

Utility Industry Comments
September 26, 2005 Workshop
Implementation of Federal Clean Water Act Section 316(b) Regulations

Good morning. My name is Susan Damron [REDACTED]. I am the Manager of Wastewater Quality Compliance at the Los Angeles Department of Water and Power (LADWP) [REDACTED]. LADWP provides electric service to approximately 4 million people within the City of Los Angeles and is the largest municipally-owned power utility in the nation [REDACTED].

I am here today representing a number of the electric utility industries whose once-through cooled power plants represent approximately 24,000 megawatts of California's generating resources, equaling about one-third of California's total generating capacity.

The State Board's public notice sought input on the manner in which the state should implement the federal 316(b) regulations and on the issues that should be addressed. The electric utilities seek state-wide consistency in implementing the federal Rule through the issuance of state guidance for use by the various Regional Boards.

Consistency with Federal Rule

For critical timing reasons, the California utilities advocate implementing the federal Rule, which was first signed by the EPA

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administrator on 2/16/04, released to the public on 2/20/04, and published in the Federal Register on July 9, 2004, via the more expeditious use of guidance. Since the Rule "hit the streets", utilities have been moving forward towards achieving compliance with the Rule's provisions. Requests for Proposal have been circulated, consultants hired, the Rule-required Proposals for Information Collection (PICs) have either been submitted to the respective Regional Boards or soon will be submitted, and the year-long Impingement Mortality/Entrainment (Im/E) Characterization Studies have either been completed or are set to commence January 2, 2006.

The compliance gears are already well in motion to gather the necessary information to comply with the provisions of the federal Rule and to submit the Comprehensive Demonstration Study (CDS) by January 7, 2008. Utilities must adhere to the January, 2008 deadline in order to not be found in non-compliance with federal law. At this late date, it is highly unlikely that efforts to develop state law, approved by the Office of Administrative Law, will be available prior to the January, 2008 date.

In addition to timing reasons, the utilities advocate consistency with the federal Rule because its structure purposefully allows compliance flexibility. USEPA recognized the need to account for plant-specific, site-specific, and water body-specific differences across the United States and

within states. A “one size fits all” rule was clearly not workable. USEPA spent many years developing the Phase II 316(b) Rule, listening to stakeholders, scientists, and other knowledgeable experts, gathering data, and responding to comments. As such, the federal Rule represents the best approach to minimizing impacts from once-through cooling systems. California’s implementation of the federal Rule allows for the application of this best approach and for achieving consistency between the Regions while providing the necessary flexibility.

USEPA also seriously considered the nature and scope of the Phase II 316(b) Rule. In this Rule, EPA specifically and intentionally avoided defining adverse environmental impact (AEI), while at the same time, constructing a rule to address AEI. The scope of this federal Rule is in contrast to EPA’s previous requirements under their 1976 316(b) Development Document for Best Technology Available for Cooling Water Intake Structures where impingement and entrainment were documented, AEI were assessed, and, based on the existence and/or nature of the AEI, technologies were assessed. This time, EPA developed a Rule that is expressly based on meeting a level of protection performance with the establishment of performance standards. In fact, during Rule development, EPA considered and rejected explicit limitations based on adverse

environmental impacts and cumulative impacts and chose instead to focus on performance standards.

As previously noted, EPA recognized that addressing 316(b) issues on a national basis would require some flexibility in the Rule in order to address some of the specificities noted above. An example of where EPA has provided some clear definitions, and yet has also built in some flexibility, is the definition of Calculation Baseline. Because of this flexibility, many have commented that the EPA definition is unclear or vague; however, the definition is very straight forward. Calculation Baseline is the impingement or entrainment that occurs at a power plant with a once-through cooling system where the opening of the cooling water intake structure is located parallel to the shoreline, is at the surface, has 3/8-inch traveling screens, and has no other controls in place for the purpose of reducing impingement mortality and entrainment (Im/E). Where other Im/E controls are in place (e.g., velocity caps, submerged discharges, fish diversions, fish return systems, etc.), these would constitute credits against the baseline. The perceived vagueness or lack of clarity arises because, for most utilities, the Calculation Baseline won't be known until the Im/E Characterization Studies are completed at which time the

Calculation Baseline will be the measured values minus any existing credits.

There have also been comments by some interested stakeholder that the Calculation Baseline should be a point in the historic past. The point that must be made here is that if the state chooses to deviate from the federal Rule definition, namely the Calculation Baseline is that population of fish, eggs and larvae that existed before the influence of man, before the industrial age, or before the presence of the power plants, then there must be the corresponding data to establish that baseline. Absent the data from these historic periods, the definition of Calculation Baseline then becomes purely arbitrary.

Use of State Law

It is recognized that the State of California may wish to establish its own 316(b) rule and that the state can be more stringent than the federal rule; however, the utilities offer these reflections. Section 125.90(d) of the federal Rule states that nothing in the subpart can preclude a state from adopting or enforcing any requirement "with respect to the **control** or abatement of pollution" as long as it is not less stringent than federal law. It is important to note that this applies to the **control** or abatement of pollution, not impacts. Section 125.94(e) says that states can establish

more stringent BTA in state law in order to minimize AEI if the state determines that compliance with the Rule would not meet state law. That is to say, a state law exists which says the performance standard necessary to minimize AEI is greater than the federal Rule's impingement standard of 80-95% and the entrainment standard of 60-90%.

Once again, as previously noted, the timing of having a state law adopted and implementable to coincide with the federal Rule's schedule is an issue of great concern to the utilities. Most likely, if the state decides to undertake a rulemaking it would not come to fruition before many, if not all, of the significant federal Rule milestones had passed. A utility could not simply suspend its 316(b) compliance efforts and be found in non-compliance with federal law. A post January 1, 2008 state rule would require utilities to redo or augment completed studies and submitted compliance documents. This would be highly inefficient, costly, and not very productive. For this reason, the utilities advocate the issuance of guidance to achieve consistency within the state in the implementation of the federal Rule. [Incidentally, any additional work to incorporate state requirements would delay implementation of any compliance efforts.]

State Guidance versus Policy

The utility industry supports a transparent process for the development of state guidance to implement the federal Rule. Guidance can offer assistance where the federal Rule is vague or unclear, and can be timely and responsive to the issues of concern. Guidance can also be flexible as the utilities and state work through the compliance steps, and can better respond to areas which are still in a state of flux like the availability of restoration as a compliance tool. Guidance which is developed in a process similar to, but perhaps on a more expedited time frame than the triennial review of state plans, would allow for the listing and prioritization of key topics requiring guidance. For example, guidance could be initiated for the top three priority topics, and upon their completion, guidance for the next three priority topics could be developed, and so on. In this way, consistency with the federal Rule and conformance of its implementation throughout the state at the various Regional Boards could be accomplished.

Technological Uncertainties

The utilities have been undertaking many efforts to initiate compliance with the federal Rule, including understanding available technological controls. While utilities will look at the full range of possible

control technologies in the context of their CDS, it is becoming increasingly clear that the range of technologies available for western coastal discharges to meet both the impingement and entrainment performance standards, the latter being the more difficult, is very limited.

Issues related to feasibility, technology performance, level of demonstratable benefit, and costs are key considerations. Retrofitting the power plant with wedge wire screens where there is insufficient sweeping flow merely transforms entrainment issues into impingement issues. Retrofitting existing screens with fine mesh screens and a fish return system provides little real benefit to the organisms if the fish return system must travel a mile or more to return the organisms to an unaffected part of the source water body (Haynes, Alamitos, Harbor Generating Stations).

In order for the technology to be a viable consideration, the organisms must be able to survive being transported to the source water body. The ability of some west coast species to survive this handling and transport is unknown. The ability to control fouling on openings which are in the range of 0.5 millimeter, or the ability to deliver compressed air bursts over long distances to remove accumulated silt or algae covering these minute openings, is also unknown.

Use of Restoration

A utility may install some of these technologies, and properly maintain and operate these technologies – thus achieving Rule compliance, only for all concerned to later find that the actual, tangible benefit to the environment is not at the anticipated level. For all of the concerns and reason identified above, the utilities stress the importance of maintaining restoration as a viable compliance option. The ability for a utility to pursue restoration is not without limitations. Restoration can only be pursued if the technological and/or operational measures prove to be less feasible, less cost-effective or less environmentally beneficial. In addition, restoration must produce ecological benefits at a level substantially similar to the level achieved by the performance standard or the derived site-specific standard.

The environmental benefits associated with Restoration are likely to exceed those that can be attained through the use of technologies and/or operational measures. Furthermore, restoration projects will undoubtedly exceed the life expectancy of many of the power plants, thus creating a long-term, sustainable benefit to the environment. The utilities encourage the state to consider the long-term benefits restoration can provide and support its use as a 316(b) compliance option.

Other Areas of Interest

The utilities realize that there are many interests and concerns regarding the health, viability, and sustainability of California's fishery populations. There are also many areas of fishery science that is little understood or for which there is much scientific data. Examples of these data gaps include life history data for many west coast fish species, fishery population data, and the identification of all potential stressors of fishery populations (e.g., El Nino events, recreational/commercial fishing, watershed pollution, storm water runoff, habitat modifications, power plants, etc.). The filling of all of these data gaps, with the exception of that attributable to power plants, will not be answered via compliance with the requirements of the federal Rule. The utilities support the usage of research dollars available through the California Energy Commission's Public Interest Energy Research Program and other such entities to investigate these data gap issues in order to gain a better understanding of our west coast fisheries.

Technical Support

Lastly, the utilities recognize that oversight of the 316(b) compliance effort process will require dealing with many complex issues. The utilities recommend that the state quickly embark upon obtaining federal grant

funding to be able to retain and have access to technical experts which can support the State and the various Regional Boards in their oversight roles.

Thank you for the opportunity to share our comments and concerns for your consideration regarding implementation of federal 316(b) Rule.