Petition for Reconsideration of EPA's Final Rule: Repeal of the Clean Power Plan; Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units; Revisions to Emission Guidelines Implementing Regulations

Docket No. EPA-HQ-OAR-2017-0355

September 6, 2019

Via Email and First-Class Mail

American Lung Association, American Public Health Association, Appalachian Mountain Club, Chesapeake Bay Foundation, Clean Air Council, Clean Wisconsin, Conservation Law Foundation, Environmental Defense Fund, Environmental Law & Policy Center, Minnesota Center for Environmental Advocacy, Natural Resources Defense Council, and Sierra Club submit the following petition for reconsideration of EPA's final rule "Repeal of the Clean Power Plan; Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units; Revisions to Emission Guidelines Implementing Regulations," 84 Fed. Reg. 32,520 (July 8, 2019).

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I. Introduction

American Lung Association, American Public Health Association, Appalachian Mountain Club, Chesapeake Bay Foundation, Clean Air Council, Clean Wisconsin, Conservation Law Foundation, Environmental Defense Fund, Environmental Law & Policy Center, Minnesota Center for Environmental Advocacy, Natural Resources Defense Council, and Sierra Club (collectively, "Petitioners") hereby request that the U.S. Environmental Protection Agency ("EPA") reconsider the final rule titled "Repeal of the Clean Power Plan; Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units; Revisions to Emission Guidelines Implementing Regulations," published at 84 Fed. Reg. 32,520 (July 8, 2019) ("Final ACE Rule").

Clean Air Act ("CAA") section 307(d)(7)(B) provides:

Only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. If the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within such time or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, the Administrator shall convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed.¹

Thus, employing the mandatory term "shall," section 307(d)(7)(B) requires that EPA convene a proceeding for reconsideration when the requisite showing is made. Section 307(d)(7)(B), moreover, makes a petition for reconsideration a prerequisite to pursuing certain claims on judicial review.²

When inquiring whether it was impracticable to have raised an objection during the public comment period, the U.S. Court of Appeals for the D.C. Circuit has asked whether the Agency made only "incremental changes" from proposal to finalization, such that the final rule is a "logical outgrowth" of the proposal.³ An objection is of central relevance if it "provides substantial support for the argument that the regulation should be revised."⁴

The Final ACE Rule includes three discrete actions. It repeals the Clean Power Plan ("CPP"), promulgates a new regulation EPA holds out as a replacement for the CPP, and promulgates amended regulations governing emission guidelines under section 111(d) of the CAA. In key

¹ 42 U.S.C. § 7607(d)(7)(B).

² See, e.g., EME Homer City Generation, L.P. v. EPA, 795 F.3d 118, 137 (D.C. Cir. 2015).

³ Sierra Club v. Costle, 657 F.2d 298, 352 (D.C. Cir. 1981).

⁴ Coal. for Responsible Regulation v. EPA, 684 F.3d 102, 125 (D.C. Cir. 2012), aff'd in part, rev'd in part on other grounds sub nom. Util. Air Regulatory Grp. v. EPA, 573 U.S. 302 (2014).

respects, the Final ACE Rule departs considerably from the actions and rationales that EPA presented in the three prior notices—two notices of proposed rulemaking and one advance notice of proposed rulemaking—leading to the Final ACE Rule: "Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program," 83 Fed. Reg. 44,746 (Aug. 31, 2018) ("ACE Proposal"); "Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units," 82 Fed. Reg. 48,035 (Oct. 16, 2017) ("CPP Repeal Proposal"); and "Advance Notice of Proposed Rulemaking: State Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units," 82 Fed. Reg. 61,507 (Dec. 28, 2017) ("Replacement ANPRM").

As detailed below, the public was denied the opportunity to raise objections to these substantive and important changes. Administrator Wheeler must initiate a reconsideration proceeding so that the public can provide input on the issues that follow.

Petitioners have filed timely petitions for review of the Final ACE Rule in the U.S. Court of Appeals for the D.C. Circuit, and those cases are pending.⁵ As explained below, EPA's notices of proposed rulemaking failed to provide adequate notice as to the issues raised herein, and it was therefore impracticable for Petitioners to present these objections during the public comment period. Under the CAA, parties challenging EPA rules must petition for judicial review of a rule within 60 days of the rule's publication in the Federal Register. At the same time, as a general matter only those issues that were presented to the Agency during the period for public comment or presented in a subsequent reconsideration proceeding may be raised on judicial review.⁷ Petitioners note that there is sometimes uncertainty whether a particular objection will be deemed subject to section 307(d)(7)(B)'s exhaustion requirements and reconsideration procedures, and that definitive judicial resolution of that uncertainty may come after the time for submitting the objection to the agency has expired. Petitioners also note that section 307(d)(7)(B)'s exhaustion requirement is not jurisdictional and can be waived by the Agency.⁸ Accordingly, Petitioners reserve the right to press some or all of the objections presented herein in their pending judicial challenges. To promote efficient resolution of disputes over the Final ACE Rule, EPA should act on this petition expeditiously, and should grant reconsideration on the following issues.

⁵ American Lung Ass'n, et al. v. EPA, D.C. Cir. No. 19-1140; Appalachian Mountain Club, et al. v. EPA, D.C. Cir. No. 19-1166; Chesapeake Bay Foundation, Inc. v. EPA, D.C. Cir. No. 19-1173.

^{6 42} U.S.C. § 7607(b)(1).

⁷ 42 U.S.C. § 7607(d)(7)(B).

⁸ See EPA v. EME Homer City Generation, L.P., 572 U.S. 489, 512 (2014) (noting that section 7607(d)(7)(B) is not jurisdictional and proceeding to review the merits of unexhausted objections because EPA did not "unequivocally" assert challengers' "procedural obligation[]" to present issues to the Agency before seeking judicial review of these issues).

II. EPA Failed to Provide Notice of Several of the Final ACE Rule's Central Statutory Interpretation Arguments.

The CAA's rulemaking provisions require EPA to provide at proposal "the major legal interpretations . . . underlying the proposed rule." In both proposals and the Replacement ANPRM, EPA was unclear as to whether its interpretation of section 111 was based on statutory command or policy choice. In the Final ACE Rule, EPA has definitively chosen to rely exclusively on its argument that the CPP is unambiguously precluded by the language of the statute. However, the Final ACE Rule includes several new statutory interpretation arguments to support that conclusion—which is undeniably central to the rulemaking—that did not appear in the CPP Repeal Proposal, the ACE Proposal, or the Replacement ANPRM. While these three rulemaking notices included other statutory arguments that the CPP was unlawful, EPA relied on entirely new legal interpretations in the Final ACE Rule.

The Final ACE Rule argues that the best system of emission reduction (BSER) determined in the CPP is unambiguously and categorically precluded by the language of the CAA. The relevant language of section 111 requires that "each State . . . shall submit . . . a plan which . . . establishes standards of performance for any existing source." A "standard of performance" in turn is "a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which . . . the Administrator determines has been adequately demonstrated." 12

The Final ACE Rule includes four new interpretations of section 111, which were not noticed but which now form the core of EPA's argument that the CPP is precluded by the plain language of the statute: that the term "application" requires a direct and indirect object; that the CPP was impermissibly based on "implementation" rather than "application" of the BSER; that the dictionary definition of "system" is too broad for use in the context of the CAA; and that the definition of "standard of performance" in CAA section 302(l) precludes consideration of reduced utilization as part of a section 111 BSER. EPA claims these are obvious and decisive statutory features, yet the Agency did not unveil them in any of its three prior rulemaking notices. Accordingly, commenters—including Petitioners here—did not have a reasonable opportunity to respond to these yet-unmade arguments during the public comment period. EPA should grant this petition and convene a reconsideration proceeding to allow for public input on these new legal interpretations.

A. EPA Failed to Provide Notice of Its Arguments Predicated on the Claimed Grammatical Properties of the Word "Application."

In the Final ACE Rule, EPA makes for the first time a new argument that the text of CAA sections 111(a)(1) and 111(d) combine to *unambiguously* limit the BSER to measures that can be

^{9 42} U.S.C. § 7607(d)(3)(C).

^{10 84} Fed. Reg. at 32,524.

¹¹ 42 U.S.C. § 7411(d)(1).

¹² 42 U.S.C. § 7411(a)(1).

physically applied "at" or "to" an individual source. In support of its new legal interpretation, EPA introduces a complex and obscure grammatical argument about the word "application" that did not appear in the ACE Proposal, and was therefore impossible to comment on. This new legal interpretation is so critical to EPA's conclusions regarding the scope of its authority under section 111 that the Final ACE Rule "begins with the meaning of 'application,' as it appears in CAA section 111(a)(1)." The objections detailed below are therefore of central relevance to the outcome of the rulemaking. ¹⁴

1. Contrary to EPA's Assertions, "Application" Does Not Require an Indirect Object.

Fundamental to EPA's new conclusion that the plain language of section 111 unambiguously limits the BSER to at-the-source measures is the Agency's claim that the word "application" requires an indirect object. According to EPA, "the ordinary and natural use of the term 'application'... requires both a direct object and an indirect object. In other words, someone must apply *something* to *something else*." The Agency proceeds from this claim to the further conclusion that the word "application" rules out a system of emission reduction like that underlying the CPP.

While EPA put forth other arguments in the ACE Proposal that EPA asserted would render the CPP unlawful, nowhere did it claim that the word "application" requires an indirect object, or that the CAA unambiguously excludes certain kinds of systems of emission reduction from being selected as the "best system" for the purposes of section 111. This despite the fact that this new argument is central to the Agency's final interpretation of section 111. Had EPA disclosed that it might rely upon this grammatical argument, Petitioners would have demonstrated why it is deeply flawed and unpersuasive, and why it does not provide support for the Agency's claim of an unambiguous statutory bar.

EPA's un-noticed grammatical argument is flawed for several reasons. To begin with, EPA provides no support for this "indirect object rule." The Agency relies on several different dictionary definitions in its attempt to limit the meaning of "application" to "the act of putting to use" and to argue that the BSER must be "put to use" within the fenceline of a source—definitions that, in point of fact, provide examples in which "application" has no indirect

¹³ 84 Fed. Reg. at 32,524.

¹⁴ 42 U.S.C. § 7607(d)(7)(B).

^{15 84} Fed. Reg. at 32,524.

¹⁶ See CPP Repeal Proposal, 82 Fed. Reg. at 48,039-40 (merely stating that use of the term "application" in other parts of the Clean Air Act "suggests" that the BSER "should be" applicable to an individual source); Replacement ANPRM, 82 Fed. Reg. 61,507 (giving no indication of a proposal to interpret "application" as requiring an indirect object, or to interpret section 111 as unambiguously requiring an at-the-source BSER); ACE Proposal, 83 Fed. Reg. at 44,752-54 (providing no grammatical or textual analysis of the term "application" and thrice describing its proposed interpretation as "reasonable").

¹⁷ See ACE Final Rule, 84 Fed. Reg. at 32,524 ("The EPA begins with the meaning of 'application,' as it appears in CAA section 111(a)(1).").

object.¹⁸ But EPA cites no authority whatsoever for its claim that "the ordinary and natural use of" "application" requires an indirect object.¹⁹ Rather, EPA's predetermined conclusion that a BSER must apply "at" or "to" a source leads it to infer a grammatical requirement that does not exist, and which is contradicted by the dictionary definition and examples that EPA provides.

Indeed, Congress routinely uses "application of" without an explicit or implied indirect object. These uses are consistent with EPA's preferred definition—"the act of putting to use"—but rather than such usage requiring an indirect object (application of x to y), the term is used in a manner analogous to "deployment of" or "operation of" without an indirect object. For example, the Passenger Rail Investment and Improvement Act of 2008 (PRIIA) directs that "Amtrak shall develop . . . a performance improvement plan . . . based on the data collected through the application of the financial and performance metrics developed under section 207 of [PRIIA]."20 This statutory language does not suggest that there is some specific indirect object to which "financial and performance metrics" must be applied. Likewise, Section 2668a of Title 10, which limits the authority of the "Secretary concerned" to grant restrictive easements on real property, provides that "[a]n easement . . . may not be granted unless . . . the conservation purpose to be promoted by the easement cannot be effectively achieved through the application of State law by the State or local government without the grant of restrictive easements."²¹ Here again, Congress does not indicate that "State law" must, or even could, be applied to anything in particular.²² It is noteworthy that the Merriam-Webster Thesaurus defines "application" as "the act or practice of employing something for a particular purpose" and provides as synonyms "employment, exercise, operation, play, usage, use."²³ Congress's use of "application" in the above-mentioned contexts—and in section 111(a)(1)—is consistent with this definition and these synonyms, not the rigid and unsupported grammatical theory that EPA puts forward in the Final ACE Rule.

¹⁸ See 84 Fed. Reg. at 32,524 n.35 (citing Merriam-Webster's Collegiate Dictionary, which presents as examples "an act of applying . . . of new techniques" and "new applications for old remedies" without specifying anything to which new techniques or old remedies apply).

¹⁹ *Id.* at 32,524 (citing no authority for the proposition).

²⁰ 49 U.S.C. § 24710(b).

²¹ 10 U.S.C. § 2668a(c)(2).

²² See also, e.g., 15 U.S.C. § 278*l* ("[T]he Secretary . . . shall provide technical assistance to State technology programs . . . in order to help those programs help businesses . . . to enhance their competitiveness through the application of science and technology[.]"); 16 U.S.C. § 1829 ("[T]he Secretary may . . . enhance enforcement capabilities through the application of commercial or governmental remote sensing technology to locate or identify vessels engaged in illegal, unreported, or unregulated fishing on the high seas . . . "); 49 U.S.C. § 44506 ("[T]he Administrator shall conduct research . . . investigation . . . methods for improving and accelerating future air traffic controller training through the application of advanced training techniques[.]"); 10 U.S.C. § 14306 ("[T]he number of officers to be considered from below the [promotion] zone may be established through the application of the running mate system or otherwise as the Secretary determines to be appropriate"); 19 U.S.C. § 4317 ("The Commissioner shall . . . develop and implement Centers of Excellence and Expertise through the U.S. Customs and Border Protection that . . . improve enforcement efforts . . . in specific industry sectors through the application of targeting information from the National Targeting Center . . . and from other means of verification.").

²³ Merriam-Webster's Online Thesaurus, "Application," https://www.merriam-webster.com/thesaurus/application (last visited Aug. 19, 2019).

Moreover, Congress knows how to specify an indirect object when it desires one. Section 3104 of the National Indian Forest Resources Management Act provides that "Indian forest land management activities . . . shall be designed to achieve . . . the development, maintenance, and enhancement of Indian forest land . . . by providing effective management and protection through the application of sound silvicultural and economic principles to (A) the harvesting of forest products, (B) forestation, (C) timber stand improvement, and (D) other forestry practices."²⁴ That Congress occasionally, and only occasionally, specifies an indirect object when it employs the term "through the application of" severely undermines EPA's assertion that "application" ordinarily and naturally requires an indirect object.

Had EPA proposed this new grammatical argument that fundamentally underpins the Final ACE Rule, commenters would have presented arguments demonstrating that "application" need not have an indirect object, and EPA would have had to reconsider its new conclusion that section 111 unambiguously requires that BSER measures be applicable "at" or "to" an individual source.

2. Even If "Application" Requires an Indirect Object, EPA Fails to Demonstrate that Section 111(a)(1)'s Indirect Object Must Be an Individual Building, Structure, Facility, or Installation.

Having concluded that "application" requires an indirect object, EPA claims that Congress unambiguously provided one—namely, any "building, structure, facility, or installation" that emits or may emit any air pollutant.²⁵

This new interpretation, however, could not have been anticipated. In the CPP Repeal Proposal, for example, EPA merely said that the term "application" "suggests" that the BSER "should be" applicable to individual sources, with scant analysis for why that might be. ²⁶ Indeed, nowhere in EPA's three proposals preceding the Final ACE Rule did the Agency propose to interpret "any building, structure, facility, or installation" as the necessary indirect object of "application" as that term is used in section 111(a)(1). Had EPA noticed such an interpretation, commenters could have demonstrated that, to the extent the word "application" requires an indirect object, EPA's assertion that Congress unambiguously specified one in section 111 is deeply flawed.

EPA's un-noticed claim of unambiguity requires an intricate and ultimately untenable argument, provided for the first time in the Final ACE Rule. There being no indirect object specified in section 111(a)(1), EPA jumps down to section 111(d), pointing out that that provision directs each State to "submit to the Administrator a plan which establishes standards of performance for

²⁴ 25 U.S.C. § 3104(b)(1) (emphasis added). See also 7 U.S.C. § 3196(c)(5) ("In establishing... priorities [for "a rational allocation of funds appropriated under this section,"] the Secretary and the Advisory Board shall consider . . . whether the status of scientific research is such that accomplishments may be anticipated through the application of scientific effort to such health or disease problem." (emphasis added)).

²⁵ 84 Fed. Reg. at 32,524.

²⁶ See 82 Fed. Reg. at 48,039-40 (stating that the term "application" "signals a physical or operational change to a source" and then merely quoting the statutory standards for MACT, BACT, and motor vehicles and engines).

any existing source."²⁷ The Agency then moves back up to section 111(a)(6), noting that "existing source" is defined by the CAA as "any stationary source other than a new source."²⁸ EPA finally arrives at section 111(a)(3), which defines "stationary source" as "any building, structure, facility, or installation which emits or may emit any air pollutant."²⁹ EPA claims that this combination of provisions and definitions represents the unambiguously expressed intent of Congress that the indirect object of "application" must be a "building, structure, facility, or installation." We have seen, however, that when Congress employs "through the application of" and wishes to specify an indirect object, it plainly states the indirect object immediately after use of the term,³⁰ the ordinary and natural place one would expect to find it, not hidden in a series of definitions of other terms. Thus, even if "application" requires an indirect object as EPA claims, in the context of section 111 Congress plainly did not specify what that indirect object must be.

In any event, the statutory language recited by EPA merely shows that *standards of performance* must be established for "any building, structure, facility, or installation which emits or may emit any air pollutant." EPA, however, concludes from this language that "CAA section 111 unambiguously limits *the BSER* to those systems that can be put into operation *at* a building, structure, facility, or installation." This inference is a bridge too far, for two reasons. First, section 111(a) merely provides that "standards of performance" must "reflect the degree of emission limitation achievable through the application of the [BSER]." It describes no physical or locational limitations whatsoever on the BSER. Nor does section 111(d) require that the BSER—as opposed to a standard of performance—be "for" a source. Accordingly, the fact that standards of performance under section 111(d) must be established for "any building, structure, facility, or installation" does not give rise to the inference that such entities are objects to which the BSER must be capable of physical application.

Second, and equally fatal, EPA's new textual argument also assumes without warrant that the word "for" as used in section 111(d)³⁴ is synonymous with the words "at" or "to." EPA provides no support for this assumption. Indeed, the Agency does not even acknowledge this leap. But it

²⁷ 84 Fed. Reg. at 32,524 (emphasis in original).

²⁸ *Id.* (quoting 42 U.S.C. § 7411(a)(6)).

²⁹ *Id.* (quoting 42 U.S.C. § 7411(a)(3)).

³⁰ See, e.g., 25 U.S.C. § 3104(b)(1); see also 7 U.S.C. § 3196(c)(5).

³¹ See 84 Fed. Reg. at 32,524 (acknowledging that section 111(d) requires that State plans establish standards of performance for existing sources).

³² *Id.* (first emphasis added; second emphasis in original).

³³ See 42 U.S.C. § 7411(a)(1). Moreover, even if EPA's restrictive and atextual interpretation of "BSER" were correct, the Final ACE Rule is nonetheless arbitrary and unlawful because emissions-reducing utilization can be applied to or at an individual source and should therefore have been considered by EPA. See Comments of Environmental Defense Fund on "Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program, 83 Fed. Reg. 44,746 (Aug. 31, 2018)," at 2-5, Docket ID No. EPA-HQ-OAR-2017-0355-24419 (Oct. 31, 2018).

³⁴ 42 U.S.C. § 7411(d)(1)(A) (providing for the establishment of "standards of performance *for* any existing source" (emphasis added)).

plainly does not follow that because standards of performance must be for existing sources that the BSER must be applicable at or to existing sources. A standard of performance can be for a particular source even if the BSER that informs the standard is based on measures not applicable at or to that source.

Lastly, EPA does not explain what, if any, statutory purpose such a limitation would serve. If EPA's invented at-the-source requirement is intended to ensure feasibility, one need look no further than the CPP to see that such a requirement is unnecessary. In the CPP, EPA demonstrated the many ways that sources could secure the reductions required by standards of performance and could, in fact, apply the best system of emission reduction.³⁵ That it was demonstrably feasible for sources to achieve the reductions required by the CPP (and that, in many cases, sources have already begun to achieve them) shows that EPA's narrow construction of section 111(a)(1) is unnecessary to ensure feasibility. Indeed, section 111(a)(1) already stipulates that the system be "adequately demonstrated" and the level of emission reduction required be "achievable," rendering EPA's inferred requirement superfluous. Moreover, in the CPP, EPA amply demonstrated the feasibility of meeting the emission limitation through the application of the BSER. In sum, EPA's invented interpretative constraint—apparently designed to ensure feasibility of standards that reflect an emission limitation based on the BSER—is redundant with explicit statutory requirements and clearly unnecessary in light of the CPP's record and ensuing market trends. It is therefore arbitrary and unlawful.

B. EPA Failed to Provide Notice of Its Newfound Argument that There Is a Critical Legal Distinction Between "Application" and "Implementation."

In the Final ACE Rule, the Agency argues for the first time that the CPP is impermissible because it is supposedly premised on a source owner "implementing" actions at another source, as demonstrated by EPA's use of the term "implement" in a footnote in the legal memorandum supporting the CPP. EPA now contends that implementing actions at another source is inconsistent with a requirement to "appl[y]" the BSER.³⁷ Specifically, EPA adopts the position that the CPP wrongly equated the legal effect of "implementation" and "application," and that the supposed misuse of the term "implementation" leads to an unlawful regulatory structure.³⁸ Since EPA made this terminological argument for the first time in the Final ACE Rule, it was impracticable for Petitioners to object to it during the comment period.

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³⁵ See 80 Fed. Reg. 64,662, 64,718 (Oct. 23, 2015) ("CPP Final Rule") ("The BSER also encompasses a variety of measures or actions that individual affected EGUs could take to implement the building blocks, including (i) direct investment in efficiency improvements and in lower- and zero-carbon generation, (ii) cross-investment in these activities through mechanisms such as emissions trading approaches, where the state-established standards of performance to which sources are subject incorporate such approaches, and (iii) reduction of higher-carbon generation.").

³⁶ 42 U.S.C. § 7411(a)(1).

³⁷ 84 Fed. Reg. at 32,527 (quoting 42 U.S.C. § 7411(a)(1)).

³⁸ 84 Fed. Reg. at 32,527.

In fact, in the CPP Replacement ANPRM and in the ACE Proposal, EPA itself used "application" and "implementation" interchangeably—calling into serious question the "plain language" argument it is now making about the distinctive meanings of these terms. ³⁹ This is not a logical outgrowth of EPA's prior arguments, which were limited to arguing that the CPP was unlawful because it involved the implementation of the BSER by the owner or operator of a source "on behalf of the source at another location."

EPA also now reaches the strikingly broad conclusion that the BSER cannot be based on measures that an owner or operator implements at a source (such as reduced utilization)⁴¹—in direct tension with its own previous request for comment and description of the proposed BSER of HRI measures.

This alleged distinction between "application" and "implementation" is of central relevance to the outcome of the Final ACE Rule because it serves as one of EPA's major legal arguments to support its contention that the CPP should be repealed. Indeed, it is the first prong in its argument that the CPP is illegal in the Final ACE Rule. As we explain below, this conclusion was not only un-noticed, it is severely flawed and must be reconsidered.

At the outset, it is important to note that the term "application" comes from section 111(a)(1)'s definition of "standard of performance," which "means a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction." In this sentence it is *EPA* that *applies* the best system of emission reduction to determine the degree of emission limitation that sources must meet. In contrast, the use of the word "implementation" to which EPA now objects comes from the legal memorandum supporting the CPP, and was used in reference to *sources implementing* the BSER, not *EPA applying* the BSER. As such, EPA's prior use of the term "implementation" is irrelevant to the question of whether EPA in fact applied the BSER in the CPP as the statute requires.

As the CPP clearly lays out, EPA *did* apply the BSER—taking each of the building blocks, applying them to the regulated sources, and calculating "the degree of emission limitation achievable through the application of the" BSER—and in the legal memorandum, EPA explained how in doing so, it had satisfied the requirements of Section 111(a)(1).⁴⁴

³⁹ CPP Replacement ANPRM, 82 Fed. Reg. at 61,513; ACE Proposal, 83 Fed. Reg. at 44,752.

⁴⁰ CPP Repeal Proposal, 82 Fed. Reg. at 48,039 (emphasis in original); *see also* CPP Replacement ANPRM, 82 Fed. Reg. at 61,512; ACE Proposal, 83 Fed. Reg. at 44,752.

⁴¹ See 84 Fed. Reg. at 32,527.

⁴² 42 U.S.C. 7411(a)(1).

⁴³ EPA, Legal Memorandum Accompanying Clean Power Plan for Certain Issues, at 84 & n. 175 ("CPP Legal Memorandum").

⁴⁴ *Id.* at 85.

In any event, EPA's artificial and irrelevant distinction between "application" and "implementation" in the context of section 111 is not supported by the use of these terms in other CAA provisions. The Final ACE Rule takes the position that Congress had the opportunity to define a "standard of performance" as reflecting the "implementation" of a BSER, but that it, ostensibly, knowingly used the word "application" and intended that its meaning should drastically differ from, and be more restrictive than, the meaning of the word "implementation." EPA further asserts that "Congress does not in fact use these [application and implementation] terms interchangeably in the Act . . . and the term that Congress actually used is one that reflects the CAA's other source-focused standard-setting provisions."

Many of the provisions EPA now posits as exemplifying an intentional distinction between "application" and "implementation" in fact demonstrate the opposite point, namely, that Congress itself has used these words interchangeably throughout the CAA:

- EPA observes that section 112(d) of the CAA contemplates the "application" of various measures in setting standards for hazardous pollution. However, section 112 uses "implementation" and "application" interchangeably in parallel contexts. For example, CAA section 112(i) refers to the "implementation of emissions reduction measures. Section 112(d)(2) refers to "the maximum degree of reduction in emissions . . . through the application of measures, and section 112(i)(5) allows for an alternative compliance schedule based on early reductions through "implementation of emissions reduction measures. Although section 112(i)(5) does not specify what those measures might be, as section 112(d)(2) does, there is no apparent reason why Congress would have intended for "application" and "implementation" to have different meanings when both provisions describe the use of emission reduction measures under subsections (d) and (i).
- EPA notes that section 182 of the CAA, which delineates nonattainment plan provisions, refers to the "implementation" of reasonably available control measures ("RACM").⁵¹ Those provisions, however, indicate that implementation of RACM may entail solely the

⁴⁵ 84 Fed. Reg. at 32,527.

⁴⁶ *Id.* at 32,527 n.72 (citing 42 U.S.C. § 7412(d)(2)).

⁴⁷ Compare 42 U.S.C. § 7412(f)(1)(A) ("methods of calculating the risk to public health remaining, or likely to remain, from sources subject to regulation under this section after the application of standards under subsection (d)" (emphasis added)), with id. § 7412(n)(2)(C) ("control technologies for coke oven production facilities to reduce residual risks remaining after implementation of the standard under subsection (d)" (emphasis added)).

⁴⁸ 84 Fed. Reg. at 32,527 n.75 (citing 42 U.S.C. § 7412(i)(5)(C)).

⁴⁹ 42 U.S.C. § 7412(d)(2).

⁵⁰ 42 U.S.C. § 7412(i)(5).

⁵¹ 84 Fed. Reg. at 32,527 n.74 (citing 42 U.S.C. § 7511a(b)(2)).

"adoption" of reasonably available control technology ("RACT"),⁵² and EPA has historically discussed RACT in terms of "application." ⁵³

Evidence that Congress has alternated between these two terms in statutory language is understandable given that they are also synonymous in common usage. Indeed, after contending in the preamble that "application" and "implementation" have distinct legal meanings, EPA, as it did in the proposals, discussed above, uses the two terms interchangeably later on in the very same document by stating that "[i]mplementation of heat rate improvement measures would achieve reasonable reductions in CO₂ emissions..." Further, whereas EPA uses the term "application" to refer to the process by which it determines the degree of emission limitation associated with the Final ACE Rule's BSER, it uses "implementation" to refer to the process by which states translate the Final ACE Rule's BSER into standards of performance, which is precisely analogous to how EPA used the term "implementation" in the CPP Legal Memorandum. The Agency's newfound distinction between "application" and "implementation" is inapt, and its own use of the term "implementation" to describe the utilization of its BSER by sources—not EPA's application of the BSER to sources to determine an emission limitation—confirms that the Agency has fabricated this distinction solely as a pretext for repealing the CPP.

In the Final ACE Rule EPA also points to the section-specific definition of "implementing" in CAA section 105(a)(1)(A) and argues that because Congress did not include the term "applying" within the list of activities provided under the definition of "implement[ation]," the meaning of these two terms must differ. Section 105(a)(1)(A) defines "implementing" as "any activity related to the planning, developing, establishing, carrying-out, improving, or maintaining of such programs. EPA argues for the first time in the Final Rule that since the term "applying" is absent from the definition under section 105(a)(1)(A), the term "application" cannot also be synonymous with "implementation." 57

⁵² See 42 U.S.C. § 7502(c) ("Such plan provisions shall provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards." (emphasis added)).

⁵³ See, e.g., NRDC v. EPA, No. 90-2447, 1991 WL 157261, at *2 (4th Cir. Aug. 19, 1991) ("The definition of Reasonably Available Control Technology (RACT) set forth in the Strelow memorandum has been regularly repeated by EPA since then. The memorandum states: The determination of RACT and the corresponding emission rate, ensuring proper application and operation of RACT, may vary from source to source due to source configuration, retrofit feasibility, operation procedures, raw materials, and other technical or economic characteristics of an individual source or group of sources. . . ."); Navistar Int'l Transp. Corp. v. EPA, 941 F.2d 1339, 1343 (6th Cir. 1991) ("Reasonably available control technology" (RACT) has been defined at 40 C.F.R. § 51.1(o) to mean 'devices, systems, process modifications, or other apparatus or techniques, the application of which will permit attainment of the emission limitations set forth in Appendix B to this part."").

⁵⁴ 84 Fed. Reg. at 32,542 (emphasis added).

⁵⁵ Section 105 of the CAA relates to the authority for EPA to issue grants to air pollution control agencies, so as to further the efficacy of State Implementation Plans (SIPs) as pertaining to national ambient air quality standards (NAAQS). 84 Fed. Reg. at 32,527 (citing 42 U.S.C. § 7405(a)(1)(A)).

⁵⁶ 42 U.S.C. § 7405(1)(a)(A).

⁵⁷ 84 Fed. Reg., at 32,527.

EPA did not reference the definition of "implementing" under section 105 as a basis for its rescission of the CPP in the Replacement ANPRM, the CPP Repeal Proposal, or the ACE Proposal. The absence of this argument prior to the Final ACE Rule is unsurprising: the definition clearly indicates that it applies only "[f]or the purpose of this section;" the fact that "application" does not appear within the list of activities that could "implement[]" SIP programs has no bearing on the meaning of "application" in the context of the BSER under section 111(a)(1). Section 105(a)(1)(A) does not even support the limited proposition that the words "application" and "implementation" have entirely separate meanings as used in the CAA: the list of activities that implement a SIP program includes any activity related to the "carrying-out" of a SIP program, which is a phrase that is essentially interchangeable with "application." In sum, Congress indicated that the definition of "implementing" in section 105(a)(1)(A) is expressly limited to section 105 and, in any event, undermines EPA's contextual conclusion that "implementation" and "application" are mutually exclusive terms as used throughout the CAA.

EPA further asserts that the word "application" requires a subject, direct object, and indirect object whereas "implement" merely requires a subject and a direct object. As we argue elsewhere in this petition for reconsideration, this is simply untrue: many federal statutes use the word "application" or some variant thereof without including or implying an indirect object.

As EPA now performs a flawed surgical deconstruction of the two common synonyms "application" and "implementation," and concludes that their respective use should result in drastically different consequences, the public must be granted an opportunity to comment; the relevant definitions and historical context of these words, within the CAA and other federal statutes, clearly demonstrates that EPA's legal argument is groundless. EPA has provided no etymological history on which to rest its sweeping determination, which the Agency now believes to be a critical piece of evidence to support its statutory construction. EPA's rationale and conclusion that the definitions of these two words support the agency's decision to rescind the CPP is not a logical outgrowth of the ACE Proposal. The objections commenters would raise,

⁵⁸ 42 U.S.C. § 7405(a)(1)(A).

⁵⁹ EPA's misuse of this section-specific definition, to narrow the meaning of section 111, is especially hypocritical and inconsistent, as elsewhere the Agency denies that the CAA's NAAQS provisions should inform the authority granted by section 111—despite an express cross-reference to section 110 in section 111(d). 42 U.S.C. § 7411(d)(1). See, e.g., EPA's Responses to Public Comments on the EPA's Repeal of Carbon Dioxide Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, Ch. 2, at 20 (June 2019) ("Section 111(d) expressly provides that EPA's regulations must establish 'a procedure similar to that provided by section 110'; it does not incorporate the substantive elements of CAA section 110, including section 110(a)(2)'s authorization of trading schemes.").

⁶⁰ 42 U.S.C. § 7405(a)(1)(A).

⁶¹ See Merriam-Webster's Online Dictionary, "Application," https://www.merriam-webster's Online Dictionary, "Apply," https://www.merriam-webster.com/dictionary/apply (last visited Aug. 28, 2019) ("to put into operation or effect").

as outlined here, are of central relevance to the outcome of the rule because the scope of EPA's authority in determining the BSER is critical to its rulemakings under section 111.

In conclusion, the public should be granted the opportunity to comment on these highly specific and severely constraining usages, and any possible relevance (or irrelevance) of these definitions to the Final ACE Rule.

C. For the First Time in the Final ACE Rule, EPA Claims that the CPP's Usage of the Ordinary Meaning of "System" Was Impermissible.

EPA offers a third new legal interpretation in its Final ACE Rule to support the rescission of the CPP. EPA now argues that to accept the definition of "system" as used in the CPP would result in the removal of all constraints on EPA's regulatory authority—generally, that a "system" precludes the trading of emission credits. In support of this contention, the Agency adopts the position that the dictionary definition⁶² (i.e., common usage) of the term "system" is inappropriate as applied to the CAA because using the dictionary definition would effectively result in unbounded authority to determine a BSER, and that, ostensibly, the Final ACE Rule adheres to the law by construing the term narrowly.⁶³ This is a novel theory that did not appear in any of the proposed rules.

EPA's new position is of central relevance to the Final ACE Rule because the term "system" is an integral component of the phrase "best system of emission reduction," the determination of which is EPA's central obligation under section 111.

In the CPP Repeal Proposal, EPA acknowledges that the CPP defined "system" as a "set of measures," but asserted that, based on "conformity with statutory context and congressional intent," the BSER must be "something that can be *applied to* or *at* the source." However, the CPP Repeal Proposal did not challenge the CPP's common understanding of the definition of "system" itself.

"System" is not defined within the CAA. The Final ACE Rule now takes the position that the CPP exceeded EPA authority by using, for purposes of section 111(a)(1), an ordinary dictionary definition of the term. In the CPP, EPA defined "system" to include a "set of measures" that could be implemented by source owners or operators; EPA now argues that the dictionary definition "could create unbounded discretion in the Agency." Yet EPA overlooks criteria set

⁶² 84 Fed. Reg. at 32,528 ("Thus, the issue is not whether the dictionary provides a broad definition of the word 'system,' but what are the permissible bounds of the *legal* meaning of the word 'system'.") (emphasis added).

⁶³ *Id.* ("'System,' as used in CAA section 111, cannot be read to encompass *any* 'set of measures' that would—through some chain of causation—lead to a reduction in emissions. . . On its own, this phrase could create unbounded discretion in the Agency.") (emphasis in original).

^{64 82} Fed. Reg. at 48,039.

^{65 84} Fed. Reg. at 32,528

⁶⁶ Id. ("The CPP read 'system' in CAA section 111(a)(1) to mean any 'set of measures,' relying on the dictionary, and then determined that there was no limitation on those 'set of measures' so long as they were measures that could be implemented through obligations placed on the owner or operator of a source. At both steps, the CPP relied on an

forth in section 111(a)(1) that, as discussed below, guide and limit the Agency's selection of the BSER. With those criteria in view, the term "system" is not unbounded and its ordinary dictionary meaning is a reasonable construction of the statute.

EPA asserts that section 111(a)(1)'s reference to "system" "cannot be read to encompass *any* 'set of measures' that would—through some chain of causation—lead to a reduction in emissions." EPA asserts that the CPP's interpretation of "system" was so broad that the CPP's reach would "[be] stretched to every aspect of the entire power sector." The Agency cites to *California Independent System Operator Corp. v. FERC* ("CAISO"), of for the first time in the Final ACE Rule, arguing that the definition of "system" in the CPP would open the floodgates to an "infinitude" of regulatory overreach.

However, the CPP definition of system is not infinitely unbounded, and nothing in the present situation is similar to that in *CAISO*. In *CAISO*, FERC issued an Order that expansively interpreted its authority to regulate "rates" as extending to itself the ability to replace the governing board of the California Independent System Operator with a new board chosen by FERC. The Court in *CAISO* ultimately rejected the theory that FERC's authority over wholesale electricity rates also afforded it concomitant "authority to regulate anything done by or connected with a regulated utility, as any act or aspect of such an entity's corporate existence could affect, in some sense, the rates." The Agency now asserts for the first time in the Final ACE Rule that the definition of "system" in the CPP is "untenable for the same reasons."

The EPA began, like FERC, with an ordinary statutory term ("system") and then read into it maximally broad authority to shift generation away from coal-fired and gas-fired power plants to other electricity producers on the basis that generation shifting would cause those regulated sources to be displaced and therefore not be a source of emissions. But for nearly 45 years prior to the CPP, this Agency had never understood section 111 to confer upon it the implicit power to restructure the utility industry through building blocks 2 and 3. Indeed, the EPA has issued many rules under section 111 (both the limited set of existing-source rules under section 111(d) and the much larger set of new-source rules under section 111(b)). In all those rules, the EPA determined that the BSER consisted of add-on controls or lower-emitting processes/practices/designs that can be applied to individual sources Taken to its logical end, however, any

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absence of an express textual commandment forbidding these open-ended interpretations. That methodology is untenable.").

⁶⁷ 84 Fed. Reg. 32,528.

⁶⁸ *Id*.

⁶⁹ 372 F.3d 395, 401 (D.C. Cir. 2004).

⁷⁰ *Id*.

action affecting a generator's operating costs could impact its order of dispatch and lead to generation shifting.⁷¹

The Agency's comparison between the CPP and the order struck down in CAISO is inapt. FERC sought to leverage its authority to regulate wholesale electricity rates to oust the governing board of the California Independent System Operator, an action that went far beyond merely overseeing rates, and sought to govern the organization's personnel. The Court held that "practices affecting rates" only includes "methods or ways of doing things on the part of the utility that directly affect the rate or are closely related to the rate, not all those remote things beyond the rate structure that might in some sense indirectly or ultimately do so."⁷² As opposed to CAISO, in which FERC did not maintain statutory authority to regulate governance boards, EPA maintains direct statutory authority to determine the "best system of emission reduction." As such, the CPP BSER is directly related to the emissions of carbon pollution. Indeed, the CPP BSER comprises measures that energy companies routinely use to reduce carbon pollution, and measures that have been integral to other CAA programs relating to the energy sector. Put differently, FERC's overbroad action in CAISO was indirectly related to its authority to regulate electricity market rates (only after numerous causal leaps), while the CPP's system of emission credits was directly related to its statutory mandate to designate a "system" of "emission reduction." Nothing in the CPP is remotely as broad as what FERC attempted in CAISO.

In addition to the fact that the EPA has clear statutory authority to determine a "system" of emission reduction, the Agency's reliance on *CAISO* is further misguided because the *CAISO* Court clearly indicated that the factual circumstances unique to FERC's order were an outlier. The *CAISO* Court described FERC's proposal to replace the California Independent System Operator's Board of Directors as "an absurdity," and that the policy implications would be "staggering." ⁷³ The Court noted that there was no comparable order by FERC, or any comparable order issued by any other federal regulatory body. ⁷⁴

This is not the case with the CPP; there are numerous instances of trading programs that have been implemented under the CAA prior to the CPP. Trading mechanisms reflect common practices to reduce emissions in the power sector—practices that underpin other CAA programs such as Title IV (acid deposition control) and the Cross-State Air Pollution Rule. The fact that similar systems of emission reduction have been utilized under different sections of the CAA belies the notion that the CPP extended the EPA's authority into radically new areas.

The Court in *CAISO* noted that section 305 of the Federal Power Act ("FPA") had already delegated authority to FERC to "regulate conflicts of interest among the directors of public utilities and market actors who deal with such utilities."⁷⁵ FERC's Order would have afforded

⁷¹ 84 Fed. Reg. at 32,528-29.

⁷² CAISO, 372 F.3d at 403.

⁷³ *Id.* at 402-403.

⁷⁴ *Id.* at 398.

⁷⁵ *Id.* at 401.

itself "plenary" authority to resolve corporate governance conflicts, and section 305 of the FPA would be rendered superfluous; such a result, the Court condemned, is against "traditional principles of statutory construction." Furthermore, the California legislature had also asserted its own authority in the field by passing legislation that prescribed rules relating to the appointment of members to the board of the California Independent System Operators.⁷⁷

The CPP's BSER was nothing remotely like the proposed FERC Order in CAISO. The CPP did not, for instance, seek to replace the board of directors of affected utilities, or to sack uncooperative heads of state environmental agencies. Rather, the CPP merely identified the BSER as including low-cost measures that were already in use by utilities and energy companies to reduce emissions. There are clear limiting principles on the scope of the BSER in the CPP, and the assertion that the CPP presents an "infinitude of possibilities" is false. EPA is mandated to designate a "system" of emission reduction and this determination is circumscribed by the statutory factors that Congress provided within section 111(a)(1). The emission limitation must be achievable, and the system must be the best, be adequately demonstrated, and consider the amount of emission reduction potential in conjunction with costs, nonair quality health and environmental impacts, and energy requirements. These explicit principles limit the definition of "system" in section 111 without a need for EPA to invent additional constraints found nowhere in the statute. EPA's hypothetical situation of a regulation that would increase the minimum wage at energy facilities⁷⁸ provides an instructive (if far-fetched) counterexample, as EPA could clearly not select a "system" that does not guarantee emission reductions from the affected source.

Not only was the case law relied upon by EPA inappropriately applied to the facts of the CPP, but the holding itself was also distinguished by *South Carolina Public Service Authority v*. *FERC*.⁷⁹ In that case, the Court held that the FPA afforded FERC the authority to mandate that transmission providers participate in regional planning processes. The Court held that the requirement that transmission providers participate in regional planning processes "is not the kind of interpretive 'leap'" found in *CAISO*, but rather, "involves a core reason underlying Congress' instruction in section 206."⁸⁰ In the case of the CPP, the EPA's "core reason" under section 111 is to designate a system of emission reduction that a state may implement through its standard of performance.

In sum, the definition of "system" as set forth in the CPP clearly does not implicate an "infinitude" of possibilities. *CAISO* is not applicable because the proposed FERC action was held to be far beyond the bounds of any previous FERC action (or any other comparable agency), the action was not directly related to its regulatory subject matter, and subsequent

⁷⁶ *Id*.

⁷⁷ *Id.* at 397-98.

⁷⁸ 84 Fed. Reg. at 32,529.

⁷⁹ 762 F.3d 41 (D.C. Cir. 2014).

⁸⁰ *Id.* at 57. The Court cites to FERC Order No. 888, which was upheld as providing authority to mandate the unbundling of generation and transmission services, in support of its holding that "practice" under section 206 meant that FERC must act when a failure to act "directly affects or is closely related to jurisdictional rates." *Id.*

policy implications would have granted the Agency unfettered authority to micro-manage state regulated utilities. None of these results are remotely similar to the system of emission reduction proposed under the CPP because the plain language of section 111 requires EPA to designate a system of emission reduction, which is exactly what the CPP has done; the CPP did not attempt to insert itself into any regulated area that is not *directly* related to its statutory authority. In *CAISO* there were many intermediary causal steps between the corporate governance structure and the resultant rate structure; whereas in the CPP, the "system" adheres directly to EPA's statutory authority to regulate air emissions. No additional causal steps are required between a "set of measures" constituting a "system" and reductions to carbon emissions.

EPA now subverts its own statutory mandate by attempting to extend the *CAISO* ruling to constrain its ability to select a BSER. The Agency's argument that the CPP's definition of "system" would remove all constraints on EPA's regulatory authority was not presented in the ACE Proposal. The public must have an opportunity to comment on EPA's new and distinct argument that the prior use of the term "system" was inappropriate, especially since this interpretation would result in a severe constraint to the Agency's own authority. The Agency's convenient new theory is consistent with its concomitant rush to conclude that the language of the CAA now affords it with no authority to develop regulations that would result in meaningful reductions to carbon dioxide emissions from existing power plants. As such, the public must be granted an opportunity to comment on these legal inconsistencies and inaccuracies presented by the EPA.

D. The Final ACE Rule's Reliance on Clean Air Act Section 302(1) Was Never Noticed in the Proposals.

EPA contends in the Final ACE Rule that, "[e]ven if the CPP could be reframed as employing reduced utilization, it would fail to satisfy statutory criteria." Specifically, the Agency in the Final ACE Rule, for the first time, points to the generally applicable definition of "standard of performance" in CAA section 302(l), which calls for a "requirement of continuous emission reduction." EPA observes that, because of this provision's use of the word "continuous," "standards of performance cannot be based on intermittent control strategies." From here, however, it leaps to the conclusion that section 302(l)'s requirement of continuous reduction, when considered together with the definition of "standard of performance" in section 111(a)(1), here means that "basing BSER on reduced utilization is statutorily precluded for purposes of CAA section 111." This erroneous leap, from the "continuous emission reduction" language in

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^{81 84} Fed. Reg. at 32,531.

⁸² 42 U.S.C. § 7602(1) ("The term 'standard of performance' means a requirement of continuous emission reduction, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction.").

^{83 84} Fed. Reg. at 32,532.

⁸⁴ *Id.* § 7411(a)(1) ("The term 'standard of performance' means a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.").

^{85 84} Fed. Reg. at 32,532.

section 302(l) to the argument that reduced utilization is prohibited as a means of reducing emissions under section 111, is not a viable reading of the statute and ignores relevant case law and legislative history, which indicate that section 302(l)'s "continuous" requirement mandates a continuously applicable standard. Even if EPA were correct (which it is not), that the phrase "continuous emission reduction" in section 302(l) requires something more than a continuously applicable standard, the statute, caselaw, and legislative history confirm that the form such a requirement would take for purposes of section 111 would be a standard that reflects the continuous use of the BSER—as opposed to relying on intermittent controls. As explained below, reduced utilization would clearly meet such a standard.

EPA must reexamine its decision to repeal the CPP with an accurate understanding of the import of section 302(l). It was impracticable for commenters to have raised this issue during the public comment period, ⁸⁶ because they could not have anticipated that the Agency would rely on section 302(l) either to reject the CPP's BSER or to eliminate reduced utilization as a BSER option in the Final ACE Rule. The CPP Repeal Proposal contains no mention of section 302(l) or reduced utilization. ⁸⁷ The Replacement ANRPM similarly does not cite section 302(l) or acknowledge reduced utilization as a BSER option, instead directing readers to submit comments on the scope of section 111(a)(1) to the CPP Repeal Proposal docket. ⁸⁸ The ACE Proposal does briefly discuss reduced utilization, but EPA rules it out as a potential BSER because, allegedly, "reduced utilization is directly correlated with a source's output" and "predicating a CAA section 111 standard on a source's non-performance would inappropriately inject the Agency into an owner/operator's production decisions;" EPA does not cite section 302(l). ⁸⁹ The Agency's attempt to invoke this provision to undermine the CPP or, by implication, to constrain its analysis in the Final ACE Rule presents a shift that commenters could not have anticipated.

EPA's failure to notice this interpretation in any of its proposals itself violates the CAA's requirement to disclose "the major legal interpretations . . . underlying the proposed rule." This severe procedural flaw is of central relevance to the outcome of the rule under CAA Section 307(d)(7)(B), which contemplates mandatory reconsideration based on procedural objections. Moreover, the issue is also of central relevance to the rulemaking because it "provides substantial support for the argument that the regulation should be revised." EPA's narrow view of the scope of its authority under section 111 derives from its misapprehension of what section 302(l) requires, which, if corrected along with its numerous other interpretive missteps, would render both the CPP Repeal and ACE indefensible.

⁸⁶ 42 U.S.C. § 7607(d)(7)(B).

⁸⁷ See generally 82 Fed. Reg. 48,035 (Oct. 16, 2017).

⁸⁸ See 82 Fed. Reg. 61,507, 61,510, 61,513 n.12 (Dec. 28, 2017).

⁸⁹ See 83 Fed. Reg. 44,746, 44,752 (Aug. 31, 2018).

^{90 42} U.S.C. § 7607(d)(3)(C).

⁹¹ See 42 U.S.C. § 7607(d)(7)(B).

⁹² Coal. for Responsible Regulation v. EPA, 684 F.3d 102, 125 (D.C. Cir. 2012), rev'd on other grounds by Util. Air Regulatory Grp. v. EPA, 573 U.S. 302 (2014).

EPA acknowledges the well-established principle that "specific terms prevail over the general in the same ... statute." But assuming for the sake of argument that the Agency is correct that the definition of "standard of performance" in section 302(1) is "relevant to interpreting CAA section 111," the definition of the very same term in section 111 itself is even more relevant and certainly cannot be ignored. Yet the Agency's discussion of the alleged implications of section 302(1) for the term "best system of emission reduction"—a term which does not appear in section 302(1)—is nearly devoid of any mention of section 111(a)(1)'s definition of "standard of performance."

Had EPA considered the definition in section 111(a)(1) in conjunction with the definition in section 302(l), it would have had to conclude that its hoped-for interpretation of section 302(l) irreconcilably conflicts with the broad delegation of authority in section 111. The language Congress used in section 111(a)(1)—in particular, "system of emission reduction," is explicitly broad and flexible, in contrast with other parts of the CAA that prescribe precisely how a standard is to be set. The Administrator is authorized to determine which systems are "adequately" demonstrated, and to identify the one that is "best," considering the statutory criteria.

EPA's only record analysis of the section 111 definition of "standard of performance" in relation to the section 302(l) definition appears in the Final ACE Rule, and even there is limited to an assertion that section 111(a)(1) does not "supplant" section 302(l).⁹⁷ As an initial matter, this assertion is wrong, as it turns on an illogical contextual analysis: the Agency notes that the Act-wide definition of "major stationary source" in section 302(j)⁹⁸ provides that other provisions may override section 302(j) if they do so "expressly." The lack of any such requirement in section 302(l) indicates that the ordinary rule that section-specific definitions of terms override general, Act-wide definitions would apply. In any event, EPA failed to notice this interpretation in any of its proposals. Further, its interpretation also provides no support for the conclusion that standards of performance may not include reduced utilization.

⁹³ 84 Fed. Reg. at 32,531 n.129; see also White Stallion Energy Ctr. v. EPA, 748 F.3d 1222, 1246-47 (D.C. Cir. 2014) ("Consistent with ordinary rules of statutory construction, EPA reasonably relied on the more specific definition in [CAA] § 112(a)(8) rather than the general definitions applicable to all other sources."), rev'd on other grounds sub nom. Michigan v. EPA, 135 S. Ct. 2699 (2015).

^{94 84} Fed. Reg. at 32,531.

^{95 42} U.S.C. § 7411(a)(1).

⁹⁶ See, e.g., id. § 7412(d).

⁹⁷ 84 Fed. Reg. at 32,531.

⁹⁸ 42 U.S.C. § 7602(j) ("Except as otherwise expressly provided, the terms 'major stationary source' and 'major emitting facility' mean any stationary facility or source of air pollutants which directly emits, or has the potential to emit, one hundred tons per year or more of any air pollutant (including any major emitting facility or source of fugitive emissions of any such pollutant, as determined by rule by the Administrator).").

⁹⁹ 84 Fed. Reg. at 32,531; see also Ala. Power Co. v. Costle, 636 F.2d 323, 370 (D.C. Cir. 1979) (observing that CAA "section 169(1) has no 'express' provision modifying section 302(j)").

EPA's misreading of the requirement of "continuous emission reduction" in section 302(1) begins with a false dichotomy. The Agency correctly notes that "standards of performance" must require "continuous emission reduction" but suggests that this requirement demands something other than a continuously applicable standard or a standard reflecting the constant use of the BSER. ¹⁰⁰ To do so, EPA compares the definition of "standard of performance" with the definition in section 302(k) of "emission standards," which must apply "on a continuous basis," but which supposedly need *not* require continuous emission reduction through a standard reflecting constant use of the BSER. ¹⁰¹ To erect this illusory distinction, EPA contrasts the use of the term "continuous" in the definition of "standard of performance" in section 302(1), 42 U.S.C. § 7602(1):

The term "standard of performance" means a requirement of continuous emission reduction, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction.

with the use of the term "continuous" in the definition of "emission limitation" in section 302(k), 42 U.S.C. § 7602(k):

The terms "emission limitation" and "emission standard" mean a requirement established by the State or the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction, and any design, equipment, work practice or operational standard promulgated under this Act.

EPA's reading of section 302(k) suggests that continuous emission reduction is optional, whereas under section 302(l), continuous emission reduction is required. This is wrong; both sections 302(k) and 302(l) require continuous emission reductions.

In addition, the Final ACE Rule's conclusion that reduced utilization is precluded from consideration as part of a section 111 BSER relies on the mistaken conflation of reduced utilization with "intermittent control strategies." The Act's legislative history confirms that Congress in 1977 was concerned with the use of intermittent controls to meet national ambient air quality standards (NAAQS). This technique "seek[s] to reduce concentrations of pollutants not by reducing the amounts of pollutants emitted into the air, but rather by relying on the dispersion of pollutants through the atmosphere." Thus, sources could deactivate controls

¹⁰⁰ 84 Fed. Reg. at 32,531.

¹⁰¹ *Id*.

¹⁰² See 84 Fed. Reg. at 32,531 (contending that "[w]hereas emission limitations and emission standards apply 'on a continuous basis, *including any* requirement...to assure continuous emission reduction,' standards of performance *must* impose a 'requirement of continuous emission reduction.'").

¹⁰³ 84 Fed. Reg. at 32,532.

¹⁰⁴ H.R. Rep. No. 95-294, at 81 (1977).

when "meteorological conditions favor dispersion," or shift production to sources "where dispersion is more favorable." Among the many problems with intermittent control systems is that they depend on accurate weather forecasting and quick responses to changing conditions. In addition, although they might facilitate maintenance of the NAAQS, they would not necessarily reduce overall amounts of pollution. For these reasons, Congress sought to rule out, through the definitions of these terms discussed above, intermittent controls as a means of satisfying the CAA's requirements for "emission limitation[s]," "emission standard[s]," and "standard[s] of performance." These definitions did not exist before 1977 and were added specifically to eliminate the use of intermittent controls.

The need for a requirement that is readily enforceable and ensures overall emission reductions becomes even clearer in light of the courts of appeals decisions that partly prompted the 1977 amendments. For instance, in *Kennecott Copper Corp. v. Train*, the Ninth Circuit observed that "[t]he reliability and enforceability of [intermittent] controls is questionable." 111

Moreover, there is no assurance that temporary reductions in emissions resulting from such controls will not be balanced, or even exceeded, by an increase in the amount of pollutant emitted when weather conditions improve and production is increased to make up for prior losses. ... Thus, intermittent controls may only disperse the pollutant rather than reduce it. ... [They do not] assure[] a reduction in the quantity of the pollutant eventually emitted. 112

Similarly, in *Big Rivers Electric Corp. v. EPA*, the Sixth Circuit concluded that a requirement would qualify as an emission limitation "only if it regulates the *amount* of [pollution] which may be included in the emission from a given source."

Following enactment of the definitions in section 302, the Sixth Circuit held that Congress had "resolved the argument" about intermittent controls: although they may preserve the NAAQS, "[t]he total quantity of . . . emissions . . . is not being reduced [and] pollutants will continue to damage the air and the environment This appears to be the exact sort of fact situation that Congress had in mind when adopting the 1977 Clean Air Act Amendments." These court rulings confirm that Congress sought to prohibit intermittent control systems to further "[t]he

¹⁰⁵ *Id*.

¹⁰⁶ *Id.* at 82; S. Rep. No. 95-127, at 95 (1977).

¹⁰⁷ H.R. Rep. No. 95-294, at 83.

¹⁰⁸ *Id.* at 92.

¹⁰⁹ See id. at 91-92.

¹¹⁰ See 84 Fed. Reg. at 32,531; H.R. Rep. No. 95-564, at 134 (1977) (Conf. Rep.); H.R. Rep. No. 95-294, at 92.

¹¹¹ 526 F.2d 1149, 1155 (9th Cir. 1975).

¹¹² *Id*.

¹¹³ 523 F.2d 16, 21-22 (6th Cir. 1975).

¹¹⁴ Dow Chemical Co. v. EPA, 635 F.2d 559, 562 (6th Cir. 1980).

national policy to reduce air pollution."115 Congress did so through not only a requirement that "emission limitation[s]" and "emission standard[s]" apply "on a continuous basis," per section 302(k), but also a general directive for "continuous emission reduction" in section 302(k) and $(1).^{116}$

A standard based on reduced utilization, such as a standard derived from or implementing a mass-based cap, ensures continuous emission reduction because it would not allow intermittent reduction techniques and would require emissions to go down. Sources could continuously deploy a system of reduced utilization to comply with a standard; they would never depart from that system by opportunistically excluding some time periods from their accounting of overall emissions, even as standards continued to apply during those times. This is a far cry from the use of intermittent pollution controls, which failed to ensure that overall emissions go down, and which Congress precluded through the two "continuous" requirements in section 302(k) and the parallel requirement for continuous emission reduction in section 302(1).

As a practical matter, it is evident that a standard of performance based on reduced utilization does not implicate Congress's concerns, as expressed in the legislative history and the court precedent that it cites. A standard that takes the form of a declining cap on emissions does not require precise and accurate weather forecasts, and is readily enforceable, and will necessarily decrease air pollution. Most importantly, a declining cap on emissions ensures that emissions will continuously be reduced. Thus, reduced utilization bears none of the hallmarks of intermittent controls and fully comports with the continuous emission reduction requirement in section 302(1).

With this essential requirement satisfied, there is no plausible contention that this definition precludes reduced utilization. A standard of performance based on a BSER involving reduced utilization—such as, for example, a standard derived from or implementing a mass-based cap that declined over time, according to the reductions available via reduced utilization—would secure "emission reduction[s]" as the term is used in both section 302(1) ("continuous emission reduction") and section 111 ("best system of emission reduction"). Emissions from sources would be forced to decline over time in accordance with the cap.

In the context of a concern about intermittent controls, the section 111 framework is distinct from the section 110 framework, which requires enforceable emission limitations as one of several tools to attain and maintain the NAAQS.¹¹⁷ Section 110 itself is focused on concentrations of pollutants in the ambient air, including over specific, short time-periods—in other words, it concerns pollution levels that are highly affected by the timing of emissions. Under section 110, before the "continuous" requirements were added to the Act, there was a risk that sources could comply with a health-based ambient air quality standard, but without actually reducing overall emissions from either historical or projected levels—such as by shifting the timing of emissions. In other words, sources could emit less during the afternoon hours when

¹¹⁵ Big Rivers Elec. Corp., 523 F.2d at 22.

¹¹⁶ See Sierra Club v. EPA, 551 F.3d 1019, 1027-28 (D.C. Cir. 2008).

¹¹⁷ 42 U.S.C. § 7410(a)(2)(A).

ambient pollution levels were higher, but shift those emissions to the morning when ambient pollution levels were lower—not violating the NAAQS, but also not reducing emissions. As such, the word "reduction" in "continuous emission reduction" contributes to the effort to preclude the use of intermittent controls and give additional clarity to the requirement of "emission limitations" in section 110, regardless of attainment of the NAAQS. 118

The section 111 framework is designed to ensure that sources collectively achieve emission reductions that reflect the state-of-the-art emission reduction system available. In order to achieve that goal, the degree of emission limitation achievable using that "best" system informs the section 111 standards of performance that sources must meet. Under this structure, there is no possibility for shifting emissions from one time to another while still meeting the section 111 standard. The structure of section 111 ensures that the reductions available using the best system are, in fact, achieved.

In sum, EPA's view of the implications of section 302(l) for a BSER of reduced utilization, even had it been properly noticed, which it was not, is an inadequately explained departure from its previous interpretation and, even on its own terms, mistaken. An ongoing requirement for sources to meet a limitation or standard, possibly through reduced utilization of higher emitting sources over an extended time period, would satisfy the requirement to achieve a "continuous emission reduction"—and would certainly not involve temporary deactivation of controls during favorable weather conditions. Furthermore, it would better serve the statute's fundamental goal of reducing overall air pollution than the restrictive statutory interpretation that EPA has put forward. Therefore, a standard of performance that reflects reduced utilization as part of the best system of emission reduction would not only satisfy the definition in section 111(a)(1), but would advance the purposes animating Congress's enactment of the definition in section 302(l). The public must be given an opportunity to comment on EPA's interpretation of section 302(l) and its implications for this rulemaking and EPA must reconsider the rule in light of these comments.

III. EPA's Flawed New Position on the Stringency of State Plans Is Centrally Relevant and Was Not Properly Noticed.

In the Final ACE Rule, EPA declines to decide whether it could lawfully approve a state plan containing more stringent requirements than those minimally necessary to comply with ACE (whatever that might mean in the context of a rule that fails to provide any binding emission limitation). ¹¹⁹ Instead, the Agency indicates that it will assess such plans after states submit them for approval. ¹²⁰ However, despite its refusal to take a clear position on the issue, EPA strongly

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¹¹⁸ See Big Rivers Elec. Corp., 523 F.2d at 21 (noting that "the Act mandates the use of techniques for emission reduction A plan which would permit unlimited emission of pollutants into existing clean air and require limitation only when emissions would cause air quality at the location of the particular polluting source to fall below prescribed standards would conflict with the congressional policy of nondegradation").

^{119 84} Fed. Reg. at 32,559.

¹²⁰ See id. at 32,559 & n.255.

suggests that it would not finalize state plans that included more stringent standards, commenting that, "[i]n response to the commenters who contend the EPA does not have the authority to approve more stringent state plans, the EPA believes that these comments have merit." While EPA did not solicit comments on this important question in the proposed rule, some commenters nevertheless explained why the CAA, as interpreted by Supreme Court precedent, prevents EPA from disapproving state plans under section 111(d) on the basis that they exceed the federal requirements. However, the proposal did not apprise commenters of EPA's new legal thinking on this issue. Commenters had no opportunity to address the effects of the Agency's tactical decision to leave this question formally undecided or to object to the faulty legal reasoning underlying EPA's tentative position. For these reasons, the Agency must grant reconsideration on this question.

1. EPA's New Position on the Stringency of State Plans Is of "Central Relevance."

This issue "is of central relevance to the outcome of the rule"¹²³ because EPA's obligation under the statute is to inform states as to what plans will be approvable. EPA has violated that obligation by leaving open the question of whether it can approve plans more stringent than the emission guidelines. This issue pertains directly to how ACE would function and be implemented—and it is in tension with the revised regulations implementing section 111(d), ¹²⁴ even though EPA has not acknowledged its sweeping implications for those provisions. The emission guidelines must "provide information for the development of State plans,"¹²⁵ yet the final rule would keep states and other stakeholders in the dark about which types of plans EPA would even consider eligible for approval. Furthermore, by effectively threatening (without deciding) to reject state plans that are more stringent than the federal minimum, EPA strongly discourages states from developing more stringent programs that may actually be fully approvable even under the agency's own ultimate legal position. The informational void would persist throughout the entire state plan development process, until after states submitted their plans to EPA.

EPA's new stance fundamentally disrupts the state planning process. In an effort to protect its residents from dangerous air pollution, a state might expend significant resources developing a plan with requirements more stringent than those in ACE, only for EPA to (unlawfully) reject it on the basis of a legal position that the agency should have clarified in the emission guidelines. Conversely, the confusion EPA has created might deter states from incorporating public health protections into plans that EPA ultimately would have approved, which would interfere with the cooperative federalism arrangement that sections 111(d) and 116 established. Given the meager and geographically uneven health and environmental benefits—as well as harms—that ACE is

¹²¹ Id. at 32,559.

¹²² See 42 U.S.C. § 7461; Union Elec. Co. v. EPA, 427 U.S. 246, 263-64 (1976).

¹²³ 42 U.S.C. § 7607(d)(7)(B).

¹²⁴ See 84 Fed. Reg. at 32,577 (40 C.F.R. § 60.24a(f)(1) ("Nothing in this subpart shall be construed to preclude any State . . . from adopting or enforcing . . . [s]tandards of performance more stringent than emission guidelines specified . . . in applicable emission guidelines.")).

¹²⁵ 40 C.F.R. § 60.22a(b); see also 84 Fed. Reg. at 32,566.

projected to result in, as modeled in EPA's "illustrative scenario," states' ability to surpass the rule's requirements in their plans is critical.

By punting on this key question in its final rule, EPA has arbitrarily and unlawfully injected uncertainty into the state plan development and approval process for all states, regardless of the level of ambition they may choose to pursue. EPA's regulations implementing section 111(d) require the agency to publish emission guidelines that "provide information for the development of State plans," including "[t]he degree of emission limitation achievable through the application of the best system of emission reduction." Even if EPA had included a binding emission limitation in ACE, the change in the final rule as to approvability of more-stringent state plans has created so much uncertainty that states do not have the information they need to develop approvable state plans.

It is no answer that states may simply hedge their bets by designing plans that do not surpass the guideline. State plans must establish standards of performance that are "no less stringent than the corresponding emission guideline(s)." Yet, if a state were required to develop standards that are both no more and no less stringent than the emission limitation in the emission guideline, it would have to hit an exceedingly precise target. Indeed, the Supreme Court noted a similar problem in rejecting the argument that states could not receive EPA approval for plans under section 110 designed to meet national ambient air quality standards. This impracticality not only indicates that EPA's statutory interpretation is wrong, as discussed below, but also demonstrates that EPA has failed to fulfill its obligation to provide information sufficient for development of approvable state plans by calling into question states' authority to develop plans that are any more stringent than the emission guidelines.

In addition, this issue is of "central relevance" because it could impose a numerical limit on the pollution reductions available under ACE, especially if EPA rejects state plans incorporating standards of performance more stringent than the ranges provided in Table 1. ¹²⁹ In the proposal, EPA indicated that state plans could not incorporate standards of performance based on non-BSER measures such as averaging and trading. ¹³⁰ However, as explained in Part IV, the final rule introduces a new, expanded threat: that EPA will impose an absolute numerical limit on federally approvable emission rates required by standards of performance, *regardless of whether a state uses EPA's BSER to determine those rates*. The ability of state plans to achieve pollution reductions is essential to the purpose and operation of section 111(d); an absolute ceiling on federally enforceable pollution reductions is manifestly "of central relevance."

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 $^{^{126}}$ 40 C.F.R. § 60.22a(b)(5). An emission guideline must itself "reflect[] the degree of emission limitation achievable through the application of the best system of emission reduction." *Id.* § 60.21a(e).

¹²⁷ *Id.* § 60.24a(c).

¹²⁸ See Union Elec. Co., 427 U.S. at 264 (noting that this interpretation would problematically "require the Administrator to expend considerable time and energy determining whether a state plan was precisely tailored to meet the federal standards").

¹²⁹ See 84 Fed. Reg. at 32,537 tbl.1; see also Part IV, infra.

¹³⁰ See 83 Fed. Reg. at 44,767.

As explained in Part IV, prohibiting state plans from incorporating more stringent standards of performance than the emission guidelines require would have an absurd effect—a state would have to implement any standards that are more stringent than the emission guidelines through a separate, parallel, state-enforceable program. In *Union Electric Company v. EPA*, the Supreme Court expressly rejected "visiting such wasteful burdens upon the States and the Administrator." EPA's apparent adoption of a position that the Supreme Court has deemed overly burdensome and lacking any statutory basis 132 further renders this an issue of "central relevance."

For these reasons, the objections to EPA's new treatment of this issue provide substantial support for the position that the rule should be revised and are therefore of central relevance. 133

2. EPA's New Position on the Stringency of State Plans Was Not Properly Noticed.

It was impracticable for commenters to object to EPA's new, flawed interpretation of section 111 during the comment period, as the issue was not properly noticed. The proposal does not acknowledge or even imply that EPA is considering changing its pre-existing legal position on more stringent state plans, which the agency *does* acknowledge in the final rule. And the proposal's cursory reference to the approvability of more stringent state plans is buried in a discussion about averaging and trading, giving no indication of the significance that this issue would carry in the final rule.

Indeed, even EPA acknowledges that its interpretation of *Union Electric* is new in the final rule. EPA did not mention this case in the proposal, and it appears that the agency received no comments on the interpretation that it endorsed in the final rule. While some commenters referenced *Union Electric*, they did so for its clear holding that state plans may incorporate requirements more stringent than those required by law—not to address the flawed interpretation that EPA introduces for the first time in the final rule. In addition, several commenters cited the Eighth Circuit opinion affirmed in *Union Electric* to emphasize that the discretion afforded to states under section 110 is at least as present in section 111(d). But EPA did not address or

^{131 427} U.S. at 264.

¹³² See id.

¹³³ Coal. for Responsible Regulation v. EPA, 684 F.3d 102, 125 (D.C. Cir. 2012), rev'd on other grounds by Util. Air Regulatory Grp. v. EPA, 573 U.S. 302 (2014).

¹³⁴ 84 Fed. Reg. at 32,559 n.255 ("[T]he Agency *now* identifies a potentially salient structural distinction between CAA sections 110 and 111(d)." (emphasis added)). In the final rule, EPA also acknowledges for the first time that its new position differs from its position in the Clean Power Plan. *See id.* As recently as the ANPRM, EPA expressly stated, "States are, as a general matter, free to adopt *more* stringent standards than federal standards under CAA title I," citing section 116. 82 Fed. Reg. at 61,510 n.7.

¹³⁵ See Comments of Environmental Defense Fund 60-61, Docket ID No. EPA-HQ-OAR-2017-0355-24419. See also Comments of Tri-State Generation and Transmission Association, Inc. (Part 2) 15, Docket ID No. EPA-HQ-OAR-2017-0355-23673.

¹³⁶ See, e.g., Comments of the Utility Air Regulatory Group 75, Docket ID No. EPA-HQ-OAR-2017-0355-24421 ("EPA *must* approve a state plan so long as it is 'satisfactory.' In the context of section 110, states have broad discretion in developing state implementation plans ('SIPs') to implement the NAAQS, and EPA cannot disapprove

even mention *Union Electric* at any point in the proposed rule. EPA's novel, aberrant interpretation was not foreseeable, nor was the disruptive impact of EPA's reservation of final judgment on this issue.

3. EPA's New Position on the Stringency of State Plans Is Fatally Flawed.

To the extent that EPA seeks to justify its newfound uncertainty about (and manifest skepticism toward) whether it may approve more stringent state plans, its arguments are deeply flawed. Most notably, the final rule contains a lengthy discussion of *Union Electric Co. v. EPA*, a Supreme Court case that garnered no mention in the proposal. *Union Electric* addressed a challenge to a state plan developed under section 110 of the Clean Air Act. Relying in part on section 116, the Supreme Court ruled that state plans could include federally enforceable requirements that exceeded the minimum requirements of the program they were created to satisfy. EPA now questions whether *Union Electric* should apply to section 111(d) on the basis that "the BSER aspect of section 111(d) is absent from section 110, as SIP-measures required for attainment or maintenance of the NAAQS are not predicated on application of a specific technology." States, according to EPA's new theory, therefore have relatively "broad latitude on designing the contents of SIPs" under section 110 as compared to section 111(d). 139

Contrary to EPA's theory, the Supreme Court in *Union Electric* did not base its interpretation of section 116 on the structure of section 110. Rather, it did the opposite: it interpreted section 110 so as to advance the Clean Air Act's cooperative federalism framework and to preserve the authority afforded to states under section 116 to provide greater protection for their residents than would be offered by the minimum federal requirements. PA's new claim that the discretion guaranteed to states by section 116 is somehow cabined or limited by the structure of section 111(d) directly contradicts the Court's analytical approach. Instead, EPA must ensure that its interpretation of section 111(d) does not deprive states of their discretion enshrined in section 116. And as noted above, *Union Electric* also rejected an approach that would require

a SIP based on its disagreement with the state's policy choices so long as it meets the minimum statutory requirements. *See Union Electric Co. v. EPA*, 515 F.2d 206 (8th Cir. 1975). State discretion is at least as broad in the context of section 111(d), as EPA has repeatedly emphasized in the Proposed ACE Rule."); Comments of the American Public Power Association 40, Docket ID No. EPA-HQ-OAR-2017-0355-24257 (same); Comments of the American Coalition for Clean Coal Electricity 15 n.9, Docket ID No. EPA-HQ-OAR-2017-0355-23745 ("Just as states have broad discretion in developing SIP emission control measures for attaining ambient air quality standards, states have wide latitude in the development of plans for regulating existing stationary sources under CAA section 111(d). In both cases, EPA cannot disapprove a state plan based on its disagreement with the state's policy choices so long as it meets the minimum statutory requirements. *See Union Electric Co. v. EPA*, 515 F.2d 206 (8th Cir. 1975).").

¹³⁷ *Union Elec. Co.*, 427 U.S. at 264.

¹³⁸ 84 Fed. Reg. at 32,559 n.255.

¹³⁹ *Id*.

¹⁴⁰ See 427 U.S. at 263-64 (concluding that the phrase "as may be necessary" in section 110 does not limit states' ability to require progress beyond the minimum controls necessary to attain the NAAQS, in part because the alternative, constraining interpretation would conflict with state authority preserved under section 116).

states to implement more stringent standards through separate programs operating parallel to federal programs.¹⁴¹

The absurdity of requiring states that seek greater emission reductions to operate separate, parallel programs is evident from the final rule's treatment of carbon capture and sequestration ("CCS") and natural gas co-firing. EPA excludes both of these measures from the BSER but allows states to authorize such measures as compliance options under the emission guidelines. However, EPA's suggested limits on state plan stringency would forbid states from requiring sources to reduce emissions to a level commensurate with the capabilities of CCS and natural gas co-firing. Instead, states wishing to fully leverage the benefits of these compliance measures would have to operate separate, state-enforceable programs—a significant burden for both states and sources. EPA's apparent disinclination to approve state plans based on what the compliance options (that EPA has deemed acceptable even under its narrow interpretation of BSER and unfounded imposition of the BSER on state plans) could achieve is either an arbitrary inconsistency in the final rule or an overt violation of the Clean Air Act as interpreted by the Supreme Court in *Union Electric*.

Assuming, *arguendo*, that section 116 has to be interpreted separately in the respective contexts of sections 110 and 111(d), EPA conjures artificial distinctions between those two sections of the law. In fact, both sections 110 and 111(d) set minimum benchmarks for state plans. Under section 110, that benchmark is attainment of the national ambient air quality standards, while under section 111(d), the benchmark derives from the BSER. Each section grants states flexibility to determine how to meet (or surpass) its benchmark and does not require states to utilize any particular pollution-control measure. The fact that EPA uses a different process to promulgate the benchmarks under sections 110 and 111(d) is irrelevant to whether a state has discretion to go further than the federally mandated benchmark. Along these lines, EPA's new assertion that section 111(d) "more narrowly prescribes that the contents of state plans include performance standards based on the application of [the BSER]" is false. Rather, the standards of performance must "reflect[] the degree of emission limitation achievable through the application of the best system of emission reduction," as more stringent standards certainly do.

At a fundamental level, EPA's new construction of the statute fails to give meaning to either section 116 or the cooperative federalism structure of section 111(d), and is therefore unlawful. Section 116 preserves the right of states to do more in their territories to address air pollution than is required under federal standard-setting, and, as noted, the Supreme Court in *Union Electric* has held that this preservation of states' rights includes an obligation on the federal government to allow states to do so through their Clean Air Act standard-setting to avoid duplicative standards. The cooperative federalism structure of section 111(d)—like the cooperative federalism structure of section 110—similarly preserves the right of states to implement federally established air pollution limits by taking an approach of their own design.

¹⁴¹ See id. at 264.

¹⁴² See 84 Fed. Reg. at 32,555 (compliance mechanisms); id. at 32,545 (natural gas co-firing); id. at 32,549 (CCS).

¹⁴³ *Id.* at 32,559 n.255.

¹⁴⁴ 42 U.S.C. § 7411(a)(1).

Although state-promulgated standards of performance under section 111(d) must reflect the degree of emission limitation achievable using the "best system of emission reduction" identified by EPA, those standards need not require deployment of the best system of emission reduction itself—and, because the required measures are different from the BSER, it is highly likely that they will produce non-identical, greater emission reductions. EPA has no authority under the statute to disapprove state plans because they are more stringent than the emission reductions delivered by EPA's best system of emission reduction.¹⁴⁵

In addition, EPA has offered no explanation of why this question could not have been resolved in the final rule. In the final rule, EPA states that it "does not prejudge the approvability of any state plan submission," and that "the question of whether it has the authority to approve, and thereby render federally enforceable, a state plan that establishes standards of performance that are more stringent than those that would result from the application of the BSER that the EPA has identified is addressed properly in the context of evaluating an individual state plan." ¹⁴⁶ This conclusion does not stand to reason: whether or not section 111 bars EPA from approving state plans on the grounds that they are more stringent than the federal minimum should not be contingent upon the particulars of an individual state plan. Either the law permits (or requires) the agency to approve more stringent state plans or it prohibits it from doing so. EPA's decision to punt on this question lacks any basis in law or the practical realities of state-plan development, and is arbitrary and capricious.

Further, EPA's decision misses the point of emission guidelines entirely, which the agency affirms is to "provide information for the development of State plans," including, among other things, the degree of emission limitation that is achievable through the application of the BSER. 147 EPA offers no compelling reason that a fundamental and foreseeable question about state plans—whether the agency can approve plans with more stringent requirements than the ineffectual measures contemplated by ACE—must remain unresolved throughout the entire state planning process. The agency thus has created unworkable uncertainty for state plan development and created a situation where EPA's own decision making is not simply unpredictable, but potentially arbitrary—especially if EPA's case-by-case approach¹⁴⁸ leads to inconsistent application of its vague rule against standards that require more than EPA's emission guidelines. EPA's choice to defer decisions about more-stringent standards to individualized review of state plans also irrationally skews the process against pollution control,

¹⁴⁵ EPA recognized as much in the preamble to its 1975 implementation regulations for section 111(d): "[I]t is inaccurate to argue . . . that, because EPA's emission guidelines will reflect best available technology considering cost, States will be unable to set more stringent standards. EPA's emission guidelines will reflect its judgment of the degree of control that can be attained by various classes of existing sources without unreasonable costs. Particular sources within a class may be able to achieve greater control without unreasonable costs. Moreover, States that believe additional control is necessary or desirable will be free under section 116 of the Act to require more expensive controls, which might have the effect of closing otherwise marginal facilities, or to ban particular categories of sources outright. Section 60.24(g) has been added to clarify this point." 40 Fed. Reg. 53340, 53343 (Nov. 17, 1975).

¹⁴⁶ 84 Fed. Reg. at 32,560.

¹⁴⁷ 40 C.F.R. § 60.22a(b); see also 84 Fed. Reg. at 32,566.

¹⁴⁸ 84 Fed. Reg. at 32,559-60.

as it has essentially preapproved numerous ploys to relax standards, such as by setting standards that vary based on load or operating conditions and granting extended compliance periods. ¹⁴⁹ For this reason as well, EPA's non-decision on this issue is arbitrary and capricious and contrary to the purpose of section 111 to reduce dangerous pollution to the maximum feasible degree.

In the proposal, EPA did not indicate that it was adopting a new position on its authority to approve state plans, nor did it suggest that it might decide that question on a plan-by-plan basis. In the final rule, EPA seems to want it both ways: it concludes (without support) that this question must be decided on a plan-by-plan basis but marshals legal arguments indicating that it may *not* approve more stringent state plans. As a consequence, states are left to guess about what types of plans EPA will approve. In this context, the public interests that sometimes weigh against reconsideration—"expedition and finality"¹⁵⁰—do not apply, since the rule expressly renounces any final position, and reconsideration may be the most expeditious path toward certainty. EPA must grant reconsideration to resolve this ambiguity and acknowledge that it cannot disapprove state plans on the basis that they incorporate more than the minimally stringent requirements. To reject such plans would contravene the letter and spirit of section 111, which requires maximum feasible emission reductions and authorizes states to set standards more stringent than the emission guidelines—including by taking a different approach than the best system of emission reduction provided by EPA—and would deprive section 116 of any practical force, as the Supreme Court concluded in *Union Electric*.

IV. EPA's Use of Table 1 in the Final Rule as Reflecting the Degree of Emission Reductions Achievable Through Application of the BSER Is Not a Logical Outgrowth of the Proposal.

In the Final ACE Rule, EPA identifies the value ranges in Table 1 as reflecting the degree of emission reduction (i.e., the level of stringency) achievable through application of the BSER. This position diverges significantly from the proposal, in which EPA sharply distinguished between the act of actually *identifying* the BSER stringency and that of merely *providing* information on the BSER stringency. In the final rule, though, EPA treats these two supposedly distinct actions as essentially identical: the Agency refers to Table 1 for both purposes, and specifies in both cases that the value ranges in Table 1 are, effectively, optional (at least to the extent that states may establish more lenient standards). For EPA to draw a critical legal distinction in the proposal that it fundamentally obliterates in the Final ACE Rule is unlawful unless the Agency provides an opportunity for additional comment on the role and merits of Table 1. Although EPA correctly concludes in the Final ACE Rule that it may not avoid identifying the level of stringency associated with the BSER under section 111, it has unlawfully repurposed the same, minimally informative study (reflected in Table 1) that it cited in the proposal for "informational" purposes only after having led commenters to believe that "identifying" the BSER entailed a considerably more comprehensive and prescriptive analysis than merely pointing to a single, decade-old study of voluntary HRI projects at a select number of coal plants.

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¹⁴⁹ *Id.* at 32.551-53.

¹⁵⁰ Small Refiner Lead Phase-Down Task Force v. EPA, 705 F.2d 506, 547 (D.C. Cir. 1983).

Because of Table 1's newfound function in the Final ACE Rule, a second grounds for reconsideration also emerges that requires a new opportunity for public comment. As discussed above, EPA has effectively proposed to reinterpret Section 111 in a way that would prohibit the Agency from approving state plans that exceed the level of stringency associated with the BSER. In the Final ACE Rule, EPA has, for the first time, identified Table 1 as actually reflecting the level of stringency associated with the ACE Rule's BSER, as opposed to just one particular data point relevant to that determination, as it appeared in the ACE Proposal. The interaction between (first) the Agency's threat to reject state plans that are more stringent than the BSER, and (second) its identification of Table 1 as reflecting the BSER's level of stringency create a serious dilemma that did not exist at all in the proposal: states may well sacrifice the federal approvability of their performance standards if they exceed Table 1's maximum values for any particular HRI measure at an affected source. At a minimum, the interaction between these two new policies results in a deeply uncertain legal landscape with regard to Table 1's max values, and EPA has refused to clarify this issue by punting on the question of whether it will approve more stringent state plans.

The section that follows discusses these two grounds for reconsideration in further detail. It also explains why Table 1 and the underlying study are particularly ill-suited to the task of determining the level of stringency associated with the BSER, which is why this issue truly is of central relevance to this rulemaking.

1. In Claiming to Identify the Degree of Emission Reductions Achievable Through Application of the BSER, EPA Has Unlawfully Repurposed Table 1 from the Proposal Without Providing Notice and an Opportunity to Comment.

In the ACE Proposal, EPA denied that it had any legal obligation to identify the degree of emission reductions (i.e., the level of stringency) associated with the BSER. Instead, the Agency claimed that it need only provide "information on" the degree of emission reductions associated with the BSER, ¹⁵¹ rather than actually and definitively identify that degree. According to EPA, the difference between identifying/determining the BSER stringency (on the one hand) and providing information on the BSER stringency (on the other hand) was not merely theoretical. Indeed, the Agency went so far as to actually propose amendments to the section 111(d) implementing regulations that would have removed EPA's obligation to identify in all future emission guidelines the degree of emission reduction associated with the BSER—a requirement that had been in place since 1975—while replacing it with a requirement that EPA simply "include[] information on the degree of emission reduction achievable through [the BSER]." ¹⁵²

In making this distinction in the ACE Proposal and offering the aforementioned amendment to the section 111(d) implementing regulations, EPA indicated that "information" on the BSER stringency entailed a different—and presumably much less prescriptive and comprehensive—analysis than a sharp definition of the BSER stringency would require. This conclusion is reinforced by the remarkably threadbare nature of the "information" that EPA provided in the

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¹⁵¹ 83 Fed. Reg. at 44,763.

¹⁵² 83 Fed. Reg. at 44804 (proposed 40 C.F.R. § 60.21(e)).

ACE Proposal with regard to the Agency's chosen BSER of heat rate improvements: the Agency relied solely on data from a single, decade-old study conducted by EPA contractor Sargent & Lundy that examined "typical" HRI performance at a group of coal plants that had voluntarily undertaken these projects. The Agency presented those data as "maximum" and "minimum values in Table 1 of the proposal:

TABLE 1 TO PARAGRAPH (A)(2)(I)—MOST IMPACTFUL HRI MEASURES AND RANGE OF THEIR HRI POTENTIAL (%) BY EGU SIZE

HRI Measure		< 200 MW		200-500 MW		>500 MW	
	Min	Max	Min	Max	Min	Max	
Neural Network/Intelligent Sootblowers	0.5	1.4	0.3	1.0	0.3	0.9	
Boiler Feed Pumps		0.5	0.2	0.5	0.2	0.5	
Air Heater & Duct Leakage Control	0.1	0.4	0.1	0.4	0.1	0.4	
Variable Frequency Drives	0.2	0.9	0.2	1.0	0.2	1.0	
Blade Path Upgrade (Steam Turbine)		2.7	1.0	2.9	1.0	2.9	
Redesign/Replace Economizer		0.9	0.5	1.0	0.5	1.0	
Improved Operating and Maintenance							
(O&M) Practices		Can range from 0 to $> 2.0\%$ depending on the unit's historical O&M practices". ¹⁵³					

However, Table 1 appeared nowhere in the actual regulatory text of the ACE Proposal. Instead, the ACE Proposal merely required states to undertake an "evaluation" of the applicability of each of the candidate heat rate improvements to each affected EGU. Table 1 served as a solely informational function; the ACE Proposal did not require state plans to reflect the degree of emission limitation associated with Table 1—or, for that matter, any other degree of emission limitation.

This aspect of the ACE Proposal reflected EPA's newfound theory that "it is the state, not EPA, that is tasked in the first instance with 'select[ing] an achievable limit' for existing sources." To that end, EPA also proposed to amend the definition of "emission guidelines" in the implementing regulations for section 111(d). Whereas that preexisting provision defined "emission guideline" as "a guideline . . . which *reflects* the degree of emission reduction achievable through the application of the [BSER]," the ACE Proposal would have redefined it as "a final guideline document . . . which *includes information on* the degree of emission reduction achievable through the application of the [BSER]." 156

In the Final ACE Rule, EPA has properly abandoned its misguided "informational" theory of the BSER and has retained the pre-existing definition of "emission guideline." The Agency explains that:

¹⁵⁵ 40 C.F.R. § 60.21(e) (emphasis added).

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¹⁵³ 40 C.F.R. § 60.5740a (a)(2)(i) (emphasis added).

¹⁵⁴ 83 Fed. Reg. at 44,753.

¹⁵⁶ Proposed 40 C.F.R. § 60.21a(e) (emphasis added).

EPA agrees with commenters that because the EPA evaluates components such as cost of emission reductions and environmental impacts on a broader, systemwide scale when determining the BSER, if a state instead were to determine the degree of emission limitation achievable for the sources within its borders, these factors will naturally be re-balanced on a smaller scale than the EPA's calculation and likely re-define the BSER in the process.¹⁵⁷

Petitioners do not fault EPA with abandoning its "informational" theory of the BSER; indeed, we urged the Agency to do so, as the CAA clearly tasks EPA, not the states, with actually determining the degree of emission reductions achievable through the BSER. However, the Agency has gone astray in failing to take the legally necessary step of issuing a supplemental proposal that identifies and solicits comment (as well as additional data) on the "maximum feasible [level of] control" within the selected categories of technologies. Instead, the Agency simply reprints Table 1 in the Final ACE Rule, claiming that what was merely "informational" data at the stage of the ACE Proposal is now an actual and legally sufficient "identification]" of the emission reductions achievable through the various candidate technologies that supposedly comprise the BSER.

In other words, EPA has, without notice and an opportunity for comment, repurposed Table 1 in the Final ACE Rule in a way that deviates significantly from the ACE Proposal. EPA originally stated:

One requirement of the new proposed implementing regulations . . . is that an EPA-promulgated emission guideline provide information on the degree of emission reduction which is achievable with each system This means that EPA will provide, in addition to the BSER, *information* on the degree of emission reduction that is achievable when the BSER is applied. In the case of this proposed rulemaking . . . EPA is proposing that the BSER is HRI made at the unit level. To meet the requirements of the new proposed implementing regulations, EPA is proposing candidate technologies for HRI measures corresponding to a range of reductions and costs as information regarding the degree of emission reduction achievable through application of the BSER. Because affected EGUs in each state are different and the application of different HRI measures may take into account source-specific factors, EPA is providing expected ranges of HRIs. These ranges are shown in Table 1. 160

In the final rule, EPA recasts identical information as fulfilling its now-recognized duty to identify the degree of emission limitation that results from the BSER:

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¹⁵⁷ 84 Fed. Reg. at 32,567.

¹⁵⁸ 40 Fed. Reg. at 53,342; *see also Essex Chem. Corp. v. Ruckelshaus*, 486 F.2d 427, 437 (D.C. Cir. 1973) (section 111(b) standards must provide for the "maximum practicable degree" of pollution control).

¹⁵⁹ 84 Fed. Reg. at 32,536-37 (emphasis added).

¹⁶⁰ 83 Fed. Reg. at 44,763.

By providing the level of emissions reductions achievable using the candidate technologies the EPA is fulfilling its responsibility as part of the BSER determination. In this instance, the EPA has identified the degree of emission limitation achievable through application of the BSER by providing ranges of expected reductions associated with each of the technologies. These ranges are provided in Table 1, clearly presenting the percentage improvement ranges that can be expected when each candidate technology comprising the BSER is applied to a designated facility. ¹⁶¹

The Agency never acknowledges or explains how it can now use the information in Table 1 to identify the degree of emission limitation associated with the BSER—which it now concedes is its legal responsibility—when it initially provided that same information in the proposal under the auspices of *not* needing to identify a degree of emission limitation associated with the BSER.

As noted above, the Clean Air Act requires reconsideration where it "was impracticable" for the petitioner to raise an issue of "central relevance" to the outcome of the rulemaking during the public comment period. 162 Environmental Petitioners' objections to EPA's newfound use of Table 1 meet these criteria. First, the issue is of central relevance to the outcome of the rulemaking: it concerns EPA's performance of its core duty to identify the degree of emission limitation that state plans must achieve and to approve only those state plans that meet or exceed that degree of stringency. The failure to provide an absolute, quantitative emission limitation not only violates section 111(a)(1), but also disserves states by failing to provide a benchmark against which to measure their plans for approvability, thereby undermining the cooperative federalism inherent in section 111(d)—one of EPA's key rationales for "retaining the requirement that . . . emission guidelines reflect the degree of emission limitation achievable through application of the BSER." ¹⁶³ Indeed, section 111(d) requires EPA to reject state plans that are not "satisfactory," 164 and without a clear and definitive numerical benchmark for what constitutes a "satisfactory" plan, states are effectively left in the dark. 165 These serious deficiencies, if brought to the Agency's attention, would "provide[] substantial support for the argument that the regulation should be revised."166

Second, EPA's decision to adopt Table 1 as a reflection of the degree of emission reduction associated with the BSER is not a logical outgrowth of the proposal, and thus it was impracticable for Petitioners to have commented on this issue. In the proposal, EPA declined to identify the degree of emission reduction achievable through the BSER; on the contrary, the

¹⁶¹ 84 Fed. Reg. at 32,537.

¹⁶² 42 U.S.C. § 7607(d)(7)(B).

¹⁶³ 84 Fed. Reg. at 32,567.

¹⁶⁴ 42 U.S.C. § 7411(d)(2)(A).

¹⁶⁵ See 40 Fed. Reg. at 53,343 ("If there is to be substantive review, there must be criteria for the review, and EPA believes it is desirable (if not legally required) that the criteria he made known in advance to the States, to industry, and to the general public.").

¹⁶⁶ Coal. for Responsible Regulation, 684 F.3d at 125.

Agency outright denied that it had any legal obligation to do so, and thus did not solicit comment on a specific proposal for the degree of emission limitation that state-developed standards of performance must reflect. 167 Not only did EPA reject its long-held position that it must identify the degree of emission reduction associated with the BSER, it actually proposed amendments to the section 111(d) implementing regulations to formalize its new (and now properly rejected) position for all future rulemakings. Although EPA cited the Table 1 values—which derive from a single ten-year-old Sargent & Lundy study—as one point of relevant "information" on the ranges of HRI that might be typical of the candidate technologies, it certainly did not indicate that the Table 1 values actually represented the achievable degree of stringency associated with the BSER. The very fact that EPA's proposal so strongly distinguished between "providing information on" the degree of emission reduction associated with the BSER (on the one hand) and actually "identifying" that degree of emission reduction (on the other hand), such that the Agency proposed amending the implementing regulations that had been in place for over 40 years, gave every indication that EPA considered the latter action of "identifying" the BSER's emission reductions to be considerably more detailed, involved, and prescriptive than the former "providing information on" the BSER's emission reduction. Commenters were not on notice that EPA actually viewed these tasks as, effectively, one and the same, and did not have the opportunity to comment on EPA's "identification" of Table 1 as reflecting the emission reductions achievable through the ACE Rule's BSER.

2. In the Final Rule, EPA Suggests for the First Time that States Lack Authority to Adopt Standards of Performance that Exceed Table 1's HRI Ranges.

The second basis for reconsideration of Table 1 concerns the interaction between EPA's newfound use of Table 1 in the Final ACE Rule and its new legal theory (discussed in the previous section of this petition) that EPA may lack authority to approve state plans that includes standards that are "more stringent than what is required under CAA section 111(d)." When explaining the new function that Table 1 serves in the Final ACE Rule, EPA describes the numerical ranges as reflecting "the degree of emission limitation achievable through the application of the BSER (*i.e.*, the level of stringency) associated with the candidate technologies." That is, Table 1 no longer provides one data point that states may use in setting standards that adhere to the BSER, as it did in the proposal—it now actually defines the level of stringency that can be achieved through application of the BSER. This indicates that EPA would consider any HRI value that exceeds Table 1's maximum number for a given technology to be greater than "the level of stringency" associated with that BSER element. Thus, if EPA ultimately decides that it lacks authority to approve more stringent state plans—an issue it claims

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¹⁶⁷ Commenters rigorously opposed the Agency's denial of any such duty. *See generally* Joint Comments of Environmental and Public Health Organizations on Proposed Revisions to Emission Guideline Implementing Regulations, Docket No. EPA-HQ-OAR-2017-0355-24258 (submitted Oct. 31, 2018). They also pointed out that the proposed rule "contains no limit." Joint Comments of Environmental and Public Health Organizations on the Best System of Emission Reduction and Other Issues in EPA's Proposed Emission Guidelines, Docket No. EPA-HQ-OAR-2017-0355-24260, at 12 (submitted Oct. 31, 2018).

^{168 84} Fed Reg. at 32,559.

¹⁶⁹ *Id.* at 32,537 (emphasis added).

it will decide in the context of particular state plan submissions—it may well interpret the maximum Table 1 values as establishing the upper limit for what EPA may approve with respect to any given BSER technology.

This conclusion is reinforced by the fact that EPA explicitly states in the preamble that "states may where appropriate *relax* [the] level of stringency [associated with the BSER] when establishing standards of performance by accounting for source-specific factors," but nowhere affirms that the converse is also true; *i.e.*, that federally approvable state plans may, where appropriate, *exceed* the level of stringency associated with the BSER when establishing standards of performance by accounting for source-specific standards. Likewise, when discussing the authority of states to adopt HRI requirements that "fall outside the range" of the Table 1 values, EPA provides only an example in which the state-issue standard is less stringent, not more stringent, than the Table 1 values. ¹⁷¹ This strongly suggests that EPA's approach to standards that fall "outside of the [Table 1] ranges" is asymmetrical: less stringent standards based on source-specific factors are clearly permitted, but more stringent standards may be prohibited.

For the reasons described in Part III, EPA did not properly signal in the ACE Proposal that it was considering a new legal position with regard to more stringent plans as a general matter; it certainly did not provide adequate notice—or even hint at the possibility—that Table 1 (which, as we have noted, was merely "informational" in the proposal) might establish a hard upper limit on the level of HRI that states could require in any federally approvable state plan. Imposing a cap on HRI reductions from the listed "candidate technologies" is not a variation on the proposal or an intermediate alternative; rather, it is philosophically at odds with EPA's claimed preference to defer to state determinations in these matters. It is also contrary to EPA's longtime understanding of, and practice under, the Clean Air Act. Since adoption of the 1970 CAA, EPA's role has been to provide a floor for state environmental protection efforts, not a ceiling. Here, the Agency reverses this role for the first time by setting out a rule that definitively lacks a floor, but may indeed have a ceiling. Together, EPA's revised interpretation of *Union Electric*, its newfound "uncertainty" as to the approvability of more stringent state plans, and its repurposed use of Table 1 all make for a scenario that was wholly impracticable for commenters to even imagine at the time of proposal, let alone meaningfully address in comments

Had EPA properly noticed this issue in the ACE Proposal, commenters would have had the opportunity to point out the many legal reasons why EPA *must* approve more stringent state plans that otherwise satisfy the requirements of section 111(d), as described previously. At a minimum, commenters could have requested greater clarity from EPA on this issue such that there would be no ambiguity as to whether the Agency did or did not intend Table 1's maximum

¹⁷⁰ *Id.* at 32,567.

¹⁷¹ See id. at 32,551.

¹⁷² Senior EPA officials have admitted that they intend no floor: in August, 2018, EPA Assistant Administrator Bill Wehrum affirmed that, under the ACE Proposal, "[t]here is no lower limit, there is no number below which states can't go. That's not how this program works." Niina Heikkinen and Nick Sobczyk, "Trump kicks off next big climate battle," *E&E News* (Aug. 21, 2018), *available at* https://www.eenews.net/stories/1060094871/print.

HRI values to function as a ceiling for what the Agency might approve in terms of state plan stringency. Yet the Agency simply did not raise this issue in the proposal, and thus commenters did not have an opportunity to address these important issues. In these circumstances, it is clear that the value of a full and fair airing of objections to EPA's approach outweighs any interests in "expedition and finality."¹⁷³

Furthermore, this issue is of central relevance to the outcome of the rulemaking. If Table 1 reflects a hard limit on what states may require in their federally approvable plans, then it also limits the total amount of emission reductions that can be expected under the ACE rule. The quantity of emission reductions achieved is not only one of the statutory factors that EPA must consider when selecting the BSER,¹⁷⁴ but directly relates to the driving purposes of the Clean Air Act itself: to "to protect and enhance the quality of the Nation's air resources," to promote research and programs that "achieve the prevention and control of air pollution," to assist "State and local governments in connection with the development and execution of their air pollution prevention and control programs," and to "to encourage and assist the development and operation of regional air pollution prevention and control programs."¹⁷⁵ A brand new legal interpretation that limits the amount of pollution reduction that states can require in their plans clearly goes to the heart of the Clean Air Act as a whole and section 111 in particular.

Notably, while EPA finds "merit" in the viewpoint that it lacks authority to approve more stringent state plans, the Agency adds that it prefers "not [to] prejudge the approvability of [such] state plan[s]." However, it is reasonable to assume that the Agency will not approve plans where it believes it does not have authority to do so. By affirming industry's arguments in support of this position while somehow claiming that this affirmation does not *necessarily* mean EPA will not approve more stringent plans, EPA attempts to influence those plans toward weaker standards while attempting to defer judicial review of this important question.

The Agency suggests in the Final ACE Rule preamble that states would still be free under section 116 of the Clean Air Act to adopt more stringent standards, but that they may not be federally enforceable.¹⁷⁷ If EPA were to view Table 1 as establishing a maximum level of stringency for state plans, this logic would lead to absurd results: any state wishing to impose more stringent standards than indicated by Table 1 would need to impose *two* separate sets of standards on the affected sources. One set of standards, which could not exceed Table 1's max values, would be federally enforceable and approved by EPA, while the other set of standards *would* exceed Table 1's max values and would be enforceable as a matter of state law only. More bizarre still, if EPA were to reject a state plan for exceeding the BSER level of stringency, the

¹⁷³ Small Refiner, 705 F.2d at 547.

¹⁷⁴ Costle, 657 F.2d at 326.

¹⁷⁵ 42 U.S.C. § 7401(b)(1)–(4). *See also id.* § 7401(c) ("A primary goal of this chapter is to encourage or otherwise promote reasonable Federal, State, and local governmental actions, consistent with the provisions of this chapter, for pollution prevention.").

¹⁷⁶ 84 Fed. Reg. at 32,559-60.

¹⁷⁷ 84 Fed. Reg. at 32,559.

Agency would then be legally obligated be to begin developing a weaker federal plan for the state in question, which would take effect within two years unless the state revised and submitted a sufficiently weakened state plan to EPA.¹⁷⁸

This outcome would impose meaningless administrative burdens on states, on affected sources, and on EPA itself without providing any environmental benefit—the exact inverse of the current administration's avowed goal of "streamlining" regulation while maintaining environmental stewardship. Under this legal theory, not only would EPA not require states to even *evaluate* HRI improvements above Table 1's max range for a given source—even where there is ample evidence that a particular technology would provide greater reductions at that source than the max value—the Agency would *reject* a state-issued performance standard that required more stringent HRI improvements.

This problem is compounded by EPA's unlawful 'menu' approach with individual ranges of percentage improvements for each technology, because states cannot push some technologies that would feasibly produce extra reductions to make up for the unavailability of other technologies at a given source. If EPA had adopted a single range of efficiency improvement as its "emission limitation," at least states would have been able to compensate for the complete unavailability (or underperformance) of certain candidate technologies by requiring better-than-typical performance from other, feasible technologies—while staying within EPA's overall parameters for efficiency improvement. Under the ACE rule, however, this approach appears to be unavailable: Table 1's maximum values may well reflect upper limits for each technology, regardless of all other factors.

This cannot be the correct understanding of section 111.¹⁷⁹ Because EPA did not properly notice this issue in the proposal, and because it concerns an issue of central relevance to the outcome of the rulemaking—the full scope of state authority under section 111(d)—it must a topic for reconsideration.

- 3. These Issues Are of Central Relevance to the Outcome of the Rulemaking Because the Values in Table 1 Do Not Reflect the Degree of Emission Reductions Achievable Through the BSER.
 - a. The Values in Table 1 Do Not Correspond with the Proper Level of Stringency Associated with the HRI Candidate Technologies.

In addition to the reasons stated above, these issues regarding Table 1 are of central relevance to EPA's rulemaking because Table 1 does not, in fact, reflect the proper level of stringency that can be achieved through application of the specific HRI measures that EPA has selected for inclusion in the BSER. At the outset, this determination is fatally flawed because the Agency has not meaningfully identified the BSER itself. Rather, it has merely defined several broad categories of emission reduction technologies, any one of which states may select or reject for its

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¹⁷⁸ 40 C.F.R. § 60.27a(c)–(d).

¹⁷⁹ *Griffin v. Oceanic Contractors, Inc.*, 458 U.S. 564, 575 (1982) ("[I]nterpretations of a statute which would produce absurd results are to be avoided if alternative interpretations consistent with the legislative purpose are available.").

performance standards, without providing sufficient detail to operationalize the emission guidelines' requirements. According to 40 C.F.R. § 60.5740a(a), states need only "evaluat[e]" the applicability of each technology when developing their performance standards; there is no requirement that the performance standards actually reflect the implementation of any one or more of those measures. It is thus inherently impossible for EPA to actually define the level of stringency of the BSER when "the BSER" is an amorphous collection of items that states can choose to select (or not select) from an à la carte menu.

EPA claims that section 111(d)'s remaining useful life provision, which permits states to account for certain source-specific factors in setting performance standards, permits this approach, allowing the Agency to "express the 'degree of emission limitation achievable through application of the BSER' as a set of ranges of values, rather than a single number, that *reflects application of the candidate technologies as a whole.*" This is patently incorrect. The existence of source-specific contingencies cannot excuse EPA of its obligation to both define the particular combination of measures that constitutes the BSER (rather than a mere list of "candidate" measures) and to assign a specific value to the emission reductions associated with that combination of measures. If it is technologically impossible to pinpoint a single HRI number such that a value range is necessary, the Agency must still provide a *single* value range that reflects a definite combination of BSER measures. Table 1's values do not meet this requirement.

Second, Table 1 does not actually reflect the "maximum feasible control" achievable through each listed technology. The data in that study were derived from a 2009 Report, Coal-Fired Power Plant Heat Rate Reductions prepared by EPA contractor Sargent & Lundy. 181 By its own description, the Sargent & Lundy study did not analyze the "maximum feasible" improvements associated with a broad spectrum of potential options. Rather, it was a survey of existing plant operators and published literature to assess the cost of heat rate reductions "typically achieved in the industry" from a limited set of technologies. 182 The study produced ranges of "typical" HRI results—not the "maximum feasible level of control" achievable—at coal plants that were included in the study. Furthermore, the projects evaluated were voluntarily undertaken by source operators, and thus presumably represent only those projects with zero net cost to the operator. Yet BSER determinations under section 111(b) are *not* limited to emission reduction measures that are without net cost to the owner/operator. Had EPA provided notice that it was planning to repurpose Table 1 in the manner it has, Petitioners would have both requested the underlying data from the study and objected that EPA must identify the maximum feasible degree of control achievable through these technologies *today*, not "typical" HRI results from voluntary projects undertaken at least decade ago. We address specific issues related to the Sargent & Lundy study below.

Third, EPA has done nothing to ensure that the HRI values reflected in Table 1 actually translate into end-of-stack emission reductions. For each candidate technology, Table 1 depicts a

¹⁸⁰ 84 Fed. Reg. at 32,538 (emphasis added).

¹⁸¹ Sargent & Lundy, *Coal-Fired Power Plant Heat Rate Reductions* (2009), *available at* https://www.epa.gov/sites/production/files/2015-08/documents/coalfired.pdf.

¹⁸² *Id.* at 1-1

percentage decrease in a plant's energy input per unit of electricity output. All else being equal, reducing a unit's energy input/energy output ratio will reduce CO₂ emissions at the stack per unit of output. Yet the Final ACE Rule rule does *not* require that all else will actually be equal at each affected source. For instance, a source may install certain technologies that improve its HRI but then begin using lower-grade fuel, resulting in higher overall emissions. Or the source may implement HRI-improving technologies while letting other technologies or processes degrade, thus negating whatever improvements the new technologies achieved. As written, the ACE rule does not prohibit states from taking these circumstances into account and setting overly lenient performance standards that reflect certain candidate technologies but do not actually require sufficient (or any) emission reductions. This is unlawful: a best system of emission reduction that does not actually reduce pollution is not a "system of emission reduction" at all, let alone the "best" such system. Nor can a system that increases emissions from the source category reasonably be said to result in a degree of emission "limitation" under section 111(a)(1). EPA must therefore either provide the BSER values as a binding percent improvement in a source's CO₂ emission rate, as opposed to its heat rate, or prohibit states from incorporating future offsetting conditions (such as lower-grade fuel or neglected improvements of other plant components) into their performance standards.

b. Both the Sargent & Lundy Study and Other Data Show that the Maximum Feasible Control of the Candidate Technologies Exceed Table 1's Value Ranges.

The Sargent & Lundy informal plant survey that EPA relies on for Table 1 did not identify, nor did it intend to identify, the full extent of emission reduction achievable through the pertinent candidate technologies. In addition to its survey results, Sargent & Lundy also provided information on the range of results that may be expected from the HRI projects evaluated, including a "case study" of three plants of differing sizes. These data establish that the "max" values in Table 1 were never meant to reflect an upper limit on the HRI achievable through the listed technologies. For example, while Table 1 sets out 0.4 percent as the "max" efficiency improvement associated with air heater and duct leakage control, Sargent & Lundy determined that exhaust gas temperature of one of the plants in its case study were well above design specifications and that heater and duct leakage repairs would improve efficiency by 96 Btu/kWh (0.92 percent). Similarly, Sargent & Lundy notes that "[d]epending on plant configuration, the improvement in heat rate [associated with variable frequency drives] can range from 20-100 Btu/kWh." This value corresponds to the percentage improvement estimates for this technology in Table 1. However, Sargent & Lundy go on to observe that "[t]here are circumstances in which the heat rate improvement has been estimated to be much higher, depending on the operation of the unit." 184 Thus, EPA has not actually selected the actual maximum HRI opportunities discussed in the Sargent & Lundy study to reflect the "max" values in Table 1.

EPA also ignores other readily available data apart from the Sargent & Lundy study, including a survey of 49 fossil-steam and 23 nuclear units that underwent turbine blade upgrades conducted

¹⁸³ Sargent & Lundy Report at 4-3.

¹⁸⁴ *Id*.

by the Electric Power Research Institute. This survey documents that the most likely outcome of a turbine blade upgrade is between 2 and 4 percent and that improvements as large as 8–10 percent have been achieved. Table 3-12, below, is from the EPRI Survey Report. If half of the units that report 2–4 percent improvement had improvement of 3–4 percent, the majority of the units responding to the survey (23.5/46) would have improvements greater than EPA's "max" range of 2.9 percent for this technology.

Table 3.12 EPRI Survey Results.

Table 3-12 Overall Expectations and Actual Results Decreased Heat Rate	Expe	Expectations		Actual Results	
0-2%	13	20%	16	28%	
2-4%	32	50%	21	36%	
4-6%	3	5%	4	7%	
6-8%	0	0%	1	2%	
8-10%	6	9%	4	7%	
>10%	0	0%	0	0%	
N/A	10	16%	12	21%	

EPA recognizes that there will be plants where the minimum emission reductions of Table 1 are too stringent and there will be plants where the maximum emission reductions of Table 1 do not reflect the degree of emission reductions that are actually achievable, but nonetheless persists in using Table 1 to establish what EPA indicates would amount to a ceiling on HRI required by federally enforceable standards (as discussed above). In purporting to identify the BSER level of stringency in the final rule, EPA ignores both other available data and even the conclusions of its own contractor, Sargent & Lundy. In doing so, the Agency adopts HRI ranges that decidedly do not reflect the "maximum feasible control" achievable through candidate technologies that EPA has selected as the BSER.

c. Table 1 Provides No Useful Information on the Degree of Emission Limitation Achievable from Application of Improved Operation and Maintenance Practices.

With regard to EPA's operation and maintenance component of the BSER, Table 1 sets out a range of efficiency improvements associated with three limited categories of O&M practices¹⁸⁶ that spans from zero percent to greater than two percent (0 - >2%). As "greater than two percent" implies no upper bound, Table 1's expected HRI through O&M practices effectively covers the full range of 0-100 percent, a meaningless value. And so, unlike its estimates for HRI from equipment upgrades, EPA's three listed categories of BSER for O&M improvements do not arbitrarily limit the authority of a state to establish a standard based on that limited list of O&M measures that are, in fact, feasible at a particular unit. Rather, EPA fails here to satisfy its legal

¹⁸⁵ EPRI, Compilation of Results and Feedback Regarding Turbine Upgrades at Nuclear and Fossil Power Plants (2008), at Table 3-12. These data are also presumably limited to projects that were thought by the operators to involve no net cost. Once again, the "no net cost" is *not* the standard of section 111(d), the primary purpose of which is to reduce air pollution and protect public health.

¹⁸⁶ EPA's list ignores many feasible and effective options for additional O&M improvements.

obligation to actually identify the degree of emission limitation achievable through application of these measures that it acknowledges elsewhere in the Final ACE Rule.

Further, EPA provides no relevant guidance concerning the level of O&M that would provide the "maximum feasible control." The Agency's BSER for O&M includes only three categories of potential O&M improvements: staff training, on-site appraisals, and improved steam surface condenser cleaning. The first two items in this list are so vague as to be essentially meaningless, and while the third—improved steam surface condenser cleaning—is at least somewhat more concrete, EPA still fails to specify what this practice should entail, how often it should occur, and the emission reductions that should be expected. Notably, EPA ignores specific findings in the 2009 Sargent & Lundy report that it otherwise bases Table 1 on:

[a]n **average** cleaning schedule that is properly implemented can reduce the backpressure on a once-through condenser by about 0.35 in. Hg, resulting in heat rate reduction of approximately 30-70 Btu/kWh. Facilities using a regular condenser cleaning schedule may achieve more significant heat rate reductions, depending on fouling characteristics at a particular plant location. A full economic analysis must be performed to determine which offline cleaning method is to be used. Such an analysis would result in an optimum offline or reduced-load cleaning schedule that could average between two and three cleanings a year. ¹⁸⁸

EPA has incorporated none of these specifications into the O&M component of the BSER in the Final ACE Rule. What is more, it offers no alternative approach for a meaningful O&M component, either in terms of engineering (e.g., maintain condenser back pressure at, or within *X* percent of, the design value for this parameter), or "best practices" (e.g., full offline condenser cleaning no less than three times per year, unless the source demonstrates that back pressure is maintained at design levels).

Similarly, as noted above, EPA's BSER includes HRI "awareness training" to ensure that all O&M staff are aware of best practices and how those practices affect the unit's heat rate. Once again, this suggestion is so vague as to be meaningless. Is "HRI awareness training" a generic 30-minute Power Point presentation offered once a year; or is it a regular, maintained program, based on facility-specific experiences that includes documented revisions to plant operating practices such as designation of a plant efficiency officer? EPA offers neither a minimum mandatory emission reduction associated with this component of the BSER nor a description of what it considers to be the best elements of "HRI awareness training." Instead, EPA reverts to the legal theory of the Proposed ACE Rule that, "as with other BSER measures, it will be up to each state to determine the extent of this requirement," an assertion directly at odds with the Agency's acknowledgement in the Final ACE Rule that it is legally obligated to determine the level of emission reductions achievable through the BSER.

¹⁸⁷ 84 Fed. Reg. at 32,540.

¹⁸⁸ Sargent & Lundy Report at 3-4 (emphasis added). The 30–70 Btu/kWh range for an "average" cleaning schedule is reflected in Table 1.

¹⁸⁹ 84 Fed. Reg. at 32,540.

The on-site appraisal component is perhaps the most vacuous of the three aspects of the O&M element of EPA's BSER. It amounts to nothing more than a directive that source operators examine their plants and look for opportunities to improve their heat rates. In other words, sources are expected to achieve HRI by searching for opportunities to achieve HRI. Needless to say, this is entirely circular. EPA has very specifically *not* required that states or sources take any particular action in response to information developed during on-site appraisals, nor has the Agency specified any the level of rigor anticipated (or required) for such appraisals. And, as discussed above, EPA has threatened that it may not approve state plans that are more stringent than EPA's BSER. What this means in the context of on-site appraisals is both unknown and unknowable. Had they been able, Petitioners would have pointed out the inconsistency of (on the one hand) the Agency's new (and correct) legal position that it has an obligation to identify the emission reductions achievable under the BSER and (on the other hand) EPA's irrational choice to provide an à la carte set of efficiency improvements with an arbitrarily limited range of potential percentage reductions in emissions, only some of which EPA has modeled in the final RIA.

V. EPA Alters Important Aspects of the Regulatory Impact Analysis Without Providing Notice or Opportunity to Comment.

The Regulatory Impact Analysis (RIA) accompanying the Final ACE Rule¹⁹⁰ contains several new analytical assumptions, conclusions, and approaches that were entirely absent from the ACE Proposal and the RIA accompanying the Proposal.¹⁹¹ Specifically, EPA changed the baseline against which it compared the illustrative policy scenario from a baseline including the CPP in the ACE Proposal RIA¹⁹² to a "No CPP" base case in the Final ACE RIA.¹⁹³ Additionally, the Final ACE RIA includes a new sensitivity analysis of the section 45Q tax credits for carbon dioxide sequestration, which did not appear in the ACE Proposal RIA.¹⁹⁴

It was impracticable for commenters to have objected to these changes because EPA never indicated that it would alter its analysis in these ways. As described in detail below, the problems with these crucial components of the Final ACE RIA are of central relevance to the outcome of the rule because EPA's analysis presented within the RIA must inform its BSER determination. Because section 111 requires the standard of performance to reflect the degree of emission reduction achievable by the best system of emission reduction, taking into account cost, EPA must engage in a factual assessment of both the costs and the benefits of reductions. ¹⁹⁵ As shown

¹⁹⁰ EPA, Regulatory Impact Analysis for the Repeal of the Clean Power Plan, and the Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units (June 2019) ("Final ACE RIA").

¹⁹¹ EPA, Regulatory Impact Analysis for the Proposed Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program (Aug. 2018) ("ACE Proposal RIA").

¹⁹² ACE Proposal RIA at ES-1.

¹⁹³ Final ACE RIA at 1-5.

¹⁹⁴ *Id.* at 3-27.

¹⁹⁵ See Sierra Club v. Costle, 657 F.2d 298, 326 (D.C. Cir. 1981) (quantity of emission reductions is an important factor in determining "best" system of emissions reduction); see also Michigan v. EPA, 135 S. Ct. 2699, 2707

below, EPA's reliance on flawed analytical assumptions and incomplete modeling is arbitrary and capricious. 196

1. EPA Arbitrarily Alters the Final ACE RIA Baseline.

In the Final ACE RIA, EPA argues, for the first time, that the appropriate baseline against which to compare the ACE illustrative policy scenario is the "No CPP" case. EPA offers two new justifications for this change. First, EPA argues that "ACE is being analyzed as a separate action that occurs only after repeal of the CPP." Second, "the EPA does not believe that there would be any significant differences between a scenario with or without CPP." EPA failed to offer either of these arguments for public comment, and accordingly Petitioners had no opportunity to raise objections to either justification for this flawed analytical framework, or to the framework itself.

The ACE Proposal RIA compared three illustrative policy scenarios against a base case that correctly included the CPP, "so that the reader can understand the combined impact of a repeal and replacement." The Proposal RIA also included a "No CPP" case as a fourth illustrative scenario, to "allow[] for an understanding of the repeal alone." Yet the "No CPP" case was decidedly *not* the RIA's baseline—the CPP implementation scenario was—and the Proposal RIA gave no indication that EPA would alter the baseline in the Final RIA.

Office of Management and Budget (OMB) Circular A-4 directs the Agency to assess the benefits and costs of its action against a "no action" baseline—that is, a scenario describing "what the world will be like if the proposed rule is not adopted."²⁰¹ In the case of a new regulatory action that rescinds an existing rule, "the baseline for measuring the impact of a change or rescission of a final rule is the requirements of the rule itself, not the world as it would have been had the rule never been promulgated." *Air All. Hous. v. EPA*, 906 F.3d 1049, 1068 (D.C. Cir. 2018). In accordance with Circular A-4 and *Air Alliance Houston*, as well as principles of sound regulatory analysis, the appropriate no-action baseline against which to compare the ACE Rule is the CPP.

^{(2015) (&}quot;Consideration of cost reflects the understanding that reasonable regulation ordinarily requires paying attention to the advantages *and* the disadvantages of agency decisions.").

¹⁹⁶ See Small Refiner Lead Phase-Down Task Force v. EPA, 705 F.2d 506, 534 (D.C. Cir. 1983) (EPA "retains a duty to examine key assumptions as part of its affirmative burden of promulgating and explaining a non-arbitrary, noncapricious rule."); Columbia Falls Aluminum Co. v. EPA, 139 F.3d 914, 923 (D.C. Cir. 1998) ("An agency's use of a model is arbitrary if that model 'bears no rational relationship to the reality it purports to represent." (quoting Am. Iron & Steel Inst. v. EPA, 115 F.3d 979, 1005 (D.C. Cir. 1997))).

¹⁹⁷ Final ACE RIA at 1-5.

¹⁹⁸ *Id*.

¹⁹⁹ ACE Proposal RIA at ES-1.

²⁰⁰ *Id*.

 $^{^{201}}$ OMB Circular A-4 (Sept. 17, 2003), $\underline{\text{https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/circulars/A4/a-4.pdf}.$

In the Final ACE RIA, EPA alters course to eliminate the CPP from the analysis. The Agency posits that "there is likely to be no difference between a world where the CPP is implemented and one where it is not." This conclusion differs markedly from the ACE Proposal RIA, which projected a substantial difference in emissions outcomes between the "CPP base case" and "No CPP" illustrative scenario: "EPA projects that a full repeal of the CPP would result in an annual CO₂ emissions increase of about 3 percent above the base case (CPP) annually in 2025, and 4 percent above the base case (CPP) in 2030 and 2035."

To support EPA's new position that the CPP does not impact emissions, EPA makes significant changes to its modeling of the CPP in the Final ACE RIA, to which Petitioners did not have the opportunity to offer comment. In the Final ACE RIA, EPA presents new "CPP implementation scenarios" that rely on two key modeling assumptions: a three-year delay in implementation, and more extensive CO2 allowance trading. The CPP set final emission reduction targets for the year 2030, with interim requirements beginning in 2022. EPA's new Final ACE Rule analysis arbitrarily assumes a three-year delay in CPP implementation, with interim compliance beginning in 2025 and final targets effective only in 2033. The Integrated Planning Model (IPM) operates by grouping years into five-year increments, such that emission reductions from the assumed 2033 compliance date appear in the modeling only in 2035, making the CPP look less effective at reducing emissions in 2030 than it would otherwise be even with the assumed three-year delay. Regardless, EPA has no basis to assume a three-year tolling of the CPP's deadlines—the CPP could be implemented immediately with its original targets intact if EPA abandoned its repeal effort. As the Agency itself notes, the power sector is already meeting the CPP's initial targets.

Moreover, EPA purports to base its new conclusion that the repeal of the CPP has no effect "on the weight of the evidence," ²⁰⁴ an approach found nowhere in the Proposal RIA. This "weight of the evidence" approach, which considers several new factors that EPA did not include in its modeling assumptions that the Agency nonetheless uses to discount the effectiveness of the CPP, is inappropriate and unfounded in the context of an RIA. EPA offers a series of observations about power sector trends that "lead the EPA to different conclusions about the potential impacts of the CPP." ²⁰⁵ EPA selectively uses these trends—"shifts in fuel supply, continued advances and cost declines for key power generating technologies, market operation and policy evolution, and end-use demand influence"—to qualitatively discount the effect of the CPP, while conveniently ignoring the very same trends in its analysis of the Final ACE Rule. EPA does not model or otherwise quantify the impacts of these trends, and does not substantiate its new conclusion that IPM—the Agency's modeling platform—does not sufficiently account for industry trends and must therefore be supplemented with EPA's qualitative observations and assumptions.

²⁰² Final ACE RIA at 2-1.

²⁰³ ACE Proposal RIA at 3-14.

²⁰⁴ Final ACE RIA at 2-1.

²⁰⁵ *Id.* at 2-3.

In its "weight of the evidence" consideration, EPA makes several specific assumptions about recent data trends that are incorrect or unsupported. For example, EPA's predictions regarding the retirement of older coal plants²⁰⁶ ignore the fact that EPA still intends to finalize its proposed revisions to NSR, under which older coal plants will be able to upgrade equipment and extend their lives. EPA also observes, in two sentences, that U.S. natural gas production "hit a new record in 2018," but offers no reasons why it would expect this abnormal growth to continue or why IPM's projections of natural gas prices are inaccurate²⁰⁷—especially when EPA later notes that "[1]arge increases in supply over the last few years, and relatively low prices, are represented in the analysis." Had EPA solicited comments on the specific power sector trend data it now uses to discount the effectiveness of the CPP, Petitioners could have corrected EPA's mistaken assumptions.

EPA must re-open the Final ACE Rule for public comment on the appropriate baseline against which to compare the impacts of the Final ACE Rule and the specific modeling choices and data assumptions EPA used to conclude that the CPP would have no effect.

2. EPA's New Analysis of the 45Q Tax Credit Fails to Inform its BSER Determination.

The Final ACE RIA discusses a new sensitivity analysis that includes the section 45Q tax credits for carbon dioxide sequestration under the Bipartisan Budget Act of 2018.²⁰⁹ This analysis, which was entirely absent from the ACE Proposal RIA, shows 3 GW of projected CCS retrofits at existing coal-fired EGUs. However, EPA concludes without any further reasoning that "EPA does not expect that inclusion of this tax credit would have a significant impact on the incremental results presented in this RIA."²¹⁰

This result, in which EPA's own analysis shows that some existing sources install CCS retrofits in the baseline, business-as-usual no-policy model run, ought to have caused EPA to reexamine whether CCS should be considered part of the BSER for at least a subset of sources. This is especially true because this new modeling indicates that some EGUs would install CCS even in the absence of a standard that reflects the significant emission reductions achievable through this technology. This new analysis seriously calls into question at least two of the assumptions underlying EPA's cursory rejection of CCS: the technology's purported high costs; and the possibility that the extended state plan submission timeframe would prevent regulated entities from adopting CCS for compliance in time to benefit from the tax credit (for which projects must commence construction by January 1, 2024).

Petitioners should have the opportunity to comment on the agency's new analysis of the 45Q tax credit and its implications for the viability of CCS as a BSER measure.

²⁰⁷ *Id*. at 2-9.

²⁰⁶ *Id*. at 2-7.

²⁰⁸ *Id.* at 3-29.

²⁰⁹ *Id.* at 3-27.

²¹⁰ *Id*.

VI. EPA's Unexpected Postponement of Final Action on Proposed Changes to the New Source Review Program Fatally Compromises the Agency's Decisions in the ACE Rule.

In the ACE Proposal, EPA proposed "to amend the [New Source Review (NSR)] regulations to include an hourly emissions increase test for EGUs" to facilitate the development of state plans that require HRI measures that could increase annual emissions through increased utilization. In the Final ACE Rule, EPA neither adopts the proposed NSR revisions nor abandons them, instead deferring action on this consequential component of its proposal. The Agency states that it is "not finalizing NSR revisions at this time; instead, the EPA intends to take final action on the proposed revisions at a later date in a separate notification of final action." Commenters could not have anticipated this outcome or expressed their views on its implications for ACE. For the reasons discussed below, EPA should grant reconsideration on a series of issues related to this change and convene a proceeding in which all stakeholders can provide input to the Agency.

Objections to EPA's deferral of final action on the NSR component of the proposal were both "impracticable" to have been raised during the period for public comment and "of central relevance to the outcome of the rule." Deferring action on NSR revisions is not a variation on the proposal or an intermediate alternative; rather, it unexpectedly and illogically changes course by making *no* revisions to the NSR program (and premising the Final ACE Rule on the absence of changes to the NSR program) yet promising to do so at a later date.

The CPP Repeal Proposal does not mention NSR.²¹⁴ The Replacement ANPRM does discuss NSR, but only to outline existing requirements, note stakeholders' concerns with those requirements, and solicit comment on "the topic of how the NSR program overlays with emission guidelines."²¹⁵ In the ACE Proposal, EPA asserted that the "added time and cost to sources and the associated burden on permitting agencies could hinder the effective and prompt implementation of state 111(d) plans."²¹⁶ These asserted concerns do not hint at the possibility that EPA would simply take no action on the proposed NSR revisions.²¹⁷ Deferral of NSR changes is even more unpredictable in light of the complications this move results in, as

²¹¹ 83 Fed. Reg. at 44,780; *see also id.* at 44,775 ("[I]t is possible that a source undertaking a HRI project at its EGU would project, or actually experience, an increase in operation of its EGU and a corresponding increase in annual emissions.").

²¹² 84 Fed. Reg. at 32,533.

²¹³ 42 U.S.C. § 7607(d)(7)(B).

²¹⁴ See generally 82 Fed. Reg. 48,035 (Oct. 16, 2017).

²¹⁵ 82 Fed. Reg. at 61,518-19.

²¹⁶ 83 Fed. Reg. at 44,777.

²¹⁷ The Agency also requested comment on "whether it would be appropriate to finalize the NSR revisions as a separate action from the remainder of the proposal." 83 Fed. Reg. at 44,783. The request, however, appears under the heading of "[s]everability" and suggests an intention to insulate the NSR provisions from judicial invalidation based on other flaws in the proposed rule, or vice versa; it does not place stakeholders on notice that the Agency could opt to defer action on the NSR component.

discussed in greater detail below. This postponement significantly alters the effects of the ACE Rule and necessitates further consideration of those effects or how changes to NSR, if finalized, would affect the choice of the BSER and identification of the resulting emission limitation.

EPA must grant reconsideration of the Final ACE Rule to examine the implications of deferring NSR changes with the benefit of input from stakeholders. In these circumstances, the value of a full and fair airing of objections to EPA's approach outweighs any interests in "expedition and finality."²¹⁸ The objections go to the core of EPA's statutory obligations. The interests in expedition and finality would not be served by refusing to reconsider ACE when the Agency has delayed action on a major component of its proposal—one which has fundamental consequences for the design, operation, and environmental and economic effects of ACE. Postponing final action on NSR revisions differs dramatically from deciding, in a final action, not to adopt them.

This postponement creates unique and serious problems in the context of the final ACE rule because it has caused the Agency to (1) fail to fulfill its statutory obligation to consider cost and emission reductions in identifying the "best" system of emission reduction; (2) omit any comparative analysis of various BSER options, likely leading to an erroneous BSER determination; (3) fail to provide states with information necessary to develop approvable plans; and (4) unlawfully delegate to states a major cost consideration in setting standards of performance. As discussed below, each of these issues could not have been raised during the comment period and is of central relevance to the outcome of the rulemaking.

1. In the context of deferring final action on its NSR proposal, EPA has failed to fulfill its statutory obligation to consider cost and emission reductions in identifying the "best" system of emission reduction.

After previously finding that NSR revisions were essential to determining the scope of the BSER and the emission reductions achieved under the BSER, EPA now asserts that continued NSR applicability is irrelevant to the identification of the BSER and has postponed taking action on NSR. The failure to take action on the proposed NSR revisions and conduct an analysis of the effects of that final action on the proposed system of emission reduction is a violation of EPA's statutory obligation to identify the "best" system of emission reduction.²¹⁹

²¹⁸ Small Refiner Lead Phase-Down Task Force v. EPA, 705 F.2d 506, 547 (D.C. Cir. 1983).

²¹⁹ Petitioners take no position on whether it is appropriate to consider the costs of complying with other regulatory programs that may result from implementation or application of the BSER when EPA analyzes BSER options under the statutory factors set forth in section 111(a)(1). To the extent, however, that EPA has delegated the BSER analysis for each source to the states and expressly allowed them to consider the costs of HRIs in conducting unitby-unit evaluations, 84 Fed. Reg. at 32,551—with EPA concluding that should it finalize NSR revisions, the outcome will be that it is "more likely" that states will set standards that do not reflect full use of EPA's candidate BSER measures, id. at 32,555—the costs of NSR are clearly relevant to the Final Rule's unorthodox and unlawful determination of the BSER. Put differently, EPA should have considered the implications of the cost and emissions effects of ongoing NSR applicability (which EPA believes states may consider in their BSER analyses and use to exclude whole classes of candidate HRI technologies) when determining that HRI measures represent the "best" system for reducing CO₂ emissions from power plants. Whether it would have been appropriate for EPA to take these effects into account in a hypothetical BSER analysis that the agency had conducted per its statutory mandate is not a question presented by the circumstances of this rulemaking, and, again, petitioners take no position on this issue.

The ACE Proposal described NSR as a "barrier to the implementation of efficiency projects at EGUs," 220 and justified NSR revisions as needed to "allow states, in establishing standards of performance, to consider HRIs that would otherwise not be cost effective due to the burdens incurred from triggering NSR." In the ACE Proposal EPA also stated that "[t]he proposed action on NSR would ultimately impact the level of reductions reflected in the standard of performance that a state establishes for its sources." In other words, EPA has conceded that finalization of the NSR proposal will change the costs of potential BSER components and the emission reductions achieved by the BSER. Whether or not it is appropriate to consider the costs and emission effects of another CAA program when conducting its BSER analysis, EPA has apparently deemed these factors relevant to the unit-by-unit BSER analyses it has delegated to the states. As such, by failing to inform its identification of the BSER with the implications of its final decision on the NSR revisions (that was proposed with and because of the proposed BSER), EPA has arbitrarily retained its proposed BSER without a reasoned consideration of the likelihood of its deployment—which is relevant to the core statutory criteria EPA must consider in determining a BSER, both emission reductions and cost.

This failure is made more acute by the Agency's decision not to even model the impacts of eventual final action on NSR revisions on costs and emissions of the section 111(d) emission guidelines. The Agency's modeling of the effects of ACE assumes that states would entirely exclude the higher-impact HRI measures (economizer redesign/replacements and blade path upgrades) from their plans—in marked tension with the Final ACE Rule's description of the likelihood of exclusion of these technologies in the development of standards of performance.²²³ In the ACE Proposal, EPA analyzed three different scenarios pertaining to the cost and deployment of its various HRI "candidate" technologies. The first scenario, "2 Percent HRI at \$50/kW, represents a policy case that reflects modest improvements in HRI absent any revisions to NSR requirements" because "absent NSR reform, HRI at affected units might be expected to be modest."²²⁴ The second and third scenarios assume elimination of NSR applicability for plants that increase generation and therefore emissions and therefore assume greater HRI (4.5%) at two different cost levels—scenarios that "represent[] the ability of all coal-fired EGUs to obtain greater improvements in heat rate because of NSR reform."²²⁵ The ACE Proposal RIA clarifies that "[f]or the 'No NSR Reform' case, the analysis assumed that the 'steam turbine upgrade' and the 'redesign/replace the economizer' HRI options would not be available as those are among the

²²⁰ 83 Fed. Reg. at 44,746.

²²¹ Id. at 44,748.

²²² Id. at 44,767.

²²³ See 84 Fed. Reg. at 32,537 ("Without finalization of NSR reforms, the EPA anticipates that states in some instances may determine, when considering other factors, that the candidate technologies, 'Blade Path Upgrade (Steam Turbine)' and 'Redesign/Replace Economizer,' are less appropriate for application to a particular source or sources than the EPA anticipated would be when it proposed the ACE Rule.").

²²⁴ 83 Fed. Reg. at 44,791.

²²⁵ *Id*.

efficiency improvements that industry believes will trigger NSR."²²⁶ The Proposal RIA further explains that:

The primary driver for the difference in HRI level across the scenarios is an assumption pertaining to proposed changes to the New Source Review (NSR) program. . . . This proposed change is the primary driver for including two different levels of HRI to better understand the potential impacts, with the lower level of HRI representing a replacement rule without the NSR regulatory changes, and the higher HRI scenario reflecting a replacement rule that also reflects NSR reform.²²⁷

Thus, although the list of HRI technologies that EPA asserts comprise the "best system of emission reduction" to reduce greenhouse gas emissions from coal-fired power plants has not changed from proposal to final, the ACE Proposal made clear that EPA assumed two of those technologies would not be deployed in the absence of the elimination of NSR applicability. In the Final ACE Rule, EPA has nonetheless included these technologies in the BSER list—while failing to model their deployment, again reinforcing the Agency's conclusion that the technologies would not, in fact, be a component of the system of emission reduction without finalization of the NSR proposal. Thus, the results in the Final ACE RIA reflect only a partial BSER, and likely misstate both the costs and overall emission reductions that would be expected from full implementation, as discussed in the next section. This makes clear that EPA has not, in fact, identified a BSER considering cost and emission abatement and instead has assigned this balancing to the states, while making unsubstantiated assumptions about the effects of ongoing NSR applicability and ignoring the real-world results of eventually eliminating that applicability should NSR revisions be finalized.

It was impracticable for commenters to object to EPA's failure to take final action on proposed (though unlawful) NSR revisions and failure to analyze the implications of NSR revisions for EPA's identification of a best system of emission reduction. In the proposal, EPA cited NSR costs as so important that they motivated elimination of NSR applicability as a corollary to the ACE proposal—and certainly never hinted that it would completely disregard the implications of NSR revisions for the BSER in the final rule. EPA requested comment on "how a state . . . may estimate or project the cost for the source to comply with any NSR requirements *that may flow from a selected BSER*," but it never suggested that its BSER determination would be wholly insensitive to whether NSR would effectively eliminate a portion of the BSER (as ultimately chosen by the states) in the Agency's estimation. The D.C. Circuit "require[s] some degree of foresight on the part of commenters" but does not "require telepathy" or "require advocates for affected industries and groups to anticipate every contingency." "229

²²⁸ 83 Fed. Reg. at 44,777 (emphasis added).

²²⁶ ACE Proposal RIA at 1-14 (emphasis added).

²²⁷ Id. at 3-9.

²²⁹ Portland Cement Ass'n v. EPA, 665 F.3d 177, 186 (D.C. Cir. 2011).

These objections are of central relevance to the rulemaking because EPA's final action concerning the NSR program is—by EPA's own admission—critical to the content of the heatrate system of emission reduction and to both costs and the scale of emission reductions that will be achieved by the system, and therefore to the question of whether it is the "best" system. As the Agency has tacitly acknowledged in the RIA, the Agency believes that NSR revisions would likely dramatically alter the degree (even if still minuscule compared to reductions from much better systems, short-lived, and likely outweighed by extending the lives of coal-fired power plants) to which the Final ACE Rule serves section 111's paramount purpose of reducing harmful pollution. Therefore, EPA's erroneous treatment of the postponement of NSR revisions without disclosing how they would affect the Final ACE Rule or accounting for that fact in determining the BSER "provides substantial support for the argument that the regulation should be revised." 230

As such, if EPA intends to pursue its unlawful changes to the NSR program, EPA must take final action on both proposals together, or on the NSR proposal first, in order to inform its section 111(d) rulemaking. This approach would be consistent with the Agency's proposal of changes to the section 111(d) emission guideline regulations and finalization of changes to those regulations contemporaneously with finalization of the Final ACE Rule. By way of analogy, the Agency did not propose changes to the generic emission guideline regulations applying to the Final ACE Rule, and then fail to finalize them and yet note that if and when they do finalize those regulations, they will be relevant to the implementation of the Rule. At minimum, EPA must reopen the Final ACE Rule for comment on the implications of taking final action on the Rule without clarity as the to the coverage of the NSR program while the Rule is being implemented.

2. EPA has likely arrived at an erroneous BSER conclusion by failing to evaluate its full BSER with NSR revisions and compare that case with BSER alternatives.

Not only has EPA failed to identify a BSER in light of the factors set forth in section 111(a)(1) (consideration of which it has at least partially delegated to the states), but, as a consequence of the failure to consider the effects of deferral of NSR revisions, it has likely selected a system that cannot be deemed "best" under any reasonable interpretation of the statute. If EPA insists on retaining HRI measures as the BSER and finalizing the Final ACE Rule before it acts on its NSR proposal, it must at the very least reopen the public comment period and comparatively evaluate the impacts of a range of levels of HRI deployment.

EPA justified its proposal to reduce the applicability of the NSR program because an HRI project is designed to improve the energy efficiency of the EGU, acknowledging that this could result in greater generation and hence emissions from designated units:

Along with this increase in energy efficiency, the EGU which undergoes the HRI project will typically experience greater unit availability and reliability, all of which contribute to lower operating costs. EGUs that operate at lower costs are generally preferred in the dispatch order by the system operator over units that have higher operational costs, and EPA's regulatory impact analysis (RIA) for this action (located in the docket) shows that improving an EGU's heat rate will

²³⁰ Coal. for Responsible Regulation, 684 F.3d at 125.

lead to increased generation due to its improved efficiency and relative economics. As the EGU increases its generation, to the extent the EGU operates beyond its historical levels by a meaningful amount, it could result in an increase in emissions on an annual basis.²³¹

EPA has conceded that the finalization of—or failure to finalize—the NSR proposal will affect the emission reductions that occur due to the Final ACE Rule, and could even lead to emissions increases. Robust modeling of the deployment of HRI technologies in the context of the proposed alterations to the NSR program would show that these technologies increase the deployment and lifetime of coal-fired power plants, leading to emission *increases*—which would have demonstrated to the Agency that HRI alone cannot be the "best" system of emission reduction. Extending the life of a coal-fired power plant by even one year can completely erode any emission reductions that efficiency improvements would produce over the remaining life of the plant, particularly when combined with higher dispatch during its previously expected lifetime. Even within the limited timeframe covered by the RIA, emissions from the power sector could rise if HRI deployment increases following NSR revisions. In addition to emissions changes, action on the NSR proposal will also affect the energy impacts of the Final ACE Rule by affecting dispatch and likely the operating lifetimes of coal-fired power plants making HRIs to comply with the Final ACE Rule—as well as the Rule's cost.

To fulfill its legal duties, EPA should have modeled several scenarios with higher levels of HRI deployment, reflecting various combinations of HRI technologies as systems of emission reduction, ²³⁵ using its new methodology for calculating the national HRI percentage, in order to actually understand and show to the public what the effects of its Final ACE Rule will be. ²³⁶ If the results presented in the ACE Proposal RIA are any indication, EPA's full BSER would prove more costly than the limited set of HRI measures modeled in the final RIA assuming no changes to the NSR program—and, as noted, could well increase emissions regionally or nationally in the near and long term. A BSER that increases both costs and emissions over an "illustrative" alternative cannot be the "best" system.

²³¹ 83 Fed. Reg. at 44,775.

²³² See Comments of Clean Air Task Force, Clean Air Council, and Clean Wisconsin, Docket No. EPA-HQ-OAR-2017-0355-23806, at 17-41 (Oct. 31, 2018).

²³³ *Id.* at 36-38.

²³⁴ See Amelia Keyes, *The ACE Rule's Surprising Result*, Resources (May 15, 2019), https://www.resourcesmag.org/common-resources/the-ace-rules-surprising-result/.

²³⁵ *Compare* Final ACE RIA at 1-11 to 1-18 (describing development of the illustrative scenario), *with* ACE Proposal RIA at 1-13 to 1-18 (describing a similar but different methodology for the proposed illustrative scenarios).

²³⁶ At the very least, EPA should have modeled scenarios that assume HRI deployment between the minimal level in its one policy case and full deployment assuming NSR alterations, as the agency suggests that states would "in some instances" require the more-impactful HRI measures, 84 Fed. Reg. at 32,537; *see also* RIA at 1-16 to 1-17 (assuming, inconsistently, that these HRI technologies are never deployed in the policy case because they are merely "*less likely* to be installed to the extent they could trigger NSR permitting" (emphasis added)).

It was impracticable for commenters to have objected to the lack of a full and comparative analysis because the ACE Proposal or the accompanying RIA did not give any indication that EPA would abandon a comparison of various policy scenarios in the Final ACE Rule and fail to inform its final action with this analysis. Further, the Agency never suggested in the ACE Proposal that it would alter its methodology for modeling the BSER and determining its emissions, cost, and energy system impacts for the Final ACE Rule, 237 which makes even the Proposal's analysis of the effects of eliminating NSR applicability irrelevant and inappropriate to inform EPA's final BSER decision—even if EPA relied upon the proposal analysis in the Final ACE Rule, which it does not. This methodological change and its implications for the dynamics with the NSR program was also unforeseeable. The Agency now posits in a footnote that, "[i]f the EPA decides to finalize changes to the NSR program, it will be done in a subsequent rulemaking action and these modelling assumptions will be revisited at that time." It does not explain, however, how it could revisit the Final ACE Rule in an NSR rulemaking.

The issue is of central relevance to the rulemaking because information on emissions, costs, energy requirements, and other environmental effects must inform the BSER analysis, as guided by the statutory factors in section 111(a)(1).²³⁹ Moreover, EPA must consider effects related to these factors at a level that only regional and national modeling will reveal.²⁴⁰ Regardless of the appropriateness of considering NSR costs and emissions effects in EPA's BSER analysis (which it has yet to perform), the agency must consider the emission reductions, costs, energy requirements, and environmental effects that would likely result from deployment of its BSER with and without NSR applicability—even if it excludes the costs and benefits of NSR requirements. Deviations from this well-established precedent—and the plain statutory requirements—"provide[] substantial support for the argument that the regulation should be revised."²⁴¹

EPA must grant reconsideration on this issue; make a final decision as to the proposed NSR revisions; provide analysis of the HRI deployment likely to result in the context of NSR revisions applying the updated HRI methodology to various HRI combinations as different systems of emission reduction; and allow the public and the Agency to compare and evaluate those scenarios as the possible outcomes of a rulemaking that retains some set of HRI technologies as the BSER. The Agency must then make a final decision informed by analysis of the emissions, cost, and energy impacts of implementation of ACE in the context of the alteration of NSR applicability. At a minimum, the Agency must provide a full analysis of the

²³⁷ See Final ACE RIA at 1-12 to 1-18.

²³⁸ Final ACE RIA at 1-17 n.19.

²³⁹ See 42 U.S.C. § 7411(a)(1); Portland Cement Ass'n v. Ruckelshaus, 486 F.2d 375, 385 n.42 (D.C. Cir. 1973) ("The standard of the 'best system' is comprehensive, and we cannot imagine that Congress intended that 'best' could apply to a system which did more damage to water than it prevented to air.").

²⁴⁰ Sierra Club v. Costle, 657 F.2d at 330 ("EPA... must exercise its discretion to choose an achievable emission level which represents the best balance of economic, environmental, and energy considerations. It follows that to exercise this discretion EPA must examine the effects of technology on the grand scale in order to decide which level of control is best.").

²⁴¹ Coal. for Responsible Regulation, 684 F.3d at 125.

various systems of emission reduction based on HRI with and without NSR revisions, and justify a system of emission reduction as "best" with or without NSR revisions, based on that analysis.

3. EPA has failed to fulfill its statutory obligation to provide states with the information they need to develop approvable plans.

With NSR temporarily sidelined as ACE implementation moves forward, states will face considerable uncertainty as to the level of stringency that EPA will deem to be required in their plans. For instance, if states preliminarily rule out the more impactful HRI measures based partly on costs, ²⁴² and EPA subsequently vitiates that analysis by removing the NSR costs, states will have to rework their plans, losing time and resources as they redo intensive engineering analyses for each unit. The problem is compounded by EPA's suggestion, critiqued Parts III and IV of this petition for reconsideration, that it will demand that states precisely meet whatever emission level it deems feasible, and go no further.

It was impracticable to have commented on this issue because Petitioners could not have predicted that EPA would inject this massive uncertainty into the planning process. The issue is of central relevance to the outcome of the rulemaking because EPA has a statutory obligation to provide states with the information they need to develop approvable plans. Thus, EPA's regulations implementing section 111(d) require the Agency to publish emission guidelines that "provide information for the development of State plans," including "[t]he degree of emission limitation achievable through the application of the best system of emission reduction." An emission guideline must itself "reflect[] the degree of emission limitation achievable through the application of the best system of emission reduction." EPA cannot plausibly claim to have fulfilled this obligation when it has proposed together with an emission guideline—but left unfinalized yet not withdrawn—a probable regulatory change that could significantly alter the "emission limitation" achievable using the BSER, and therefore plan development. EPA must reopen the rulemaking to receive input on this crucial issue, including on its relation to EPA's suggestion that it will reject state plans that require more pollution reductions than what it ultimately deems feasible under the emission guideline.

4. EPA's position on the role of states in setting standards by considering costs of the NSR program has changed.

The lingering possibility of triggering NSR—together with EPA's choice to ignore NSR costs or explain why they do not influence its own BSER analysis—has also induced EPA to deviate from its Proposal by delegating additional elements of the BSER determination almost entirely to states, to make on a unit-by-unit basis. In the ACE Proposal, EPA reasoned that NSR applicability would "take on even greater significance and may not be as easily avoided in the

²⁴² As noted above, Petitioners take no position on whether it is appropriate or lawful to consider the costs of another air pollution program if the applicability of that other program is triggered by implementation of section 111 standards.

²⁴³ 40 C.F.R. § 60.22a(5).

²⁴⁴ *Id.* § 60.21a(e).

context of this proposed rule,"²⁴⁵ and that states frequently *would not be able* to take NSR permitting costs into account when setting standards because it is difficult to predict NSR applicability on a mass basis and to project costs of best available technology.²⁴⁶ Now, EPA "anticipates" that states may "in some instances" determine that the more-significant HRI measures are "less appropriate,"²⁴⁷ or "not as reasonable as anticipated at proposal when these were proposed as elements of BSER alongside proposed NSR reform."²⁴⁸ EPA does not explain how states would make such a determination, given EPA's assessment that states would often not be able to predict NSR applicability or costs, yet it assigns them the task of dealing with the BSER factor of cost nonetheless.

It was impracticable for commenters to have objected to EPA's unlawful decision to pass off even more of the BSER determination (which, as noted, is entirely EPA's responsibility under the statute and cannot be delegated to states in the form of authority to eliminate components of the identified BSER by considering factors that are addressed to EPA in section 111(a)(1)) to states. That move was unpredictable because EPA previously found states were ill-equipped to consider costs of the existing NSR program up-front. Furthermore, EPA argued in the ACE Proposal that "state agencies should not be burdened with having to determine a 'work around' for the NSR program requirements in developing their plans to implement the emission guidelines for affected EGUs." Thus, assigning to states the consideration of difficult-to-predict NSR costs is not a logical outgrowth of the ACE Proposal: it would not have been a viable long-term solution had EPA withdrawn its NSR proposal, the only alternative to finalizing the NSR revisions that was apparent in the proposal. Delegating this additional component of the BSER determination to states only suffices (if at all) as a stopgap measure necessitated by the deferral of the NSR changes.

As commenters could not have envisioned such a stopgap measure, which is only necessitated by deferral of the NSR changes, they could not have objected to this unlawful delegation of yet another cost consideration to the states, nor to the practical problems it generates. It is of central relevance to the outcome of the rulemaking because the statute assigns to EPA consideration of costs in identifying the BSER,²⁵⁰ and does not permit the Agency to shunt these complicated regulatory and economic determinations onto the states. Had Petitioners been able to comment on this issue, their objections would have provided substantial support for the position that the Final ACE Rule must be revised.

²⁴⁵ 83 Fed. Reg. at 44,775.

²⁴⁶ *Id.* at 44,777.

²⁴⁷ 84 Fed. Reg. at 32,537.

²⁴⁸ *Id.* at 32,555.

²⁴⁹ 83 Fed. Reg. at 44,777.

²⁵⁰ 42 U.S.C. § 7411(a)(1).

VII. Conclusion

For the foregoing reasons, Petitioners respectfully request that the Administrator convene a proceeding for reconsideration of the Final ACE Rule pursuant to Clean Air Act section 307(d)(7)(B).

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A copy of the foregoing Petition for Reconsideration was served on September 6, 2019, by email and first-class mail, on the following:

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