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U.S. Environmental Protection Agency  
Mail Code 28221T  
1200 Pennsylvania Ave., NW  
Washington, DC 20460

**American Coalition for Clean Coal Electricity Comments on  
EPA's Advance Notice of Proposed Rulemaking on Greenhouse  
Gas Emission Guidelines for Existing Electric Utility Generating  
Units**

The American Coalition for Clean Coal Electricity (ACCCE) submits the following comments in response to the advance notice of proposed rulemaking (ANPRM) regarding the development of federal emission guidelines to limit greenhouse gas emissions (GHG) from existing electric generating units (EGUs).<sup>1</sup> These emission guidelines, if adopted, would replace the Clean Power Plan (CPP), which the Environmental Protection Agency (EPA or Agency) has proposed to repeal in a separate rulemaking action.<sup>2</sup>

For the reasons explained in separate comments to the Agency, ACCCE believes that EPA should repeal the CPP in its entirety. The CPP is illegal because the rule greatly exceeds EPA's authority to regulate carbon dioxide (CO<sub>2</sub>) emissions from fossil-fueled power plants under section 111(d) of the Clean Air Act ("CAA" or "Act"). Even if the CPP were determined to be lawful (which it is not), it would establish bad environmental policy that would have substantial adverse energy and economic impacts. ACCCE, however, does support EPA's decision to issue this ANPRM because it will help EPA to gather additional information for the development of emission guidelines to replace the CPP in a manner which comports with the CAA, and which will not

exacerbate the alarming amount of coal-fired electric generating capacity that is retiring.

ACCCE is a non-profit organization that is the only national trade organization whose sole mission is to advocate at the federal and state levels on behalf of coal-fueled electricity and the coal fleet. It is made up of members representing every facet of the coal-fueled electricity industry, including electricity generators, coal producers, railroads, barge operators, and equipment manufacturers.<sup>3</sup>

In addition to our comments, ACCCE is a member of the Utility Air Regulatory Group (“UARG”) and supports and incorporates the UARG comments on the ANPRM by reference herein.

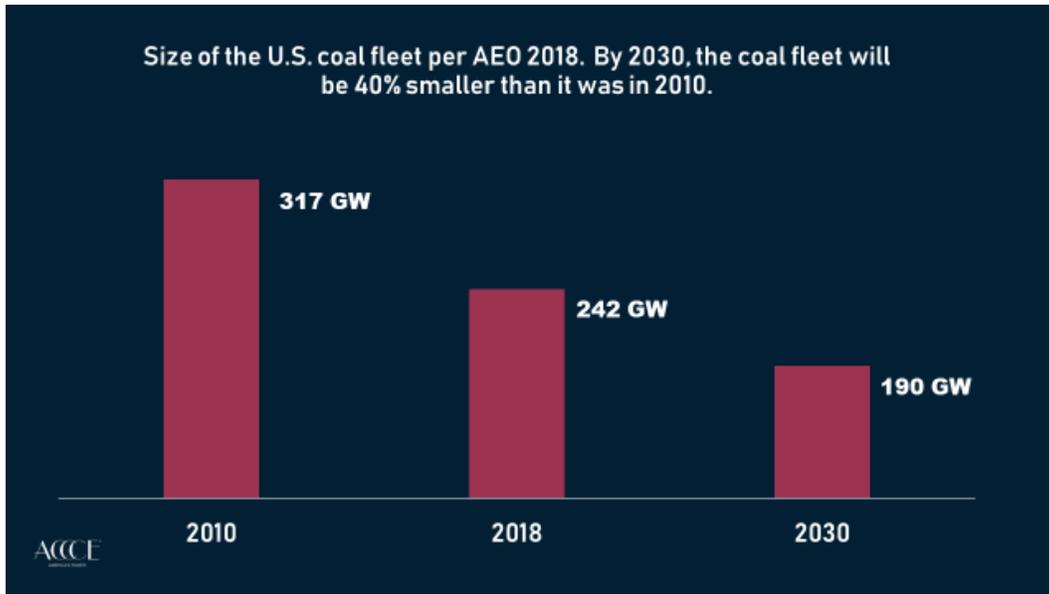
### **TEN PRINCIPLES THAT SHOULD GUIDE EPA’S DEVELOPMENT OF A CPP REPLACEMENT RULE**

The ANPRM raises a wide range of policy and technical issues for which EPA is seeking comment. Of these issues, ACCCE is providing high-level policy input on a limited subset of those issues that are critically important for the development of a balanced and effective regulatory framework for the regulation of CO<sub>2</sub> emissions from existing affected EGUs. We believe the following general principles should guide EPA’s development of such a regulatory framework if EPA elects to adopt a CPP replacement rule.

**AVOID MORE COAL RETIREMENTS.** It is vitally important to preserve the fleet of existing coal-fired power plants. The importance of the existing coal fleet was recently reaffirmed by the Department of Energy (DOE), the Federal Energy Regulatory Commission (FERC), and the North American Electric Reliability Corporation (NERC). These entities have recognized the critical reliability and resiliency attributes that the coal fleet provides to the electric grid and have expressed concerns about the impact of the changing electricity mix on grid reliability and resiliency.<sup>4</sup>

Unfortunately, the CPP would cause substantial additional retirements of existing coal-fired generation that, in turn, will increase risks to the reliability and resilience of the nation’s electric grid. In fact, some 111,000 megawatts (MW) of coal-fired generating capacity have retired or announced plans to

retire since 2010. This represents 35% of the U.S. coal fleet that existed in that year.<sup>5</sup> The chart below shows the decline of the coal fleet over time, even without the CPP. These retirements pose a threat to grid reliability and resilience.



The CPP would have further threatened grid reliability and resiliency by causing the projected retirement of an additional 29,000 MW of coal capacity by 2050.<sup>6</sup>

This disturbing trend in coal plant retirements should not be exacerbated with the adoption of a CPP replacement rule. For these reasons, EPA, in setting emission guidelines and approving state plans, should ensure that the CAA section 111(d) program does not threaten the reliability and resiliency of the electric grid by causing the premature shutdown of additional coal-fired capacity.

**RESPECT STATE PRIMACY.** The regulatory framework of a replacement rule should respect the primacy of the states. As required by the CAA, states have the primary responsibility of developing CO<sub>2</sub> standards for existing EGUs. Therefore, each state should have the lead role in setting performance standards for individual units within its jurisdiction.

The CAA is clear that EPA's role in section 111(d) is limited to developing procedures and requirements to guide states in their primary role of

developing of standards of performance that are expressed in state plans. Section 111(d) states that “the Administrator shall ... establish a *procedure* ... under which each State shall submit to the Administrator a plan which ... establishes standards of performance ...” (emphasis added). The Act could not be more explicit that EPA’s role is limited and that the states have the primary role in developing standards of performance.

EPA’s “procedures,” on the other hand, must guide states in determining standards of performance that reflect BSER. EPA has traditionally developed such “procedures” for existing sources under section 111(d) in the form of “emission guidelines.” The Agency should follow this clear and well-established statutory approach in any CPP replacement rule. As a result, EPA’s role should be limited to providing procedural and technical guidance on how states may set performance standards for EGUs within their jurisdiction. EPA cannot dictate what the performance standards states must adopt or otherwise tell a state how to regulate existing EGUs within its jurisdiction under section 111(d) of the Act. EPA has authority to establish performance standards only in those cases where states have failed to adopt satisfactory performance standards in the first instance.

**REQUIRE STATES TO SET PERFORMANCE STANDARDS BASED ON MEASURES THAT CAN BE APPLIED “INSIDE THE FENCE” AT POWER PLANTS.** EPA has authority *only* to develop guidelines for the states to set CO<sub>2</sub> performance standards that satisfy two related statutory requirements. First, the standards must be based on those control measures that are determined to be the “best system of emission reduction” (BSER) and second, in making this BSER determination, EPA may consider only those control measures “that can be applied at, to or for” an individual stationary source.<sup>7</sup> Based on this reading of the statute, EPA has properly determined in its proposal to repeal the CPP that it does not have authority to establish CO<sub>2</sub> performance standards for existing EGUs under section 111(d) based on the “beyond-the-fence” methodology used in the original CPP rule. That methodology resulted in the establishment of stringent CO<sub>2</sub> emission standards that could not be met by each individual coal-fired power plant and would instead have required generation shifting to natural gas and renewable energy resources. EPA has properly limited its purview in the ANPRM to consideration of emission

reduction measures that can be applied at, and are achievable by, individual coal-fueled generating units

**SET ACHIEVABLE STANDARDS BASED ON ADEQUATELY DEMONSTRATED TECHNOLOGIES.** The statute directs EPA to identify BSER control measures that have been shown to be “adequately demonstrated” for existing sources in the regulated source category and that will result in “emission limitations” that are “achievable” by existing sources within the regulated source category.<sup>8</sup> BSER therefore should be based on reasonable and cost-effective control measures for limiting CO<sub>2</sub> emissions from EGUs, and not on measures that are novel or extraordinarily costly. For example carbon capture and storage (CCS) is not a viable control measure because CCS is neither commercially available nor economically feasible at the present time to reduce CO<sub>2</sub> emissions from fossil-fueled EGUs.<sup>9</sup> Similarly, it is inappropriate to define BSER for coal-fired EGUs as switching to or co-firing with natural gas given the major adverse energy and cost repercussions of this control measure for the electric power sector.

**PROVIDE STATES WITH BROAD DISCRETION IN SETTING PERFORMANCE STANDARDS.** States should have wide latitude in setting performance standards for individual EGUs within their jurisdiction, as expressly authorized by both the statute and EPA’s implementing regulations.<sup>10</sup> Most importantly, the EPA emissions guidelines should recognize states’ authority to adjust the stringency of the performance standards or extend the compliance deadlines based on the remaining useful life of the particular plant or other site-specific factors. These site-specific factors include the unreasonable cost of control resulting from plant age, location, or basic design process, physical impossibility of installing the necessary control equipment, or other factors associated with the facility that make application of a less stringent standard or final compliance time more reasonable.<sup>11</sup>

**ESTABLISH A SIMPLE STATE IMPLEMENTATION PROCESS.** EPA guidelines should establish a simple, straightforward process for states to establish performance standards for EGUs within their jurisdiction. This process should not be overly complicated, burdensome, or time-consuming for states and regulated sources. The longer and more complex the process is, the greater the uncertainty and attendant regulatory and litigation risks.

**ALLOW STATES TO SET UNIT-SPECIFIC STANDARDS BASED ON THE DIVERSITY AMONG INDIVIDUAL UNITS.** There is no commercially available retrofit control equipment to reduce CO<sub>2</sub> emissions from existing coal-fueled power plants. Instead, the CO<sub>2</sub> emission reduction measures available for power plant units are limited to those physical or operational changes that enable a power plant to operate more efficiently, burning less coal per megawatt-hour of generation, and therefore emitting less CO<sub>2</sub>. As ACCCE stated in its comments on the proposed CPP, a variety of factors influence the types of efficiency improvements available at individual power plants.<sup>12</sup>

In addition to basic boiler, turbine, and steam generator design, heat rate is influenced by, for example, temperature of the cooling water source, the type of cooling system (once-through vs. recirculating cooling water), ambient temperatures, coal type and moisture content, capacity factor, and the amount of cycling each individual unit undergoes.<sup>13</sup> The combination of all these factors causes individual generating units to have widely different operating characteristics, efficiencies, and CO<sub>2</sub> emission rates.<sup>14</sup> In fact, even individual units vary widely in their utilization, efficiency, and CO<sub>2</sub> emissions over time. Importantly, as the UARG comments discuss in detail, measures available to *improve* heat rates are also highly unit-specific and vary based on unit design, operation, and measures that the unit owners have already taken to improve efficiency.<sup>15</sup>

A replacement rule should establish a flexible implementation framework that allows states to account for the differences and diversity of the coal-fueled generating fleet in establishing unit-specific standards of performance. Attempts to standardize CO<sub>2</sub> emissions “performance” within the diverse fleet by using a “one-size-fits-all” subcategorization approach should be avoided when making the BSER determination. Similarly, states should have the authority to set unit-specific performance standards based on the unique design attributes and operating characteristics of each affected unit. In addition, as noted above, states should be allowed to adjust, on a case-by-case basis, the stringency of CO<sub>2</sub> performance standards applicable under EPA’s emissions guidelines based on such factors as the remaining useful life of the affected EGU, physical impossibility of controls, or other relevant factors, as expressly authorized by the CAA and EPA’s implementing regulations.

**ACCOUNT FOR VARIATIONS IN DISPATCH AND OPERATION.** Performance standards should be set in a manner that will not have the effect of dictating or interfering with the unit's utilization and operating profile. Load levels of coal-fueled EGUs fluctuate due to a wide range of factors, including demand for electricity and relative costs of natural gas and coal. While many coal-fueled EGUs may be operating at lower load levels in recent years, this trend could change in the future if the relative price of natural gas versus coal changes substantially in the future. EPA therefore should establish emission guidelines that do not constrain a coal-fueled unit's ability to meet market demand for electricity. Rather, the EPA guidelines and state performance standards should account for the fact that CO<sub>2</sub> emission rates and tonnages can increase or decrease by a change in the utilization of the unit or other unit-specific circumstances.

**ALLOW FLEXIBLE IMPLEMENTATION AND COMPLIANCE.** The EPA guidelines should confirm states' broad authority to implement the CO<sub>2</sub> control requirements through flexible, emissions averaging or market-based mechanisms that can achieve required CO<sub>2</sub> reductions in the most cost-effective and efficient manner. While it is clear (as noted above) that EPA must determine BSER and states must set performance standards based solely on what can be achieved "inside the fence" at the individual electric generating unit, the use of flexible implementation and compliance mechanisms should be allowed and encouraged by EPA and the states. EPA's emissions guidelines should allow states to grant power plant owners the flexibility to average among units at a plant, within a corporate fleet, or even among unaffiliated units. As has been shown many times in other CAA programs, trading and emissions averaging result in more cost-effective emission reductions and, therefore, have the potential to maintain needed coal-fueled electric generating capacity into the future. Each state should be allowed to develop such flexibility mechanisms so long as the state regulatory program achieves CO<sub>2</sub> emission reductions that are at least equivalent to the reductions that would otherwise be achieved by the application of EPA's emission guidelines on a unit-by-unit basis.<sup>16</sup>

**REMOVE REGULATORY BARRIERS TO EFFICIENCY IMPROVEMENT PROJECTS.** The New Source Review (NSR) program is a major deterrent to improving the efficiency of the coal fleet. Just recently, the House Energy and Commerce

Committee held a hearing spotlighting the many challenges with the NSR program for both “modified” and new sources. For example, former EPA Assistant Administrator for Air and Radiation Jeff Holmstead pointed out that “the NSR program has become a complicated mess that makes it more difficult for companies to do things that we should all want them to do – like maintaining the reliability and safety of their facilities and making them more efficient.”<sup>17</sup> In fact, many of the projects EPA lists in Table 1 in the ANPRM as available to power plant owners to improve heat rates have been the subject of NSR enforcement actions by EPA itself. These include improvements to boiler components like the economizer, as well as condenser, and turbine upgrades. Obviously, the NSR program needs reform, or the kinds of projects need to be undertaken to comply with section 111(d) could be stymied or delayed. However, given its complexity, NSR reform should be undertaken either through legislation or a separate rulemaking. If EPA proceeds to reform the current NSR modification rules, ACCCE urges EPA to remove as many of these regulatory barriers as legally permissible under existing CAA authorities.

In conclusion, we appreciate the opportunity to submit these comments and respectfully urge EPA to develop GHG emission guidelines that are consistent with these ten principles. Please contact me at [Pbailey@americaspower.org](mailto:Pbailey@americaspower.org) if you have any questions.

Sincerely,

/s/

Paul Bailey

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<sup>1</sup> State Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units, 82 Fed. Reg. 61,507 (December 28, 2017).

<sup>2</sup> See Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Proposed Rule, 82 Fed. Reg. 48,035 (October 16, 2017).

<sup>3</sup> A list of ACCCE members is attached.

<sup>4</sup> See e.g., Perry, Rick, “Secretary of Energy’s Direction ...,” Received by Neil Chatterjee, Cheryl LaFleur, and Robert Powelson, September 28, 2017; Federal Energy Regulatory Commission, Department of Energy, “Grid Resiliency Pricing Rule,” Notice of Proposed Rulemaking, 82 Fed. Reg. 46940 (October 10, 2017); NERC, “Comments of the North American Electric Reliability Corporation in Response to Notice of Proposed Rulemaking,” October 23, 2017; NERC, *2017 Long Term Reliability Assessment*.

<sup>5</sup> ACCCE, Retirement of U.S. Coal-Fired Generating Units, January 2018.

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<sup>6</sup> EPA, *Regulatory Impact Analysis for the Clean Power Plan Final Rule*, October 23, 2015.

<sup>7</sup> 82 Fed. Reg. at 48,039.

<sup>8</sup> Section 111(a)(1) of the CAA.

<sup>9</sup> One recent confirmation that CCS is not adequately demonstrated is Congress' recent enactment of extensions to tax credits for sequestered CO<sub>2</sub>. This shows the non-commercial nature of the technology in that it requires taxpayer support to be implemented.

<sup>10</sup> See Section 111(d)(1) of the CAA; 40 C.F.R. 60.24.

<sup>11</sup> 40 C.F.R. §60.24(f). Unfortunately, EPA's implementing regulations also authorize EPA to make emission guidelines binding on states and not allow such state discretion when the Agency determines that the emission guidelines "may cause or contribute to endangerment of public health." This regulation has no foundation in the CAA and is in fact contrary to the express language in Section 111(d) that requires EPA to allow states to take into consideration "among other factors, the remaining useful life of the existing source." EPA should consider rescinding 40 C.F.R §60.24(c).

<sup>12</sup> American Coalition for Clean Coal Electricity Comments on EPA's Proposed 'Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electricity Utility Generating Units,'" (December 1, 2014).

<sup>13</sup> *Ibid.*

<sup>14</sup> Comments of the Utility Air Regulatory Group on the United States Environmental Protection Agency's State Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Units; Advance Notice of Proposed Rulemaking, February 26, 2018.

<sup>15</sup> *Ibid.*

<sup>16</sup> As noted above, states should be allowed to adjust, on a case-by-case basis, the stringency of CO<sub>2</sub> performance standards developed under EPA's emissions guidelines based on such factors as the remaining useful life of the affected EGU, physical impossibility of controls, or other relevant factors

<sup>17</sup> "Testimony of Jeffrey R. Holmstead before the House Committee on Energy and Commerce Subcommittee on Environment: Hearing on New Source Review Permitting Challenges for Manufacturing and Infrastructure," February 14, 2018.