construct new plants or simply shut the old plants down and walk away. Creating new generation will be a challenging undertaking due to complexities associated with the permitting, contracting, financing, and constructing over 40 new generating units across the State. Proposing a hard schedule for the completion of these compliance efforts is unreasonable, and will create more unnecessary challenges. Replacing low capacity power plants will also be prohibitively expensive due to the high fixed costs of new capacity as compared to the existing assets that have already largely been depreciated. This will undoubtedly result in much high electrical rates for consumers at a time when other environmental issues such as Assembly Bill 32 will also require significant public expenditures.

As the Water Board is aware, the US Supreme Court has granted review of whether 316(b) authorizes the US Environmental Protection Agency to compare costs with benefits in determining the "best technology available for minimizing adverse environmental impact" at cooling water intake structures. AES is extremely concerned about the cost of implementation of the rule as currently contemplated in the Scoping Document that requires retrofitting as the path to compliance and urges the Water Board to wait upon the guidance from the Supreme Court on this issue or create an exemption from compliance if the cost is wholly disproportionate to the benefits.

Solution – The Federal 316(b) Phase II regulations exempted low capacity power plants from the entrainment performance standard. The environmental impacts of these facilities are already greatly reduced, and EPA recognized this in their rule-making effort. A large majority of the plants impacted by the proposed rule have very limited run profiles resulting in impacts that are already 60% to 80% below what they were designed for. If the Water Board were to require further reductions, allowing a Track 2 compliance route would allow for utilizing operational measures such as shutting down some pumps while at minimum loads and using alternate means to cool auxiliary equipment. The energy market is slowly phasing out these older low capacity power plants as newer and more efficient plants come on line. This is a natural market process and the Water Board should embrace incentives to new power development rather than develop a policy that forces retirement of older plants and places the people of California at risk of another energy crisis.

AES is committed to 316(b) compliance at all three of its facilities and appreciates the opportunity to provide these comments to help inform the Water Board of what we believe is a feasible policy that balances the need to protect marine life and provide reliable electricity at a reasonable cost. If you have any questions or comments regarding this letter or our compliance efforts please feel free to contact me.

Sincerely,

Eric Pendergraft
President
AES Southland LLC