

Postponement of Certain Compliance Dates  
for the Effluent Limitations Guidelines and  
Standards for the Steam Electric Power  
Generating Point Source Category;  
Proposed Rule;

82 Fed. Reg. 26,017 (June 6, 2017)

Docket ID No.  
EPA-HQ-OW-2009-0819

**COMMENTS OF SIERRA CLUB, EARTHJUSTICE, ENVIRONMENTAL INTEGRITY  
PROJECT, CLEAN WATER ACTION, PRAIRIE RIVERS NETWORK, PHYSICIANS  
FOR SOCIAL RESPONSIBILITY, CHESAPEAKE PHYSICIANS FOR SOCIAL  
RESPONSIBILITY, NATURAL RESOURCES DEFENSE COUNCIL, SOUTHERN  
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Submitted electronically via regulations.gov to: EPA-HQ-OW-2009-0819

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## EXECUTIVE SUMMARY

In response to petitions for reconsideration submitted by the Utility Water Act Group and the U.S. Small Business Administration, EPA has proposed to postpone indefinitely the compliance deadlines for its final 2015 rule to limit toxic water pollution from Steam Electric power plants. This rule provides critical and long-overdue protections for our nation's waters, including those used for drinking water, recreation, economic activity such as fishing and tourism, and wildlife. When EPA finalized the 2015 rule in response to a court order, it was over 30 years overdue: these critical protections had not been updated to require treatment of power plant wastewater with affordable, state-of-the-art technology *since 1982*, despite a Clean Water Act requirement that they be reviewed annually and that effluent limitations be updated every five years. Now, the rule has been effective for over 18 months and implementation is finally underway.

EPA should withdraw its proposal to postpone the ELG compliance deadlines. First and foremost, EPA should withdraw the proposal because its issuance would be unlawful:

- EPA lacks legal authority under either the Clean Water Act or the Administrative Procedure Act (“APA”) to alter compliance deadlines for standards lawfully promulgated under 33 U.S.C. § 1311(b)(2). As the D.C. Circuit Court of Appeals has recently reminded the agency, it has no inherent authority to stay regulations, but only the authority granted to it by statute. *Clean Air Council v. Pruitt*, D.C. Cir. No. 17-1145 (Order issued July 3, 2017). EPA cites no statutory authority for the present action because there is none. The Clean Water Act contains no provision for staying regulations pending reconsideration, in contrast to the Clean Air Act, and moreover, requires compliance with BAT standards within three years of promulgation. The APA allows an agency to stay the effective date of a regulation pending judicial review only if the agency can make a satisfactory showing under the four-factor test that applies to preliminary injunctions. Because the proposed stay (1) is expressly pending reconsideration, not judicial review, (2) is proposed long after the effective date of the rule, and (3) the notice makes no showing of any kind regarding the four factors, the APA does not provide authority for EPA's action. As neither the Clean Water Act nor the APA authorize EPA's action here, the agency's proposed action is *ultra vires*.
- EPA must engage in consultation under the Endangered Species Act prior to finalizing a rule that would increase water pollution that EPA's own record shows would adversely affect 75 threatened or endangered species. Because the ELGs are a final, effective rule, the pollution reductions anticipated on a specific timeline established in the rule, must be considered the baseline condition for consultation. As such, EPA must consult with the federal wildlife agencies about the effect of its proposed postponement action to insure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of designated critical habitat.

Even if EPA had authority to postpone the ELG compliance deadlines, which it does not, its action is arbitrary and capricious:

- EPA has failed to provide a reasoned explanation of the advantages and disadvantages of its proposed action. *See Michigan v. EPA*, 135 S. Ct. 2699, 2707 (2015).
- In particular, EPA fails to consider the costs of its proposed postponement in the form of the forgone economic, public health, and environmental benefits that the rule would provide if implemented in the original timeline. The benefits that EPA was able to monetize are over half a billion dollars annually, to which must be added the significant additional benefits that EPA acknowledged it either omitted, underestimated, or was unable to monetize. EPA's failure to consider the public's loss of these benefits violates a basic tenet of reasoned decisionmaking and as such, renders its action arbitrary and capricious.
- EPA has not justified the postponement based on economic harm to the Steam Electric industry. EPA's proposed action rests on a bare assertion that the postponement is needed to avoid "imminent planning and capital expenditures that facilities incurring costs under the Rule will need to undertake." 82 Fed. Reg. at 26,018. In fact, the estimated costs to the industry of complying with these regulations, as reported on their SEC Form 10-Ks, as a percentage of company revenue, is significantly less than one percent. Moreover, many companies are already delaying incurring ELG compliance costs for one or more years as a result of extended compliance timelines or preliminary determinations regarding continued operation of the facility. Many facilities that are already undertaking bottom ash conversions or FGD wastewater treatment systems are doing so for compliance with other state or federal regulations; these costs would not be avoided by this postponement. In short, the purported costs that would be avoided through this postponement are minimal and do not justify depriving the public of the benefits of the rule.

The two petitions for reconsideration on which this postponement is purportedly based lack merit. As such, they provide no foundation for reconsidering the rule at all, let alone postponing ELG compliance deadlines during the reconsideration period:

- EPA's proposal to stay all ELG compliance deadlines that have not yet passed bears no relationship to the scope of the reconsideration petitions, which present evidence challenging EPA's bottom ash, FGD, and gasification wastewater standards, but not its standards for fly ash and flue gas mercury control wastes. EPA has presented no rational explanation for postponing compliance deadlines that are not even implicated by the pending reconsideration.
- The record supporting the 2015 final rule contained ample evidence to support EPA's BAT determinations, despite EPA's decision to withhold evidence from the public record in order to preserve confidentiality of information provided by both vendors and utilities

(including UWAG's own members). As such, UWAG's assertion that the entire rule must be reconsidered based on the fraction of information redacted from the record is without merit.

- UWAG presents no evidence that EPA's FGD wastewater standards cannot be met at plants that burn sub-bituminous or lignite coal. On this issue, UWAG's case rests entirely on effluent data and a pilot study at a single plant burning a refined form of Powder River Basin Coal, the Pleasant Prairie Power Plant. In a report attached to these comments, Dr. Ranajit Sahu, an engineer with nearly three decades of experience in the field, concludes that the EPRI-funded pilot study of the GE ABMet system at the Pleasant Prairie Power Plant showed promising results during an early stage but was unable to achieve the target selenium levels at scale due to project constraints and inadequate analytical support for the project team. Dr. Sahu also concludes that the Pleasant Prairie plant cannot be viewed as representative of other plants burning sub-bituminous coal due to its admittedly "challenging" FGD wastewater stream and use of refined coal, among other factors.
- EPA's record shows that over 80% of units built in the last 20 years, and over half of all units subject to the rule, employ zero discharge systems for bottom ash disposal. Dry handling or closed loop systems are therefore undeniably technically and economically achievable for the industry as a whole, which is the primary statutory standard on which EPA's BAT determination is to be based. UWAG's and SBA's arguments regarding the quality of EPA's data regarding the precise characteristics of bottom ash transport water, even if they had merit (which they do not), are relevant only to cost-effectiveness, which courts have repeatedly held may not be used as a basis for EPA's BAT determination. Finally, the record does not support exempting units smaller than 400 MW from the bottom ash transport water requirements. EPA's cost analysis shows that these units do not experience materially greater costs for retrofitting with zero discharge systems and SBA has provided no new evidence to justify EPA reconsidering its 2015 determination to establish zero-discharge systems as BAT for all units larger than 50 MW.
- UWAG's suggestion that EPA must redo its cost analysis because of impending and uncertain changes to the Coal Combustion Residuals rule and Clean Power Plan has been repeatedly rejected by courts because it is a recipe for perpetual analysis and delay in agency action—perhaps exactly what UWAG intends. Moreover, even if it were legitimate for EPA to reconsider the ELG Rule based on post-promulgation changes to other rules affecting power plants, neither the CPP nor the CCR rule has undergone any final changes that would warrant such a reconsideration.
- Neither Executive Order 13771 nor 13777 supports reconsidering the final ELG Rule, as UWAG and SBA assert. EO Order 13771 is unlawful for several reasons, including that it directs agencies to condition each new regulation on the repeal of two prior regulations, and to offset the costs of new regulations by the avoided cost of repealed or replaced regulations—mandates which do not appear in any statute, and conflict with many

statutes (including the Clean Water Act). EO 13777 does not apply to the ELG Rule, as there is no evidence the rule causes a net loss in jobs, that its costs exceed its benefits, or that it is not based on solid data. Even if both Executive Orders were lawful and applied here, an executive order can never override conflicting statutory provisions, such as the Clean Water Act's requirement that EPA set BAT standards so as to eliminate discharges of pollutants whenever feasible.

- EPA properly determined in 2015 that the final ELGs would not have a significant economic impact on a substantial number of small entities. Specifically, EPA found that only 6 out of nearly 200 small entities affected by the rule would incur costs that exceeded 1% of revenue, and only one of those would incur costs that exceeded 3% of revenue. SBA has provided no new evidence that requires EPA to revisit this determination.

The undersigned organizations urge EPA to withdraw its proposed action to postpone the already generous compliance deadlines in the 2015 ELG rule for the reasons set out below. At the outset, we note that the 30 days that EPA allowed for the public to comment on this proposed action is completely inadequate given the scope of what EPA proposes to do, and the degree of public concern about toxic water pollution from coal-fired power plants. To make matters worse, the deadline for this extremely short comment period falls only two days after a major national holiday. Dozens of organizations filed a request for an extension of this comment period weeks ago, which EPA denied.<sup>1</sup> This short comment period has impaired our organizations' ability to gather and submit additional data that would have assisted EPA's ability to make an informed decision in this matter. We urge EPA to allow a comment period of at least 90 days on any proposed action to modify any portion of the 2015 ELG Rule, to ensure that the public has adequate time to review the agency's record and submit informed comments.

#### **I. EPA HAS NO LEGAL AUTHORITY TO CHANGE THE COMPLIANCE DATES AS EPA PROPOSES HERE.**

EPA's proposal is an *ultra vires* action that has no legal basis. As a federal administrative agency, EPA is a creature of statute and possesses only the authority which Congress has granted it. *North Carolina v. EPA*, 531 F.3d 896, 922 (D.C. Cir. 2008) ("Lest EPA forget, it is 'a creature of statute,' and has 'only those authorities conferred upon it by Congress'; 'if there is no statute conferring authority, a federal agency has none.'" (quoting *Michigan v. EPA*, 268 F.3d 1075, 1081 (D.C. Cir. 2001))). Less than a week before these comments were filed, the D.C. Circuit issued an opinion forcefully restating precedent that agencies have no inherent authority to issue a stay of a rule pending reconsideration, but rather only the authority granted to them by Congress under statute. *Clean Air Council v. Pruitt*, D.C. Cir. No. 17-1145 (Order issued July 3, 2017) (per curiam) (setting aside stay of new source performance standards for methane emitted from oil and gas production facilities where the Clean Air Act did not provide authority for the agency's action).

While EPA has authority, if appropriate findings are made, to reconsider the BAT determinations in the ELG Rule, EPA's proposal is premised on EPA having the authority to alter the BAT compliance dates before reconsidering the BAT determinations themselves. EPA has no such authority.

Here, neither the Clean Water Act, the Administrative Procedure Act, nor any other law authorizes EPA's action. Lacking any legal authority for the proposal, EPA must withdraw the proposed rule.

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<sup>1</sup> Request for a 60-day Extension of Comment Period and for a Public Hearing by Sierra Club, *et al.*, (June 14, 2017), Docket ID No. EPA-HQ-OW-2009-0819-6501.

### **A. The Clean Water Act Prohibits EPA From Establishing BAT Deadlines Longer Than Three Years After Issuance of BAT Standards.**

The Clean Water Act does not authorize EPA to postpone BAT compliance deadlines at all, given that the statute does not contain any provisions concerning reconsideration or postponement of deadlines. *Compare* 33 U.S.C. § 1311 (containing no provision regarding postponement of compliance deadlines pending reconsideration) *with* 42 U.S.C. § 7607(d)(7)(B) (authorizing EPA to postpone the effectiveness of a Clean Air Act rule for up to 90 days when EPA grants reconsideration). Even if EPA could, in some circumstances, alter the compliance deadlines in a final BAT rule, the statute expressly forbids BAT compliance dates beyond three years—which is what EPA proposes here.

The Clean Water Act states that compliance with BAT limitations shall be “as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated . . . , and in no case later than March 31, 1989.” 33 U.S.C. § 1311(b)(2)(C), (D). EPA must “provid[e] guidelines for effluent limitations, and, at least annually thereafter, revise, if appropriate, such regulations.” *Id.* § 1314(b). The most natural reading of 33 U.S.C. § 1311(b)(2)(C)-(D) is that, for ELGs issued after March 31, 1989, the maximum compliance deadline is three years after issuance of the ELGs. Interpreting the statute as imposing a deadline for compliance with only the initial promulgation of ELGs is contrary to the goals of the Clean Water Act and would allow industry to evade timely compliance with regulations that EPA must review and revise at regular intervals to ensure maximum reductions in effluent discharges on a mandatory schedule. *See, e.g., McCarthy v. Bronson*, 500 U.S. 136, 139 (1991) (“In ascertaining the plain meaning of [a] statute, the court must look to the particular statutory language at issue, as well as the language and design of the statute as a whole.” (quoting *K Mart Corp. v. Cartier, Inc.*, 486 U.S. 281, 291 (1988))).

Congress passed the Clean Water Act in 1972 “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a). The Act protects all waters of the United States, including surface waters that supply drinking water, support fish and wildlife, and provide aesthetic and recreational opportunities for current and future generations of Americans. The Clean Water Act’s goal is to eliminate all discharges of pollution into navigable waters. *Id.* § 1251(a)(1). To achieve this goal, the Act requires that EPA set effluent limits based on BAT for pollutants including toxic metals. *See id.* §§ 1311(b)(2)(A)-(F), 1314(a)(4). To facilitate the adoption and revision of effluent limitations, the Act also requires that EPA develop and publish ELGs that characterize the effluent discharges from a given industry, identify the level of pollution control that is possible in light of available technologies, and specify the relevant factors for determining what constitutes BAT. *Id.* § 1314(b).

To ensure that governing regulations reflect advances in control technology, the Clean Water Act requires EPA to review and, if appropriate, revise these effluent limitations and underlying ELGs at regular intervals. *See id.* §§ 1311(d), 1314(b). Section 301(d) of the Clean Water Act requires that all effluent limitations “*shall* be reviewed at least every five years, and, if appropriate, revised.” *Id.* § 1311(d) (emphasis added). Similarly, with respect to ELGs, section 304(b) of Clean Water Act requires that “the Administrator *shall* . . . publish . . . regulations,

providing guidelines for effluent limitations, and, at least annually thereafter, revise, if appropriate, such regulations.” *Id.* § 1314(b) (emphasis added).

Furthermore, courts look to the “title of a statute or section [to] aid in resolving an ambiguity in the legislation’s text.” *Immigration & Naturalization Serv. v. Nat’l Center for Immigrants’ Rights*, 502 U.S. 183, 189-90 (1991) (citing *Mead Corp. v. Tilley*, 490 U.S. 714, 723 (1989)). The title of section 301(b) is “Timetable for achievement of objectives,” and the first sentence of section 301(b) begins “[i]n order to carry out the objective of this chapter...” (i.e. Federal Water Pollution Control Act). 33 U.S.C. § 1311(b). The title of section 301(b) is further support that Congress intended the compliance timetables to further all CWA objectives, including reductions in pollution discharges through the mandatory revision of, and compliance with, ELGs and effluent limitations at regular intervals. *Id.* § 1311(d).

The legislative history of the Act supports this interpretation as well. The Conference Report accompanying the Water Quality Act Amendments of 1987 explained the Congressional intent for ELGs promulgated for an industry group or subcategory after the deadline of March 31, 1989. The conferees stated that if the dischargers in an entire category were unable to meet the March 31, 1989 deadline as a result of EPA’s failure to promulgate effluent limitations in time to allow compliance by the deadline, EPA would specify a schedule of compliance as expeditiously as practicable, but not later than three years after the date of permit issuance. H.R. Conf. Rep. No. 1004, 99th Cong., 2d Sess. 115 (1986).

In short, Congress’ goal in enacting the Clean Water Act was to produce progressively cleaner waters—and ultimately eliminate all pollution—through the ratcheting down of effluent limits over time as technology advances. 33 U.S.C. § 1251(a)(1), (2), (6). Mandatory revisions to standards would be meaningless without mandatory requirements for compliance with those standards within a definite timeframe. An interpretation of 33 U.S.C. § 1311(b)(2)(C)-(D) that does not impose a three-year outer bound on compliance with revisions of these limits is contrary to the language and design of the Clean Water Act. *See Rybachek v. EPA*, 904 F.2d 1276, 1300 (9th Cir. 1990) (holding that EPA lacked the authority to extend the March 31, 1989 deadline for complying with the original BAT standards); *Chemical Mfrs. Ass’n v. EPA*, 870 F.2d 177, 242 (5th Cir. 1989) (rejecting industry’s arguments that the CWA provides three years at a minimum, and usually longer, for compliance with BAT standards).<sup>2</sup>

Here, EPA issued BAT determinations for the steam electric power plant industry on November 3, 2015. Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, 80 Fed. Reg. 67,838. Three years from issuance of the BAT determinations is November 3, 2018. EPA’s proposal would set compliance deadlines for BAT which far exceed the three-year deadline in the Clean Water Act. Indeed, *any* postponement of the BAT deadlines in the final ELG Rule would be unlawful, because the current deadlines

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<sup>2</sup> In interpreting a provision of the Clean Air Act containing a similar three-year compliance deadline, the D.C. Circuit has held that EPA lacks authority to extend the deadline set by Congress. *See Nat. Res. Def. Council v. EPA*, 489 F.3d 1364, 1373-74 (D.C. Cir. 2007) (holding that EPA lacked authority under the Clean Air Act to extend compliance deadlines beyond the three year maximum in the statute).

already go beyond what the statute allows in permitting states to set compliance deadlines more than three years after the issuance of the BAT standards. *See* 40 C.F.R. § 423.13(g)(1)(i), (h)(1)(i), (i)(1)(i), (j)(1)(i), (k)(1)(i); *see also* Comments of EIP *et al.* at 110-13 (Sept. 2013), Docket ID No. EPA-HQ-OW-2009-0819-4684. Having already established such a generous compliance schedule, EPA has no authority to postpone those compliance deadlines indefinitely in the face of the explicit mandate in Section 301 of the Act that BAT-based effluent limitations must be complied with as expeditiously as practicable, and in any event no later than three years after they are promulgated. Therefore, EPA’s proposal to delay the compliance deadlines is unlawful, and should be withdrawn.

## **B. The Administrative Procedure Act Does Not Authorize a Postponement of the ELG Rule.**

Many of the groups submitting these comments filed a lawsuit in the District Court for the District of Columbia Circuit challenging EPA’s stay of the ELG Rule under the Administrative Procedure Act (“APA”). *See* Complaint, *Clean Water Action v. Pruitt*, No. 17-cv-00817-KBJ, ECF Doc. 1 (D.D.C. Complaint filed May 3, 2017). As we explained in our complaint and summary judgment brief, which we incorporate by reference and attach here as Exhibits 1 and 2, the APA does not authorize EPA to postpone the ELG Rule’s compliance dates. To stay a rule under the APA, 5 U.S.C. § 705, an agency must find that the four factors for a preliminary injunction have been met. Pls.’ Memo. of Points and Authorities in Support of Motion for Summary Judgment at 19-24, *Clean Water Action v. Pruitt*, No. 17-cv-00817-KBJ, ECF Doc. 20 (D.D.C. Motion filed June 14, 2017), Attached as Exhibit 2. EPA has not done that here, nor could it. *Id.* at 24. That distinction is essential since unlike a judicial proceeding where the parties may seek expedited consideration, EPA’s timeline for reconsideration is subject to considerable discretion, effectively allowing the agency to indefinitely eliminate the protections provided by the original ELG Rule by slow-walking its reconsideration process. Finally, the APA authorizes a stay of an agency rule pending judicial review, not pending reconsideration, which is what EPA seeks to do here. *Id.* at 25-28. And the APA allows an agency to stay the effective date of a rule before the effective date has passed, not after. *Id.* at 28-30. As the effective date of the ELG Rule has long since passed, the APA does not permit EPA to postpone the effective date of the ELG Rule. *Id.*

In short, the APA, 5 U.S.C. § 705, does not authorize EPA’s proposal to postpone the ELG Rule’s compliance dates.<sup>3</sup>

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<sup>3</sup> Utility Water Act Group’s (“UWAG”) petition for reconsideration cites a Clean Air Act rule, 69 Fed. Reg. 51,184 (Aug. 18, 2004), for the proposition that EPA has authority to amend the BAT compliance dates. The CAA rule in question was never challenged in litigation, and thus its legality was never adjudicated. Moreover, in the CAA rule that UWAG cites, EPA had already proposed to substantively amend the underlying standards, by delisting certain industrial categories, when it proposed to change the compliance dates for those categories. But EPA is taking the opposite approach here: EPA proposes to postpone the compliance dates before it has even begun to consider whether changes to the underlying BAT standards are appropriate.

## II. THE ENDANGERED SPECIES ACT REQUIRES EPA TO CONSULT WITH THE FISH AND WILDLIFE SERVICE AND THE NATIONAL MARINE FISHERIES SERVICE BEFORE FINALIZING ANY RULE.

Prior to issuing a final rule to postpone the ELG compliance dates, EPA must consult with the Fish and Wildlife Service (“FWS”) and the National Marine Fisheries Service (“NMFS”) under Section 7 of the Endangered Species Act (“ESA”) regarding the effects on threatened and endangered species of postponing implementation of the ELG Rule. Under the ESA, federal agencies must, in consultation with FWS and/or NMFS, insure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of designated critical habitat. 16 U.S.C. § 1536(a)(2).

An agency proposing an action must first determine whether the action “may affect” species listed as threatened or endangered under the ESA. 50 C.F.R. § 402.14. “The ‘may affect’ threshold for triggering the consultation duty under section 7(a)(2) is low.” *Nat’l Parks Conservation Ass’n v. Jewell*, 62 F. Supp. 3d 7, 12-13 (D.D.C. 2014); *see also Karuk Tribe of Cal. v. U.S. Forest Serv.*, 681 F.3d 1006, 1027 (9th Cir. 2012) (en banc) (“[A]ctions that have any chance of affecting listed species or critical habitat—even if it is later determined that the actions are ‘not likely’ to do so—require at least some consultation under the ESA.”).

If the action “may affect” listed species or designated critical habitat, the action agency must pursue either formal or informal consultation. Informal consultation is “an optional process that includes all discussions, correspondence, etc., between the Service and the Federal agency . . . designed to assist the [action agency] in determining whether formal consultation . . . is required.” 50 C.F.R. § 402.13(a). “If during informal consultation it is determined by the [action agency], with the written concurrence of the Service, that the action is not likely to adversely affect listed species or critical habitat, the consultation process is terminated, and no further action is necessary.” *Id. Am. Bird Conservancy, Inc. v. FCC*, 516 F.3d 1027, 1034 (D.C. Cir. 2008) (“If an agency determines that an action “may affect” endangered or threatened species or critical habitats, the agency must initiate formal consultation with the [FWS], at least unless preparation of a biological assessment or participation in informal consultation indicates that a proposed action is ‘not likely’ to have an adverse affect.”).

If an action agency chooses to forego informal consultation, or the informal consultation concludes that the proposed action is likely to adversely affect listed species or critical habitat, the agency must participate in “formal consultation.” 50 C.F.R. § 402.14. Formal consultation entails the formulation of a Biological Opinion (“BiOp”) by either FWS or NMFS. In a BiOp, the FWS or NMFS determines whether the proposed action, taken together with all other relevant impacts on the species – including both those included in the environmental baseline as well as cumulative impacts – is likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat. *Id.* § 402.14(h)(3).<sup>4</sup>

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<sup>4</sup> If it is determined that a “take,” 16 U.S.C. 1538(a)(1)(B), 16 U.S.C. 1532(19), 50 C.F.R. § 17.3, may occur incidental to the proposed action, but that the action and associated incidental

Here, postponing implementation of the ELG Rule is likely to adversely affect, and at a bare minimum may affect, threatened and endangered species, and therefore EPA must initiate informal or formal consultation under ESA Section 7. Under the ESA's implementing regulations, the action area is defined as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." 50 C.F.R. § 402.02. When developing the ELG Rule, "EPA identified 138 threatened and endangered species whose habitats overlap with, or are located within, an 'affected' surface water under baseline conditions." EPA, Environmental Assessment for the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, Doc. No. EPA-821-R-15-006, Docket ID No. EPA-HQ-OW-2009-0819-6427, at 3-45 ("Final Environmental Assessment"). Of the species with habitats that overlap with waters to which power plants discharge coal ash wastewater, "EPA classified 54 percent of the species (75 of 138 species) . . . as highly vulnerable to changes in water quality." *Id.* at 3-46. These highly vulnerable species inhabit 145 different stream reaches. *Id.*

EPA has acknowledged that many chemicals present in coal ash wastewaters can harm, and even kill, fish and other wildlife. *E.g.*, EPA, Benefit and Cost Analysis for the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, Doc. No. EPA-821-R-15-005, Docket ID No. EPA-HQ-OW-2009-0819-5856, at 5-1 ("Final Benefit & Cost Analysis"). "[S]team electric power plant discharges may either lengthen recovery time, or hasten the demise of these [listed] species. For this reason, the final ELGs may have a significant impact on T&E [threatened and endangered] species populations." *Id.* EPA concluded that 138 threatened or endangered species would benefit from the improvement in water quality caused by the ELG Rule. *Id.* at 5-3, Table 5-1. EPA found that 75 highly vulnerable threatened or endangered species would benefit from the ELG Rule's reduction in water pollution, *id.*; EPA then narrowed that list down to 15 species, *id.* at 5-4, and, finally, narrowed the list even further, to four species for which EPA could quantify the monetary benefits attributable to the ELG Rule improving the recovery trajectory of the species, *id.*

Given that the ELG Rule is a final, legally effective rule, the baseline<sup>5</sup> for ESA purposes includes the improvements in water quality that would be expected under the ELG Rule, on the

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take will not violate the Section 7 jeopardy standard, then FWS or NMFS includes an incidental take statement with the BiOp. 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i)(1)(i-v). The incidental take statement specifies the predicted impact to the species, the reasonable and prudent measures that FWS or NMFS determines necessary to minimize take, and the terms and conditions required to implement the reasonable and prudent measures. *Id.* If the action complies with the terms and conditions of the incidental take statement, ESA Section 7(o)(2) exempts the incidental taking from the prohibitions contained in ESA Section 9. 16 U.S.C. § 1536(o)(2).

<sup>5</sup> Under the ESA's implementing regulations, the "environmental baseline" is defined to include "the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process." 50 C.F.R. § 402.02.

timetable included in the final rule. *See generally Columbia Snake River Irrigators Ass'n v. Nat'l Wildlife Fed'n*, 2007 WL 1073785, \*1 (9th Cir. 2007 Apr. 6, 2007) (affirming the district court's decision that the NMFS properly included reasonably foreseeable future actions in the environmental baseline when preparing a Biological Opinion); *Defs. of Wildlife v. Babbitt*, 130 F. Supp. 2d 121, 127 (D.D.C. 2001) (finding that the environmental baseline for a Biological Opinion is required to set forth all of the federal activities in the action area that have past, present, or future anticipated impact on affected species). EPA's proposed action would postpone the compliance deadlines in the ELG Rule, thereby increasing the amount of time when coal ash wastewater would be discharged relative to the baseline. Put differently, the proposed postponement of compliance deadlines would delay the improvements in the take and recovery of listed species that EPA found the ELG Rule would achieve, *see* Final Benefit & Cost Analysis at 5-3 to 5-4.

In sum, EPA's proposal would increase water pollution that harms listed species, and thus the proposed action may affect listed species within the meaning of 50 C.F.R. § 402.14. As a result, EPA must initiate consultation with FWS and NMFS under ESA Section 7 prior to finalizing any rule. *See generally Nat'l Parks Conservation Ass'n v. Jewell*, 62 F. Supp. 3d at 17 (finding that a 2008 rule revising standards for coal mining near streams may affect listed species where there was "clear evidence that habitats within stream buffer zones are home to threatened and endangered species and that mining operations affect the environment, water quality, and all living biota").<sup>6</sup>

### **III. IT IS UNREASONABLE TO DELAY THE RULE, GIVEN THE SIGNIFICANT BENEFITS.**

#### **A. EPA Must Consider the Costs of Postponing Compliance with the ELGs.**

In proposing to postpone implementation of the ELGs, EPA failed even to mention the benefits of the rule, despite an extensive record showing that this rule will result in at least \$451-\$566 million in annual benefits.<sup>7</sup> Rather, EPA's notice of postponement is concerned only with the costs that power plant operators may incur during reconsideration, and therefore represents a

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<sup>6</sup> EPA has initiated consultation for other rules governing power plants' impacts on waterways, such as the cooling water intake rule. *See* Endangered Species Act Section 7 Consultation Programmatic Biological Opinion on the U.S. Environmental Protection Agency's Issuance and Implementation of the Final Regulations Section 316(b) of the Clean Water Act at 21-28 (May 19, 2014), Docket ID No. EPA-HQ-OW-2008-0667-4150. While the plants subject to the 316(b) Rule and the ELG Rule are not identical, there is substantial overlap. Moreover, many, if not most, of the plants that will have to make operational changes to comply with the ELG Rule are also subject to the 316(b) Rule. Given the overlap between the facilities subject to the two rules, there is every reason to believe that the Services' conclusion that the 316(b) Rule may affect listed species holds true for the proposed delay in implementing the ELG Rule. While the 316(b) Rule would impact species primarily by allowing continued impingement or entrainment, delaying the ELG Rule would impact listed species by allowing continued discharge of conventional and toxic pollutants without BAT-level treatment.

<sup>7</sup> Final Benefit & Cost Analysis at 11-1 (using a 3% discount rate).

lopsided and incomplete assessment of the implications of this agency action. EPA's failure to consider any of the disadvantages of the ELG postponement violates a basic tenet of reasoned decisionmaking, that an agency must provide a reasoned explanation of its action that considers both the advantages and disadvantages of issuing a rule. *See Michigan v. EPA*, 135 S. Ct. 2699, 2707 (2015). If EPA were to finalize the proposed rule without fully considering both the benefits and the costs of its action, the action would be arbitrary and capricious, because the agency would have "entirely failed to consider an important aspect of the problem." *Motor Vehicle Mfrs.' Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

Viewed another way, EPA's failure to consider the forgone benefits of a rule that has already been in effect for 16 months amounts to a failure to assess the costs of its proposed action. Because the ELGs are final and in effect, delaying the benefits associated with that rule represents costs to the public. *See Sierra Club v. Jackson*, 833 F. Supp. 2d 11, 36 (D.D.C. 2012) (noting the "significant deleterious effects on the environment" that a delay can cause); *see also Davis Cty. Solid Waste Mgmt. v. EPA*, 108 F.3d 1454, 1458 (D.C. Cir. 1997) (describing the impact of substantial emissions resulting from vacating EPA's emissions limits). Forgone benefits are a type of cost that EPA must consider. *See, e.g., State of N.Y. v. Reilly*, 969 F.2d 1147, 1153 (D.C. Cir. 1992) (remanding rule where agency failed to explain how economic benefits of failing to finalize a proposed Clean Air Act standard would justify forgoing its projected air quality benefits); *see also* Office of Mgmt. & Budget, Exec. Office of the President, OMB Circular No. A-4, Regulatory Analysis (Sept. 17, 2003), 2003 WL 24011971, at \*18 (instructing agencies to monetize "forgone benefits" when calculating the costs and benefits of the alternatives under consideration).

In conclusion, the costs (forgone benefits) of postponing the ELG deadlines must be considered alongside the purported (but unquantified) benefits of the proposed postponement (in the form of avoided expenditures by power plant operators). As described below, the benefits of the ELG Rule are so significant and long-overdue that EPA must withdraw its proposed postponement of the ELGs.

## **B. EPA Calculated ELG Benefits Worth Over Half a Billion Dollars Annually.**

Given that the power plant industry is the largest single source of toxic water pollution in the country,<sup>8</sup> it is unsurprising that EPA previously found that implementing the ELG Rule would dramatically reduce the amount of lead, mercury, and other toxics dumped into waterbodies.<sup>9</sup> In 2015, EPA further found that by reducing this water pollution, the ELG Rule will prevent cases of cancer, cardiovascular disease, neurological damage, and other diseases, reduce the amount of money spent on environmental cleanups, and improve water quality across the country.<sup>10</sup>

When it issued the ELG Rule, EPA detailed the benefits that would result from reduced pollution to the nation's waters, and the benefits fell into three general categories: "enhanced

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<sup>8</sup> Final Environmental Assessment at 3-15 (Table 3-3).

<sup>9</sup> *Id.* at 7-7 (Table 7-3).

<sup>10</sup> Final Benefit & Cost Analysis at 2-1, 2-3 to 2-7.

surface water quality, reduced health risks, and increased productivity in economic activities that are adversely affected by steam electric discharges.” Final Benefit & Cost Analysis at 2-1. Additional benefits would result from reduced air emissions, reduced water usage, and reduced risks of groundwater contamination from, and catastrophic collapse of, surface impoundments used to contain coal combustion wastes. *Id.* For example, EPA estimated that lower levels of arsenic, mercury, and lead in fish tissue would lead to reduced incidence of cancer, cardiovascular disease, and adverse neurological effects among members of the public. *Id.* at 2-3 to 2-5. EPA assessed benefits that would result from healthier aquatic ecosystems, including expanded commercial and recreational fishing, and those resulting from improved surface water quality such as expanded recreational activities like fishing, hunting, swimming, and boating. *Id.* at 2-5 to 2-7. EPA also quantified economic productivity benefits like reduced impoundment risks and marketability of dry fly ash and bottom ash once it is no longer deposited in the nation’s waters. *Id.* at 2-9 to 2-11.

In total, the benefits that EPA monetized range from \$451 to \$566 million annually. 80 Fed. Reg. at 67,838, 67,841-42. This means that every day the ELG deadlines are stayed costs the public \$1.2 to \$1.5 million dollars, at a minimum. As described below, EPA seriously underestimated the benefits of the ELGs.

### **C. Extensive Benefits of the ELG Rule were Not Monetized.**

EPA’s monetized benefits are only the tip of the iceberg,<sup>11</sup> and by definition fail to capture the intangible benefits to Americans of better health, and lakes and rivers that are safe for swimming and fishing. EPA acknowledged that it was unable to quantify or monetize many significant benefits of the rule, including reduced drinking water treatment costs, reduced incidence of many cancers and non-cancer health effects, reduced groundwater contamination, benefits to commercial fisheries and the tourism industry, and increased availability of surface water for other uses.<sup>12</sup> EPA’s inability to quantify or monetize these benefits often stems from an absence of underlying data (such as dose-response curves) needed to support a rigorous analysis, as well as a lack of resources to develop these underlying data. These comments are not made to criticize EPA’s inability to monetize these benefits, but rather to urge EPA to qualitatively account for these substantial benefits as it weighs whether to postpone ELG compliance deadlines.

Dr. Elizabeth Stanton, an expert environmental economist, has concluded that “EPA’s monetization of these benefits in the final ELG rule is incomplete with the result that the Agency’s estimation of the total social value of these benefits in dollar terms greatly

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<sup>11</sup> Gottlieb, et al., *Selling Our Health Down the River: Why EPA Needs to Finalize the Strongest Rule to Stop Water Pollution from Power Plants* at 11, Docket ID No. EPA-HQ-OW-2009-0819-5557 (June 17, 2015), available at <https://www.regulations.gov/document?D=EPA-HQ-OW-2009-0819-5557>, attached hereto as Exhibit 3 (“Selling Our Health”).

<sup>12</sup> See Final Benefit & Cost Analysis at 2-13 to 2-15 (Table 2-1).

underestimates their actual value to society.”<sup>13</sup> The benefits that EPA was not able to monetize are many and significant, as shown in the following table.<sup>14</sup>

Effect of ELGs	Benefit (Avoided Cost) Category	Analysis Type
<b>Health Impacts</b>		
Reduced exposure to toxins in drinking water	Reduced adverse health effects	Discussed, Value Omitted
Reduced exposure to pollutants from recreational water uses	Reduced adverse health effects	Discussed, Value Omitted
Reduced exposure to bromide	Reduced incidence of cancer	Discussed, Value Omitted
<b>Ecological Conditions and Recreational Use Benefits</b>		
Improved water quality	Reduced sediment contamination	Discussed, Value Omitted
Reduced exposure to impoundments, constructed wetlands	Reduced adverse health impacts to wildlife	Value Omitted
<b>Groundwater Quality Benefits</b>		
Reduced groundwater contamination	Improved groundwater quality	Discussed, Value Omitted
<b>Market and Productivity Benefits</b>		
Improved water quality for drinking and irrigation	Reduced water treatment costs	Discussed, Value Omitted
Improved fisheries yield	Increased commercial fisheries yield	Discussed, Value Omitted
Improved water quality	Benefits to tourism industry	Discussed, Value Omitted
	Increased property values	Discussed, Value Omitted
Reduction in wastewater storage	Increase land availability for redevelopment	Value Omitted
Avoided administrative costs	Avoided BPJ determinations and TMDL administration	Value Omitted
Reduction in illegal discharges and pollution	Avoided cost of litigation	Value Omitted
<b>Air-Related Benefits</b>		
Reduced air emissions from impoundments' parasitic load	Reduced mortality and morbidity from air pollution	Value Omitted
Reduced air emissions from dry handling of ash	Reduced mortality and morbidity from air pollution	Value Omitted
<b>Water Withdrawals Impacts</b>		
	Reduced vulnerability to drought	Discussed, Value Omitted

<sup>13</sup> Declaration of Elizabeth A. Stanton ¶ 10, Ex. 19 to Plaintiffs’ Motion for Summary Judgment, *Clean Water Action v. Pruitt*, No. 17-cv-00817-KBJ, ECF Doc. 20 (D.D.C. Motion filed June 14, 2017), attached hereto as Exhibit 4 (“Stanton Declaration”).

<sup>14</sup> *Id.* ¶ 14.

Several of the undersigned organizations produced a report shortly before the final ELG rule was issued further describing some of the benefits that EPA had failed to monetize, or in several cases, had underestimated. That report, entitled *Selling our Health Down the River: Why EPA Needs to Finalize the Strongest Rule to Stop Water Pollution from Power Plants*, details several significant ways in which EPA's analysis fails to capture the spectrum of benefits, including very common-sense benefits, like avoided harm to children from mercury in fish that they eat. For example:

In regard to fish consumption, the analysis only looked at two of many health risks, and underestimated even the two that it did analyze. The analysis of the cancer risks associated with contaminated fish only looked at one carcinogen, arsenic, and for arsenic EPA used an outdated cancer potency estimate. EPA's analysis of the neurological effects of contaminated fish only looked at two neurotoxins and failed to account for exposure after age seven (for lead) or after birth (for mercury). Even the value of reduced neurological damage in young children exposed to lead and mercury was underestimated, as EPA admits (see below). For all of these reasons, the true public health benefit of the rule is likely to be many times greater than the value reflected in EPA's Benefit-Cost Analysis.<sup>15</sup>

Another substantial benefit that EPA failed to account for is the health benefit to people living downstream from power plants, where most power plant pollution ultimately ends up. EPA did calculate a monetary value for these downstream benefits, in a modeling exercise that can be found in the Benefit-Cost Analysis for the proposed rule.<sup>16</sup> However, this value was omitted from the comprehensive benefits estimate at the proposal stage,<sup>17</sup> and appears to have been omitted from the final Benefit-Cost Analysis as well. The unaccounted-for downstream health benefit alone is worth between \$230 and \$330 million each year, according to EPA.<sup>18</sup>

In some cases, EPA undervalued benefits that it was able to monetize. For example, EPA used an outdated cancer potency factor for arsenic of 1.5 cases per mg/kg-d, rather than 25.7 cases per mg/kg-d, which is the figure supported by EPA's proposed revision to the cancer assessment for arsenic.<sup>19</sup> As a result, EPA's estimate of the benefit of eliminating cancers

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<sup>15</sup> *Id.* at 11.

<sup>16</sup> EPA, Benefit and Cost Analysis for the Proposed Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category at C-1 to C-3 (Apr. 2013), Docket No. EPA-HQ-OW-2009-0819-2238 ("Proposed Benefit-Cost Analysis").

<sup>17</sup> *Id.* at 3-17.

<sup>18</sup> *Id.* at C-1 to C-3 (assuming a 3% discount rate); *Selling Our Health* at 12; Stanton Declaration ¶ 16.

<sup>19</sup> Proposed Benefit-Cost Analysis at 3-6; *see also* EPA, Draft Toxicological Review of Inorganic Arsenic in Support of Summary Information on the Integrated Risk Information System (IRIS) (Feb. 2010), EPA/635/R-10/001, at 131-32.

caused by eating arsenic-contaminated fish is \$2.6–\$2.7 million per year less than it would be if the approved slope factor reflected the most recent science.<sup>20</sup>

That report also highlighted the fact that EPA failed to monetize any benefits from improved drinking water quality, based on the short-sighted premise that “public drinking water supplies are already treated for pollutants that pose human health risks.”<sup>21</sup> EPA’s decision not to quantify human health benefits from reduced arsenic in drinking water, based on drinking water utilities’ responsibility for treating such water to meet regulatory standards, overlooks the fact that the current rules to protect us from over-exposure to arsenic in drinking water are inadequate, a fact well known to EPA. As explained by Barbara Gottlieb of Physicians for Social Responsibility:<sup>22</sup>

Drinking water utilities are required to reduce arsenic to a level below the Maximum Contaminant Level (MCL) of 10 micrograms per liter. According to EPA's Integrated Risk Information System, the drinking water unit risk for arsenic is 0.00005 per microgram per liter. This means that the lifetime cancer risk associated with drinking water at the Maximum Contaminant Level (MCL) of 10 micrograms per liter is 1 in 2,000. This would ordinarily be considered an "unacceptable" level of risk, but the MCL was based in part on the cost and feasibility of drinking water treatment options. Since arsenic is a carcinogen, it presents a cancer risk that is proportional to dose, even at low levels of exposure. As a result, surface water contaminated by power plants discharges can present a substantial cancer risk, even if treated to existing standards for drinking water.

In addition, EPA’s Maximum Contaminant Levels only apply to a subset of the pollutants associated with coal ash: “EPA has not set MCLs for many of the most health-threatening pollutants in power plant discharges. For example, drinking water utilities are not required to remove manganese, which as discussed above can cause damage to the developing nervous system, and which power plants discharge at a rate of over 14 million pounds each year.”<sup>23</sup> Furthermore, “MCLs do not account for the combined risk of multiple pollutants that share a common mechanism of toxicity, affect the same body organ or system, or result in the same health endpoint. . . . [P]ower plants discharge several cancer-causing pollutants and several neurotoxins, yet cumulative effects are not considered.”<sup>24</sup>

On top of these concerns, EPA’s conclusion that drinking water authorities’ regulatory obligations relieve concerns that humans will be adversely affected by power plant pollution ignores that public water utilities do not always meet the MCLs. EPA’s own data show that in fiscal year 2016, nearly 27 million people were served by community water systems with

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<sup>20</sup> Selling Our Health at 13.

<sup>21</sup> *Id.* at 11 (quoting Proposed Benefit-Cost Analysis at 2-4).

<sup>22</sup> Declaration of Barbara Gottlieb ¶ 9, Ex. 20 to Plaintiffs’ Motion for Summary Judgment, *Clean Water Action v. Pruitt*, No. 17-cv-00817-KBJ, ECF Doc. 20 (D.D.C. Motion filed June 14, 2017), attached hereto as Exhibit 5 (“Gottlieb Declaration”).

<sup>23</sup> Selling Our Health at 11.

<sup>24</sup> *Id.* at 12.

violations of MCLs or other standards, including over 360,000 people served by systems in violation of arsenic standards.<sup>25</sup> Lower levels of pollutants in drinking water sources would decrease the number of MCL violations. The bottom line is that because the MCLs are not always sufficiently protective of human health, and because public water systems do not always comply with the MCLs, reductions in arsenic and other pollutants in the source of drinking water will have significant human health benefits notwithstanding public water systems' efforts to meet the MCLs. As shown by the crisis that has unfolded in Flint, Michigan over the last several years, it is often the most vulnerable populations that are served by public water utilities unable to ensure safe drinking water.

As Dr. Elizabeth Stanton concludes, “[a]ny delay in implementing the ELGs will result in harm to the public. When implemented, the ELGs will have the immediate impact of reducing toxins in water and food consumed in the United States. Delayed implementation of ELGs exposes human communities and natural environments to immediate, serious harm.”<sup>26</sup> Given the extensive evidence that EPA itself produced on the benefits of implementing the ELG Rule, as well as additional evidence in the record, it is arbitrary and capricious for EPA to postpone the ELGs. By failing to give any consideration to the disadvantages of staying the ELG Rule, EPA ran afoul of the principle that “reasonable regulation ordinarily requires paying attention to the advantages *and* the disadvantages of agency decisions,” *Michigan v. EPA*, 135 S. Ct. at 2707 (emphasis in original), and EPA failed to consider an important aspect of whether to issue a stay, *Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 43. As a result, EPA must withdraw the ELG postponement.

#### **IV. EPA HAS NOT JUSTIFIED THE NEED FOR THE STAY TO AVOID ECONOMIC HARM TO THE INDUSTRY.**

EPA’s proposal to postpone the ELG compliance dates is based on the bare assertion that “[i]n light of these imminent planning and capital expenditures that facilities incurring costs under the Rule will need to undertake in order to meet the compliance deadlines for the new, more stringent limitations and standards in the Rule . . . the Agency views that it is appropriate to postpone the compliance dates of the Rule that have not yet passed.” 82 Fed. Reg. 26,017, 26,018 (June 6, 2017). The proposed rule does not make any effort to quantify the “imminent planning and capital expenditures” that facilities will incur during the time EPA is reconsidering the ELGs. Nor does EPA trouble itself to cite any evidence of the magnitude of such costs aside from the Utility Water Act Group’s (“UWAG”) petition for reconsideration. EPA appears to have accepted UWAG’s assertions regarding the “devastating” economic impacts of the ELG rule at face value,<sup>27</sup> without any effort to investigate the issue further.

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<sup>25</sup> EPA, Report on the Environment, Drinking Water (2017). U.S. population served by community water systems with reported violations of EPA health-based standards, by type of violation, fiscal year 2016, available at <https://cfpub.epa.gov/roe/indicator.cfm?i=45#3>.

<sup>26</sup> Stanton Declaration ¶ 10.

<sup>27</sup> UWAG Petition for Reconsideration of EPA’s “Effluent Limitation Guidelines and Standards for the Steam Electric Power Generating Point Source Category; Final Rule,” 80 Fed. Reg. 67,838 (Nov. 3, 2015) (Mar. 24, 2017) at 65, Docket ID No. EPA-HQ-OW-2009-0819-6478,

UWAG’s evidence for the costs of the ELG rule comes primarily from the Securities and Exchange Commission’s 10-K filings by several utilities with very large fleets of steam electric power plants covered by this rule. For the specific companies cited by UWAG, those costs are miniscule when viewed in light of their annual revenue.

EPA also has not examined the magnitude of costs that power plants will experience during what is expected to be a brief period of reconsideration. In federal court filings, EPA has stated that it plans to make a significant announcement, presumably relating to reconsideration, on August 25, 2017.<sup>28</sup> Through the remainder of this calendar year, most power plants that have publicly disclosed schedules for their ELG compliance efforts are engaged in planning studies and budget evaluations. Detailed engineering and procurement does not begin until well into 2018 or even later for most facilities.

EPA’s perceived need to postpone the compliance deadlines ignores that the majority of power plants are not spending significant capital now to comply with the ELG Rule. Moreover, those plants that are moving forward with capital projects now to comply with the rule for one or more wastestreams are typically doing so because the plants were already planning to undertake the needed treatment upgrades, usually as a result of state law or water-quality requirements.

#### **A. Utilities Report Low Costs for ELG Compliance**

EPA’s Regulatory Impact Analysis considered the forecasted costs of the ELGs as a portion of these companies’ annual revenues.<sup>29</sup> We believe EPA’s own analysis in the Final Regulatory Impact Analysis showing minimal impact on revenues and negligible retirement of units as a result of ELG costs remains highly relevant to whether near-term compliance costs justify delaying these public health protections. UWAG’s petition for reconsideration cites forecasted ELG compliance costs for three publicly traded companies: NRG, Dynegy and American Electric Power as well as City Utilities of Springfield, a municipal utility.<sup>30</sup> UWAG fails to put these costs in the context of the company’s overall revenues and expenses, however, and that context is incredibly significant. Dr. Elizabeth Stanton, an expert environmental economist, determined that the “ELG cost estimates presented as evidence by UWAG amount to

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available at <https://www.epa.gov/aboutepa/uwag-petition-reconsider-effluent-limitations-guidelines-and-standards-steam-electric-power> (“UWAG Petition”).

<sup>28</sup> EPA’s Motion to Dismiss or Transfer or, in the Alternative, to Stay All Proceedings, and Memo. in Support at 17-18, *Clean Water Action v. Pruitt*, No. 17-cv-00817-KBJ, ECF Doc. 18 (D.D.C. Motion filed June 13, 2017), attached hereto as Exhibit 6. (seeking stay until August 25, 2017, “by which time EPA anticipates that the scope of any agency rulemaking to revise the ELG Rule and the potential impact on proceedings in the Fifth Circuit . . . may be better known”).

<sup>29</sup> EPA, Regulatory Impact Analysis for the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category Final Regulatory Impact Assessment (Sept. 2015) at 4-1 to 4-12, Doc. No. EPA-821-R-15-004, Docket ID No. EPA-HQ-OW-2009-0819-5849 (“Final Regulatory Impact Analysis”).

<sup>30</sup> UWAG Petition at 67.

just 0.6 to 0.8 percent of the referenced parent companies’ annual revenues,” as shown below.<sup>31</sup> This is consistent with the preamble to the final rule, in which EPA found that 90% of regulated entities would have compliance costs equal to less than 1% of revenue.<sup>32</sup> According to EPA, these entities are “unlikely to face economic impacts” at all.<sup>33</sup>

	UWAG Reported ELG Compliance Cost per Year	ELG Costs as a Share of Estimated Revenue
<b>Dynegy</b>	\$44,000,000	0.8%
<b>NRG Energy</b>	\$25,000,000	0.3%
<b>AEP</b>	\$79,000,000	0.6%
<b>City Utilities of Springfield</b>	\$1,590,000	0.6%

In total, only eight companies reported ELG compliance costs on their 2016 10-Ks as a separate line item, including Otter Tail Corporation, which affirmatively stated that it would not incur any costs for compliance with the ELGs. Adding in City Utilities of Springfield and AEP, for which estimated ELG compliance costs were provided in UWAG’s petition, these estimated annual costs averaged a mere 0.3% of the companies’ revenues.

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<sup>31</sup> Table excerpted from Stanton Declaration ¶ 20.

<sup>32</sup> 80 Fed. Reg. at 67,866.

<sup>33</sup> *Id.* at 67,865 (plants incurring costs below one percent of revenue are unlikely to face economic impacts).

**Cost-to-Revenue Ratio for Companies Reporting Estimated ELG Compliance Costs on 10-K or in UWAG Petition for Reconsideration**

<b>Parent Company</b>	<b>ELG Compliance Cost per year</b>	<b>Corporate Revenue</b>	<b>Cost-to-Revenue Ratio</b>
Dynegy	\$ 44,000,000	\$ 4,318,000,000	1.0%
NRG Energy	\$ 25,000,000	\$ 12,351,000,000	0.2%
AEP	\$ 79,000,000	\$ 16,380,100,000	0.5%
City Utilities of Springfield	\$ 1,590,000	\$ 284,107,000	0.6%
Black Hills Corporation	\$ 600,000	\$ 1,572,974,000	0.0%
CMS Energy Corporation	\$ 21,800,000	\$ 6,399,000,000	0.3%
NiSource Inc.	\$ 24,285,714	\$ 4,492,500,000	0.5%
Otter Tail Corporation	\$ 0	\$ 803,539,000	0.0%
<b>Average</b>			<b>0.3%</b>

Table Notes:

Where companies reported the time period over which their costs would be incurred, this analysis assumes those costs would be incurred equally over the years specified. Where no time period was listed, it assumes the costs would be incurred equally over seven years (2016 through 2023).

For publicly traded companies filing 10-Ks, this analysis used 2016 corporate revenue as reported in those filings. For City Utilities of Springfield, total electric operating revenues are based on EIA Form 1: Page 300, Line 27, Column b; EIA Form 861 (2015). Due to the very short period of time provided for public comment, this analysis uses different annual revenue numbers than those used by Dr. Stanton in the analysis cited earlier, and therefore yields slightly different percentages. Despite the slight differences in these two analyses, they both support the conclusion that ELG compliance costs are affordable for these utilities.

The overall average of 0.3% is calculated based on a larger number of decimal places than appear in the company-level cost-to-revenue ratios shown in this table and therefore averaging the company-level numbers as they appear here may not yield the same figure.

The costs cited by UWAG are for companies that must comply with the ELGs at many coal-fired units, and as such, the per-unit annual compliance costs are extremely low, especially in comparison to these companies' annual revenue. AEP owns or operates 11 coal-fired power plants, comprising 27 units that must be retrofitted to comply with the ELGs for multiple wastestreams.<sup>34</sup> For AEP to incur costs of \$400-550 million<sup>35</sup> over each of the next seven years to achieve compliance with the ELGs at 27 units averages to about \$2.5 million per unit. These costs are affordable for a company of AEP's size, which reported nearly \$16.4 billion in annual revenue on its 2016 10-K. Similarly, NRG and Dynegy have extensive fleets of coal-fired power plants: NRG owns all or part of 30 coal-fired units, while Dynegy owns all or part of 29 coal-fired units.<sup>36</sup> Based on NRG and Dynegy's reported ELG costs of \$200 million and \$308 million, respectively,<sup>37</sup> their per-unit annual ELG compliance costs will average \$957,000 and \$1.5 million, respectively. These costs almost do not register in relation to the annual revenue reported by these companies, as summarized in the following table.

Company Name	Reported 7-year ELG compliance cost	Number of units in which company owns a share	Average annual cost per unit	2016 Revenues (10-K)
AEP	\$400-550 million	27	\$2.5 million	\$16.4 billion
NRG	\$200 million	30	\$957,000	\$12.4 billion
Dynegy	\$308 million	29	\$1.5 million	\$4.3 billion

Moreover, a review of utility Form 10-Ks revealed that numerous companies disclaim any material risk to their financial condition caused by the ELGs, regardless of the magnitude of those costs, based on their confidence that such costs will be recovered from retail electric

<sup>34</sup> Letter from Michael Brown, Environmental, Safety & Health Director, Indiana-Kentucky Electric Corporation, to Nicole Gardner, Indiana Department of Environmental Management (Aug. 1, 2016), Re: Justification for Alternate ELG Applicability Date, at 11-12 (seeking extension for compliance at Clifty Creek plant and noting need for co-owner AEP to coordinate compliance schedules across its fleet). Exhibit 7 includes cited pages from all NPDES permitting materials cited in these comments.

<sup>35</sup> UWAG Petition at 67. Although UWAG's petition cites to the AEP, Inc. Form 10K for 2016, we were unable to confirm these cost estimates by reference to AEP's 10K.

<sup>36</sup> Unit information for Dynegy and NRG from SNL, based on S&P Global Market Financial data (downloaded July 3, 2017). In contrast to the figure for AEP, which is based on AEP's own assessment of which units will incur ELG compliance costs, the figures for Dynegy and NRG reflect the total number of coal-fired units that these companies own all or part of, regardless of whether those units are expected to incur ELG compliance costs.

<sup>37</sup> UWAG Petition at 67.

ratepayers.<sup>38</sup> In its Final Regulatory Impact Analysis for the 2015 Rule, EPA acknowledged that many plants would be able to pass through compliance costs, but chose not to account for that fact in a quantitative manner:

In assessing the cost impact of the five regulatory options on steam electric power plants in this screening-level analysis, the Agency assumed that the plants would not be able to pass any of the increase in their production costs to consumers (zero cost pass-through). This assumption is used for analytic convenience and provides a *worst-case* scenario of regulatory impacts to steam electric power plants. Even though the majority of steam electric power plants *may* be able to pass increases in production costs to consumers through increased electricity prices, it is difficult to determine exactly which plants would be able to do so. Consequently, EPA judges that assuming zero cost pass-through is appropriate as a screening-level, upper bound estimate of the potential cost impact from the final ELGs to steam electric power plants and their parent entities. To the extent that some steam electric power plants are able to recover some of the increased production costs in increased prices, this analysis overstates plant-level impacts.<sup>39</sup>

Obviously, passing through these costs increases electric rates, which is an issue that EPA has been and should be attentive to.<sup>40</sup> Without discounting the importance of that issue, we note that the ability to pass through costs diminishes any argument that operators subject to the ELGs simply cannot manage the costs of compliance. Moreover, there is no evidence in the ELG rulemaking record that these compliance costs would have harmful impacts on ratepayers: EPA

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<sup>38</sup> Dominion Resources, Inc., *Form 10-K 2016* at 153-54 (2017) ("Virginia Power has eight facilities that may be subject to additional wastewater treatment requirements associated with the final rule. While the impacts of this rule could be material to Dominion's and Virginia Power's results of operations, financial condition and/or cash flows, the existing regulatory framework in Virginia provides rate recovery mechanisms that could substantially mitigate any such impacts for Virginia Power."); MGE Energy, Inc., *Form 10-K 2016* at 10, 94 (2017) ("The rule will be applied to Wisconsin-based power plants as they renew their WPDES permits, beginning in 2018 but no later than 2023. Management believes that any compliance costs will be recovered in future rates based on previous treatment of environmental compliance projects."); NextEra Energy, Inc., *Form 10-K 2016* at 20 (2017) ("The impact of complying with current environmental laws and regulations has not had, and, along with compliance with proposed regulations as currently written, is not expected to have, a material adverse effect on the financial statements of NEE and FPL. As permitted by the environmental clause, FPL expects to seek recovery for compliance costs associated with any new environmental laws and regulations."); SCANA Corporation, *Form 10-K 2016* at 92 (2017) ("Any costs incurred to comply with the ELG Rule are expected to be recoverable through rates."); PPL Corporation, *Form 10-K 2016* at 208 (2017) ("Costs to comply with ELGs or other discharge limits, which are expected to be significant, are subject to rate recovery."); Xcel Energy Inc., *Form 10-K 2016* at 143 (2017) ("Xcel Energy believes that compliance costs would be recoverable through regulatory mechanisms."). Exhibit 8 includes cited pages from all 10-K forms cited in these comments.

<sup>39</sup> Final Regulatory Impact Analysis at 4-2.

<sup>40</sup> See Final Regulatory Impact Analysis at Chapter 7.

found that, even under an overly conservative assumption that 100% of compliance costs would be passed on to ratepayers, the ELG Rule would result in a negligible increase in electricity rates. Specifically, EPA found that the ELG Rule would increase monthly electricity prices for a typical household by no more than 12 cents, for a total increase of \$1.44 per year. 80 Fed. Reg. at 67,856.

**B. There is Little to No Evidence That Companies are Spending Significant Capital on ELG Compliance Now, or in the Near Term.**

Since the ELGs became effective in January 2016, our organizations have tracked draft and final NPDES permits issued to coal-fired power plants to ensure that the ELGs are properly applied and that permitting authorities did not grant unwarranted extensions in compliance deadlines beyond the default November 2018 date. We have identified 28 draft or final NPDES permits issued between January 2016 and June 2017 for plants that discharge wastestreams subject to the ELGs, which are listed in Exhibit 7a.<sup>41</sup>

Permitting authorities (all states in these 28 cases) are already exercising the discretion granted to them by the final rule to allow plants to achieve compliance with the ELGs late in the allowable compliance period. For bottom ash transport water, 18 of the 28 plants have draft or final compliance deadlines in 2020 or later. With only a handful of exceptions, those plants with compliance deadlines in 2018 or 2019 fall into one of two categories: plants for which bottom ash conversions were already planned for compliance with other laws,<sup>42</sup> or permits that contain

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<sup>41</sup> This list is complete to the best of our knowledge, but EPA's Regional Offices may be aware of additional permits. We have observed that NPDES permit issuance for coal-fired power plants has slowed down considerably since EPA's stay under 5 U.S.C. § 705 became effective on April 25, 2017. In fact, other than a handful of draft NPDES permits just issued by the Maryland Department of the Environment, pursuant to a consent decree, we have seen no other draft or final NPDES permits issued since the stay became effective. We attribute this slowdown to uncertainty on the part of permit writers as to what to include in permits regarding the ELGs. Thus, not only is EPA's illegal Section 705 stay and this proposed postponement delaying ELG implementation, it is also preventing permits from being revised in other respects, such as to incorporate stronger water-quality based effluent limits, thermal limits, or cooling water intake protections.

<sup>42</sup> Dominion Chesterfield Power Station, VPDES Permit Fact Sheet, Permit No. VA0004146, at 4 ("In response to the [CCR] rule, the facility will convert from a wet ash management system to a dry ash management system in the third quarter of 2017."); Duke Energy Progress, LLC, Mayo Steam Electric Generating Plant, DEQ/DWR Fact Sheet for NPDES Permit Development NPDES No. NC0038377, at 1 (Fact Sheet noting that Mayo already has dry fly and bottom ash handling systems); Duke Energy Carolinas, LLC, Rogers Energy Complex, NPDES Permit NC0005088, Supplemental Information Package, at 1 ("North Carolina's Coal Ash Management Act and the Federal CCR rule will prohibit continued wastewater flows to the existing ash basin at Rogers Energy Complex. Projects are underway or will be in the future to convert ash handling for all ash (both bottom ash and fly ash) to dry handling and disposal systems."); Draft or final NPDES permits for SCGENCO, A.M. Williams Station (Final Permit No. SC0003883 at 37-38), Merom Generating Station (Final Permit No. IN0050296 at 3), Michigan City

“reopener” provisions allowing the permittee to apply for a modification of the permit to extend the compliance date.

Sixteen permits have been issued that contain deadlines for compliance with the FGD wastewater standards. Five of these allow until the very last day of the allowable compliance period<sup>43</sup>—December 31, 2023—which is still five and a half years away. Another three plants have 2022 compliance deadlines.<sup>44</sup> Three plants have 2018 deadlines, but include reopener provisions as described above, which strongly suggests that these deadlines may be modified.<sup>45</sup> The Belews Creek and Allen Stations, which as EPA knows have already installed the technology selected as BAT, have until late 2019 and early 2021, respectively, to achieve compliance. The Duke Energy Mayo plant in North Carolina has a 2018 compliance date for FGD wastewater because the plant has operated a vapor-compression evaporation system since 2015.<sup>46</sup>

As such, while in theory direct dischargers could be required to comply with the ELGs as early as November 2018, in practice, most states have not set early compliance dates, but have given facilities five or more years from the date the final rule was issued to comply. Further delay by EPA is unwarranted in light of these extended compliance deadlines, which as noted above, already contradict the Clean Water Act’s clear three-year compliance requirement for new BAT-based effluent limitations.

These delayed compliance deadlines mean that many facilities are not incurring significant engineering or capital costs in the near future. We reviewed the materials submitted by permittees to justify compliance dates later than November 1, 2018, though in many cases these were sparse and contained no detail about project timelines or engineering schedules to

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Generating Station (Final Permit No. IN0000116 at 11), Petersburg Generating Station (Final Permit No. IN0002887 at 6, 49-50), A.B. Brown Generating Station (Final Permit No. IN0052191 at 3-4), and F.B. Culley Generating Station (Draft Permit No. IN0002259 at 3) all contain provisions allowing permittee to seek a modification of the 2018 ELG compliance date. *See Exhibit 7.*

<sup>43</sup> Brunner Island (Draft Permit No. PA0008281 at 29); Plant Hammond (Draft Permit GA0001457 at 28); Rogers Energy Complex (Draft Permit No. NC0005088 at 10); Roxboro Steam Electric Generating Plant (Draft Permit No. NC0003425 at 15-16); F.B. Culley Generating Station (Draft Permit No. IN0002259 at 8). *See Exhibit 7.*

<sup>44</sup> Big Bend Power Station (Draft Permit No. FL0000817 at 12); Chesterfield Power Station (Final Permit No. VA0004146 at 21); Clifty Creek Station (Final Permit No. IN0001759 at 12). *See Exhibit 7.*

<sup>45</sup> A.M. Williams Station (Final Permit No. SC0003883 at 37-38), Merom Generating Station (Final Permit No. IN0050296 at 3), Petersburg Generating Station (Final Permit No. IN0002887 at 49-50). *See Exhibit 7.*

<sup>46</sup> Duke Energy Progress, LLC Mayo Steam Electric Generating Plant, DEQ/DWR Fact Sheet for NPDES Permit Development, NPDES No. NC0038377, at 2 (“Duke Energy Progress treats the FGD blowdown via VCE (vapor compression evaporator) whose purpose is to evaporate the majority of the waste water produced from the FGD scrubber system. The VCE became operational in February, 2015.”). *See Exhibit 7.*

support the requested extension.<sup>47</sup> Below are some examples demonstrating that plants are postponing significant expenditures on ELG compliance:

- Brunner Island Steam Electric Station (PA): Talen Energy has requested December 31, 2023 compliance dates for both the FGD and bottom ash transport water standards for the three units at Brunner Island.<sup>48</sup> Talen is undertaking a project to begin co-firing natural gas at the plant, followed by a multi-year period to evaluate the effect of co-firing on the plant's operation.<sup>49</sup> To avoid the risk of stranded assets, the company states that "any ELG Rule retrofits cannot be initiated before early 2019."<sup>50</sup> Although Pennsylvania Department of Environmental Protection's draft NPDES permit for the plant includes a January 2022 compliance date for bottom ash transport water,<sup>51</sup> this deadline still allows three full years after Talen's preferred 2019 date to begin incurring ELG-related costs.
- Allen Steam Generating Station (NC): Duke Energy will decide whether to retire these units by December 31, 2017. To avoid stranded costs, Duke Energy requested and was granted in a draft permit a February 28, 2021 compliance deadline for bottom ash and FGD wastewater.<sup>52</sup> The clear implication of this decision is that the company will incur minimal if any costs for ELG compliance prior to the end of 2017.
- Plant Hammond (GA): Draft NPDES permit for Plant Hammond sets December 31, 2023 compliance deadlines for FGD, fly ash, and bottom ash wastewater. These deadlines are based in large part on an order of the Georgia Public Service Commission requiring Georgia Power to minimize expenditures at Plant Hammond through July 31, 2019. As such, Georgia Power would be expected to avoid any capital expenditures during the time reconsideration of the ELGs is pending.<sup>53</sup>
- Sheldon (NE): Operator is evaluating whether to convert all units at the plant to burn a gas mixture, rather than coal, thereby eliminating bottom ash transport water discharges. As such, costs to comply with the FGD's BATW requirements will not

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<sup>47</sup> See Iowa Department of Natural Resources, Memo. to Wastewater File # 6-03-00-1-00 re NPDES Permit Rationale (Jan. 25, 2015), at 7 ("The facility [IPL Lansing] feels they will be able to accomplish these changes by December 31, 2021.") See Exhibit 7.

<sup>48</sup> See Talen Energy, Talen Proposed ELGs Compliance Schedule (Aug. 29, 2016), at 3. Exhibit 7.

<sup>49</sup> *Id.* at 4.

<sup>50</sup> *Id.*

<sup>51</sup> See Penn. Dept. of Env'tl. Protection, NPDES Public Notice, NPDES Permit No. PA0008281, at 6. See Exhibit 7.

<sup>52</sup> Duke Energy Carolinas, LLC, NPDES Wastewater Permit Application Update, Permit No. NC0004979 (Aug. 31, 2016), at 4-5. See Exhibit 7.

<sup>53</sup> Plant Hammond, Draft NPDES Permit No. GA0001457, at 22. See Exhibit 7.

be incurred until after this decision regarding fuel type is made. The final NPDES permit includes a December 31, 2023 compliance date for the plant.<sup>54</sup>

- Bull Run (TN): Operator's proposed schedule for compliance with FGD limits allows 18 months (through April 2018) for preliminary studies of how plant might comply.<sup>55</sup>
- Belle River Plant (MI): Final NPDES permit requires elimination of bottom ash transport water discharges by the end of 2021. Permit sets out project schedule which calls for a technology feasibility evaluation to be completed by early 2018, during which time DTE Energy will be engaged in groundwater monitoring required by the Coal Combustion Residuals Rule, a water balance study, and evaluating different compliance options. Engineering design will not commence until early 2018 and construction will not begin until July 2019.<sup>56</sup>
- Clifty Creek (IL): Final permit requires compliance by April 1, 2022 with ELGs for fly ash, bottom ash, and FGD wastewater. As described in justification submitted by Indiana-Kentucky Electric Cooperative, the first year of the compliance planning period is taken up with water balance modeling (collecting water samples) and selecting the compliance technology.<sup>57</sup>
- Plant Crist (FL): For the first nine months of the 60-month project period, Gulf Power will be engaged in technology assessment, followed by 12 months of effluent assessment.<sup>58</sup>

American Electric Power Company has filed comments in this docket explaining that in the second half of 2017 and first half of 2018 it will be spending money on preliminary engineering, site-specific water sampling, water balance modeling and similar tasks. The cost of these tasks for the remainder of 2017 is \$15.3 million and \$18.4 million in the first half of

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<sup>54</sup> Nebraska Dep' of Env'tl. Quality letter to Mr. Sunil Bector, Sierra Club Staff Attorney, Re: NPPD Sheldon Station (Sept. 30, 2016), at 5. *See* Exhibit 7.

<sup>55</sup> Tennessee Valley Authority (TVA), Bull Run Fossil Plant (BRF), NPDES Permit No. TN0005410, Permit Renewal Application Update, Bull Run NPDES Permit App., at 5-6. *See* Exhibit 7.

<sup>56</sup> Belle River Plant, Final NPDES Permit No. MI0038172, at p. 13; DTE Electric Company, Steam Electric Effluent Limitation Guidelines (ELG) DTE Energy - Belle River Power Plant (undated application material). *See* Exhibit 7.

<sup>57</sup> Letter from Michael Brown, Environmental, Safety & Health Director, Indiana-Kentucky Electric Corporation, to Nicole Gardner, Indiana Department of Environmental Management (Aug. 1, 2016), Re: Justification for Alternate ELG Applicability Date, at 6. *See* Exhibit 7.

<sup>58</sup> Letter from Richard Markey, Gulf Power, to Marc Harris, Florida Department of Environmental Protection, Re: Gulf Power Plant Crist (Permit# FL0002275) ELG Extension Request (Apr. 26, 2016), at 1-2. *See* Exhibit 7.

2018.<sup>59</sup> AEP asserts that this money “may be spent without any commensurate benefit” and to do so would “wast[e] rate-payer resources.”<sup>60</sup> AEP’s argument that these expenditures are wasted presumes that upon reconsideration, EPA will reverse its earlier BAT and/or effluent limit determinations. In fact, as discussed further below, there is no basis for EPA to modify its 2015 decision. Even if the limits are modified in some way, much of the work AEP describes such as sampling and water balance modeling is fundamental to any wastewater treatment project, and AEP would be able to make use of that work to move expeditiously towards compliance with any revised ELGs. Moreover, both AEP and EPA should recall that absent national ELGs for these wastestreams, NPDES permitting authorities are obligated to develop technology-based effluent limits on a case-by-case basis. Power plants would not be off the hook for reducing FGD and ash water pollution in the absence of ELGs, so AEP’s current expenditures would place them one step closer to compliance in that case as well. Finally, we note that the figures AEP provides for the coming year, approximately \$33 million, are spread across 27 units that generated \$16.4 billion in revenue in 2016. These short-term costs are insignificant for a company of AEP’s size and do not justify a stay.

Other companies reported in their 2016 10-K filings that they are not yet able to determine whether they will incur material costs due to the ELG rule.<sup>61</sup> Some of these companies indicate that they will not know the costs until their NPDES permits are issued.<sup>62</sup> These statements clearly indicate that the companies have not yet begun planning for ELG compliance in any level of detail and as such, are likely to incur minimal costs in the near term. This is a predictable consequence of the protracted compliance timeline allowed in the final rule

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<sup>59</sup> Comments of the Operating Companies of American Electric Power Company on Proposed Rule for Postponement of Certain Compliance Dates for the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category Docket Number EPA-HQ-OW-2009-0819, at 2-3 (filed July 3, 2017), EPA Docket Id. No. EPA-HQ-OW-2009-0819-6543.

<sup>60</sup> *Id.*

<sup>61</sup> Allele, Inc., *Form 10-K 2016* at 115-16 (2017) (“We are reviewing the [ELGs] and evaluating its potential impact on Minnesota Power’s operations, primarily at Boswell. . . . At this time, we cannot estimate what compliance costs we might incur related to these or other potential future water discharge regulations . . . .”); Cleco Corporate Holdings LLC, *Form 10-K 2016* at 15 (2017) (“Management is currently evaluating the effect of the final rule and is not able to predict if the new rule will have a material impact on the results of operations, financial condition, or cash flows.”); Northwestern Corporation, *Form 10-K 2016* at F-44 (2017) (“It is too early to determine whether the impacts of [the ELGs] will be material.”); Public Service Enterprise Group Incorporated, *Form 10-K 2016* at 23 (2017) (“We are unable to predict if this rule will have a material impact on our future capital requirements, financial condition and results of operations.”); *see also* sources in following footnote.

<sup>62</sup> *See, e.g.*, OGE Energy Corp., *Form 10-K 2016* at 78 (2017) (“OG&E expects to be able to provide a reasonable estimate of any material costs associated with the rule’s implementation following issuance of the permits from the state.”); PNM Resources, Inc., *Form 10-K 2016* at B-95 (2017) (“Until a draft NPDES permit is proposed for Four Corners, APS is uncertain what will be required to comply with the finalized effluent limitations. PNM is unable to predict the outcome of this matter or a range of the potential costs of compliance.”).

and negates any argument that further postponement is needed to avoid companies having to make significant capital investments.

### **C. Many Steam EGU Operators Report Incurring Costs Due to Other Regulations, not the ELGs.**

Many operators of coal-fired steam EGUs are in the process of converting to zero-discharge bottom ash systems or upgrading flue gas desulphurization wastewater treatment for other reasons, such as to comply with state law requirements, the Coal Combustion Residual rule, or water-quality-based effluent limits. As such, these costs are not attributable to the ELG rule.

All seven North Carolina coal plants operated by Duke Energy are required by the state's Coal Ash Management Act to convert to dry handling of bottom ash and close coal ash impoundments by the end of 2019.<sup>63</sup> In filings with the North Carolina Department of Natural Resources, Duke Energy explains that costs to eliminate ash transport water discharges are not attributable to the ELGs, but rather state law and CCR rule.<sup>64</sup>

Other utilities also assign costs for bottom ash conversions to the CCR rule. For instance, AES Corporation states in its 2016 10-K that “[Indianapolis Power & Light] plans to install a dry bottom ash handling system in response to the CCR rule described below in advance of the ELG compliance date. As such, the impact of the ELG rule is not expected to be material.”<sup>65</sup> That same facility, Petersburg Generating Station, is installing a zero-discharge system for its FGD wastewater, which must be operational by September 29, 2017 in order to comply with water quality based effluent limits for various metals set in an Agreed Case Order.<sup>66</sup> Thus, the cost of the Petersburg FGD wastewater treatment system cannot be attributed to the ELGs. Northern Indiana Public Service Company is proceeding with plans to install remote ash conveying systems at two of its plants, Michigan City and Schahfer, in order to comply with the CCR rule, while at the same time tabling plans for ELG compliance as a result of EPA's proposed postponement.<sup>67</sup>

The Berkshire Hathaway company reports that “[m]ost of the issues raised by this rule are already being addressed through the coal combustion residuals rule and are not expected to

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<sup>63</sup> N.C. Senate Bill 729 § 130A-309.208(d)&(f), available at <http://www.ncleg.net/Sessions/2013/Bills/Senate/PDF/S729v7.pdf>.

<sup>64</sup> Duke Energy Carolinas, LLC, Rogers Energy Complex, NPDES Permit NC0005088, Supplemental Information Package at 4. *See* Exhibit 7.

<sup>65</sup> The AES Corporation, *Form 10-K 2016* at 53 (2017).

<sup>66</sup> *See* National Pollutant Discharge Elimination System (NPDES) Fact Sheet for Third Permit Modification Indianapolis Power & Light Company (IPL) – Petersburg Generating Station, at 6. *See* Exhibit 7.

<sup>67</sup> Verified Settlement Testimony of Kelly R. Carmichael, on behalf of Northern Indiana Public Service Company, at 5:8-12 and 12:6-12, Indiana Utility Regulatory Commission Cause No. 44872 (filed June 22, 2017), attached hereto as Exhibit 9.

impose significant additional requirements on the facilities.”<sup>68</sup> Dominion Energy Resources states in documents filed with the Virginia Department of Environmental Protection that, “[i]n response to new federal regulations governing the disposal of coal ash, Dominion plans to convert the coal ash management system at Chesterfield from a wet to a dry system.”<sup>69</sup>

In sum, EPA cannot assume that all costs reported to convert to dry ash handling or to treat scrubber wastewater are attributable to the ELG Rule, as there are other rules, such as the CCR Rule, driving the installation of these pollution controls. In evaluating the costs which companies would purportedly avoid as a result of postponing ELG compliance deadlines, EPA must ensure that it is including only the costs attributable solely to the ELGs. EPA’s proposal does not even attempt to do this, and thus does not provide a rational basis for postponing the compliance dates.

## **V. THE SCOPE OF THE STAY HAS NO RATIONAL RELATIONSHIP TO THE PETITIONS FOR RECONSIDERATION.**

The scope of the proposed stay bears no rational relationship to the petitions for reconsideration, which are the purported basis for the stay, 82 Fed. Reg. at 26,018. The UWAG and the U.S. Small Business Administration (“SBA”) petitions allege flaws in the BAT limits for bottom ash, FGD, and gasification wastewater. *See* SBA Petition at 6-12<sup>70</sup>; UWAG Petition at 32-65. Neither UWAG nor SBA has alleged any errors in the BAT determinations for fly ash and flue gas mercury control wastewater. And while UWAG has submitted new data for some wastestreams, UWAG has not submitted new data for fly ash and flue gas mercury control wastewater. Yet EPA proposes to postpone the compliance dates for the BAT determinations for fly ash and flue gas mercury control wastewater.

Even if EPA were justified in postponing compliance for portions of the ELG Rule—which EPA is not—the scope of the proposed action bears no rational relationship to the evidence before the agency. The proposal contains no basis for questioning the correctness of the BAT limits for fly ash and gasification wastewater and no basis for questioning the achievability of those limits. Moreover, as EPA itself noted in the final ELG Rule, there is no inherent reason why the “as soon as possible” compliance date for new BAT-based effluent limitations must be the same for every wastestream, including where the applicable effluent limitaitons are not being reconsidered by the Agency. *See* 80 Fed. Reg. at 67,883 (“The ‘as soon as possible’ date determined by the permitting authority may or may not be different for each wastestream.”). As a result, it would be arbitrary and capricious to postpone the dates for complying with the BAT limits for fly ash and gasification wastewater.

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<sup>68</sup> Berkshire Hathaway Energy Company, *Form 10-K 2016* at 64 (2017).

<sup>69</sup> Dominion Chesterfield Power Station, VPDES Permit Fact Sheet, Permit No. VA0004146, at 4 (“In response to the [CCR] rule, the facility will convert from a wet ash management system to a dry ash management system in the third quarter of 2017.”). *See* Exhibit 7.

<sup>70</sup> SBA Petition for Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, Nov. 3, 2015 (Apr. 5, 2017), Docket ID No. EPA-HQ-OW-2009-0819-6481, *available at* <https://www.epa.gov/aboutepa/sba-petition-effluent-limitations-guidelines-and-standards-steam-electric-power-generating>.

**VI. UWAG’S AND SBA’S PETITIONS FOR RECONSIDERATION HAVE NO MERIT, AND ARE NOT A RATIONAL BASIS FOR POSTPONING THE COMPLIANCE DEADLINES.**

Although EPA has requested comment only on its proposal to postpone certain ELG compliance deadlines, we wish to offer comment relevant to EPA’s reconsideration of the rule, because EPA’s view of the merits of the pending reconsideration petitions is relevant to a decision as to whether the existing rule should be stayed. By offering comments at this time on the reconsideration petitions, the undersigned organizations do not waive any right to comment further on these petitions. These comments are not intended to be comprehensive, but rather to present EPA with information available at this time, which it should consider as it determines whether to finalize a stay of the ELG deadlines.

**A. EPA’s Reliance on CBI as Part of the ELG Rulemaking Record Does Not Warrant Reconsideration.**

UWAG asserts that EPA’s reliance on CBI in the ELG rulemaking somehow calls into question the validity of the final rule. This argument is without merit.

First, although UWAG claims that EPA redacted “at least 1,194 documents” as CBI from this rulemaking (UWAG Petition at 15), UWAG fails to mention that there were an estimated 12,843 documents in the certified index of the administrative record that EPA filed with the Fifth Circuit for the final ELG Rule. Certified Index to the Administrative Record, *Sw. Elec. Power Co. v. EPA*, No. 15-60821, ECF Doc. 00513538746 (5th Cir. June 8, 2016). This means that only a small fraction – less than ten percent – of the documents in the record of the rule were withheld as CBI.

It is not surprising that EPA gathered a significant number of CBI documents during the course of its work on the ELG rulemaking. EPA performed detailed studies of the steam electric generating industry as a whole for nearly a decade, from 2005 through 2015. Among other things, the agency (1) conducted more than 70 site visits in 18 states, (2) sent out a survey on 733 plants, which obtained a 100% response rate, and (3) conducted on-site sampling at seven power plants with operating wet FGD systems. Technical Development Document for the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, Doc. No. EPA-821-R-15-007, Docket ID No. EPA-HQ-OW-2009-0819-6432, at Chapter 3 (“Final TDD”).

Most of what EPA tagged as CBI in the record was identified as such by the regulated entities themselves, many of whom are UWAG members. The breadth of the CBI claims in EPA’s docket was largely within the control of the utilities themselves: if UWAG’s members want EPA to release additional information from the ELG rulemaking record, they could choose to relinquish their own CBI claims.

Moreover, any CBI data in the record that was not submitted by power plant operators was submitted by vendors of the technology that EPA evaluated when determining BAT.

Obtaining CBI data from vendors about the costs of their treatment technologies was essential to EPA accurately determining BAT in this rulemaking. Notwithstanding UWAG's unfounded assertion that vendor-supplied data is somehow less reliable than data from utilities, vendors face the same obligation that utilities do to provide truthful information when they are presented with a data request from the U.S. government. *See* 33 U.S.C. § 1319(c)(3)-(4) (providing authority to EPA to levy fines or criminal punishment against any person who knowingly makes any "false material statement, representation, or certification"). Nor is there any basis for UWAG's assertion that EPA's findings must be subject to heightened scrutiny to the extent that they were based on information supplied by vendors. *See, e.g., Chem. Mfrs. Ass'n v. EPA*, 870 F.2d 177, 249, 252 (5th Cir. 1989) (upholding EPA reliance on vendor-supplied information as the basis for a BAT determination).

EPA was entitled to rely on CBI, both from industry and from vendors, in the ELG rulemaking as long as it provided a publicly accessible explanation for its decision that adequately explained its reasoning. *See, e.g., Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 56-57. Here, despite withholding some of the underlying technical documents on the ground that their disclosure could reveal CBI, EPA presented cumulative evidence of the bases for its BAT determinations in the final rule. To point to just a few examples: Table 4-6 in the Final TDD presents cumulative information about fly ash collection practices by more than 500 coal-fired power plants and about 30 oil-fired power plants; Table 4-9 in the Final TDD presents cumulative information about the bottom ash handling practices of 516 coal-fired power plants and more than 80 oil-fired plants; and Tables 9-5 through 9-16 of the Final TDD all estimate industry-level costs for the implementation of new technologies pursuant to the ELG rule, depending on the type of material to be regulated and the method of production. Additionally, Chapter 4 of the Final Regulatory Impact Analysis discusses the different regulatory options that EPA considered, and Table 4-1 provides a detailed breakdown comparing the cost of the rule to the revenues of each type of plant, broken down by the type of owner. And the final ELG rule itself contains a summary of how it assessed costs to the regulated industry. *See* 80 Fed. Reg. at 67,864. These supporting documents amply support EPA's BAT determinations in the final rule, even in the absence of the CBI that EPA redacted.

## **B. The FGD limits in the ELG rule are achievable.**

The Final ELGs set effluent limits for mercury, arsenic, selenium, and nitrate/nitrite in FGD wastewater based on EPA's determination that the best available technology for removing these pollutants of concern is a combination of physical/chemical treatment and biological treatment.<sup>71</sup> The mercury and arsenic limits were based on the physical/chemical treatment component, while the selenium and nitrogen limits were based on the best-performing biological treatment systems.

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<sup>71</sup> 40 C.F.R § 423.13(g)(1)(i). Specifically, EPA determined that the best available technology is a chemical precipitation series including hydroxide precipitation, sulfide precipitation, and iron coprecipitation, followed by an anoxic/anaerobic fixed-film biological treatment system. 80 Fed. Reg. at 67,850.

In its Petition for Reconsideration, UWAG contends that EPA did not demonstrate that biological treatment is technologically available at all plants, and that EPA should reconsider the FGD wastewater limits in the final rule.<sup>72</sup> While UWAG's requested scope of reconsideration is extremely broad, the only evidence of any kind that it submits relates to the suitability of these limits at plants burning sub-bituminous or lignite coal. EPA should decline UWAG's suggestion that it revise the FGD wastewater limits in the final rule for any subset of plants.

The core of UWAG's argument is that EPA cannot show that the FGD ELGs are technically achievable at every single Steam EGU, regardless of what type of FGD system it operates, what type of coal it burns, or any other possible factor unique to that plant.<sup>73</sup> However, courts have emphasized that the plain text of the Act requires EPA to establish BAT limits for categories of sources rather than on a plant-by-plant basis, and therefore BAT limits should be based on a consideration of costs to the industry rather than the compliance cost for an individual plant.<sup>74</sup> Furthermore, Congress envisioned technology-based limits as spurring the rest of each industry to catch up to the model plants using the most effective pollution controls.<sup>75</sup> The Clean Water Act's technology-based limits require firms to meet at the top, rather than race to the bottom based on the performance of the least-efficient plants.

EPA has already addressed comments similar to that raised here by UWAG, as shown in the following response to a comment filed by UWAG member AEP on the proposed rule:

EPA notes that the caselaw concerning this provision of the Act holds that EPA is not required to study each plant; rather it may consider industry as a whole. *See E.I. du Pont de Nemours & Co. v. Train*, 430 U.S. 112, 129 (1977) (it's simply an impossible task to give individual consideration to the circumstances of each plant). *CMA v. U.S. EPA*, 870 F.2d 177, 221 (5th Cir. 1989) (OCPSF ELGs). As an initial matter, however, we note that the EPA is not required to consider fundamentally different factors of particular plants in the national BPT rulemaking. Both Congress and the Supreme Court have expressed concern that the process of formulating nationally applicable water-quality standards would be unduly impeded by requiring EPA to address the idiosyncracies of individual plants in the context of a national rulemaking. The Supreme Court has held that

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<sup>72</sup> UWAG Petition at 32-48.

<sup>73</sup> *Id.* at 46-47.

<sup>74</sup> *E.I. du Pont de Nemours & Co. v. Train*, 430 U.S. 112, 127, (1977); *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486, 516 (2d Cir. 2005); *Rybachek*, 904 F.2d at 1290-91; *Am. Iron & Steel Inst. v. EPA*, 526 F.2d 1027 (3d Cir. 1975).

<sup>75</sup> *See Weyerhaeuser v. Costle*, 590 F.2d 1011, 1036-37 (D.C. Cir. 1978) ("Most prominently, the Act's supporters in both Houses acknowledged and accepted the possibility that its 1977 requirements might cause individual plants to go out of business. . . They self-consciously made the legislative determination that the health and safety gains that achievement of the Act's aspirations would bring the future generations will in some cases outweigh the economic dislocation it causes to the present generation."); *Chem. Mfrs. Ass'n*, 870 F.2d at 252 ("Congress clearly understood that achieving the CWA's goal of eliminating all discharges would cause 'some disruption in our economy,' including plant closures and job losses.")

the fundamentally-different-factors (FDF) variance procedure provides an entirely acceptable alternative to subcategorizing an industry to account for plant-specific characteristics. *Chemical Mfrs. Ass'n v. NRDC*, 470 U.S. at 116, 105 S.Ct. 1102, 84 L.Ed.2d 90.<sup>76</sup>

EPA's prior position is consistent with ample case law establishing that EPA need not "give individual consideration to the circumstances of each [plant]."<sup>77</sup> As shown below, UWAG's argument that these standards cannot be achieved at plants burning subbituminous coal boils down to one plant that may or may not be typical of other plants burning subbituminous coal, and for which a pilot study shows promising interim results for treating that plant's admittedly challenging FGD wastewater stream using the biological treatment system on which EPA based its selenium standards.

**1. UWAG Does Not Show that FGD Wastewater from plants burning sub-bituminous or lignite coal differs meaningfully from that at plants burning bituminous coal.**

UWAG first contends that EPA was incorrect to conclude that evidence of the treatability of FGD wastewater at plants burning bituminous coal is applicable to plants burning sub-bituminous or lignite coal because the nature of the pollutants to be removed is the same. UWAG argues that the record refutes this by comparing FGD wastewater effluent data from Allen and Belews Creek (which burn bituminous coal) to Pleasant Prairie Power Plant, which burns sub-bituminous Powder River Basin ("PRB") coal. Given UWAG's insistence just a few pages earlier<sup>78</sup> that the composition of FGD wastewater depends on a variety of factors, its suggestion that such a critical conclusion could be drawn by comparing a single plant burning sub-bituminous coal is highly questionable.<sup>79</sup> Second, EPRI has acknowledged that Pleasant Prairie's FGD wastewater is "especially challenging," because the high degree of recycling and low blowdown rate in the plant's two FGD units results in high levels of TDS and sulfates.<sup>80</sup>

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<sup>76</sup> EPA, Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category: EPA's Response to Public Comments, Docket ID No. EPA-HQ-OW-2009-0819-6469, at 3-188 ("Response to Comments").

<sup>77</sup> *E.I. du Pont de Nemours & Co.*, 430 U.S. at 132.

<sup>78</sup> UWAG Petition at 33.

<sup>79</sup> This is not the only instance in which UWAG's petition tries to "have it both ways." After insisting that plants burning subbituminous or lignite coal have higher levels of TDS (which is based on data from a single plant), which can make biological treatment more difficult, UWAG dismisses EPA's evidence regarding a pilot study at the Petersburg Generating Station with TDS levels as high as 27,000 mg/L because this plant burns bituminous coal. If UWAG's argument is grounded in concentrations of various parameters in FGD wastewater, rather than simply the "coal type" label, it cannot dismiss treatability data for high-TDS wastewaters based solely on the type of coal burned. UWAG Petition at 36-41.

<sup>80</sup> Electric Power Research Institute, *Biological Treatment of Flue Gas Desulfurization Wastewater at a Power Plant Burning Powder River Basin Coal Pilot Demonstration with the*

Third, the data that UWAG compares is from effluent after each plant's chemical precipitation system, not directly from the FGD unit.<sup>81</sup> As such, these data say little about the characteristics of the FGD wastewater itself, since there has been an intervening treatment step at each plant.

UWAG later takes EPA's recommendation that plants conduct pilot studies prior to installing FGD equipment as an admission that FGD wastewater varies among plants.<sup>82</sup> This is a straw man – EPA readily acknowledges that FGD wastewater is variable – its record would support nothing else. The fact that FGD wastewater is not identical at every plant in the country does not preclude EPA from setting industry-wide technology-based effluent limits, as described above. In short, EPA is not required to guarantee that the effluent limits it sets under 33 U.S.C. § 1311 can be met by every single facility in an industrial category, using the technology that formed the basis of EPA's best available technology determination. If biological treatment is not suitable for the wastewater at a particular facility, the operator of that facility is free to pursue alternate technologies that would achieve pollution levels required by the final ELGs. Notably, the final rule provides a voluntary incentive program through which a facility may choose to install a vapor-compression evaporation system and comply with the limits in 40 C.F.R. § 423.13(g)(3). Dischargers who participate in the voluntary incentive program are automatically granted until December 31, 2023 to comply.<sup>83</sup> At least two facilities have chosen to pursue zero liquid discharge systems due to their greater level of confidence in these systems, as compared to biological systems.<sup>84</sup> The option to choose any technology (biological or not) with which the standards may be met, combined with the fundamentally-different-factors variance procedure, provides sufficient flexibility to address any situation in which evidence may show that biological treatment cannot adequately reduce selenium levels in FGD wastewater.

## **2. EPRI's Pilot Study at Pleasant Prairie Does Not Show that FGD Wastewater at a PRB-burning plant cannot comply with the ELG's selenium limits.**

Since UWAG's Petition for Reconsideration was filed, EPRI has released its report regarding a pilot study of the GE ABMet system at WE Energies' Pleasant Prairie Plant in Wisconsin. This report was alluded to in UWAG's petition for reconsideration, with representations that it would show that "treating FGDW from plants burning subbituminous coal

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*ABMet Technology* (Mar. 2017), at Exec. Summ. p. 4. Docket ID No. EPA-HQ-OW-2009-0819-6480.

<sup>81</sup> UWAG Petition at 37, 37 n.96.

<sup>82</sup> *Id.* at 46.

<sup>83</sup> 40 C.F.R. § 423.13(g)(3).

<sup>84</sup> *See* Talen Energy, "Talen Proposed ELGs Compliance Schedule," at 2 (describing the operator's decision to pursue a zero liquid discharge solution at Brunner Island). Exhibit 7. NIPSCO has also chosen a zero liquid discharge technology for its Schahfer station in Indiana because it would allow greater operating flexibility, ensure compliance with future more stringent regulations, and guarantee a December 2023 compliance date. *See* Verified Direct Testimony of Kelly R. Carmichael, on behalf Northern Indiana Public Service Company, at 28:11-30:12, Indiana Utility Regulatory Commission, Cause No 44872 (Nov. 23, 2016), attached hereto as Exhibit 10.

will be substantially more difficult than treating FGDW from plants burning bituminous coal; and (2) the model biological treatment technology for FGDW is not demonstrated for use with FGDW from subbituminous plants.”<sup>85</sup>

A review of that EPRI report shows that it is inconclusive in many respects and does not deliver on UWAG’s representations. As discussed in the attached report by Dr. Ranajit Sahu, an engineer with nearly three decades of experience in the power sector and with project management, the EPRI study at Pleasant Prairie does not show that biological treatment systems cannot achieve compliance with the selenium limits at plants burning sub-bituminous coal.<sup>86</sup> In fact, that study provides encouraging results in that the pilot system met the target selenium limits (as well as limits on mercury, arsenic, and nitrogen) under lower flow conditions.<sup>87</sup> Although problems developed as the pilot system was tested under higher flows, Dr. Sahu concludes that these were typical of a pilot project and could have been resolved had the project team had additional time, operational flexibility, and more timely and accurate analytical data.<sup>88</sup> In fact, a likely culprit of the biological system’s reduced effectiveness at removing selenium was identified, but there was inadequate time to make process changes.<sup>89</sup>

Moreover, as Dr. Sahu explains, one should be cautious about drawing conclusions about all plants burning subbituminous or PRB coal from this pilot study, not only because of some of its procedural shortcomings, but because neither the coal burned at Pleasant Prairie nor its FGD unit’s operation is necessarily typical of other plants that burn subbituminous coal.<sup>90</sup> WE Energies burns refined PRB coal at Pleasant Prairie, which includes additives to improve mercury, NOX and SO2 control.<sup>91</sup> As Dr. Sahu notes, these “additional chemical additives . . .

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<sup>85</sup> UWAG Petition at 48.

<sup>86</sup> Dr. Ranajit (Ron) Sahu, Comments on the EPRI GE ABMet Technology Pilot Demonstration Final Report Entitled “Biological Treatment of Flue Gas Desulfurization Wastewater at a Power Plant Burning Powder River Basin Coal,” EPRI Report No. 3002006089, March 2017 (July 5, 2017), attached hereto as Exhibit 11. Dr. Sahu’s resume is provided as Exhibit RS-1 to his report, and shows nearly three decades of experience in the fields of environmental, mechanical, and chemical engineering including: program and project management services; design and specification of pollution control equipment for a wide range of emissions sources including stationary and mobile sources; soils and groundwater remediation including landfills as remedy; combustion engineering evaluations; energy studies; multimedia environmental regulatory compliance (involving statutes and regulations such as the Federal CAA and its Amendments, Clean Water Act, TSCA, RCRA, CERCLA, SARA, OSHA, NEPA as well as various related state statutes); transportation air quality impact analysis; multimedia compliance audits; multimedia permitting (including air quality NSR/PSD permitting, Title V permitting, NPDES permitting for industrial and storm water discharges, RCRA permitting, etc.), multimedia/multi-pathway human health risk assessments for toxics; air dispersion modeling; and regulatory strategy development and support including negotiation of consent agreements and orders.

<sup>87</sup> *Id.* at 5 (citing EPRI Report at Table 5-1).

<sup>88</sup> *Id.* at 7-9.

<sup>89</sup> *Id.* at 8-9.

<sup>90</sup> *Id.* at 12-13.

<sup>91</sup> *Id.* at 12 & Ex. RS-3.

have the potential to alter critical chemistries in the FGDs and wastewater treatment processes.”<sup>92</sup> Dr. Sahu also notes several other idiosyncracies at the Pleasant Prairie plant and FGD units that call for caution in assuming similar results at other plants.

In this respect, Dr. Sahu concludes:<sup>93</sup>

The report provides no context as to why P4 is representative of the fleet of all PRB-burning coal units or plants (even those burning 100% PRB, much less units that blend PRB with other coals). For example, the report provides literally no discussion of: the PRB-burning plants in the current coal fleet subject to the ELG requirements; the types of additives being used along with the coal; the list of wet FGDs operating in that fleet and their characteristics such as the type of wet FGD, age, materials of construction and other pertinent details; any of the design details of such wet FGDs such as reagents used, purity and reactivity of the reagents; absorber cycles of concentration, etc.; how any of the other wet FGDs are operated at other PRB-burning plants; details on the pre-treatment systems present at the other PRB-burning plants including their design bases; and current effluent limits at the other PRB-burning plants. Without this discussion, the report does not establish that P4 is representative of “plants burning PRB coals” and therefore EPRI’s objective to evaluate how GE’s ABMet might work or not at “plants burning PRB coal” is simply too expansive.

EPA must decline UWAG’s invitation to revisit its FGD wastewater standards set in 2015 for all plants burning subbituminous coal. UWAG has submitted inconclusive evidence regarding the ability of a single plant burning a form of modified subbituminous coal and no evidentiary basis to generalize these mixed findings to the entire fleet that burns these coals. More fundamentally, EPA is not required to prove that every single facility in this industrial category can meet the standards; where appropriate and established by evidence, facility-specific variances can be made under the fundamentally-different-factors procedure, as EPA explained in its response to comments nearly two years ago.

### **C. EPA Correctly Determined BAT for Bottom Ash**

EPA’s determination of the Best Available Technology for bottom ash transport water was the only legally defensible determination that the Agency could have made. None of the concerns raised by the petitions for reconsideration<sup>94</sup> would change that determination, and therefore the petitions provide no grounds for reconsideration or delay of the bottom ash limits in the ELG rule. The petitions for reconsideration suggest that EPA’s determination of the Best Available Technology for Bottom Ash Transport Water (“BATW”) is flawed because it relies on flawed wastewater characterization data and, as a consequence, on flawed cost-effectiveness

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<sup>92</sup> *Id.*

<sup>93</sup> *Id.* at 12-13.

<sup>94</sup> The two petitions for reconsideration raise the same issues with respect to bottom ash transport water; for this section of our comments we refer to the UWAG petition as illustrative of both.

estimates. These concerns, even if they were legitimate, would not affect EPA's BAT determination.

BAT determinations are not based on cost-effectiveness. Congress determined that investments in pollution controls are warranted to the greatest degree possible, and therefore the inquiry is not whether the costs of a given control are "worth it" in EPA's estimation. Instead, EPA's determination of economic achievability must be guided by the Supreme Court's holding that BAT limits "represent[] a commitment of the maximum resources economically possible to the ultimate goal of eliminating all polluting discharges."<sup>95</sup> In its response to comments, EPA agreed: "[T]he Clean Water Act does not authorize EPA to use cost-effectiveness as the sole or primary basis of a BAT determination; the correct legal standard is whether costs can be borne by the industry as a whole."<sup>96</sup>

The Agency elaborated in detail in response to a UWAG comment on this issue: "BAT is to reflect the performance of 'the single best performing plant,' and it can rely on pilot projects, foreign plants, or technology transfer. Senator Muskie, the principal Senate sponsor of the Act, explained the distinction between Best Practicable Technology ("BPT") and BAT this way:

The distinction between 'best practicable' and 'best available' is intended to reflect the need to press toward increasingly higher levels of control in six-year stages. Through the research and development of new processes, modifications, replacement of obsolete plans and processes, and other improvements in technology, it is anticipated that it should be possible, taking into account the cost of controls, to achieve by 1983 levels of control which approach and achieve the elimination of the discharge of pollutants.

As to the cost of 'best available' technology, the Conferees agreed upon the language of the Senate bill in section 304(b)(2). While cost should be a factor in the Administrator's judgment, no balancing test will be required. The Administrator will be bound by a test of reasonableness. In this case, the reasonableness of what is 'economically achievable' should reflect an evaluation of what needs to be done to move toward the elimination of the discharge of pollutants and what is achievable through application of available technology – without regard to cost.<sup>97</sup>

EPA determined that dry handling or closed-loop technologies are the Best Available Technology for BATW according to the statutory criteria that the Agency was required to employ. Specifically, these technologies are BAT because they are available and economically achievable.<sup>98</sup> A technology is "available" if it is in use in the industry, even if only by the best-performing plant in the industry, or if it can be demonstrated to be available through pilot studies

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<sup>95</sup> *EPA v. Nat'l Crushed Stone Ass'n*, 449 U.S. 64, 74 (1980).

<sup>96</sup> Response to Comments at 3-364.

<sup>97</sup> *Id.* at 4-459 to 4-460 (internal citations omitted).

<sup>98</sup> 33 U.S.C. § 1311(b)(2)(B).

or its use in other industries.<sup>99</sup> A technology is economically achievable if the “costs can be reasonably borne by the industry.”<sup>100</sup>

In the case of bottom ash transport water, EPA observed that “80% of plants built in the last 20 years have adopted dry bottom ash handling systems,” and that “more than half of the entities that would be subject to BAT requirements for [BATW] are already employing zero discharge technologies ... or planning to do so in the near future.”<sup>101</sup> Dry bottom ash handling systems are therefore undeniably available and economically achievable, and EPA is required by law to identify dry handling as BAT for bottom ash. None of the data quality or cost-effectiveness issues raised by the petitions for reconsideration would change the fact that dry handling is BAT, and the petitions therefore provide no justification for reconsideration or a delay in implementation of the BATW limits in the ELG rule.

For the sake of argument, however, we note that the data quality and cost-effectiveness issues raised by the petitions for reconsideration are largely unfounded, as discussed below.

**1. The data quality issues raised by UWAG and SBA do not affect the validity of EPA’s determination of the Best Available Technology for bottom ash transport water, and are not a valid basis for extending the compliance deadlines in the ELG rule.**

**a. The data quality issues raised by UWAG do not affect EPA’s determination of the Best Available Technology for Bottom Ash Transport Water.**

The petitions for reconsideration take issue with the quality of EPA’s BATW database, raising a laundry list of concerns that ultimately prove to be both hollow and beside the point. Dry handling or closed loop technologies are BAT because most new coal plants use these technologies.<sup>102</sup> Even if EPA were to replace its bottom ash effluent database with one cherry-picked by UWAG, its original BAT determination would be the only legally defensible determination.

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<sup>99</sup> *Chem. Mfrs. Ass’n v. EPA*, 870 F.2d at 226 (“Congress intended these [BAT] limitations to be based on the performance of the single best-performing plant in an industrial field.”); *see also Nat. Res. Def. Council, Inc. v. EPA*, 863 F.2d 1420, 1426 (9th Cir. 1988); *Kennecott v. EPA*, 780 F.2d 445, 448 (“In setting BAT, EPA uses not the average plant, but the optimally operating plant, the pilot plant which acts as a beacon to show what is possible.”); *Am. Petroleum Inst. v. EPA*, 858 F.2d 261, 265 (5th Cir. 1988) (stating that under BAT, “a process is deemed ‘available’ even if it is not in use at all”); *FMC Corp. v. Train*, 539 F.2d 973, 983-84 (4th Cir. 1976) (finding EPA justified in setting BAT for chemical oxygen demand based on performance data from a single pilot plant).

<sup>100</sup> *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d at 516; *Rybachek v. EPA*, 904 F.2d at 1290-91 (discussing this standard).

<sup>101</sup> Response to Comments at 6-419.

<sup>102</sup> 80 Fed. Reg. at 67,852 (noting that more than 80% of coal units built over the last 20 years have installed systems for dry handling of bottom ash).

If a substantial number of plants in the industry are already using technologies that achieve zero-discharge of bottom ash transport water, there can be no question that it is both available and economically achievable, and therefore the Best Available Technology. EPA has clearly and definitively closed the book on this issue: UWAG's data quality concerns are irrelevant. "[E]ven if EPA's pollutant loading estimates are higher or lower than estimated, it would not have affected EPA's selection of the technology basis for BAT for bottom ash transport water or fly ash transport water."<sup>103</sup> The Agency has no basis whatsoever to reconsider the bottom ash limitations in the ELG rule, or to delay implementation of these limitations.

**b. The data quality issues raised by UWAG are unfounded and/or insignificant.**

Although UWAG's data quality issues are irrelevant, for the sake of argument we briefly consider them here. To begin with, UWAG argues that the Agency inappropriately withheld data and methodological details about BATW and other waste streams based on concerns that releasing this information would reveal Confidential Business Information (CBI).<sup>104</sup> This is simply not credible coming from UWAG. As EPA observed, "it was the *submitters* (including, as noted, many members of [UWAG]) – *not EPA* – who asserted claims of confidentiality."<sup>105</sup> Moreover, as EPA has argued, "notwithstanding its protection of CBI materials, EPA provided sufficient information in the public record to fully explain the bases for its decisions."<sup>106</sup> We agree with EPA – the record is sufficient to support the ELG rule and the BAT determination for BATW, and the CBI issues raised by UWAG do not justify a delay in ELG implementation.

Next, UWAG argues that the BATW database is "infected" with "errors in units of measure."<sup>107</sup> Yet UWAG cites only one potentially erroneous data point in support of its contention. There are 2,252 data points in the BATW database.<sup>108</sup> If UWAG is correct, it has identified unit errors in 0.04% of the database. This cannot possibly be significant enough to justify the imposition of daily health risks on American citizens through suspension of the ELG rule. It would certainly have no bearing on EPA's BAT determination.

UWAG next argues that EPA applied "overly conservative methodologies addressing non-detect analytical results," and used "unacceptable or obsolete analytical methods,"<sup>109</sup> rehashing a complaint that was raised in comments and dismissed by EPA.<sup>110</sup> There is nothing inherently wrong with using data generated by multiple analytical methods or older analytical methods. Regardless of the analytical method, EPA utilized a consistent approach to nondetects,

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<sup>103</sup> Response to Comments at 6-419.

<sup>104</sup> UWAG Petition at 24.

<sup>105</sup> EPA's Response to Industry Petitioners' "Joint Motion to Complete the Administrative Record at 3, *Sw. Elec. Power Co. v. EPA*, No. 15-60821, Doc. No. 00513661798 (5th Cir. Response filed Sept. 1, 2016) (emphasis in original), attached hereto as Exhibit 12.

<sup>106</sup> *Id.* at 11.

<sup>107</sup> UWAG Petition at 50.

<sup>108</sup> *Id.* at 54 n.143.

<sup>109</sup> *Id.* at 50.

<sup>110</sup> *See, e.g.*, Response to Comments at 6-424.

which happens to be an approach that most professionals use – it assumed that nondetects were present at one-half of the quantitation limit.<sup>111</sup> In its comments to EPA, the Electric Power Research Institute (EPRI) – whose website states that “most members are electric utilities” – advanced this method as the “EPRI approach.”<sup>112</sup> We find it hard to believe that UWAG would describe the EPRI approach as “overly conservative.” Regardless of when the data were collected, this approach is eminently reasonable and appropriate. Moreover, EPA has clearly rebutted the notion that the use of old analytical methods introduced any bias into the database: “EPA disagrees that non-detects in the 1982 data bias the pollutant concentrations high.”<sup>113</sup> The Agency took the extra step of conducting a sensitivity analysis on the effect of its treatment of nondetects, and found that excluding more of the nondetects could change the pollutant concentrations for 6 out of 44 analytes,<sup>114</sup> but concluded that its BAT determination would be the same using either method.<sup>115</sup> Again, UWAG’s criticism has no merit as a basis to reconsider the BATW BAT determination, nor can it serve as a justification for delaying ELG implementation.

Next, UWAG argues that EPA should have omitted a set of BATW data from the 1970s, because the data might not be representative of current conditions.<sup>116</sup> Again, EPA has already conclusively rebutted this argument. To begin with, the Agency stated that it “disagrees that ‘old’ data is inherently not representative and further disagrees that it is not representative for characterizing today’s wastewater discharges of ash transport water from the steam electric industry.”<sup>117</sup> In general, “the Agency seeks to use as much data as it can,” as it should, and using these older data is therefore perfectly reasonable.<sup>118</sup> Moreover, as EPA observed, “[s]urface impoundments are a basic treatment technology that hasn’t changed in more than fifty years.”<sup>119</sup> In case the point needed further elaboration, EPA also observed that “the composition of coal has not changed in millions of years, boilers have not changed significantly in ways that would affect bottom ash composition since 1982, wet sluicing processes and surface impoundments remain virtually unchanged ... and air pollution controls do not affect the composition of bottom ash.”<sup>120</sup> In short, bottom ash wastewater data from the 1970s are representative and relevant.

The older BATW data at issue come from three TVA coal plants.<sup>121</sup> Critically, UWAG does not provide any quantitative evidence that these older data provide a different

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<sup>111</sup> Final TDD at 10-21; Response to Comments at 6-424.

<sup>112</sup> *Id.* at 6-414.

<sup>113</sup> *Id.* at 6-424.

<sup>114</sup> Final Regulatory Impact Analysis at F-12. Notably, the six pollutants affected by the sensitivity analysis (antimony, cobalt, molybdenum, silver, thallium, and titanium) did not include the main human health risk-drivers in the rule (arsenic, lead, and mercury).

<sup>115</sup> 80 Fed. Reg. at 67,882.

<sup>116</sup> UWAG Petition at 53.

<sup>117</sup> Response to Comments at 6-423.

<sup>118</sup> *Id.*

<sup>119</sup> *Id.* at 3-482.

<sup>120</sup> *Id.* at 6-424.

<sup>121</sup> EPA, Development Document for Final Effluent Limitations Guidelines, New Source Performance Standards, and Pretreatment Standards for the Steam Electric Point Source

characterization of BATW than newer data, or that the older data result in an “overestimation of pollutant loadings for BATW.”<sup>122</sup> It is unlikely that the older TVA data would significantly skew the data because, as UWAG acknowledges, they make up only 28% of the BATW data points.<sup>123</sup> The database used by EPA is in fact dominated by data submitted by industry groups, including UWAG.<sup>124</sup> And for certain key pollutants, the TVA data actually show lower concentrations than the rest of the data used by EPA, suggesting that any bias is towards underestimating, not overestimating, loadings for these pollutants.<sup>125</sup> In the aggregate, the loadings and removals calculated by EPA, expressed as toxic-weighted pound equivalents, would not be significantly different if the TVA data were removed from the database.

Ironically, while UWAG is asking EPA to remove the TVA data, elsewhere they suggest that EPA should have augmented the database: “EPA could have simply taken the time to collect more data that are not CBI. It could have supplemented the CBI information with information from other sources ...”<sup>126</sup> This is exactly what EPA did. UWAG’s arguments are transparently not about data quality. UWAG would simply like to cherry-pick the data and delay the implementation of the rule as long for as possible. UWAG’s stated concern about the TVA data is yet another red herring.

In sum, UWAG’s data quality concerns have no bearing on EPA’s BAT determination, and are certainly not valid bases for reconsideration of the ELG rule or a delay in its implementation.

## **2. Concerns about EPA’s cost-effectiveness analysis for bottom ash treatment water are unfounded and do not affect EPA’s BAT determination.**

In its petition, UWAG essentially argues that the data quality issues discussed above lead to a distortion in EPA’s estimated cost-effectiveness for the technologies selected as BAT for BATW.<sup>127</sup> Since UWAG’s data quality concerns are largely unfounded, so are their cost-effectiveness concerns. At the end of the day, there is nothing objectionable about the cost-effectiveness of EPA’s BAT determinations. The final BAT requirements for the rule as a whole

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Category, Docket ID No. EPA-HQ-OW-2009-0819-2186, Appendix A (Nov. 1982) (“1982 Technical Development Document”).

<sup>122</sup> UWAG Petition at 50.

<sup>123</sup> *Id.* at 54.

<sup>124</sup> EPA, Incremental Costs and Pollutant Removals for the Final Effluent Limitations Guidelines and Standards for the Steam Electric Point Source Generating Category (Sept. 2015), Docket ID No. EPA-HQ-OW-2009-0819-6472, at 12-2 to 12-12.

<sup>125</sup> Cadmium, chromium, lead, manganese and selenium all have lower average values in Appendix A of EPA’s 1982 Technical Development Document (averaged, as EPA did, on plant-specific basis and then among plants) than they have in the final, 2015 Technical Development Document. 1982 Technical Development Document at Appendix A; Final TDD at 10-22, Table 10-7.

<sup>126</sup> UWAG Petition at 19.

<sup>127</sup> *Id.* at 59.

have a cost-effectiveness ratio of \$134/TWPE.<sup>128</sup> Even when EPA assumed an upper-bound estimate by adjusting for potential outlier nondetects, the cost-effectiveness of the rule is \$149/TWPE.<sup>129</sup> This is comfortably within the range of cost-effectiveness values for other industries' BAT determinations (less than \$1/TWPE to \$404/TWPE).<sup>130</sup> Note that this is the correct comparison, evaluating the cost-effectiveness of the ELG rule as a whole to cost-effectiveness estimates for other industries; it is inappropriate, by contrast, to compare the cost-effectiveness estimate for a subset of one industry (in this case, the BAT determination for BATW) to overall cost-effectiveness determinations for other industries.

Yet even if this were an appropriate comparison, it would show that EPA's determination was within the range of past BAT determinations. The primary cost-effectiveness estimate for EPA's bottom ash BAT determination is \$314/TWPE.<sup>131</sup> EPA also conducted an upper bound estimate, eliminating some nondetects, and derived a cost-effectiveness value of \$457/TWPE.<sup>132</sup> In its Regulatory Impact Analysis, EPA noted that "the actual baseline pollutant loadings and the resulting removals and cost effectiveness of the final rule likely fall somewhere between the estimated values."<sup>133</sup> The mid-point of the two bottom ash-specific cost-effectiveness values is \$386/TWPE, which is within the range of EPA's historical BAT determinations.<sup>134</sup>

In short, the technologies selected by EPA as BAT for BATW are within the range that has historically been considered "cost-effective," even after making corrections for what UWAG would consider errors in the database. Although UWAG and SBA would undoubtedly prefer alternative estimates using cherry-picked data, EPA's analysis was eminently reasonable.

However, none of this has any bearing on EPA's determination of the Best Available Technology for treating BATW. EPA was not authorized to use cost-effectiveness estimates as a basis for its BAT determination for BATW, and it did not do so.<sup>135</sup> Even if EPA's cost-effectiveness estimates were too low – and there is no compelling evidence in the record that they were – it would have no bearing on the Agency's BAT determination. The cost-effectiveness concerns raised by the petitions for reconsideration do not provide any justification for reconsidering the Agency's original BAT determination or any other part of the ELG rule, or for delaying implementation of the ELG rule.

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<sup>128</sup> 80 Fed. Reg. at 67,881.

<sup>129</sup> *Id.* at 67,882.

<sup>130</sup> *Id.* at 67,881.

<sup>131</sup> *Id.* at 67,882.

<sup>132</sup> *Id.*

<sup>133</sup> Final Regulatory Impact Analysis at F-12.

<sup>134</sup> *Id.* at F-10 to F-11 (noting that EPA has issued ELGs with a cost-effectiveness of \$404 per TWPE for direct dischargers in the electrical and electronic components industry and \$380 per TWPE for indirect dischargers in the transportation equipment cleaning industry).

<sup>135</sup> Response to Comments at 4-456.

### **3. There is No Rational Basis for EPA to Reverse Course and Exempt Units Smaller than 400 MW From the Requirement to Achieve Zero Discharge of Bottom Ash Wastewater.**

In its petition for reconsideration, SBA recycles old arguments that EPA should exempt units equal to or smaller than 400 MW from the new BAT requirement to achieve zero discharge of bottom ash wastewater. *See* SBA Petition at 9-10. SBA's petition ignores completely the rationale EPA provided for rejecting this option in the final ELG Rule, and SBA presents no new evidence or arguments to undermine EPA's rationale. While SBA is free to ignore the record on this issue, EPA is not. As explained below, the record demonstrates that there is no rational basis for exempting units equal to or smaller than 400 MW from the new BAT requirements for bottom ash, and thus there is no basis for reconsidering this portion of the Rule.

In the final ELG Rule, EPA considered, and properly rejected, the exact argument SBA advances in its petition:

Annualized cost per amount of energy produced increases along a smooth curve moving from the very largest units to the smallest units. *See* DCN SE05813. That, however, is expected due to economies of scale. There is no clear breaking point at which to establish a size threshold for purposes of differentiated requirements for bottom ash transport water. Furthermore, EPA collected information in the industry survey that found that units of all sizes, including those less than 400 MW, have installed dry handling and closed-loop systems. And, as further described below, EPA projects a net retirement of only 843 MW under the final rule. This suggests that, as a group, units of 400 MW or less do not face particularly unique hardships under the final rule with respect to the industry as a whole. For these reasons, the final rule does not establish differentiated bottom ash transport water requirements for units equal to or below 400 MW (or for units equal to or below any other size threshold, other than 50 MW, as explained in Section VIII.C.12).

80 Fed. Reg. at 67,853; *see also* Response to Comments at 3-618 to 3-619.

SBA provides no new information or arguments to rebut any portion of EPA's rationale quoted above. SBA does not question the evidence that the cost curve for bottom-ash retrofits provides no basis for selecting 400 MW as the threshold for which units should be required to retrofit. As we explained previously, ERG, EPA's contractor, produced a cost curve for bottom ash retrofits which shows that the cost-effectiveness of a zero-discharge standard for bottom ash is \$99 per TWPE for units larger than 400 MW, and \$107 per TWPE for units between 50 MW and 400 MW. Comments of EIP *et al.* at 61 (discussing the ERG Subcategorization Memo at 10-11); *see also* Fox Report, Comments of EIP *et al.*, Appendix E, Docket ID No. EPA-HQ-OW-2009-0819-4704 (Sept. 2013), at 39-47 ("Fox Report"). An incremental cost of \$8 per TWPE provides no basis for exempting units from the zero-discharge requirement.

SBA continues its exercise in ignoring the record when it asserts, with no citations, that there is a lack of evidence that existing units, and small units, have retrofitted to achieve zero-

discharge of bottom ash wastewater. SBA Petition at 10 (“EPA is relying on information from plants that have installed zero discharge systems in new plants. There is no information about whether the same would be true for plants that would have to retrofit.”). This is simply not true.

The Technical Development Document found that between 2000 and 2009, between 21 and 35<sup>136</sup> units had converted from wet to dry handling of bottom ash. Final TDD at 4-27. As of 2015, power companies had announced plans to retrofit an additional 67 units from wet handling to dry handling of bottom ash by 2020. *Id.* at 4-26. Moreover, vendors of dry handling systems have stated that virtually all existing coal units—even units smaller than 400 MW—could retrofit to dry handling systems for bottom ash. *See* Fox Report at 14-15, 46.

SBA’s assertion that no small units have converted to dry handling of bottom ash, SBA Petition at 10, ignores abundant evidence to the contrary. Below are a handful of small units that have retrofitted to dry handle bottom ash:

- In 2007 and 2008, South Carolina Electric & Gas Company retrofitted two 125-MW units at its McMeekin station, Units 1 and 2, to install dilute phase, vacuum/pressure dry systems;
- In 2010, the BL England Station retrofitted a 125-MW and a 155-MW coal fired unit as well as a 170-MW oil-fired unit to install a recycle system;
- Prior to 2012, the Salt River Project retrofitted the Coronado Generating System to install a submerged drag chain conveyor in a customized bottom ash hopper/trough;
- In October 2012, SCE&GC installed two remote submerged flight conveyor systems on two 372-MW units at its Wateree plant to handle bottom ash.<sup>137</sup>
- In 2016, TVA proposed to construct a dewatering system for handling bottom ash at its nine-unit, 1700-MW Kingston coal plant.<sup>138</sup>
- In 2017, TVA proposed to construct a dewatering system for handling bottom ash at two 300-MW units and two 327.6-MW units at its Gallatin coal plant.<sup>139</sup>

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<sup>136</sup> EPA provided a range, rather than a single number, in order to not divulge CBI.

<sup>137</sup> Fox Report at 45.

<sup>138</sup> *See* TVA, Draft Environmental Assessment, available at [https://www.tva.com/file\\_source/TVA/Site%20Content/Environment/Environmental%20Stewardship/Environmental%20Reviews/Kingston%20Fossil%20Plant%20Bottom%20Ash%20Dewatering%20Facility/KIF%20DW%20Revised%20EA\\_01-11-2016.pdf](https://www.tva.com/file_source/TVA/Site%20Content/Environment/Environmental%20Stewardship/Environmental%20Reviews/Kingston%20Fossil%20Plant%20Bottom%20Ash%20Dewatering%20Facility/KIF%20DW%20Revised%20EA_01-11-2016.pdf)

<sup>139</sup> *See* TVA, Draft Environmental Assessment, available at [https://www.tva.gov/file\\_source/TVA/Site%20Content/Environment/Environmental%20Stewardship/Environmental%20Reviews/Gallatin%20Fossil%20Plant%20Bottom%20Ash%20Process%](https://www.tva.gov/file_source/TVA/Site%20Content/Environment/Environmental%20Stewardship/Environmental%20Reviews/Gallatin%20Fossil%20Plant%20Bottom%20Ash%20Process%20)

SBA also “believes it would be particularly difficult for small plants that do not have available space to expand” to convert to dry handling of bottom ash. SBA Petition at 10. SBA provides no support whatsoever for this “belief.” Moreover, SBA ignores that there are technologies available for complying with the zero-discharge standard that can be installed at plants with space constraints. For example, the Northern Indiana Public Service Company (“NIPSCO”), faced with space constraints at its Schahfer plant, has proposed to install a remote ash handling system which would dewater the plant’s bottom ash and recycle the transport water.<sup>140</sup>

SBA notes that exempting plants under 400 MW would preserve 73% of the bottom ash pollution reductions but save \$96 million per year in costs. SBA Petition at 9. SBA’s suggestion that EPA revisit the BAT standards solely on the basis of cost-benefit balancing is misguided, for several reasons. SBA’s petition invites EPA to engage in precisely the kind of cost-benefit balancing that the Clean Water Act neither requires nor permits. *See* Comments of EIP et al. at 14-16, 89-90. BAT represents the best available technology that is economically achievable. 33 U.S.C. § 1311(b)(2)(B). A technology is economically achievable if the “costs can be reasonably borne by the industry.” *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d at 516; *Rybachek v. EPA*, 904 F.2d at 1290-91 (discussing this standard). Congress determined that investments in pollution controls are warranted to the greatest degree possible, and therefore the inquiry is not whether the costs of a given control are “worth it” in EPA’s estimation. Instead, EPA’s determination of economic achievability must be guided by the Supreme Court’s holding that BAT limits “represent[] a commitment of the maximum resources economically possible to the ultimate goal of eliminating all polluting discharges.” *EPA v. Nat’l Crushed Stone Ass’n*, 449 U.S. 64, 74 (1980).

In developing BAT guidelines, costs are to be given even less importance than in developing the less stringent BPT guidelines. Congress underscored this by including a requirement to balance costs against benefits in promulgating BPT guidelines, but omitting any cost-benefit analysis from the development of BAT guidelines. *Compare* 33 U.S.C. § 1314(b)(1)(B) *with id.* § 1314(b)(2)(B). “[I]n assessing BAT[,] total cost is no longer to be considered in comparison to effluent reduction benefits.” *Nat’l Crushed Stone*, 449 U.S. at 71; *see also Am. Iron & Steel*, 526 F.2d at 1051-52 (“With respect to the [BAT] standards,” Congress intended “that there should be no cost-benefit analysis.”). As the D.C. Circuit has explained, Congress affirmatively rejected amendments that would have required cost-benefit balancing for BAT. *See Weyerhaeuser Co. v. Costle*, 590 F.2d 1011, 1046 (D.C. Cir. 1978).

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20Dewatering%20Facility/Gallatin%20Bottom%20Ash%20Process%20Dewatering-Draft%20EA.pdf.

<sup>140</sup> *See* Verified Direct Testimony of Kurt W. Sangster (Revised), on behalf of Northern Indiana Public Service Company, at 5:13-18 and 15:6-14, Indiana Utility Regulatory Commission Cause No. 44872 (filed June 22, 2017), attached hereto as Exhibit 13.

For decades, courts have rebuffed the argument UWAG and SBA make here, that cost-benefit analysis should be the basis for BAT determinations.<sup>141</sup> Thus, at least seven circuit courts of appeal have affirmed, in accord with the Supreme Court’s decisive pronouncement in *Nat’l Crushed Stone*, that EPA cannot base BAT guidelines on cost-benefit analysis.

Congress declined to premise BAT standards on cost-benefit analysis for sound policy reasons. The sponsors of the 1972 Clean Water Act amendments recognized that the costs of pollution controls are more easily quantified than the benefits; Congress understood that while the cost of compliance are “readily quantifiable,” “[s]ome economic benefits can be calculated with reasonable accuracy,” but many more benefits are “difficult to calculate.” S. Rep. 92-414 (1972), in 1972 U.S.C.C.A.N. 3668, 3713-14. This is exactly the situation here, where EPA acknowledged that it was unable to quantify and/or monetize several categories of important benefits of the ELG Rule. *E.g.*, 80 Fed. Reg. at 67,876-77. As costs are more easily quantified and monetized than benefits, any cost-benefit analysis will be biased toward emphasizing costs over benefits, as is the case with the ELG Rule.

Furthermore, even if it were lawful for EPA to weigh costs against benefits as SBA recommends, SBA has not actually weighed costs against benefits. Instead, SBA cites only the avoided costs, \$96 million, without citing the comparable figure for the foregone benefits. SBA Petition at 9.

Moreover, there is no rational basis for selecting 400 MW as the cut-off for converting to dry bottom ash handling. *See* 80 Fed. Reg. at 87,860-64. It will always be true that exempting some plants from a regulatory requirement would reduce the total costs and benefits of a rule.

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<sup>141</sup> *See, e.g., Am. Iron & Steel Inst. v. EPA*, 526 F.2d at 1053 n.54 (“a cost-benefit analysis is not required at all” for BAT); *CPC Int’l Inc. v. Train*, 540 F.2d 1329, 1341-42 (8th Cir. 1976) (BAT guidelines are “governed by a standard of reasonableness without the necessity of a thorough cost-benefit analysis”); *Reynolds Metals Co v. EPA*, 760 F.2d 549, 565 (4th Cir. 1985) (“no balancing is required” for BAT); *Rybachek v. EPA*, 904 F.2d at 1290-91 (EPA “need not compare [control] cost with the benefits of effluent reduction”); *BP Exploration & Oil, Inc. v. EPA*, 66 F.3d 784, 799-800 (6th Cir. 1995) (rejecting industry demand for cost-benefit analysis because BAT “does not require cost-benefit analysis” and “EPA need only find ... that the cost of the technology is reasonable”); *Texas Oil & Gas Ass’n v. EPA*, 161 F.3d 923, 928 (5th Cir. 1998) (underlining that “BAT is the CWA’s most stringent standard” and must be set based not on costbenefit analysis but on “the performance of the single best-performing plant in an industrial field”); *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d at 516 (BAT can be set to the level which can “reasonably be borne by a given industry”); *Am. Paper Inst. v. Train*, 543 F.2d 328, 354 (D.C. Cir. 1976) (“Section 304(b)(2)(B) mandates no such [cost-benefit] balancing for the 1983 limitations”); *Ass’n of Pac. Fisheries*, 615 F.2d 794, 818 (9th Cir. 1980) (“The conspicuous absence of the comparative language contained in section 304(b)(1)(B) leads us to the conclusion that Congress did not intend the Agency or this court to engage in marginal cost-benefit comparisons [for BAT].”).

But SBA provides no basis for selecting 400 MW as the threshold, as opposed to any other size. Such an unsupported, random proposal is the very definition of arbitrary action.

SBA likewise provides no new information to contradict the record evidence that applying the bottom ash BAT requirements to units smaller than 400 MW (but larger than 50 MW) will cause few, if any, units to close. As we explained previously, while EPA did not model the retirement impacts of Option C (which included the exemption from the bottom ash BAT requirement for units 400 MW or smaller), EPA did model Option D, which includes a zero discharge bottom ash transport water standard for all plants greater than 50 MW. *Id.* at 67,848-49. Option D, which EPA selected in the final rule, would lead to a net increase in retirements of 843 MW, or 0.2 percent of total industry capacity. *Id.* at 67,853, 67,867. The incremental retirement of 843 MW is attributable to the combined effect of all the new requirements in the final Rule, including BAT for fly ash and FGD wastewater. Thus, the retirements attributable solely to units smaller than 400 MW facing a zero-discharge requirement for bottom ash are almost certainly much less than 843 MW. Even if one makes the counterfactual, conservative assumption that all of the 843 MW of retirements are due to bottom ash BAT for small units, this would hardly be the “heavy burden” on small entities that SBA alleges, SBA Petition at 9.

For all these reasons, SBA’s petition provides no grounds for revisiting EPA’s rejection of the argument that the agency should exempt units equal to or smaller than 400 MW from the BAT requirement to achieve zero discharge of bottom ash wastewater.

**D. UWAG’s Suggestion that EPA Redo its Cost Analysis Because of Potential Changes to the CPP and CCR Rules Would Result in a Never-Ending Cycle of Analysis.**

UWAG makes the untenable and legally unsupported argument that EPA must redo its cost analysis in light of *potential* changes to the Clean Power Plan (“CPP”) and the Coal Combustion Residuals Rule (“CCR Rule”). *See* UWAG Petition at 74-75. If UWAG’s theory were accepted, no agency could ever finalize and implement a rule, because agencies would have to continually re-analyze each rule’s costs based on potential changes to every other rule. Needless to say, UWAG’s theory is wholly impracticable.

UWAG’s theory is also wholly unsupported by the law. Courts review an agency decision based on the administrative record, which consists of the documents before the agency at the time of its decision—not after the decision. *Am. Wildlands v. Kempthorne*, 530 F.3d 991, 1002 (D.C. Cir. 2008) (“[R]eview is to be based on the full administrative record that was before the Secretary at the time he made his decision.” (quoting *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 420 (1971))). UWAG cites no legal authority that requires EPA to continuously reassess the evidence it considered in the cost analysis for the ELG Rule. On the contrary, courts have recognized that imposing such a requirement would effectively prevent agencies from ever taking final action. *See, e.g., Marsh v. Oregon Nat. Res. Council*, 490 U.S. 360, 373 (1989) (“[A]n agency need not supplement an EIS every time new information comes to light after the EIS is finalized. To require otherwise would render agency decisionmaking intractable, always awaiting updated information only to find the new information outdated by

the time a decision is made.” (footnote omitted)); *Wisconsin v. Weinberger*, 745 F.2d 412, 424 (7th Cir. 1984) (“Were we to require the Navy formally to reassess its proposed action with a SEIS every time some bit of new information appeared, we would be unjustifiably interfering with the Navy’s mission.”).

Moreover, even if it were legitimate for EPA to reconsider the ELG Rule based on post-promulgation changes to other rules affecting power plants, neither the CPP nor the CCR rule has undergone any final changes that would warrant such a reconsideration. As of today, the Clean Power Plan is a final, valid rule. The Supreme Court stayed the CPP pending judicial review, but no court has invalidated the CPP. While EPA *may* reconsider the CPP, unless and until the CPP is repealed by the agency or invalidated by a court, it remains a valid, final rule. And UWAG’s speculation as to compliance dates under the CPP is just that—speculation. In short, there is no rational basis for EPA to redo the cost analysis of the ELG Rule based on potential changes to a valid, final rule such as the CPP.

Similarly, UWAG’s argument that EPA must redo the cost analysis based on changes to the CCR Rule has no merit. As UWAG notes, after EPA issued the final CCR Rule, Congress made changes to RCRA, including, among other things, authorizing EPA to approve state permit programs for the disposal of coal ash.<sup>142</sup> However, Congress did not alter the key, substantive requirements of the CCR Rule, including the CCR Rule’s compliance dates.<sup>143</sup> While parties have submitted petitions for reconsideration of the CCR rule, EPA has not yet acted on those petitions. Even if EPA were to announce reconsideration of the CCR Rule, it will be some time before it is known what, if any, changes will be made to the CCR Rule. Thus, there is no rational basis for redoing the ELG Rule’s cost analysis based on changes that may or may not happen to the CCR Rule.

In sum, UWAG invites EPA to begin a never-ending cycle of redoing its analysis for the ELG Rule every time there is the *potential* that another rule affecting coal plants may change. This cynical argument is nothing more than another attempt to delay the life-saving protections of the ELG Rule.

#### **E. Executive Orders 13771 and 13777 Do Not Justify Reconsideration of the ELG Rule.**

Both UWAG and SBA advance the meritless argument that Executive Orders 13771 and 13777 support reconsidering the final ELG Rule. *See* SBA Petition at 3; UWAG Petition at 6-10. Executive Order 13771, 82 Fed. Reg. 9339 (Jan. 30, 2017) (“EO 13771”), is unlawful, and therefore cannot justify reconsidering any rule, including the ELG Rule. Executive Order 13777, 82 Fed. Reg. 12, 285 (Feb. 24, 2017) (“EO 13777”), does not apply to the ELG Rule, based on the criteria specified in the Executive Order. Even if both Executive Orders were lawful and applied here, an executive order can never override conflicting statutory provisions. The Clean Water Act requires EPA to set BAT standards so as to eliminate discharges of pollutants

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<sup>142</sup> *See* Water Infrastructure Improvements for the Nation Act, Pub. L. No. 114-322, 130 Stat. 1628, § 2301 (2016), codified at 42 U.S.C. § 6945(d).

<sup>143</sup> *See id.*

whenever feasible, and thus the zero-discharge standards for fly ash and bottom ash cannot be reconsidered on the basis of executive orders that conflict with this statutory mandate. Moreover, the Clean Water Act specifies the factors to be considered when issuing ELGs for purposes of setting BAT standards, and none of the provisions in EO 13771 and EO 13777 are listed in, or have any basis in, the Clean Water Act. For these reasons, and as explained more fully below, neither EO 13771 nor EO 13777 justifies reconsidering the BAT standards in the ELG Rule.

### **1. EO 13771 is Unlawful and Cannot Justify Reconsideration of the ELG Rule.**

EO Order 13771, otherwise known as the “2 for 1” Executive Order, is unlawful, and therefore is not a proper basis for reconsidering the ELG Rule. EO 13771 states that for every new regulation issued, “at least two prior regulations be identified for elimination.” EO 13771 § 1. “[A]ny new incremental costs associated with new regulations shall, to the extent permitted by law, be offset by the elimination of existing costs associated with at least two prior regulations.” *Id.* § 2(c).

A legal challenge to EO 13771 is pending in the district court for the District of Columbia. *See* Compl., for Declaratory & Injunctive Relief, *Public Citizen, Inc. v. Trump*, No. 17-cv-00253-RDM, ECF Doc. 1 (D.D.C. Complaint filed Feb. 8, 2017). As explained more fully in the briefs submitted in that case, no statute authorized the President to issue EO 13771. *See* Pls.’ Memo. in Support of Motion for Summary Judgment at 18-38, *Public Citizen, Inc. v. Trump*, No. 17-cv-00253-RDM, ECF Doc. 16 (D.D.C. Motion filed May 15, 2017), Attached as Exhibit 14. As the President and executive agencies have only as much legislative authority as Congress delegates, the absence of any delegation of authority to issue EO 13771 renders the EO unlawful. *See id.* Moreover, EO 13771 directs agencies to condition each new regulation on the repeal of two prior regulations, and to offset the costs of new regulations by the avoided cost of repealed or replaced regulations—mandates which do not appear in any statute, and conflict with many statutes. *See id.* at 22-35. By directing agencies to take action which conflicts with statutory provisions, the EO violates the President’s constitutional duty to ensure that the laws are faithfully executed. *See id.*

In sum, EO 13771 is unlawful, and as such is not a proper basis for reconsidering the ELG Rule.

### **2. EO 13777 Does Not Apply Here.**

SBA and UWAG mistakenly assert that EO 13777 applies to the ELG Rule, based on unfounded and inaccurate claims that the Rule adversely affects jobs, that its costs exceed benefits, and that the Rule relies on methods and data which are not transparent. *See* SBA Petition at 3; UWAG Petition at 6-8; *see generally* EO 13777 § 3(d)(i), (iii), (v).

UWAG fails to support its claim that the ELG Rule will eliminate jobs or inhibit job creation. EPA found that the ELG Rule would create jobs in some sectors (*e.g.*, to operate pollution controls, to operate power plants running on alternatives to coal such as natural gas, etc.) and cause job losses in other sectors (*e.g.*, coal mining, etc.). Final Regulatory Impact Analysis at 6-1 to 6-12. However, EPA did not provide an estimate of the Rule’s net effects on

employment. *Id.* at 6-12 (“Furthermore, this employment evaluation does not reach a quantitative estimate of the overall employment effects of the final rule on employment or even whether the net effect will be positive or negative.”). EPA did note that regardless of whether the net effect on jobs was positive or negative, “given that the expected increase in production costs for coal-fired generation is relatively small (0.6 percent, based on IPM projections of Option D for 2030), the magnitude of all effects combined could also be expected to be small.” *Id.*

Neither UWAG nor SBA has provided compelling evidence to call into question EPA’s conclusion that the overall impacts of the Rule on jobs will be small. Therefore, there is no basis for finding that the ELG Rule triggers EO 13777 under the first criterion, that a rule eliminates jobs or inhibits job creation.

Similarly, the record does not support UWAG’s claim that the costs of the rule exceed its benefits. Using a 3% discount rate, EPA estimated the Rule’s costs at \$480 million per year, and the Rule’s benefits at between \$451 and \$566 million per year. 80 Fed. Reg. at 67,842. Using a 7% discount rate, EPA estimated the Rule’s costs at \$471 million per year, and the Rule’s benefits at \$387 to \$478 million per year. *Id.* Neither estimate conclusively shows that costs exceed benefits.

Moreover, EPA acknowledged that it could not quantify and monetize many significant categories of benefits. *E.g., id.* at 67,876 (“[D]ata limitations and gaps in the understanding of how society values certain water quality changes prevent EPA from quantifying and/or monetizing some benefit categories.”); *see also id.*, Table XIV-1 (listing categories of human health benefits, ecological benefits, and market benefits which EPA was unable to quantify and/or monetize); Stanton Declaration at 5-9; *see also supra* Section III(C). If these categories of benefits were quantified and monetized, they would increase the total benefits of the Rule, and further undermine UWAG’s assertion that costs exceed benefits. On the contrary, as Dr. Stanton’s declaration makes clear, if EPA had fully accounted for the ELG Rule’s benefits in its analysis, it would have found that the benefits of the rule clearly exceed the costs, not the other way around as UWAG and SBA suggest.

And while UWAG and SBA claim that the ELG Rule satisfies the second criterion of EO 13771, *i.e.*, that the costs exceed the benefits, UWAG refutes its own claim by stating that “a full evaluation of the Rule’s true costs and benefits is effectively impossible based on the current record.” UWAG Petition at 8 n.11. Thus, even according to UWAG, there is no evidence that the costs exceed the Rule’s benefits.

Nor is there any validity to UWAG’s and SBA’s claims that the ELG Rule did not rely on transparent, reproducible methods. As noted above (*see supra* Section VI(A)), there was nothing unusual about EPA’s reliance on industry CBI as part of the record for the ELG rulemaking. Most of what EPA tagged as CBI in the record was identified as such by the regulated entities themselves, many of whom are UWAG members. EPA was entitled to rely on this information, as long as it provided adequate, publicly available explanations for the bases of its findings in the rulemaking. Here, the record produced by EPA was amply sufficient to support its BAT

determinations, so reconsideration is not appropriate simply because EPA considered CBI in making those determinations. *See supra* Section VI(A).

For all of these reasons, there is no basis for EPA to evaluate the ELG Rule under EO 13777.

### **3. Even if EO 13771 and 13777 Were Lawful and Applied Here, the Clean Water Act Overrides All Conflicting Executive Orders.**

It is well settled that “the President is without authority to set aside congressional legislation by executive order.” *In re United Mine Workers of Am. Int’l Union*, 190 F.3d 545, 551 (D.C. Cir. 1999); *see also Chamber of Commerce v. Reich*, 74 F.3d 1322, 1339 (D.C. Cir. 1996) (holding that an Executive Order was preempted by a conflicting statutory provision). If there is a conflict between an Executive Order and a statute, the statute prevails. *See id.* UWAG and SBA urge EPA to rely on Executive Orders 13771 and 13777 in ways that would conflict with the Clean Water Act, and would therefore be unlawful.

The Clean Water Act mandates that BAT “effluent limitations shall require the elimination of discharges of all pollutants if the Administrator finds . . . that such elimination is technologically and economically achievable for a category or class of point sources.” 33 U.S.C. § 1311(b)(2)(A). This mandate overrides any conflicting instruction in EO 13771 and 13777. If it is technologically and economically achievable to eliminate the discharge of pollutants in a wastestream, the BAT standards must set a zero-discharge standard—regardless of whether EPA wants to repeal or replace the ELG Rule to meet the requirements of EO 13771, and regardless of whether any of the criteria in EO 13777 are met. EPA properly found that it is technologically and economically achievable to eliminate the discharge of pollutants in fly ash and bottom ash transport waters, and therefore it makes no sense to reconsider the BAT standards for fly ash and bottom ash, which cannot lawfully be changed in light of this record.

In addition, the statute lists the factors EPA is to consider when issuing ELGs for use in determining BAT. *See id.* § 1314(b)(2)(B). The only mention of costs is “the cost of achieving such effluent reduction.” *Id.* The statute does not authorize EPA to weigh costs against benefits, *see id.*, as it does for BPT standards, *see id.* § 1314(b)(1)(B), and as UWAG and SBA urge EPA to do under the Executive Orders. Nor does the statute authorize EPA to trade off the costs of the ELGs against the costs of other rules, in order to achieve the net regulatory cost objectives in EO 13771.

### **4. If EO 13771 and/or 13777 are the Basis for Reconsideration and the Postponement of Compliance Deadlines, EPA Must Issue a New Proposal Explaining Its Reliance on the Executive Orders.**

EPA’s proposed rule does not mention either Executive Order 13771 or 13777. EPA does not request public comment on the applicability of either Executive Order, nor does EPA state that it is considering whether either EO applies. Therefore, any final rule which relied on Executive Order 13771 and/or 13777 to support reconsideration and postponement of the Rule’s deadlines would not be a logical outgrowth of the proposal, and would be arbitrary and

capricious. To the extent that EPA intends to rely on Executive Orders 13771 and/or 13777, it would need to reissue a proposed rule explaining such reliance.

#### **F. EPA’s 2015 ELGs Properly Addressed Impacts on Small Entities**

SBA argues that EPA violated the Small Business Regulatory Enforcement Fairness Act (“SBREFA”) and failed to adequately solicit comments from small businesses when promulgating the ELG rule.<sup>144</sup> SBA also argues that EPA’s failure to convene a small business panel – either in 2012 when EPA issued the proposed ELG rule, or in 2015 when EPA issued the final ELG rule – violated SBREFA. *See, e.g.*, SBA 2013 Comments at 2, 9, Docket ID No. EPA-HQ-OW-2009-0819-4477 (Sept. 19, 2013); SBA Petition at 2-5. Specifically, SBA contended in its 2013 Comments that “several hundred” small entities would potentially be affected by the ELG, and suggests that EPA’s rule would have substantially benefited from the opportunity to hear from affected entities at a SBREFA panel. SBA 2013 Comments at 2. SBA repeated these same concerns in its 2017 petition for reconsideration, noting that “[s]mall entities potentially affected by this rule include several hundred small independently-owned private utilities, small government-owned utilities, and small rural electric cooperative-owned utilities.” SBA Petition at 2.

Notwithstanding these arguments, SBA does not substantiate its allegation that there are “several hundred” affected entities, except by citing phone conversations with two individuals at the National Rural Electric Cooperative Association and American Public Power Association. *See* SBA Petition at 3 & n.15 (“Given the hundreds of small entity owners that could be affected, small entity trade associations also concluded that the EPA estimate of the number of plants with costs owned by small entities was too low.”). The cited phone calls are also of somewhat questionable veracity because they were cited in the 2017 petition for reconsideration but are dated July 2013, during the comment period for the proposed rule and well before the impacts of the final ELG Rule to the allegedly affected small entities would have been known.

SBREFA requires that agencies prepare and publish a “regulatory flexibility analysis” that describes the impact on small entities of any proposed or final rule for which the agency uses notice-and-comment rulemaking. *See* 5 U.S.C. § 603 (pertaining to notices of proposed rulemaking), 604 (applicable to final rulemaking). Section 609 of the Act also requires the agency to convene a special agency panel to review comments submitted by small entities before finalizing a regulatory flexibility analysis. *Id.* § 609(a), (b). However, the Act allows an agency to avoid producing such an analysis “if the head of the agency certifies that the rule will not, if

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<sup>144</sup> SBREFA was passed in 1996 as an amendment to the earlier Regulatory Flexibility Act of 1980. In these comments, we refer to the relevant provisions of the Regulatory Flexibility Act, as amended by SBREFA, as “SBREFA.”

promulgated, have a significant economic impact on a substantial number of small entities.” *Id.* § 605(b). This is commonly abbreviated as a “no-SISNOSE certification.”<sup>145</sup>

Here, EPA issued a no-SISNOSE certification in both the proposed ELG Rule in 2013 and the final rule in 2015. *See* 78 Fed. Reg. 34,432, 34,526-30 (proposed ELG rule); 80 Fed. Reg. at 67,888-89 (final ELG Rule). In support of its certifications, EPA documented and carefully explored the impact the ELG Rule would have on small entities. In particular, in Chapter 8 of the Final Regulatory Impact Analysis, EPA calculated the approximate range of small entities that own steam electric power plants at between 110 and 191 (the lower and upper-bound estimates), based on SBREFA’s definition of a small entity found in 5 U.S.C. § 601 and the relevant industry classifications. *See* Final Regulatory Impact Analysis at 8-2 to -5. EPA then analyzed whether those small entities would be substantially affected by the ELG Rule by evaluating which facilities will incur costs exceeding either 1% or 3% of its revenues. *Id.* at 8-6. EPA explained that a finding of significant impact could result from either a high *absolute number* of affected entities (e.g., a finding that more than 100 small entities will be significantly impacted) or a *substantial fraction* of the total number of small entities (e.g., a finding that 15 small entities will be affected among 16 in the industry). *Id.*

Here, EPA analyzed the five potential regulatory options from A through E that were considered in the final rule for their impact on small entities. For option D, which was the technology option that EPA ultimately selected in the final rule, EPA found that a total of only 6 small entities would incur significant costs (i.e. costs exceeding 1% of revenues<sup>146</sup>) and only one of these would incur costs exceeding 3% of revenue. *Id.* at 8-7 to -8. In short, between 110 and 191 entities are potentially subject to the rule, and only 6 would be affected by the rule. SBA’s claims that ‘several hundred’ entities would be affected are clearly hyperbolic and should be ignored.

A review of Chapter 8 of the Final Regulatory Impact Analysis fully supports EPA’s calculations about the relatively insignificant impact the ELG Rule will have on small entities—both as a function of the absolute number of affected entities and as a percentage of the industry by sector. Moreover, SBA has not presented *any* new information in its 2017 petition for reconsideration that contradicts or undermines the validity of EPA’s analysis. Therefore, EPA’s no-SISNOSE certification for the 2015 ELG Rule was well supported, and SBA’s petition for reconsideration of the rule based on a purported lack of sufficient analysis under SBREFA is without merit.

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<sup>145</sup> SISNOSE stands for “significant impact on a substantial number of small entities,” which is a paraphrasing of the original language in 5 U.S.C. § 605(b).

<sup>146</sup> *See, e.g.*, 80 Fed. Reg. at 67,865 (“[p]lants incurring costs below one percent of revenue are unlikely to face economic impacts”).

## CONCLUSION

For the foregoing reasons, EPA should withdraw its proposal. Please do not hesitate to contact us if you have questions concerning these comments.

Sincerely,

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