



October 31, 2018

The Honorable Andrew Wheeler
Acting Administrator
U.S. Environmental Protection Agency
Attention Docket ID No. EPA-HQ-OAR-2017-0355
EPA Docket Center, U.S. EPA, Mailcode: 28221T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program, Proposed Rule, Docket ID No. EPA-HQ-OAR-2017-0355; FRL-9982-89-OAR, 83 Fed. Reg. 44746 (Aug. 31, 2018)

Dear Administrator Wheeler:

The American Chemistry Council, American Coke and Coal Chemicals Institute, American Forest & Paper Association, American Fuel & Petrochemical Manufacturers, American Iron and Steel Institute, American Wood Council, Chamber of Commerce of the United States of America, the National Association of Manufacturers, and National Lime Association (collectively, “the Associations”) appreciate the opportunity to comment on the U.S. Environmental Protection Agency’s (“EPA’s”) 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, Docket ID No. EPA-HQ-OAR-2017-0355; FRL-9982-89-OAR, 83 Fed. Reg. 44746 (Aug. 31, 2018) (the “Proposal” or “Proposed Rule”), also known as the proposed Affordable Clean Energy (“ACE”) Rule. The Associations support EPA’s Proposal, which conforms to the authority and direction given to

EPA by the Congress under the Clean Air Act (“CAA”), and urge EPA to move forward promptly to adopt a final rule. The Associations also believe that there are aspects of the Proposal that can be improved further, and we outline those in these comments.

The **American Chemistry Council** (“ACC”) represents the leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to make innovative products and services that make people’s lives better, healthier and safer. ACC is committed to improved environmental, health and safety performance through Responsible Care®, common sense advocacy designed to address major public policy issues, and health and environmental research and product testing. The business of chemistry is a \$797 billion enterprise and a key element of the nation’s economy.

The **American Coke and Coal Chemicals Institute** (“ACCCI”) was formed in 1944 by companies interested in establishing a forum to discuss and act upon issues of common concern to the metallurgical coke and coal chemicals industry. Today, ACCCI represents over 95 percent of the metallurgical coke produced in the U.S. and Canada, including both merchant coke producers and integrated steel companies with coke production capacity, and 100 percent of companies producing coal chemicals in the U.S. and Canada. Nearly 150 representatives from about 45 companies contribute their knowledge and expertise to enhance the effectiveness of the Institute’s programs.

The **American Forest & Paper Association** (“AF&PA”) serves to advance a sustainable U.S. pulp, paper, packaging, tissue and wood products manufacturing industry through fact-based public policy and marketplace advocacy. The forest products industry accounts for approximately four percent of the total U.S. manufacturing GDP, manufactures over \$200 billion in products annually, and employs approximately 950,000 men and women. The industry meets

a payroll of approximately \$55 billion annually and is among the top 10 manufacturing sector employers in 45 states.

The **American Fuel & Petrochemical Manufacturers** (“AFPM”) is a national trade association whose members represent virtually all refining and petrochemical manufacturing capacity in the United States. AFPM’s members supply consumers with a wide variety of products and services that are used daily in homes and businesses.

The **American Iron and Steel Institute** (“AISI”) serves as the voice of the North American steel industry in the public policy arena and advances the case for steel in the marketplace as the preferred material of choice. AISI also plays a lead role in the development and application of new steels and steelmaking technology. AISI is comprised of 21 member companies, including integrated and electric furnace steelmakers, and approximately 120 associate members who are suppliers to or customers of the steel industry. According to a recently released analysis, the American iron and steel industry is a dynamic part of the U.S. economy, accounting for more than \$520 billion in economic output and nearly two million jobs in 2017 when considering the direct, indirect (supplier) and induced impacts. These workers earned over \$130 billion in wages and benefits. All told, the industry generated \$56 billion in federal, state and local taxes. The domestic steel industry has made substantial gains in reducing its energy usage, as well as its environmental footprint, over the last two decades, reducing its energy intensity by 35 percent since 1990 and reducing its greenhouse gas (“GHG”) emissions intensity by 37 percent over the same time period.

The **American Wood Council** (“AWC”) is the voice of North American wood products manufacturing, an industry that provides almost 450,000 men and women in the United States with family-wage jobs. AWC represents 86 percent of the structural wood products industry,

and members make products that are essential to everyday life from a renewable resource that absorbs and sequesters carbon. Staff experts develop state-of-the-art engineering data, technology, and standards for wood products to assure their safe and efficient design, as well as provide information on wood design, green building, and environmental regulations.

The **Chamber of Commerce of the United States of America** (the “Chamber”) is the world’s largest business federation representing the interests of more than 3 million business of all sizes, sectors, and regions, as well as state and local chambers and industry associations. The Chamber is dedicated to promoting, protecting, and defending America’s free enterprise system.

The **National Lime Association** (“NLA”) is a trade association that represents U.S. and Canadian commercial lime companies, as well as suppliers to the lime industry. NLA’s members produce more than 98 percent of domestic lime. Lime is an integral ingredient in many other manufacturing processes and industries. It is an important part of the steel manufacturing process, road building, and the creation of other building products like mortar and plaster. Lime is also integral in environmental compliance of many industries, as it is used to purify water and scrub pollutants from air stack emissions.

The **National Association of Manufacturers** (“NAM”) is the largest manufacturing association in the United States, representing small and large manufacturers in every industrial sector and in all 50 States. Manufacturing employs nearly 12 million men and women, contributes more than \$2.17 trillion to the U.S. economy annually, has the largest economic impact of any major sector, and accounts for three-quarters of private-sector research and development. The NAM is the powerful voice of the manufacturing community and the leading advocate for a policy agenda that helps manufacturers compete in the global economy and create

jobs across the United States. Over the past decade, manufacturers have reduced our GHG emissions by 10 percent while increasing our value to the economy by 19 percent.

INTRODUCTION

The Associations represent the Nation’s leading energy and manufacturing sectors that form the backbone of the Nation’s industrial ability to grow our economy and provide jobs in an environmentally sustainable and energy-efficient manner. The Associations represent members who both generate and rely on the generation of electricity, and thus have a compelling interest in how EPA may regulate environmental aspects of electricity production.

The Associations support EPA’s proposal to promulgate the ACE Rule, which would establish emission guidelines for State plans that will include standards of performance for GHG emissions from certain existing electric utility generating units (“EGUs”) under Section 111(d) of the Clean Air Act. The proposed ACE Rule would also update the Agency’s 40+ year-old regulations implementing the Section 111(d) program and would reform the CAA’s New Source Review (“NSR”) program by modifying the applicability test for major NSR for EGUs.

Importantly, the proposed ACE Rule would replace the Clean Power Plan (“CPP”),¹ the rule EPA finalized in 2015 to govern GHG emissions from existing EGUs under Section 111(d). The CPP has never been implemented, because the U.S. Supreme Court stayed the rule before it went into effect.² The CPP exceeded EPA’s statutory authority under the Clean Air Act, as the Agency attempted to use the Act to transform the way electricity is produced and dispatched across the United States. The CPP was not only unlawful, but could have caused significant

¹ See Final Rule, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64662 (Oct. 23, 2015).

² Order in Pending Case, *Chamber of Commerce v. EPA*, No. 15A787 (U.S. Feb. 9, 2016).

economic disruption across the American economy. For those reasons, the Associations commented on the proposed CPP³ and actively challenged the final CPP in the courts.⁴

This Administration has properly chosen to reconsider the approach EPA took in the CPP.⁵ During that reconsideration, the D.C. Circuit has held the pending challenges to the CPP in abeyance.⁶ In October 2017, EPA proposed to repeal the CPP,⁷ and, in December 2017, the Agency issued an Advance Notice of Proposed Rulemaking (“ANPRM”) requesting comment on a possible replacement for the CPP.⁸ Many of the Associations commented on both the proposed CPP repeal and the ANPRM.⁹

³ Am. Chem. Council *et al.*, Comments on Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generation Units, Proposed Rule, Docket ID No. EPA-HQ-OAR-2013-0602-22581 (Dec. 1, 2014), <https://www.regulations.gov/document?D=EPA-HQ-OAR-2013-0602-22581> (“Associations’ 2014 Comments”).

⁴ Petition for Review, *Chamber of Commerce of the United States of America v. EPA*, No. 15-1382 (D.C. Cir. Oct. 23, 2015).

⁵ Executive Order—Promoting Energy Independence and Economic Growth, Exec. Order No. 13783, White House (Mar. 28, 2017), <https://www.whitehouse.gov/presidential-actions/presidential-executive-order-promoting-energy-independence-economic-growth/>.

⁶ Order, *West Virginia v. EPA*, No. 15-1363 (D.C. Cir. June 26, 2018), ECF No. 1737735 (issuing currently applicable decision to hold the pending litigation in abeyance for 60 days).

⁷ Proposed Rule, Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 82 Fed. Reg. 48035 (Oct. 16, 2017).

⁸ Advance Notice of Proposed Rulemaking, State Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units, 82 Fed. Reg. 61507 (Dec. 28, 2017).

⁹ Am. Chem. Council *et al.*, Comments on Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, Proposed Rule, Docket ID No. EPA-HQ-OAR-2017-0355; FRL-9969-75-OAR, 82 Fed. Reg. 48035 (Apr. 26, 2018), <https://www.regulations.gov/document?D=EPA-HQ-OAR-2017-0355-19907> (“Associations’ Repeal Comments”); U.S. Chamber of Commerce *et al.*, Comments on State Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units, Advance Notice of Proposed Rulemaking, Docket ID No. EPA-HQ-OAR-2017-0545; FRL-9972-50-OAR, 82 Fed. Reg. 61507 (Feb. 26, 2018), <https://www.regulations.gov/document?D=EPA-HQ-OAR-2017-0545-0199> (“Associations’ ANPRM Comments”); AFPM, Comments on State Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units, Advance Notice of Proposed Rulemaking, Docket ID No. EPA-HQ-OAR-2017-0545; FRL-9972-50-OAR, 82 Fed. Reg. 61507 (Feb. 26, 2018),

The Associations urge EPA to move forward expeditiously with this Proposal, with the changes we suggest here. In summary:

- The ACE Rule correctly interprets the Federal-State division of authority Congress established under Section 111(d): EPA determines a best system of emission reduction (“BSER”) that has been adequately demonstrated to be applied at an existing source, and then reflecting what a source could achieve with BSER, States set source-specific standards of performance – but without requiring the source to adopt a specific technology. *See infra* Section I.
- The Proposal properly recognizes that States should exercise flexibility in setting standards of performance for individual sources. Congress expressly granted that flexibility in Section 111(d), consistent with the core principles of federalism underlying the Act. EPA should also confirm, however, that the Act does not contemplate more stringent standards for existing sources under Section 111(d) than those applied to new or modified sources under Section 111(b) rules. The final Rule should, additionally, provide States with guidance and support in setting standards for existing sources, in view of the considerable resources required to develop and implement a rule of this scope. *See infra* Section II.
- The Proposal correctly covers all fossil fuel-fired electric utility steam generating units, but EPA should also evaluate further whether to address GHG emissions from natural gas-fired stationary combustion turbines (“CTs”) and integrated gasification combined cycle (“IGCC”) facilities under Section 111(d). Natural gas-fired electricity generation has increased dramatically as a share of the Nation’s electricity supply in recent years, and thus the Associations would encourage EPA to assess fully those important sources of electricity and consider additional technical analysis of available efficiency improvements. At the same time, industrial combined heat and power (“CHP”) units should be excluded as affected sources due to their inherent efficiency and lower emissions and given they have a fundamentally different purpose than EGUs and utility CHPs—to provide steam and electricity to a host facility, not to sell power to the grid. *See infra* Section III.
- A final Rule should recognize that States can and should provide individual sources with flexibility in how best to achieve compliance with standards of performance. In the final rule, EPA should reaffirm that under Section 111(d), State plans can and should provide

<https://www.regulations.gov/document?D=EPA-HQ-OAR-2017-0545-0230> (“AFPM ANPRM Comments”); NAM, Comments on State Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units, Advance Notice of Proposed Rulemaking, Docket ID No. EPA-HQ-OAR-2017-0545; FRL-9972-50-OAR, 82 Fed. Reg. 61507 (Feb. 26, 2018), <https://www.regulations.gov/document?D=EPA-HQ-OAR-2017-0545-0223> (“NAM ANPRM Comments”).

an individual source with substantial flexibility in how it may comply with its State-issued standard of performance. *See infra* Section IV.

- The Associations also support EPA’s proposed changes to the CAA Section 111(d) implementing regulations, including proposed revisions to the timetables for State plan development and approval, clarifying that emission guidelines need not include a presumptive standard of performance, and improving the regulations’ compliance schedule and variance provisions. *See infra* Section V. These changes represent sound updating of the implementing rules.
- While the Associations agree with EPA’s proposal to revise its NSR regulations to include an hourly emissions increase test that would exclude physical or operational changes that would not increase a unit’s maximum achievable hourly emission rate, this important reform to EPA’s NSR program should be applied to *all* sources, not just EGUs. In this way, the important resulting efficiency improvements could be implemented across relevant industries. To accomplish this, EPA should sever the NSR provisions from the ACE Proposal and proceed with a separate rulemaking on this NSR reform on a parallel timetable to the ACE Rule. *See infra* Section VI.
- Finally, the Associations support EPA’s regulatory impact analysis (“RIA”), but believe there are ways in which it could be improved. Among other improvements, EPA should provide more complete comparisons of its ACE Rule to a baseline which assumes the CPP is not in effect. That will provide stakeholders with a real-world view of the costs and benefits of the Proposal, given that the CPP has been stayed by the Supreme Court and has never actually been in effect. *See infra* Section VII.

The following are the detailed comments on the Proposal.

I. CONSISTENT WITH SECTION 111(D), THE ACE RULE CORRECTLY PROPOSES A BEST SYSTEM OF EMISSION REDUCTION, IMPLEMENTABLE AT THE SOURCE ITSELF, THAT WOULD BE USED TO INFORM STATE STANDARDS OF PERFORMANCE.

The ACE Proposal correctly reflects the division of Federal-State responsibility in Section 111(d) of the Clean Air Act: EPA determines a BSER for a source, while States set source-specific standards of performance which reflect the reductions the source could achieve with BSER – but without requiring a source to adopt BSER or any specific technology. The Proposal also properly limits BSER for GHG emissions from existing EGUs to technologies that

can be applied *at the source*. The final rule should similarly adopt this approach towards BSER and State standards of performance.¹⁰

A. The ACE Proposal Correctly Recognizes That Section 111(d) of the Clean Air Act Only Authorizes EPA to Determine a BSER for Purposes of Informing State-Issued Standards of Performance.

The Associations support the Proposal, because it reflects the correct interpretation of Section 111(d)'s division of authority between the federal government and the States. EPA properly explains that Section 111 assigns EPA “the authority and the responsibility to determine a nationally applicable BSER.” Proposal at 44748; *see* 42 U.S.C. § 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...the Administrator determines has been adequately demonstrated.”).

Likewise, EPA properly acknowledges that “the states have the authority and responsibility to establish and apply existing source standards of performance.” Proposal at 44748. The statute unambiguously assigns this role to the States. 42 U.S.C. § 7411(d)(1) (“The Administrator shall prescribe regulations which shall establish a procedure similar to that provided by section 7410 of this title *under which each State shall submit to the Administrator a plan which (A) establishes standards of performance....*”) (emphasis added); *id.* (“Regulations of the Administrator under this paragraph *shall permit the State in applying a standard of*

¹⁰ EPA has stated it is not soliciting comments on its authority to regulate existing EGUs under Section 111(d) of the Clean Air Act and the nature of the required endangerment finding, issues which EPA says will be raised in its forthcoming New Source Performance Standard (“NSPS”) proposal for EGUs. Proposal at 44751-52. Accordingly, these comments will not address those issues in depth here, but the Associations preserve all rights to address them in any subsequent proceeding or rulemaking. To be clear, however, the Associations submit that before EPA regulates GHG emissions from a source category under Section 111(b) or 111(d) of the Act, the Agency must first find that the emissions of GHGs from that source category are a significant contributor to the endangerment of public health or welfare. 42 U.S.C. § 7411(b)(1)(A).

performance to any particular source under a plan submitted under this paragraph to take into consideration, among other factors, the remaining useful life of the existing source to which such standard applies.”) (emphasis added).

Furthermore, EPA’s existing Section 111(d) implementing regulations and proposed changes to those rules also confirm this division of responsibility between the federal and State governments under Section 111(d). The existing regulations separately establish requirements for federal emission guidelines in 40 C.F.R. § 60.22(b)(5), which “reflect[]” the BSER but do not include emission standards. It is the State plans, *see* 40 C.F.R. § 60.24(a), which must “include emission standards.” *See also* Proposal at 44805 (to be codified at 40 C.F.R. § 60.24a(a)) (“Each plan shall include standards of performance and compliance schedules.”).

While standards of performance are to “reflect” the BSER, the CAA does not *require* the States to impose the specific technology that EPA has determined is BSER. Thus, EPA should be clear and direct States to give individual sources the maximum flexibility in deciding how to comply with the emissions limits reflected in their source-specific standards of performance. These standards of performance only have to achieve “the degree of emission limitation” that application of the BSER would achieve, but the standards themselves cannot mandate any prescribed technology, method, or approach. Proposal at 44763. The statute makes this point clear, *see* 42 U.S.C. § 7411(a)(1) (“standard of performance” is to “*reflect*[] the degree of emission limitation achievable through the application of the best system of emission reduction”) (emphasis added), a fact EPA properly acknowledges. *See, e.g.*, Proposal at 44748 (“[S]tates have broad discretion in establishing and applying emissions standards consistent with the BSER”).

The statutory requirements for new sources further confirm this reading of the Act. Under the NSPS program, Section 111(b)(5) explicitly states that EPA generally cannot require a source to adopt a particular BSER technology. 42 U.S.C. § 7411(b)(5) (“Except as otherwise authorized under subsection (h), nothing in this section shall be construed to require, or to authorize the Administrator to require, any new or modified source to install and operate any particular technological system of continuous emission reduction to comply with any new source standard of performance.”). If EPA cannot require a source to adopt a particular technology under the Section 111(b) program, in which it has a greater role assigned to it by statute, it surely cannot do so in the Section 111(d) program, and neither can the States.

B. The ACE Proposal Correctly Recognizes That Section 111(d) of the Clean Air Act Only Authorizes EPA to Determine BSER Based on Measures Which Are Implementable at the Source Itself.

The Associations fully support EPA’s proposal to recognize that the Act requires the BSER determination to be based on emissions reduction technologies that can be implemented at a regulated source. With that sound reading of its statutory authority and based upon a thorough analysis of adequately demonstrated technologies, EPA correctly “proposes to identify ‘heat rate improvements’ [HRIs] (which may also be referred to as ‘efficiency improvements’) as the BSER for existing fossil-fuel fired steam generating EGUs” in the Rule. Proposal at 44755.

The Associations have detailed their support for this plain reading of the Act in previous comments.¹¹ Briefly, most fundamentally, EPA’s approach comports with the plain language of

¹¹ The Associations’ complete argument for why Section 111(d) only authorizes EPA to determine BSER based on measures implemented at the source can be found in the Associations’ Repeal Comments at pages 6-15. *See also* Associations’ ANPRM Comments at pages 4-6 and AFPM ANPRM Comments at pages 2-4. However, even if there were ambiguity as to the scope of EPA’s authority under Section 111(d) to regulate “outside the fence line” of an affected source, EPA’s interpretation of Section 111(d) in the ACE Proposal is appropriate and reasonable as a matter of policy. *See* Associations’ Repeal Comments at 15-29.

the Act. Section 111(d) of the CAA only provides EPA with the authority to determine BSER which focuses on measures that can be accomplished at the source. Associations’ Repeal Comments at 7-11. As noted, a “standard of performance” 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” 42 U.S.C. § 7411(a)(1). Section 111(d) then requires EPA to develop “procedure[s]” for States to promulgate these standards “for . . . existing source[s].” 42 U.S.C. § 7411(d)(1) (emphasis added). Moreover, Section 111(d)(1) expressly directs States to “apply[] a standard of performance” to a “particular source,” as well as consideration of the “remaining useful life of the existing source” – which by necessity is tied only to the individual source which has a unique remaining useful life. *Id.* Thus, standards of performance must be source-specific. *See also ASARCO Inc. v. EPA*, 578 F.2d 319, 324, 326 n.24 (D.C. Cir. 1978) (EPA may not “embellish[]” the statutory definition of “stationary source” in Section 111 by “rewrit[ing] the definition of a stationary source.”).

Further, the text and structure of Section 111 confirm that the BSER analysis is confined to emissions reduction technologies that have been adequately demonstrated at specific sources. Associations’ Repeal Comments at 11-15. For example, Section 111(a)(1) defines “standards of performance” for both new and existing sources. 42 U.S.C. § 7411(a)(1). In the NSPS for EGUs, EPA determined that the BSER would only consider reductions that those sources themselves could achieve. Final Rule, Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64510, 64627 (Oct. 23, 2015) (“EGU NSPS”). Section 111(a)(1) cannot plausibly have a different meaning for existing sources and require those sources to make greater reductions than those achieved by efficient new facilities. *See also* Final Rule, State Plans for

the Control of Certain Pollutants from Existing Facilities, 40 Fed. Reg. 53340, 53341 (Nov. 17, 1975) (“[T]he degrees of control represented by EPA’s emission guidelines will ordinarily be less stringent than those required by standards of performance for new sources because the costs of controlling existing facilities will ordinarily be greater than those for control of new sources.”).

EPA’s reading is also consistent with fundamental principles of statutory interpretation. Courts are skeptical when agencies claim to discover expansive powers in existing statutes. *See, e.g., Util. Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427, 2444 (2014) (“When an agency claims to discover in a long-extant statute an unheralded power to regulate ‘a significant portion of the American economy,’ ...we typically greet its announcement with a measure of skepticism.”) (internal citations omitted). If Congress intended to assign “a question of deep ‘economic and political significance’ ...to an agency,” Congress would have done so “expressly.” *King v. Burwell*, 135 S.Ct. 2480, 2489 (2015) (internal citation omitted). This is particularly true when a federal agency seeks to displace traditional State regulatory authority, as in the electricity sector. *See, e.g., Am. Bar Ass’n v. FTC*, 430 F.3d 457,471-72 (D.C. Cir. 2005) (internal citations omitted) (“Federal law ‘may not be interpreted to reach’” areas traditionally subject to State regulation “unless the language of the federal law compels the intrusion” with “unmistakably clear...language.”). By contrast, it is common for EPA to regulate emissions from a source under the Clean Air Act. Focusing EPA’s determination of BSER on systems of emission reductions implementable at the source is consistent with these principles.

In addition, EPA’s Proposal follows longstanding EPA interpretation of its Section 111(d) authority. EPA has long applied BSER analyses in a source-based manner focused primarily on individual pollution sources that can be retrofitted with pollution control

technology. *See, e.g.*, Final Rule, Standards of Performance for New Stationary Sources and Guidelines for Control of Existing Sources: Municipal Solid Waste Landfills, 61 Fed. Reg. 9905, 9914 (Mar. 12, 1996) (landfill guideline based on “[p]roperly operated gas collection and control systems achieving 98 percent emission reduction”); Notice, Primary Aluminum Plants; Availability of Final Guideline Document, 45 Fed. Reg. 26294, 26294 (Apr. 17, 1980) (emission guidelines are based on “the application of certain recommended control technologies that are applied as new retrofits to existing plants”); Notice, Kraft Pulp Mills; Final Guideline Document; Availability, 44 Fed. Reg. 29828, 29829 (May 22, 1979) (issuing pulp mill guidelines for digester systems, multiple-effect evaporator systems, straight recovery furnace systems, and other systems and tanks based on control technologies, such as incineration and process controls, described in separate guidance document); Final Rule, Emission Guideline for Sulfuric Acid Mist, 42 Fed. Reg. 55796, 55797 (Oct. 18, 1977) (determining emission guidelines for sulfuric acid mist from existing sulfuric acid plants based on the degree of control achievable via control technologies from the proposed rule); Final Guideline Document Availability, Phosphate Fertilizer Plants, 42 Fed. Reg. 12022, 12022 (Mar. 1, 1977) (using spray-crossflow packed bed scrubbers as the “principal control device” for establishing emission guidelines for fluoride emissions from existing phosphate fertilizer plants).

Here, EPA has adopted a source-specific approach, but one which relies on technologies that enable efficiency improvements instead of pollution capture technology. This approach is consistent with the requirement that the BSER be “adequately demonstrated.” 42 U.S.C. § 7411(a)(1). The D.C. Circuit has determined that “[a]n adequately demonstrated system” “has been shown to be reasonably reliable, reasonably efficient, and...can reasonably be expected to serve the interests of pollution control without becoming exorbitantly costly in an economic or

environmental way.” *Essex Chem. Corp. v. Ruckelshaus*, 486 F.2d 427, 433 (D.C. Cir. 1973). While EPA “may make a projection based on existing technology, ... that projection is subject to the restraints of reasonableness and cannot be based on ‘crystal ball’ inquiry.” *Portland Cement Ass’n v. Ruckelshaus*, 486 F.2d 375, 391 (D.C. Cir. 1973) (addressing NSPS for new or modified Portland cement plants), *superseded in part by statute*, 15 U.S.C. § 793(c)(1) (1974), *as recognized in Am. Trucking Ass’ns v. EPA*, 175 F.3d 1027 (D.C. Cir. 1999). Carbon emissions are unique, in that unlike many other air pollutants there are no “adequately demonstrated” control technologies that directly remove carbon. The Associations agree, for instance, with EPA’s conclusion that carbon capture and storage (“CCS”) has not been adequately demonstrated. *See, e.g.*, Proposal at 44761-62 (citing the CPP’s conclusions on CCS’s significant expense and uncertain viability, stating that “EPA continues to believe that neither CCS nor partial CCS are technologies that can be considered the BSER for existing fossil fuel-fired EGUs.”). Thus, it is appropriate to adopt as the BSER here currently demonstrated technologies that can be applied at the source to improve operational efficiency/heat rate and thereby reduce carbon emissions. *See also* Associations’ ANPRM Comments at 7-8.

Beyond these clear bases, as the Proposal correctly notes,¹² the link between Section 111 standards of performance and best available control technology (“BACT”) in the CAA’s Prevention of Significant Deterioration (“PSD”) program further confirms that EPA should determine BSER based on candidate emissions reductions technologies available to a specific source. The PSD program provides that Section 111 standards of performance set the floor for BACT. *See* 42 U.S.C. § 7479(3) (“In no event shall application of ‘best available control technology’ result in emissions of any pollutants which will exceed the emissions allowed by any

¹² *See* EPA Request for Comment C-2, Proposal at 44752.

applicable standard of performance established pursuant to Section 7411 ... of this title.”). BACT is clearly a source-specific measure, so Section 111’s standards, explicitly linked to BACT by statutory text, must be as well. Proposal at 44752-53. *See also* Associations’ 2014 Comments at 69 (explaining same). This likewise squares with Agency guidance, which counsels against “redefining the source” when determining BACT. *See* EPA, PSD and Title V Permitting Guidance for Greenhouse Gases (2011) (“BACT should generally not be applied to regulate the applicant’s purpose or objective for the proposed facility.”).

Thus, the Proposal correctly recognizes that Section 111(d) only authorizes EPA to determine BSER based on measures implementable at the source itself. However, in the final Rule, EPA should also confirm that the Act does not authorize States to require a source to apply a specific BSER technology itself, but only that a source must achieve its standard of performance which reflects the BSER.

C. EPA Is Not Required to Interpret Section 111(d) in Some Other Fashion in Order to Achieve a Specific Level of Environmental Benefits.

EPA should reject any invitation to interpret Section 111(d) unduly expansively to achieve a desired reduction level at all costs. Section 111(d) dictates a technology driven standard setting process. Indeed, even if there were ambiguity on this point, at the second step of the *Chevron* analysis, agencies cannot simply impose their policy preferences. If a statute is ambiguous, the question is still one of statutory interpretation and construction—that is, an agency must adopt “a permissible construction of the statute.” *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 843 (1984). An interpretation of the statute must be “reasonable and consistent with the statutory scheme and legislative history.” *City of Cleveland v. U.S. Nuclear Regulatory Comm’n*, 68 F.3d 1361, 1367 (D.C. Cir. 1995). Courts “will not uphold an interpretation ‘that diverges from any realistic meaning of the statute.’” *GTE Serv.*

Corp. v. FCC, 205 F.3d 416, 421 (D.C. Cir. 2000) (quoting *Massachusetts v. Dep’t of Transp.*, 93 F.3d 890, 893 (D.C. Cir. 1996)). The Clean Air Act is based on a careful balance among environmental, governmental, and economic considerations. See *Ala. Power Co. v. Gorsuch*, 672 F.2d 1, 17 (D.C. Cir. 1982); *Sierra Club v. Costle*, 657 F.2d 298, 330 (D.C. Cir. 1981).

Courts expect “Congress to speak clearly if it wishes to assign to an agency decision of vast economic and political significance.” *Util. Air Regulatory Grp.*, 134 S. Ct. at 2444. A reading of the CAA that seeks to maximize EPA’s regulatory authority to enhance its ability to reduce GHG emissions conflicts with established canons of construction. An attempt to regulate the entire energy grid to achieve an environmental end unlawfully seeks to “bring about an enormous and transformative expansion in EPA’s regulatory authority without clear congressional authorization” by claiming to “discover in a long-extant statute an unheralded power to regulate a significant portion of the American economy.” *Id.*

Finally, EPA has not proposed to merely repeal the CPP – but to replace it with a regulatory framework within the scope of the EPA’s authority. EPA reports that from 2006 to 2015, domestic electric power sector GHG emissions decreased by 19 percent. 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, Publ’n No. EPA-452/R-18-006 at 2-27 (Aug. 2018) (“2018 RIA”).¹³ The proposed ACE Rule is expected to result in additional annual emission reductions of up to 2 percent from 2025-2035 as compared to reductions that EPA

¹³ A more updated analysis from the U.S. Energy Information Administration (“EIA”) states that carbon dioxide emissions from the U.S. electric power sector declined by an even greater amount recently, or 28 percent from 2005 through 2017. EIA, *Carbon Dioxide Emissions from the U.S. Power Sector Have Declined 28% Since 2005* (Oct. 29, 2018), <https://www.eia.gov/todayinenergy/detail.php?id=37392>.

projects will occur under current market forces alone. *Id.* at 3-14.¹⁴ All told, by 2035, EPA projects that GHG emissions from EGUs are anticipated to be approximately 34 percent below 2005 levels. *Id.* at 3-15.

II. THE PROPOSAL APPROPRIATELY RECOGNIZES STATES' FLEXIBILITY IN SETTING STANDARDS OF PERFORMANCE, BUT EPA SHOULD PROVIDE STATES ADDITIONAL SUPPORT IN SETTING THOSE STANDARDS.

The Associations support the Agency's proposal, consistent with Section 111(d), to recognize States' flexibility in setting standards of performance. However, the Associations also believe the final Rule should provide greater technical guidance to the States on how to implement their performance standards.

As detailed, the Proposal properly acknowledges that the States "have the primary role of developing standards of performance consistent with application of the BSER." Proposal at 44748; *see also* Associations' ANPRM Comments at 8-9; AFPM ANPRM Comments at 9-10. This authority to develop standards of performance includes the flexibility to consider a range of factors in setting those standards. Under Section 111(d)(1), EPA must "permit the State[s] in applying a standard of performance to any particular source...to take into consideration, among other factors, the remaining useful life of the existing source to which such standard applies." 42 U.S.C. § 7411(d)(1).

Accordingly, the Proposal correctly directs States to consider EPA's list of candidate HRI technologies when setting standards of performance, but does not require a State to adopt a specific candidate technology when determining the standard of performance achievable. Proposal at 44809 (to be codified at 40 C.F.R. § 60.5755a(a)(2)). Beyond that requirement, the

¹⁴ This comparison is made to a baseline without the CPP, an issue discussed in more detail *infra*, Section VII.

Proposal then appropriately provides broad flexibility to the States in setting those standards, noting that they “may consider the source-specific factors included in § 60.24[a](e)” in setting standards of performance for particular sources. *Id.* (to be codified at 40 C.F.R. § 60.5755a(a)(2)(i)). These factors include the remaining useful life; unreasonable costs of control resulting from plant age, location, or design process; physical impossibility of installing necessary control equipment; and other factors with respect to each such facility of class of such facilities, which would include dispatch and operational characteristics. *Id.* at 44805 (to be codified at 40 C.F.R. § 60.24a(e)). The Associations support this flexibility, which recognizes that down to the level of a “boiler or turbine,” each EGU possesses “characteristics” that are “unique” and “specific” to it, warranting flexibility when setting a standard of performance for that specific unit. 82 Fed. Reg. at 61511.¹⁵

EPA should, however, provide some additional direction to the States to help frame their discretion. For one, the final Rule should authorize States to offer sources the option to comply with mass-based standards of performance.¹⁶ The option for mass-based compliance offers sources incentives for continued technology development and innovation and can be useful for compliance flexibility purposes, a topic discussed *infra*, Section IV. The Proposal currently only envisions rate-based standards and should be modified. *See* Proposal at 44809 (to be codified at 40 C.F.R. § 60.5755a(a)(1)).¹⁷ In addition, EPA should direct the States that their standards of

¹⁵ *See* EPA Request for Comment C-22, Proposal at 44766.

¹⁶ *See* EPA Request for Comment C-15, Proposal at 44764.

¹⁷ The proposed revised implementing regulations require standards of performance to “either be based on allowable rate or limit of emissions, except when it is not feasible to prescribe or enforce a standard of performance.” Proposal at 44805 (to be codified at 40 C.F.R. § 60.24a(b)). To allow States the flexibility to use mass-based standards, the Agency should specify either that mass-based standards are a “limit of emissions” – or that these guidelines supersede the implementing rules, as allowed by the proposed changes to the implementing rules. Proposal at 44803 (to be codified at 40 C.F.R. § 60.20a(a)(1)).

performance under this Rule should not be more stringent than the Section 111(b) standard governing GHG emissions from new and modified EGUs. The language and structure of Section 111 make clear that Congress intended for standards of performance for new and existing sources to be interpreted and applied in a consistent manner. The regulation of new sources under Section 111(b) is a necessary prerequisite for regulation of existing sources from the same source category under Section 111(d), which specifies that standards of performance may only be established for an existing source “to which a standard of performance...would apply if such existing source were a new source.” 42 U.S.C. § 7411(d)(1). By making regulation of existing sources contingent upon standards of performance for new sources, Congress intended Section 111(d) to be a supplementary program informed by the BSER analysis and standards of performance for new sources. Moreover, the flexibility which Section 111(d) allows States in setting standards of performance for existing sources, in order to take into account the challenges associated with retrofitting existing facilities, indicates that standards under Section 111(b) provide the ceiling for Section 111(d) standards.¹⁸ *See also* AFPM ANPRM Comments at 5-6; Associations’ ANPRM Comments at 7.

Additionally, in light of the scope of the affected sources under the Proposed Rule, the Associations believe that additional technical guidance and resources from EPA will be extremely helpful to States. EPA has estimated that the ACE rule could cover approximately 600 coal-fired EGUs at 300 facilities across the Nation. EPA, Fact Sheet, Proposed ACE Rule — CO₂ Emissions Trends, <https://www.epa.gov/sites/production/files/2018->

¹⁸ Until the CPP, EPA had explicitly long acknowledged this point. *See, e.g.*, 40 Fed. Reg. at 53341 (“[T]he degrees of control represented by EPA’s emission guidelines will...be less stringent than those required by standards of performance for new sources because the costs of controlling existing facilities will ordinarily be greater than those for control of new sources.”).

[08/documents/ace_trends.pdf](#) (last viewed Oct. 29, 2018). With hundreds of units at issue, it will take the States considerable time and effort to analyze each unit's performance, the relevance of the candidate HRI technologies, and unit-specific factors in setting standards of performance for each individual unit.

Accordingly, the Associations urge EPA to develop ways to provide additional support to States as they prepare standards of performance. For example, EPA should consider including more technical details on a process for the States to use to set source-specific performance standards based on the BSER, such as outlining a methodology or checklist of issues that a State might choose to consider in setting a unit-specific standard. EPA could also provide technical guidance on possible approaches for evaluating the candidate HRI technologies and how to weigh unit-specific factors. Alternatively, EPA could commit to providing these tools in the form of implementation guidance. While it would not be mandatory for States to follow the guidance, this approach could nevertheless streamline State efforts to adopt performance standards, expedite EPA's review of State plans, and thereby facilitate regulatory certainty. EPA should also make its technical expertise available to the States while they set their performance standards.

III. EPA SHOULD EVALUATE WHETHER GHG EMISSIONS FROM STATIONARY COMBUSTION TURBINES AND INTEGRATED GASIFICATION COMBINED CYCLE FACILITIES SHOULD BE REGULATED UNDER SECTION 111(D), AND SHOULD EXEMPT ALL INDUSTRIAL COMBINED HEAT AND POWER UNITS FROM THE FINAL ACE RULE.

The Associations urge EPA to address the scope of facilities covered by the Proposal in two ways. First, recognizing the electricity now generated by natural gas-fired EGUs, EPA should analyze further whether GHG emissions from stationary CTs and IGCC facilities should be regulated under Section 111(d) of the Act. Second, while the Associations support the

Agency's decision to provide a partial exemption for certain industrial CHP units in the Proposal, EPA should go further in the final Rule to exempt all industrial CHP units.¹⁹

A. EPA Should Assess Whether to Regulate GHG Emissions from Stationary CTs and IGCC Facilities.

In the Proposal, EPA excludes stationary CTs, both simple and combined cycle, from the definition of affected source. Proposal at 44754, 44761.²⁰ EPA's rationale was that the Agency was unsure whether it could identify sufficient candidate HRIs for these generation sources to determine the relevant BSER. Proposal at 44754, 44761.

EPA should consider further how to approach stationary CTs and IGCC units.²¹ Stationary CTs (and IGCC units) now produce a substantial and growing share of the electricity generated in the U.S. Natural gas-fired stationary CTs in particular have become an increasingly important component of the modern American electricity grid and the Nation's overall energy infrastructure.

EPA should engage further on this issue and conduct further analyses to determine whether it is appropriate to cover GHG emissions from stationary CTs and IGCC units. If after engaging in such analysis, EPA decides to include GHG emissions from stationary CTs and IGCC units in a Section 111(d) rule, it should, after an opportunity for comment, provide sufficient technical guidance to the States on how to set their standards of performance for these

¹⁹ See EPA Request for Comment C-4, Proposal at 44755.

²⁰ At a minimum, to avoid uncertainty in a final rule, EPA should clarify its intention. While EPA stated clearly in the preamble that it intended to exclude both simple and combined cycle CTs, the regulatory language is ambiguous. Compare Proposal at 44812 (to be codified at 40 C.F.R. § 60.5805a)) (stationary CTs defined to include simple cycle CTs), with Proposal at 44810 (to be codified at 40 C.F.R. § 60.5780a(a)(3)) (exclusion from affected EGUs includes stationary CTs "that meet[] the definition of either a combined cycle or combined heat and power combustion turbine").

²¹ See EPA Requests for Comment C-3 and C-5, Proposal at 44754-55.

units, taking into consideration source-specific factors such as age, remaining useful life, and the performance of the unit based on whether it serves as baseload or backup power (*i.e.*, if it is a peaking unit).

B. The Final ACE Rule Should Broadly Exempt Industrial CHP Units.

The Associations support EPA’s proposal to exclude certain combined heat and power units, but urge EPA to more broadly exempt all industrial CHP units in its final rule.²² As industry commenters have explained, *see* AFPM ANPRM Comments at 6-8, industrial CHP units have a fundamentally different purpose than EGUs and utility CHPs—to provide steam and electricity to a host facility, not to sell power to the grid. EPA acknowledged this very fact previously: “[U]tility CHP units ... serve essentially the same purpose as electric-only EGUs (*i.e.*, the sale of electricity to the grid),” while “[i]ndustrial CHP units, on the other hand, serve a different primary purpose (*i.e.*, providing useful thermal output with electric sales as a by-product).” EGU NSPS at 64533. This fundamental distinction counsels in favor of removing industrial CHPs entirely from a rule, such as ACE, that is directed at sources that primarily produce electricity for the power grid. This would also be consistent with EPA’s determination

²² If EPA does not adopt this approach, the Agency should modify the language in the proposed regulatory text. First, EPA should strike the phrase “always has been” from proposed 40 C.F.R. § 60.5780a(a)(2). Proposal at 44810. This would allow an industrial CHP owner/operator to add a federally enforceable permit condition to its permit to clarify that these limits apply going forward. It should not matter whether a unit had a historical permit limit if it has one now. Second, EPA should modify its definition of “combined heat and power unit or CHP unit” in proposed 40 C.F.R. § 60.5805a to explicitly include “combined heat and power combustion turbine.” Proposal at 44811. Proposed 40 C.F.R. § 60.5780a(a)(3) excludes from the Rule “[a] stationary combustion turbine that meets the definition of... [a] combined heat and power combustion turbine,” and the suggested edit would clarify that such a unit is a CHP unit. Proposal at 44810. Alternatively, EPA could reword proposed 40 C.F.R. § 60.5780a(a)(3) to exclude stationary CTs which meet the definition of “either a combined cycle or a combined heat and power unit or CHP unit.” Proposal at 44810. Third, the Agency should remove the phrase “distribution system” from proposed 40 C.F.R. § 60.5780a(a)(6). Proposal at 44810. Industrial CHPs sometimes provide electricity to utility transmission systems as well as distribution systems. Hence, including this phrase unnecessarily restricts the CHP exemption.

not to cover other industrial power generating sources, such as commercial and industrial boilers. *See* Proposal at 44810 (to be codified at 40 C.F.R. § 60.5775a) (describing what sources are affected EGUs under the Proposal).

Moreover, industrial CHP units provide clear energy and environmental benefits, a fact that EPA has previously acknowledged. Many industrial CHP units offer an opportunity to produce electricity and steam for onsite consumption using industrial process off-gases as fuel, thus improving overall industrial facility energy efficiency, lowering costs and improving power grid resiliency. *See, e.g.*, Proposed Rule, Carbon Pollution Standards for Modified and Reconstructed Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34960, 34982 (June 18, 2014) (“CHP requires less fuel to produce a given energy output, and because less fuel is burned to produce each unit of energy output, CHP reduces air pollution and greenhouse gas emissions. CHP has lower emission rates and can be more economic than separate electric and thermal generation.”); EPA, *Combined Heat and Power (CHP) Partnership: CHP Benefits*, <https://www.epa.gov/chp/chp-benefits> (last updated June 26, 2018) (“CHP requires less fuel to produce a given energy output and avoids transmission and distribution losses that occur when electricity travels over power lines....CHP [also] reduces emissions of greenhouse gases and other air pollutants.”). Hence, EPA should be encouraging industry to use CHP units, not burdening the units with new regulatory requirements.²³ Moreover, there is broad diversity among industrial CHP units, making determination of a federally-issued source category-specific BSER and State-issued standards of performance particularly problematic. Indeed, unlike standard EGUs, industrial CHP units are often tailored to their facility’s very specific needs.

²³ Indeed, given these valuable reductions, industrial CHP may in an appropriate instance be a way in which a particular source could comply with its individual, State-issued performance standard.

Thus, the Associations encourage EPA to exempt industrial CHP units from the definition of affected EGU to avoid unnecessary regulatory complexity and the additional regulatory burdens the Proposal would impose on these environmentally beneficial units.²⁴

IV. THE PROPOSAL SHOULD RECOGNIZE THAT STATE PLANS CAN AND SHOULD PROVIDE INDIVIDUAL SOURCES WITH SUBSTANTIAL FLEXIBILITY TO COMPLY WITH STATE STANDARDS OF PERFORMANCE.

The Associations believe that the final Rule should recognize that under the CAA, States should give individual sources substantial flexibility in how each source complies with its standard of performance.²⁵ As outlined above, Section 111(d) requires that States set standards of performance based on the federally-determined BSER. 42 U.S.C. §§ 7411(a)(1), (d)(1). In consultation with the affected units, the States develop plans which set numeric standards of performance which are based on measures achievable at the source. *See supra* Section I. At that point, each source has the flexibility with how it may comply with its standard and is not required, for example, to install a particular technology in order to demonstrate compliance with its standard. But, these State plans can and should include options to each individual affected source that provides further flexibility as to how it may comply with its standard.

The CAA authorizes this broad compliance flexibility. Foremost, under Section 111(d)(1), Congress directed that the State plans would “provide[] for the *implementation and*

²⁴ Indeed, some of the regulatory text related to industrial CHPs currently in the Proposal could result in negative environmental and energy implications. For instance, proposed 40 C.F.R. § 60.5780a(a)(2) would exempt from the Rule “[a] steam generating unit that is, and always has been, subject to a federally enforceable permit limiting annual net-electric sales to one-third or less of its potential electric output, or 219,000 MWh or less.” Proposal at 44810. Owner/operators of industrial CHP units who know that selling over one-third of a unit’s potential electric output to the grid could trigger compliance responsibilities under the Proposal may choose to cycle that unit on and off more to avoid that level of CHP production, artificially lowering the unit’s efficiency.

²⁵ *See* EPA Request for Comment C-19, Proposal at 44765.

enforcement of such standards of performance.” 42 U.S.C. § 7411(d)(1) (emphasis added). In determining the “implementation and enforcement” of their standards of performance for existing sources, States have broad discretion to allow a source flexibility to achieve its standard of performance. Indeed, this approach is consistent with how Congress framed the approach for new sources, as Congress used the same language to provide similar broad flexibility to States to *implement and enforce* standards of performance. *See* 42 U.S.C. § 7411(c)(1) (“Each State may develop and submit to the Administrator a procedure for implementing and enforcing standards of performance for new sources located in such State.”).

In the final ACE Rule, EPA should confirm that States should give each individual source a wide array of ways for it to comply with its standards of performance, which could include, for example, giving sources the option of a mass-based standard of performance if appropriate.²⁶ State plans that confirm each source has this flexibility to comply with its standard of performance under the CAA will spur technological innovation and allow sources to identify lower cost methods of compliance. The Associations support compliance measures that can be verified fully and easily, recognizing that Section 111(d) grants the States the flexibility to allow sources to choose other compliance methods, as existing sources under 111(d) should enjoy the opportunity and freedom to innovate.

V. EPA HAS PROPOSED APPROPRIATE CHANGES TO THE CLEAN AIR ACT SECTION 111(D) IMPLEMENTING REGULATIONS.

The Associations support EPA’s proposal to revise the Section 111(d) implementing regulations to expand the timeframe for State development and Agency review of State plans,

²⁶ *See* EPA Request for Comment C-17, Proposal at 44765.

clarify that EPA emission guidelines need not include a presumptive standard of performance, and improve the regulations' provisions governing compliance schedules and variances.²⁷

A. The Associations Support EPA's Proposed Extension of the Section 111(d) Plan Development and Approval Timeframes.

EPA has prudently recognized that its Section 111(d) implementing regulations, which have not been substantively updated since their initial promulgation in 1975, do not provide sufficient time to address the complex issues presented in these types of rulemakings.²⁸ Proposal at 44769. Currently, the Section 111(d) regulations require States to submit plans within nine months of EPA promulgation of an emission guideline. 40 C.F.R. § 60.23(a)(1). EPA must then act on a State plan within four months of submittal. 40 C.F.R. § 60.27(b). EPA must also promulgate a federal plan within six months after the State plan submittal deadline if a State failed to submit a plan or EPA disapproved of the plan. 40 C.F.R. § 60.27(d).

The proposed changes to the implementing regulations would provide much more realistic and appropriate timeframes. States would generally have three years after EPA's notice of availability of the final emission guideline to submit their plans. Proposal at 44804, 44806 (to be codified at 40 C.F.R. §§ 60.23a(a)(1), 60.27a(a)). EPA would then have 12 months from its determination that a State's submission is complete to approve or disapprove the plan. Proposal at 44806 (to be codified at 40 C.F.R. § 60.27a(b)). Under the proposed regime, EPA would have two years from finding that a State submitted an incomplete plan or from disapproving of a State plan to issue a federal plan. Proposal at 44806 (to be codified at 40 C.F.R. § 60.27a(d)).

²⁷ See EPA Request for Comment C-50, Proposal at 44770.

²⁸ See EPA Requests for Comment C-48, Proposal at 44769; C-52, C-53, C-54, C-55, Proposal at 44771.

EPA should adopt these proposed timing changes, while encouraging more expeditious plan development and approval, when possible. Section 111(d) rulemakings like the ACE Proposal are complicated. It will take States considerable time to establish individual standards of performance for each of the hundreds of EGUs, taking into account unit-specific factors, as well to develop the plans needed to implement and enforce the standards. In turn, it will require considerable time and resources for EPA to conduct its review, as required by the Act. Moreover, these timeframes would align closely with the Section 110 statutory State Implementation Plan (“SIP”) review timeframes. *See* 42 U.S.C. §§ 7411(a)(1), (c), (k)(2). This approach is logical and consistent with the direction in Section 111(d), as noted. *See* 42 U.S.C. § 7411(d)(1). The current 1975-era regulations predate the 1990 Clean Air Act Amendments, which established the expanded Section 110 SIP timeframes. Clean Air Act Amendments of 1990, Pub. L. No. 101-549, §§ 101(c), (d), 104 Stat. 2399 (1990).

B. The Implementing Regulations Properly Clarify that EPA’s Emission Guidelines Need Not Include a Presumptive Standard of Performance.

In the Proposal, EPA has explicitly clarified that it need not include a presumptive standard of performance when it promulgates Section 111(d) emission guidelines. Proposal at 44770. The Associations believe that EPA should retain this approach in the final rule. Since Section 111(d) does not authorize EPA to set standards of performance, it likewise does not direct EPA to provide a presumptive emission standard when it determines BSER in a Section 111(d) rulemaking.

However, as EPA observes, the existing Section 111(d) implementing regulations could be interpreted to imply that emission guidelines should include a presumptive emission standard. Proposal at 44770-71. The current regulations require guidelines to include “[a]n emission guideline that reflects the application of the best system of emission reduction...and the time

within which compliance with emission standards of equivalent stringency can be achieved.” 40 C.F.R. § 60.22(b)(5); *see also* 40 C.F.R. § 60.21(e) (defining “emission guideline” as “a guideline...which reflects the degree of emission reduction achievable through the application of the best system of emission reduction”).

The Associations believe the current implementing regulations do not in fact require a presumptive emission standard in Section 111(d) rulemakings. *See* 40 Fed. Reg. at 53343 (“[T]he [emission guidelines] will not be requirements enforceable against any source. Like the national ambient air quality standards prescribed under section 109 and the items set forth in section 110(a)(2)(A)-(H), they will only be criteria for judging the adequacy of State plans.”). Nevertheless, the Associations support EPA’s proposal to confirm its Section 111(d) rules do not require a presumptive emission standard and make corresponding regulatory changes. *See* Proposal at 44770; Proposal at 44804 (to be codified at 40 C.F.R. § 60.22a(b)(4)) (removing “equivalent stringency” language); Proposal at 44804 (to be codified at 40 C.F.R. § 60.21a(e)) (redefining “emission guideline” as a “final guideline document published under § 60.22a(a), which includes information on the degree of emission reduction achievable through the application of the best system of emission reduction...”).

C. EPA Should Adopt Its Proposed Changes to the Section 111(d) Implementing Regulations’ Compliance Schedule and Variance Provisions.

1. Compliance schedule provisions.

The Associations support EPA’s decision to extend the current timetable for compliance schedules. The current implementing regulations provide that any compliance schedules extending more than 12 months from the date required for State plan submittal “include legally enforceable increments of progress” 40 C.F.R. § 60.24(e)(1). The proposed implementing regulations would require legally enforceable increments of progress only for those compliance

schedules extending over 24 months from the date required for State plan submittal, rather than 12 months. Proposal at 44805 (to be codified at 40 C.F.R. § 60.24a(d)(1)). This lengthier period for imposing increments of progress in compliance schedules makes sense given the expanded timeframes for plan submittal.

2. Variance provisions.

The Section 111(d) regulations currently have an overly complex variance structure that has different standards depending upon whether EPA has found an endangerment of public health or public welfare. EPA’s proposal to simplify this structure is consistent with the statutory text and logically sound.²⁹

Under the current Section 111(d) implementing regulations, where EPA “has determined that a designated pollutant may cause or contribute to endangerment of public *welfare*,” but has not made a conclusion regarding public health effects, States may weigh “other factors of public concern” in setting standards. 40 C.F.R. § 60.24(d) (emphasis added). In contrast, where EPA “has determined that a designated pollutant may cause or contribute to endangerment of public *health*,” the implementing regulations provide that State “emission standards ... be no less stringent” than EPA’s emission guidelines, unless 40 C.F.R. § 60.24(f) applies. 40 C.F.R. § 60.24(c) (emphasis added). That provision in turn allows States to “provide for the application of less stringent emissions standards” on a “case-by-case” basis, considering various facility-specific factors. 40 C.F.R. §60.24(f).

There is no statutory or other logical basis for the distinction, and the proposed revisions to the Section 111(d) implementing regulations would appropriately eliminate the distinction between welfare- and health-based pollutants and provide one single variance regime for Section

²⁹ See EPA Requests for Comment C-57 and C-58, Proposal at 44773.

111(d) rules. Proposal at 44805 (to be codified at 40 C.F.R. §§ 60.24a(c), (e)). Section 111(d)(1) authorizes States to take “remaining useful life” and “other factors” into account in applying standards of performance to particular sources and does not differentiate between welfare-based and health-based pollutants. 42 U.S.C. § 7411(d)(1). Thus, the Proposal appropriately would remove this distinction from the implementing regulations. Additionally, the new variance provision would allow States to consider the appropriate range of factors in setting their standards of performance for individual sources. The provision takes into account remaining useful life, as required by the language of 42 U.S.C. § 7411(d)(1), and also “[o]ther factors specific to the facility.” Proposal at 44805 (to be codified at 40 C.F.R. § 60.24a(e)).³⁰

VI. EPA SHOULD REVISE ITS NSR REGULATIONS TO INCLUDE AN HOURLY EMISSIONS INCREASE TEST, BUT SHOULD ADDRESS THIS IMPORTANT REFORM FOR ALL SOURCES IN A SEPARATE, PARALLEL-TRACK RULEMAKING.

The Associations support reforming the New Source Review applicability criteria by adding an hourly emissions increase test to the NSR regulations. As framed in the ACE Proposal, the proposed NSR reform would add one additional step to determine when a physical change or a change in the method of operation to an existing EGU qualifies as a major modification subject to NSR requirements. As such, the NSR applicability test for EGUs would now have four steps: (1) determining whether a physical change or change in the method of operation occurred; (2) a new hourly emissions increase test; (3) a significant emissions increase test using the current NSR rules; and (4) a significant net emissions increase test using the current NSR rules. Proposal at 44780. Steps three and four would only be triggered if a post-change hourly emissions increase is projected. *Id.* at 44780-81.

³⁰ See EPA Request for Comment C-58, Proposal at 44773.

However, the Associations believe that EPA should extend its consideration of the proposed hourly emissions increase test to apply to all industry sources, not just EGUs.³¹ The challenges faced by EGUs to improve efficiency are not unique and are comparable to efficiency improvements pursued across industries. To accomplish this important, broader policy reform, the Associations urge EPA to sever this element from the ACE rule and issue a supplemental notice proposing this reform to the NSR program as a whole.³²

Extending this reform effort would be sound policy. As EPA has recognized previously, a central policy justification for this NSR reform—that NSR as currently structured discourages sources from investing in upgrades that may make the source more efficient and environmentally friendly—applies to all industry sources, not just EGUs. *See, e.g.*, Supplemental Notice of Proposed Rulemaking for Prevention of Significant Deterioration and Nonattainment New Source Review: Emission Increases for Electric Generating Units, 72 Fed. Reg. 26202, 26204 (May 8, 2007) (“As applied to existing power plants and refineries, EPA concludes that the NSR program has impeded or resulted in the cancellation of projects which would maintain and improve reliability, efficiency and safety of existing energy capacity. Such discouragement results in lost capacity, as well as lost opportunities to improve energy efficiency and reduce air pollution.”) (internal citations omitted). This counsels for a broader reform to NSR, which EPA has long considered. However, NSR reform is a complex process better served through a separate rulemaking.

³¹ *See* EPA Requests for Comment C-62, C-66, C-67, Proposal at 44781, 44782.

³² For this reason, the Associations believe that the ACE Proposal’s rulemaking docket is not the proper place to provide comprehensive comments on the proposed hourly emissions increase test across industry. However, the Associations have developed some preliminary comments on why this test is warranted for all sources and included those comments in Appendix 1.

The Associations recognize that one of the Proposal's justifications for including the hourly emissions increase test is that EGUs may be required to install candidate HRI technology in order to meet State standards of performance. EPA, some States, and citizens' groups have claimed in enforcement litigation that installing equipment like the candidate technology could trigger NSR requirements under existing NSR rules.³³ Requiring sources under one regulation to install equipment that some would claim would trigger requirements under another set of regulations would be unfair, because sources can ordinarily choose whether to undertake projects that could potentially trigger NSR requirements. Proposal at 44777. The Associations therefore agree it would be appropriate to reform NSR obligations to include an hourly emissions increase test in conjunction with the ACE Rule. However, as EPA acknowledges, the revisions to BSER, the changes to the Section 111(d) regulations, and the NSR reform elements, are each important policy revisions in their own right. *Id.* at 44783. Thus, in order to achieve both the broader and specific policy objectives of NSR reform, the Associations believe that the NSR reform component of the ACE Proposal should proceed on a separate rulemaking track, but along a similar timetable to this Proposal since the hourly emissions increase test is important to the Proposal's determination of HRIs as the BSER.³⁴

³³ The Associations do not concede those types of claims have merit. However, the potential claims create uncertainty, stifle investment, and discourage efficiency improvements.

³⁴ *See* EPA Request for Comment C-71, Proposal at 44783. Including an hourly emissions increase test would likely also mitigate potential adverse economic impacts of the Proposal. In its RIA, EPA predicts that the 2% HRI adoption scenario at \$50/kW would result in no net addition/reduction in compliance costs in 2025, negative \$0.2 billion in costs in 2030, and \$0.1 billion in costs in 2035, all as compared to a CPP baseline. 2018 RIA at ES-7. That scenario does not account for NSR reform. *Id.* at ES-3. By contrast, the 4.5% HRI adoption scenario at \$50/kW, which does account for NSR reform, projects negative \$0.6 billion in costs in 2025, negative \$1.0 billion in costs in 2030, and negative \$0.6 billion in costs in 2035, all as compared to the CPP baseline. *Id.* at ES-7.

VII. EPA HAS PROVIDED A THOROUGH REGULATORY IMPACT ANALYSIS, BUT THE AGENCY SHOULD IMPROVE THE ANALYSIS BY MORE COMPREHENSIVELY COMPARING THE PROPOSED RULE TO CURRENT BASELINE EMISSIONS, REVISING THE WAY THE RIA APPROACHES CO-BENEFITS, AND ADDRESSING ADDITIONAL NON-QUANTIFIED BENEFITS.

The Associations endorse rigorous cost-benefit analyses and support the key elements of EPA’s regulatory impact analysis of the ACE Proposal, as discussed below. The Supreme Court has recognized that “an agency may not ‘entirely fai[l] to consider an important aspect of the problem’ when deciding whether regulation is appropriate,” and that cost must be considered as an important aspect of a regulatory problem. *Michigan v. EPA*, 135 S. Ct. 2699, 2707 (2015). Indeed, an agency’s failure to consider cost can render a regulation arbitrary and capricious. *Id.* at 2712.³⁵ The Proposal’s RIA appropriately incorporates the domestic costs and benefits and, consistent with OMB, Circular A-4, applies 3 and 7 percent discount rates.

However, there are opportunities for EPA to improve the 2018 RIA to enhance EPA’s decision making. First, EPA should provide full cost-benefit analyses comparing the Proposed Rule to a baseline in which the CPP does not exist. Second, the 2018 RIA should more fully account for uncertainties related to claimed forgone co-benefits in its net benefit calculations. Finally, the Agency should acknowledge a wide array of non-quantified avoided costs and non-quantified benefits associated with the replacement of the CPP with the ACE Rule, in areas such as indirect compliance costs, State sovereignty, and the reliability of the Nation’s electrical grid.

³⁵ Consistent with good government and Office of Management and Budget (“OMB”) Circular A-4 (Sept. 17, 2003), the costs of a regulation should typically be consistent with its benefits. *See also Michigan*, 135 S. Ct. at 2706 (“[R]easoned decisionmaking” in rulemaking generally requires an agency to consider the costs of a regulation) (internal citations omitted); *id.* at 2707 (“No regulation is ‘appropriate’ if it does significantly more harm than good.”).

A. The 2018 RIA Appropriately Focused on Domestic Costs and Benefits and Used the Proper 3 and 7 Percent Discount Rates.

As an initial matter, EPA has properly decided in the 2018 RIA to focus on *domestic* changes rather than *global* benefits, including foreign ones.³⁶ 2018 RIA at 4-2. This squares with the plain language of the Clean Air Act, which focuses on protecting domestic air quality and the U.S. population. 42 U.S.C. § 7401(b)(1) (“The purposes of this subchapter are...to protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population”). By focusing on “the Nation” and “its population,” Congress clearly demonstrated that it enacted the Clean Air Act to affect domestic air quality. By contrast, when the Clean Air Act considers foreign effects of domestic emissions, it does so explicitly. 42 U.S.C. § 7415 (addressing the foreign effects of domestic air pollution); CAA Title VI (addressing domestic stratospheric ozone emissions with international effects by implementing an international treaty).

Focusing on domestic costs and benefits also follows relevant OMB guidance. OMB calls for developing regulatory analyses to focus on the “benefits and costs that accrue to citizens and residents of the United States” and considering international effects separately, if appropriate. OMB, Circular A-4, at 15. EPA took this approach. 2018 RIA at 4-2, 7-7 – 7-8. Furthermore, as a policy matter, since the ACE Rule will impose domestic costs, it is appropriate to focus on domestic benefits in associated cost-benefit calculations.

The 2018 RIA also appropriately uses 3 and 7 percent discount rates.³⁷ 2018 RIA at ES-4. OMB guidance mandates the use of 3 and 7 percent discount rates and permits a further

³⁶ This topic is discussed more thoroughly in the Associations’ Repeal Comments, at 34-38.

³⁷ This topic is discussed more thoroughly in the Associations’ Repeal Comments, at 44-46.

sensitivity analysis for rules with intergenerational benefits and costs. OMB, Circular A-4, at 33-34, 36. Here, EPA did just that, using the OMB-sanctioned discount rates and also conducting a further sensitivity analysis. 2018 RIA at ES-4, 7-5 – 7-6.

B. Consistent with OMB Guidance, EPA Should Expand the 2018 RIA to Also Provide Full Cost-Benefit Analyses Comparing the Proposed Rule to a Non-CPP Baseline.

EPA should expand the 2018 RIA to include a full suite of cost-benefit analyses assuming a baseline without the CPP. The 2018 RIA conducts its cost-benefit analysis using a base case scenario which “includes promulgated regulations, including the CPP.” *Id.* at 1-5. The 2018 RIA compares four illustrative scenarios to this baseline: the full repeal of the existing CPP with no replacement, plus three replacement scenarios modeling various levels of HRI adoption at various costs, some of which take into account NSR reform. *Id.* at ES-1, ES-3. Recognizing that “there may be interest in comparing the three illustrative policy scenarios against an alternative baseline that does not include the CPP,” EPA also provides a “No CPP alternative baseline.” *Id.* at ES-3 – ES-4. However, the 2018 RIA does not provide the full suite of cost-benefit calculations for this alternative baseline. *Compare id.* at ES-14 – ES-17 (net benefit calculations for CPP baseline), with *id.* at ES-18 – ES-19 (net benefit calculations for no CPP alternative baseline).

A better approach would be to include a full comparison to a “No CPP alternative” baseline. OMB guidance allows that “when more than one baseline is reasonable and the choice of baseline will significantly affect estimated benefits and costs, you should consider measuring benefits and costs against alternative baselines.” OMB, Circular A-4 at 15; 2018 RIA at ES-4. OMB guidance defines the baseline for cost-benefit analysis as “a ‘no action’ baseline: what the world will be like if the proposed rule is not adopted” or “the best assessment of the way the

world would look absent the proposed action.” OMB, Circular A-4, at 2, 15. If the baseline assumes “the world absent the regulation will resemble the present,” then it “should reflect the future effect of current government programs and policies.” *Id.* at 15.

Given the real world circumstances surrounding the CPP, policymakers should not be relying on a baseline which assumes the CPP went into effect when evaluating the ACE Proposal. Although technically still on the books, the CPP has never gone into effect because it was stayed by the Supreme Court more than two and a half years ago. Order in Pending Case, *Chamber of Commerce v. EPA*, No. 15A787 (U.S. Feb. 9, 2016). A great deal has changed during this period, making comparisons with a hypothetical world in which the CPP is in effect not the way the world would look without the proposed ACE Rule. Indeed, the Supreme Court necessarily had to, in effect, find that the CPP’s opponents were likely to succeed on the merits and the CPP would be held unlawful in order to issue the stay. Meanwhile, at EPA’s request, the D.C. Circuit has held the litigation over the CPP in abeyance while the Agency reconsiders the rule. Order, *West Virginia v. EPA*, No. 15-1363 (D.C. Cir. June 26, 2018), ECF No. 1737735 (issuing currently applicable decision to hold the pending litigation in abeyance for 60 days). As EPA has proposed to repeal the CPP because the Agency now believes the CPP is unlawful, it is expected that the CPP will never go into effect. *See* 82 Fed. Reg. at 48036 (“Under the interpretation [of Section 111(d)] proposed in this notice, the CPP exceeds the EPA’s statutory authority and would be repealed.”).

In these circumstances, it is logical to include the non-CPP scenario as an additional baseline to consider fully when evaluating a new existing source regulation. Therefore, the full suite of cost-benefit analyses should be provided for the no CPP alternative baseline to provide further support for EPA’s Proposal.

C. The 2018 RIA Should Do More to Address Uncertainties Related to Claimed Forgone Co-Benefits In Its Net Benefit Calculations.

EPA should also more fully acknowledge the uncertainties surrounding claimed forgone co-benefits by addressing a broader range of scenarios in its net benefit calculations. *See also* Associations’ Repeal Comments at 38-42. The 2018 RIA provides estimates of claimed forgone co-benefits looking at multiple thresholds—no threshold, a studies-based measurement, and a threshold based on the NAAQS for PM_{2.5}. 2018 RIA at 4-31. However, it emphasizes net benefit calculations only using the no-threshold co-benefits approach—assuming no emissions level at which claimed forgone co-benefits associated with reduced PM_{2.5} levels cease to accrue. These are the net benefit calculations which appear throughout the 2018 RIA and which are highlighted in the Proposal itself. *See, e.g.*, 2018 RIA at ES-16 – ES-17; Proposal at 44794-95. Alternative net benefit calculations considering claimed forgone co-benefits at other thresholds, on the other hand, are relegated to deep within the RIA. 2018 RIA at 6-16 – 6-17.

The net benefits of the ACE Proposal vary dramatically based on which claimed forgone co-benefits scenario EPA uses to calculate net benefits. For example, using a 7 percent discount rate and the no-threshold approach to forgone co-benefits, the present value of the net benefits of the “4.5% HRI at \$50/kW” scenario from 2023-2037 results in the ACE Proposal achieving net benefits of -\$12.8 billion to -\$35.6 billion in 2016 dollars. *Id.* at ES-16. However, using that same scenario, but substituting in the PM_{2.5} NAAQS as the threshold below which claimed forgone co-benefits fall to zero, results in the ACE Proposal producing positive net benefits of \$1.4-\$2.8 billion in 2016 dollars. *Id.* at 6-16.

EPA in fact recognizes there is substantial uncertainty associated with its claimed forgone co-benefits estimates. *See, e.g.*, 2018 RIA at ES-11. Because of this substantial uncertainty, and the reasons stated above, EPA should give more weight to net benefit calculations that focus on

the claimed potential risks associated with PM_{2.5} levels above the primary annual PM_{2.5} NAAQS. Focusing on net benefits associated with claimed forgone co-benefits based on the primary annual PM_{2.5} NAAQS is presumptively a more accurate assessment since such calculations would be based on a clear numerical regulatory threshold that EPA has already studied and determined “protect[s] the public health” with an adequate margin of safety. 42 U.S.C. § 7409(b)(1). By definition, any “better than NAAQS” co-benefits are inherently less likely. In fact, EPA’s longstanding historical approach towards co-benefits in cost-benefit calculations up until 2009 recognized this. *See* Quality Science for Quality Air: Hearing Before the Subcomm. on Energy and the Env’t, of the H. Comm. on Sci., Space, and Tech., 112th Cong. 39 (2011) (statement of Dr. Anne E. Smith, Senior Vice President, NERA Economic Consulting). Furthermore, better accounting for these benefits’ uncertainties is especially warranted in light of EPA’s concurrent effort to address shortcomings in cost-benefit analysis through its recently proposed Advance Notice of Proposed Rulemaking, Increasing Consistency and Transparency in Considering Costs and Benefits in the Rulemaking Process, 83 Fed. Reg. 27524 (June 13, 2018).

D. In Comparisons to the CPP Baseline, the 2018 RIA Should Account for Important Non-Quantified Benefits of the ACE Rule In Areas Such as State Sovereignty and Grid Reliability.

EPA’s RIA for the final Rule should clearly account for non-quantified benefits of the Rule when compared to the CPP baseline, in line with OMB guidance. OMB requires cost-benefit analyses carefully to evaluate “non-quantified benefits and costs” as well as quantifiable ones. OMB, Circular A-4, at 26-27. EPA looks at some non-quantified costs and benefits in the RIA. *See, e.g.*, 2018 RIA at 3-43 – 3-44, 4-45 – 4-55, 6-1. However, the 2018 RIA should also

explicitly consider the Proposal's unquantified benefits for both State sovereignty and grid reliability.³⁸

The Proposal would provide important benefits on both of these counts as compared to a world with the CPP, and the 2018 RIA should include those. As noted, electric utility regulation is one of the most important areas of traditional State authority. *See, e.g., Pac. Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm'n*, 461 U.S. 190, 205 (1983) (“[T]he States retain their traditional responsibility in the field of regulating electrical utilities for determining questions of need, reliability, cost and other related state concerns.”); *Ark. Elec. Co-op. Corp. v. Ark. Pub. Serv. Comm'n*, 461 U.S. 375, 377 (1983) (“[T]he regulation of utilities is one of the most important of the functions traditionally associated with the police power of the States.”). By contrast, EPA lacks the technical expertise to make predictions regarding the operation and reliability of the Nation's electric grid. *See Del. Dep't of Nat. Res. & Env'tl. Control v. EPA*, 785 F.3d 1, 18 (D.C. Cir. 2015) (“[G]rid reliability is not a subject of the Clean Air Act and is not the province of EPA.”). That responsibility has long been in the hands of State public utility regulatory commissions, the Federal Energy Regulatory Commission (“FERC”), and the North American Electric Reliability Corporation. *See Proposal at 44752-53* (“EPA's area of expertise is [the] control of emissions at the source. EPA is not the expert agency with regard to electricity management. FERC is the expert at the federal level and public utility commissions are the experts at the state and local level.”). By adopting a source-specific approach to BSER, acknowledging that States set standards of performance, and giving States great flexibility in setting standards for individual sources and in providing compliance measures, the Proposal

³⁸ For a more thorough discussion of these issues in the context of the CPP, see Associations' Repeal Comments at 19-26.

unquestionably provides benefits in the areas of State sovereignty and grid reliability when compared to the CPP.

CONCLUSION

For all these reasons, EPA should finalize the ACE Rule, with the improvements described above and sever the NSR reform component to be completed in a separate rulemaking on a parallel track.

Respectfully submitted,

American Chemistry Council
American Coke and Coal Chemicals Institute
American Forest & Paper Association
American Fuel & Petrochemical Manufacturers
American Iron and Steel Institute
American Wood Council
Chamber of Commerce of the United States of America
National Association of Manufacturers
National Lime Association

Appendix 1

Appendix 1: New Source Review - Hourly Emissions Increase Test

EPA should reform the major NSR applicability test to include an hourly emissions increase component for *all sources*, not just EGUs. Hence, EPA should consider this reform in a parallel rulemaking and thus sever the NSR provisions from the proposed ACE rule. In this Appendix, the Associations offer preliminary comments in support of adding an hourly emissions increase test to the major NSR applicability test for all sources.¹

A. EPA Should Include An Hourly Emissions Increase Test in the NSR Program.

As framed in the ACE Proposal, the proposed NSR reform would merely add one additional step to determine when a physical change in or a change in the method of operation of an existing unit qualifies as a major modification subject to NSR requirements. As a result, the NSR applicability test would now have four steps: (1) determining whether a physical change or

¹ EPA previously proposed the hourly emissions increase test in 2005 and 2007 – and several of the Associations offered supporting comments at that time, which are incorporated here by reference and link to the previous dockets. *See* Proposed Rule, Prevention of Significant Deterioration, Nonattainment New Source Review, and New Source Performance Standards: Emissions Test for Electric Generating Units, 70 Fed. Reg. 61081 (Oct. 20, 2005); 72 Fed. Reg. 26202 (May 8, 2007); *see* Clean Air Implementation Project *et al.*, Comments on Prevention of Significant Deterioration, Nonattainment New Source Review, and New Source Performance Standards: Emissions Test for Electric Generating Units, Proposed Rule, Docket ID No. OAR-2005-0163, FRL-7985-7, 70 Fed. Reg. 61081 (Feb. 17, 2006), <https://www.regulations.gov/document?D=EPA-HQ-OAR-2005-0163-0170> (“CAIP 2005 Proposal Comments”); Clean Air Implementation Project *et al.*, Comments on Prevention of Significant Deterioration and Nonattainment New Source Review: Emission Increases for Electric Generating Units, Supplemental Notice of Proposed Rulemaking, Docket ID No. OAR-2005-0163, FRL-8307-7, 72 Fed. Reg. 26202 (July 9, 2007), <https://www.regulations.gov/document?D=EPA-HQ-OAR-2005-0163-0278> (“CAIP 2007 Proposal Comments”); NAM, Comments on Prevention of Significant Deterioration, Nonattainment New Source Review, and New Source Performance Standards: Emissions Test for Electric Generating Units, Proposed Rule, Docket ID No. OAR-2005-0163, FRL-7985-7, 70 Fed. Reg. 61081 (Feb. 17, 2006), <https://www.regulations.gov/document?D=EPA-HQ-OAR-2005-0163-0150> (“NAM 2005 Proposal Comments”); Nat’l Petrochemical & Refiners Ass’n (now known as AFPM), Comments on Prevention of Significant Deterioration, Nonattainment New Source Review, and New Source Performance Standards: Emissions Test for Electric Generating Units, Proposed Rule, Docket ID No. OAR-2005-0163, FRL-7985-7, 70 Fed. Reg. 61081 (Feb. 17, 2006), <https://www.regulations.gov/document?D=EPA-HQ-OAR-2005-0163-0120> (“NPRA 2005 Proposal Comments”).

change in the method of operation occurred; (2) a new hourly emissions increase test; (3) a significant emissions increase test using the current NSR rules; and (4) a significant net emissions increase test using the current NSR rules. Proposal at 44780. Steps three and four would only be triggered if a post-change hourly emissions increase is projected as a result of a physical change or change in method of operation. *Id.* at 44780-81.

This reform is well within EPA’s Clean Air Act authority. The Act imposes pre-construction permitting requirements under the PSD program (for areas attaining the National Ambient Air Quality Standards (“NAAQS”)) and nonattainment NSR program (for nonattainment areas) (collectively, these are the NSR program). 42 U.S.C. §§ 7470-7515. PSD only requires sources to obtain permits before commencing construction, 42 U.S.C. § 7475(a), — and the Clean Air Act defines “construction” under PSD to include a “modification” as defined in the NSPS program at 42 U.S.C. § 7411(a)(4). 42 U.S.C. § 7479(2)(C). The nonattainment NSR program contains similar requirements. 42 U.S.C. §§ 7501(4), 7502(c)(5).

The Act does not, however, specify how to calculate emissions “increases” in the definition of “modification.” 42 U.S.C. § 7411(a)(4) (“The term ‘modification’ means any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted.”). That is left to EPA. *See New York v. EPA*, 443 F.3d 880, 888-89 (D.C. Cir. 2006) (“*New York II*”) (“Congress’s use of the word ‘increases’ necessitated further definition regarding rate and measurement for the term to have any contextual meaning.”). Indeed, while the Supreme Court found that the CAA did not require EPA to interpret “modification” using the exact same test under the NSPS and NSR programs, Congress granted EPA the discretion to construe the term, and “EPA’s construction need do no more than

fall within the limits of what is reasonable, as set by the Act’s common definition.” *Envtl. Def. v. Duke Energy Corp.*, 549 U.S. 561, 576 (2007). EPA, therefore, has discretion to frame the NSR applicability test, constrained by reasonableness and case law. *See, e.g., New York v. EPA*, 413 F.3d 3, 39 (D.C. Cir. 2005) (“*New York I*”) (per curiam).

Further, not only is the reform lawful, it is an entirely reasonable approach. The NSR program has compatible environmental and economic goals. *See, e.g., 42 U.S.C. § 7470(3)* (“The purposes of this part are as follows: ... to insure that economic growth will occur in a manner consistent with the preservation of existing clean air resources.”). The hourly emissions test will advance these goals, by incentivizing sources to replace operating equipment with more efficient components that require less energy to operate. *See, e.g., Proposal at 44775* (efficiencies from replacing EGU components). This approach balances economic and environmental goals, as the CAA intends. Further, it is entirely logical to require an emissions rate increase before a source is considered modified.² Prudent source owners will often seek to take steps to improve the efficiency of existing operations, as well as to repair or replace equipment in order to sustain their operations. Merely taking appropriate steps to make an operation more efficient or to maintain operations so that a business can continue to function as it was designed to operate should not trigger an expansive, additional regulatory process.

Otherwise, important investments to sustain this country’s industrial base would be discouraged

² In any final rule addressing the hourly emissions increase test, as the CAA requires, EPA should confirm that the NSR program contemplates that the project itself must *cause* the actual emissions increase before it qualifies as a major modification. *See 42 U.S.C. § 7411(a)(4)* (“The term ‘modification’ means any physical change in, or change in the method of operation of, a stationary source *which increases* the amount of any air pollutant emitted by such source or *which results in* the emission of any air pollutant not previously emitted.”) (emphasis added); *see 40 C.F.R. § 52.21(b)(2)(i)* (“Major modification means any physical change in or change in the method of operation of a major stationary source that *would result in* a significant emissions increase”) (emphasis added). This causation requirement is a central aspect of the NSR program.

and delayed. At the same time, maintaining the annual significant and significant net emissions tests as steps 3 and 4 makes sense. It would be unproductive to compel a source with a nominal increase in its hourly emissions rate to go through the burdensome NSR review process if the change at issue is not expected in fact to lead to actual, significant emissions increases.

By contrast, the arguments that have been raised in the past against adding an hourly emissions component to the NSR applicability test fall flat. Parties have argued, for instance, that an hourly emissions increase test does not measure actual emissions, because “actual emissions” are annual in nature. But there is no requirement that “actual emissions” must be measured over a particular time period. The D.C. Circuit recognized that very fact when it upheld that baseline actual emissions can be measured for non-EGUs as the average rate of any consecutive 24-month period within a 10-year period. *New York I*, 413 F.3d at 22-23, 31, 40.

Furthermore, the environmental case against such a test is overstated. Some parties have asserted that incorporating an hourly emissions test would allow sources to increase their hours of operation, and thereby increase their emissions without triggering NSR. But, under the current regulatory framework, sources can increase hours of operation without triggering NSR. 72 Fed. Reg. at 26208; *see also* 40 C.F.R. § 52.21(b)(2)(iii)(f) (defining “major modification” to exclude “[a]n increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or 40 CFR 51.166.”). Additionally, under current regulations, increases in actual emissions that come from increases in hours of operation unrelated to the change are excluded in determining projected actual emissions. 72 Fed. Reg. at 26208; *see also* 40 C.F.R. §

52.21(b)(41)(ii)(c) (demand growth exclusion). Indeed, whether sources operate more or fewer hours depends on many factors such as the demand for production.

B. The Hourly Emissions Increase Test Should Apply Nationwide, to All Regulated NSR Pollutants, and Be a Mandatory Component of States' SIPs.

In the ACE Proposal, EPA has correctly proposed to apply the hourly emissions increase test nationwide to all regulated NSR pollutants. Proposal at 44781. NSR is a nationwide program that applies to all regulated NSR pollutants, and there is no principled reason why certain regions of the country or certain pollutants should be treated differently. *See also* NPRA 2005 Proposal Comments at 3-4. Thus, EPA should maintain this approach in any future rulemaking addressing the hourly emissions increase test.

However, the Agency should make the new hourly test a mandatory component of States' SIPs.³ In the ACE Proposal, EPA proposed that the new hourly emissions increase test would generally not be a mandatory element of State programs, but that States would have discretion to decide whether to incorporate it into their SIPs. Proposal at 44782. As a result, the reform would be mandatory only where State or local permitting authorities are issuing permits under a delegation agreement with EPA. *Id.* EPA should reconsider this approach and instead provide the hourly emissions provision as a required element of State plans in any future rulemaking addressing this important NSR reform. If the hourly test is not mandatory, sources in States that have adopted the test and in jurisdictions with delegated programs will operate under a very different legal regime than those in States without the test, resulting in an inconsistent and unfair competitive environment.

³ *See* EPA Request for Comment C-70, Proposal at 44783.

C. Hourly Emissions Increases Should Be Measured Based on a Comparison of the Maximum Achievable Hourly Emissions.

In a future rulemaking, EPA should adopt the maximum achievable hourly emissions test, i.e., it should include rules that would direct sources to assess whether a particular change would result in an increase in the maximum achievable hourly emissions from the source. Proposal at 44780 (the third of three alternative hourly emissions increase tests EPA published in the Proposal); *see* CAIP 2007 Proposal Comments at 3; CAIP 2005 Proposal Comments at 11-12; NPRA 2005 Proposal Comments at 2.

The maximum achievable hourly emissions test would be a sound approach. The test would make the initial steps in the applicability test for NSR the same as under the NSPS program, which adds consistency to the Agency's air regulatory programs for new and modified sources. While the Supreme Court held that the NSPS and NSR definitions of "modification" need not be the same, it did not preclude EPA from interpreting them similarly. *Duke Energy Corp.*, 549 U.S. at 576. Sources are familiar with the NSPS test, which will make it more easily implementable. Moreover, the maximum achievable approach makes sense. The source and its maximum achievable emissions have already been permitted. Additional regulatory requirements should not be imposed if a source is not going to change that achievable maximum.

Moreover, using a "maximum achievable" test would fall within the general parameters of the NSR program to compare past actual emissions to projected future actual emissions. As EPA has explained previously, the maximum achievable test would measure "what a source has been *actually* able to emit based on physical and operating capacity during a representative period prior to the change." 70 Fed. Reg. at 61091 (emphasis added); *see also* 72 Fed. Reg. at 26219. Thus, the analysis would be tied to the unit's actual emissions. Indeed, this is certainly

true as a practical matter. As EPA explains, “[f]or most, if not all EGUs, the hourly rate at which the unit is actually able to emit is substantively equivalent to that unit’s historical maximum hourly emissions.” 70 Fed. Reg. at 61091; *see also* 72 Fed. Reg. at 26219.