



Edison Electric
Institute

September 17, 2013

The Honorable Regina A. McCarthy
Administrator
U.S. Environmental Protection Agency
William Jefferson Clinton Federal Building
1200 Pennsylvania Ave., NW
Washington, DC 20460-0001

Dear Administrator McCarthy:

On behalf of the Board of Directors and member companies of the Edison Electric Institute (EEI), as well as our partners at the Nuclear Energy Institute (NEI), Clean Energy Group (CEG), and Utility Water Act Group (UWAG), we want to extend our sincere thanks to you and your team for the productive meeting on September 5 regarding industry issues with the Clean Water Act (CWA) § 316(b) cooling water intake structures rulemaking for existing facilities. As you know, this rulemaking, which will impact almost half of the existing U.S. generation capacity, is expected to be completed by November 4. We believe the rule can be designed to achieve important environmental benefits with cost-effective technology solutions, while avoiding inappropriate energy and reliability impacts and without imposing unnecessary costs on consumers.

Our September 5 meeting demonstrated that a constructive relationship among you, your staff, and the electric power sector can be mutually beneficial in charting a path toward environmentally protective and cost-effective regulation. Maintaining an open dialogue leads to more reasonable results, as already evidenced by the flexibility we understand EPA has incorporated into the draft final rule based on the comments addressing the Impingement Mortality Notice of Data Availability published in 2012.

During our meeting, you and your team asked for feedback on several issues of profound importance to the electric power industry. We are writing to address your questions and to offer our recommendations on how best to craft an acceptable final rule.

Use of Cost-Benefit Analysis as a Basis for Best Technology Available (BTA) Selection for Entrainment

EPA's proposed BTA standard for entrainment establishes a process for site-specific determination of entrainment requirements at individual facilities. This reflects EPA's determination that there is no single technology that qualifies as entrainment BTA for all facilities nationwide. EPA's proposal appropriately requires permitting authorities to consider nine factors, including costs and benefits, when making a BTA determination.

We understand that EPA's most recent thinking alters this requirement by making consideration of costs and benefits in BTA determinations optional. If cost/benefit balancing is optional, then

a permitting authority could require a cooling tower retrofit simply because it is technically feasible regardless of the huge costs and questionable benefits created by reducing impacts to life stages that typically have very high natural mortality rates. For many plants, the only realistic option would be either to install towers at a very high cost to the customers or shutter the facility.

We support site-specific entrainment BTA determinations. However, EPA should require permitting authorities to consider all nine factors, including costs and benefits, set out in the proposed rule in making entrainment decisions.

Stated Preference Survey (Willingness-to-Pay)

We understand that EPA will not rely on its national and regional stated preference survey results to justify the rulemaking, though EPA is continuing to evaluate the usefulness of the methodology to measure non-use benefits.

Use of Survey Results

For the same reasons that EPA is not using the survey results to justify the rulemaking, EPA should make clear that states cannot rely on the results in evaluating benefits in site-specific permitting decisions. There has not been any determination that the results are scientifically sound.

EPA can address this concern by stating explicitly that: (1) EPA's stated preference survey and its results have no relevance to any future application of the § 316(b) rule, including in permitting decisions and future guidance or other decisions by EPA or state permit writers; and (2) the results of EPA's national and regionally conducted survey should not be used to quantify the non-use benefits for a site-specific decision.

Use of Survey Methodology

We are also concerned about the inappropriate use of the willingness-to-pay (WTP) survey methodology in the § 316(b) context, especially since both the proposed rule and, as we understand it, the draft final rule implicitly require permittees to use this controversial methodology. For instance, as discussed in 40 C.F.R. § 125.98(e)(3), the proposed rule requires states to consider non-use benefits by requiring permitting directors to determine quantified and qualitative social benefits and social costs of available entrainment technologies, **including ecological benefits** and benefits to any threatened or endangered species. The proposed rule also requires at 40 C.F.R. § 122.21(r)(11) that the permittee conduct a *Benefits Valuation Study* that is to identify the "basis for any monetized values ... assigned to changes in commercial and recreational species, forage fish, and shellfish, and to any other ecosystem or non-use benefits." It is our understanding that the draft final rule may go even further by precluding permitting directors from rejecting an entrainment technology based on the comparison of the costs and benefits if the information on benefits is inadequate, which EPA has suggested will be true if non-use benefits are not quantified. Further, it is our understanding that the draft final rule also incorporates the principle of WTP into the definition of social benefits.

Given EPA's decision to seek further review of its own WTP survey, EPA should not include any language in the final rule that might be interpreted to encourage or require states to pursue the use of such surveys, which are likely to inflate benefits and skew decision-making toward

closed-cycle cooling, in conflict with the Agency's own recognition that closed-cycle cooling is not BTA. Instead, the treatment of non-use benefits should be left to the states' discretion.

EPA can address our concerns by stating explicitly that quantification of non-use benefits is not required in site-specific decisions by state permitting authorities.

Definition of New and Existing Units at Existing Facilities

In what would be a significant change in definition, it is our understanding that EPA intends to treat units that replace the turbine and the condenser as "new units," and to require these units to install closed-cycle cooling except where the permittee has installed a high-efficiency unit. This would be true even where the modification or replacement results in no change in the capacity of an existing intake structure. However, EPA's authority under § 316(b) extends only to the *cooling water intake structure*. In the absence of a significant modification to the existing cooling water intake structure (beyond those undertaken expressly to comply with the impingement mortality and entrainment requirements of this final regulation), there is no statutory basis for regulating a modified or replacement unit any differently than an original or unmodified unit. Such a change in the definition of existing units is analogous to EPA creating a first of its kind new source review program for existing cooling water intake structures under the Clean Water Act without the legislative authority to do so. We believe that "repowered, rebuilt and replaced" units should be subject to the same impingement mortality and entrainment requirements as the rule applies to other units at existing facilities. Imposing a "cooling tower only" requirement on such units would be a disincentive to upgrade or repower facilities, which otherwise would lead to environmental benefits.

On a separate but related issue, uprates of existing nuclear facilities should not artificially be classified as "new units," thereby imposing a cooling tower requirement. Construction is presently underway at several of the nation's nuclear plants to install equipment and to increase the emissions-free electricity from these plants. These uprates have been approved by the Nuclear Regulatory Commission and involve billions of dollars of expenses that did not anticipate that the units would have to install closed-cycle cooling. The final rule language would jeopardize these current uprate projects and prevent future uprates.

The electric power sector strongly believes that EPA should define a new unit in the final rule the same way it did in its proposal—by expressly excluding "repowered, rebuilt or replaced" units from being defined as "new" units. The rule should also specify that nuclear plant uprates do not constitute a "new unit," and, therefore, do not trigger a requirement to install cooling towers. Facilities will need to replace turbines and/or condensers or component parts during the expected life of the facility. Requiring cooling towers upon replacement of these parts would prematurely close facilities and create disincentives to investments that otherwise would lead to environmental benefits.

Definition of Closed-Cycle Cooling and Waters of the United States (WOUS)

EPA has asked whether industry would find workable a rule that precludes impoundments classified as WOUS from qualifying as part of a closed-cycle cooling system as long as the Agency assures that it will not use this rule or revised WOUS guidance or rules to change the status quo as to the current exemption for waste treatment systems.

We do not think that approach would meet the concerns we discussed because EPA has not consistently recognized that waste treatment systems lawfully created in or by impounding waters of the United States are not themselves WOUS. Although EPA has acknowledged in regulations and guidance governing EPA's jurisdiction that waste treatment systems created in WOUS before passage of the CWA, and waste treatment systems lawfully created after passage of the CWA implementing regulations should not be disqualified from the waste treatment exemption, in practice the Regions have sometimes failed to abide by this policy. As a result, relying solely on the waste treatment system exemption could preclude the continued use of some impoundments specifically designed primarily for closed-cycle cooling. Such a result would be unfair, costly, and environmentally unnecessary.

In addition to maintaining the current regulatory exemption for waste treatment systems, EPA should specify that cooling ponds or impoundments lawfully created principally to serve as part of a closed-cycle cooling system can continue to serve that purpose and will satisfy § 316(b) for both impingement and entrainment.

Endangered Species Act and Section 7 Consultation

EPA and the U.S. Fish and Wildlife Service and National Marine Fisheries Service (Services) have now commenced formal consultation under Section 7 of the Endangered Species Act (ESA). In our September 5 meeting, EPA acknowledged that the consultation process should not blur the lines between the statutory authorities of the ESA and the CWA, and, further, that no new regulatory authority is envisioned for the Services.

It is our understanding, however, that EPA has added provisions in the draft final rule requiring permittees to submit permit application materials directly to the Services, and to coordinate directly with the Services for purposes of determining whether any more stringent impingement and entrainment control requirements are warranted at individual facilities. The provisions reportedly require States to impose any more stringent requirements deemed necessary by the Services.

However, EPA should remove from the rule any provisions inserting the Services directly into the § 316(b) compliance determination process. Neither the CWA nor the ESA provides the Services with any direct role in the National Pollutant Discharge Elimination System (NPDES) permitting process. Although the Services, like other federal and state agencies, are entitled to comment on draft permits, neither statute gives them any role in setting or implementing § 316(b) or determining NPDES permit provisions. The Services have ample authority to protect their interests in permit-based § 316(b) implementation by following customary procedures under the CWA and by using their enforcement authorities. Nothing further is authorized or required.

Low Capacity Utilization Units

EPA has recognized in other regulations that some low capacity utilization units (often peakers) are needed for grid reliability and local load balancing needs, and that such units are unable to economically bear the same compliance costs as baseload and other higher capacity units. Given how infrequently such facilities operate, there is little risk that any short-term impact from such units would have a material and adverse long-term impact on the environment. Therefore, EPA should specify a capacity factor or flow rate below which the final rule's requirements will not

apply, thus recognizing the limitations of these facilities to cost-effectively install impingement and entrainment controls.

EPA should adopt a provision similar to that found in the Mercury and Air Toxics Standards (MATS) rule, which provides a limited use subcategory for certain facilities with an annual capacity factor limit of no more than 8 percent measured over a 24-month block. Alternatively, a flow rate limit of approximately 15 percent of the maximum possible withdrawal volume on an annual basis could be used. It is vital that such a provision apply to units operated for grid reliability reasons, such as units dispatched to meet seasonal peak demand and situations where fuel flexibility is necessary to offset supply restrictions in a specific geographic region. Limiting such a provision to only units used for emergency purposes would not adequately address the fundamental need to allow peaking units to continue to operate.

Again, we thank you for your continued focus on this most important utility issue and for the prior work to address a number of our concerns. We look forward to working with you and your team to satisfactorily address the remaining issues and ensure that EPA promulgates a reasonable and environmentally protective final regulation.

Sincerely,



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cc: The Hon. Robert Perciasepe, EPA