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**Before the
California State Assembly Committees on
Natural Resources and Utilities and Commerce**

**Joint Informational Hearing on
Once-Through Cooling, Air Emissions
Credit and Electrical Generation**

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State Capitol Building, Room 4202
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Good afternoon. My name is Deborah Sivas and I am a Professor of Law at Stanford Law School, where I teach an interdisciplinary course on the law, science and policy of the California Coast and also direct the Environmental Law Clinic, which has worked with community organizations for several years on the environmental impacts of coastal power plants. I very much appreciate the opportunity to provide testimony today on how California can move forward to address the impacts of once-through cooling system operating at the state's 19 remaining coastal power plants. At the request of Committee staff, I will focus my remarks here on the legal landscape for regulating cooling water intake systems and, in particular, on the relationship between the state and federal regulatory systems.

As you have heard here today, power plant cooling water systems are regulated primarily under the federal and state water pollution laws, specifically the federal Clean Water Act and its state counterpart, the Porter-Cologne Water Quality Control Act. In particular, the Clean Water Act operates under a model of cooperative federalism whereby the U.S. Environmental Protection Agency establishes minimum pollution standards, and states then implement these standards

through so-called National Pollutant Elimination Discharge System (“NPDES”) permits. Under this system, states like California that have been delegated Clean Water Act permitting authority are generally free to set more stringent permit standards as they believe necessary to address local water quality concerns. And, in fact, as a national leader in pollution control, California has often exercised this authority by developing more environmentally protective standards for local water bodies. The state law authority for imposing more protective water quality standards comes from the Porter-Cologne Act, which gives the State Water Board and the Regional Water Boards broad authority to protect beneficial uses of coastal and inland waters.

To date, the Clean Water Act has been the key regulatory vehicle for evaluating cooling water intake systems. In particular, section 316(b) of the Clean Water Act requires state permitting agencies to ensure that NPDES permits incorporate the “best technology available” for minimizing the adverse environmental impacts of cooling water intake systems. This relatively brief section of the Clean Water Act has a long, complicated history, which bears directly on what course of action the State of California should pursue now. EPA first promulgated implementing regulations for this provision in 1976. When these regulations were struck down by a court for procedural defects, EPA directed state agencies to use their “best professional judgment” in permitting power plants until new regulations were developed. Best professional judgment is, in effect, the default standard under the Clean Water Act where national standards have not yet been promulgated. Unfortunately, it took EPA nearly two and a half decades to develop replacement regulations, beginning in 2000.

The first set of regulations, known as the “Phase I” regulations, apply to “new” facilities only. The Phase I regulations establish a national performance-based standard that requires all

new facilities to “reduce . . . intake flow, at a minimum, to a level commensurate with that which can be attained by a closed-cycle recirculating cooling water system” and to meet any additional limitations that are necessary to protect sensitive species or habitat. 40 C.F.R. § 125.84(b).

Unfortunately, EPA has defined “new” facilities in a way that does not include repower projects at an existing site unless the repowered facility will use more cooling water than the present facility does. What this effectively means is that none of California’s existing coastal power plants or the proposed repowering of those plants are likely to fall within the federal Phase I rules.

Rather, permit renewals or new permits for repowering of these existing facilities, as a federal matter, will fall within EPA’s so-called Phase II regulations for “existing facilities.” These regulations are somewhat more flexible, based on the theory that the retrofitting of existing facilities with new technology is more difficult and more costly than simply designing a new facility with that same alternative technology. Of course, this logic does not really apply to repower projects in California because new units or whole new facilities can be designed from the ground up with more environmentally protective technology. In any event, the Phase II regulations require even existing facilities to achieve a reduction in intake water “commensurate with a closed-cycle recirculating system” or through one of four compliance alternatives. 40 C.F.R. § 125.94(a). It is these compliance alternatives that have engendered most of the controversy around the Phase II regulations because they allow an exemption from the national performance standard, on a site-by-site basis, where the permitting agency concludes that the cost of compliance exceeds its environmental benefits or where after-the-fact mitigation/restoration measures are used in lieu of installed alternative technology such as closed cycle-cooling, air cooling, or one of the hybrid systems.

Those compliance alternatives lie at the heart of the legal challenge in Riverkeeper v. EPA, the case that is now pending before the U.S. Supreme Court. Although somewhat of a simplification, that case addresses two main legal issues. First, the Second Circuit Court of Appeals found that section 316(b) does not allow a permitting agency to consider restoration measures when determining what constitutes the “best technology available” for minimizing environmental impacts. In other words, the Regional Water Boards, which issue NPDES permits for California’s coastal power plants, may not look to habitat enhancement, wetlands restoration or other such measures as an alternative to closed-cycle cooling. It is important to note that this issue was not appealed to the Supreme Court and, therefore, constitutes the definitive minimum legal standard that California must implement.

The other issue at the core of Riverkeeper is whether the Clean Water Act allows for the kind of cost of compliance versus environmental benefit calculation articulated in EPA’s Phase II regulations. The Second Circuit Court of Appeals concluded that the statute does not allow for such cost-benefit analysis and it is this issue, and only this issue, that is presently pending before the U.S. Supreme Court. As with any case, it is difficult to predict what the Supreme Court will do. We will know something more by June of this year when the Court rules, but there is no reason for California to wait for that decision before moving forward with its own program.

Here’s why:

No matter what happens at the Supreme Court, the Phase II regulations are and will continue to be back in EPA’s lap for new analysis. Remember that last time this happened, in 1976, the agency took more than two decades to develop new regulations. We all certainly hope and expect that EPA will move much faster this time, but we can reasonably expect that it will

take the agency at least a few years to develop and finalize new Phase II rules. In the meantime, EPA has expressly directed states to continue permitting power plants under the default “best professional judgment” standard, using those aspects of the Second Circuit’s interpretation in Riverkeeper that are final and binding, namely, that restoration measures cannot be used to determine best technology available.

The problem in California is that the Regional Water Boards appear in some ways to be paralyzed by the Riverkeeper controversy and unwilling to move forward either with renewals of existing NPDES permits or with repower projects. But there is really no reason for such paralysis because state law gives the Boards the authority and guidance they need to move forward. In particular, Section 13142.5(b) of the Porter-Cologne Act provides that “[f]or each new or expanded coastal powerplant or 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.” Cal. Water Code. § 13142.5(b). Thus, no matter how the U.S. Supreme Court rules in Riverkeeper, and no matter how EPA subsequently revises the Phase II regulations, California can move forward with its own statewide regulations or guidance to protect local water quality pursuant to its Porter-Cologne Act authority.

And the State Water Board should move forward now, for a couple of reasons. First, both the Regional Water Boards and the electrical generating industry are in legal limbo right now. They don’t know what the federal rules will look like at the end of the day, and we may have to wait quite a considerable length of time until everything is sorted out. In the meantime, many old, inefficient coastal power plants continue to chug away, often at very low capacity, with

long expired NPDES permits, which under the Clean Water Act are supposed to be renewed and updated to incorporate the best technology every five years. We need to move these plants into and through the permitting system, and the Porter-Cologne Act provides the State with all the authority it needs to do so. Indeed, EPA does not anticipate that expired permits will continue indefinitely while the Phase II rules are revised.

Second, the adoption of statewide standards or guidance will assist both the Regional Water Boards and the electric generating industry with an orderly transition to alternative cooling technologies as coastal facilities repower to meet the State's energy demands. As it currently stands, the Regional Water Boards have little direction on how to proceed in exercising their "best professional judgment" under the Clean Water Act. Without such direction, permitting decisions are likely to be slower, less consistent across the state, and more vulnerable to challenge in the courts than they would be if the State Water Board adopted rules for implementing section 13142.5(b) of the Clean Water Act. Creating a statewide set of standards will increase the certainty for all parties – the regulators, the regulated industry, environmental stakeholders, and local communities..

In closing, I think it is fair to say that is a growing consensus, at both the state and federal level, that new and repowered plants should not be designed with outdated, environmentally destructive cooling systems. Several plants within the existing fleet have announced their intention to repower using alternative technologies. The main question for California is how we get there from here. There is not need to await action at the federal level. The State Water Board has the legal tools it needs to provide appropriate direction for permit writers up and down the coast. It should use these tools to facilitate an orderly modernization of California's aging

coastal power plant fleet and to continue the State's long-standing commitment to protect environmental resources along our 1,100-mile coastline.

Thank you.