AMERICAN COALITION FOR CLEAN COAL ELECTRICITY

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U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Comments of the American Coalition for Clean Coal Electricity in Response to EPA's Request for Comments on "Evaluation of Existing Regulations" Pursuant to Executive Order 13777, 82 Fed. Reg. 17,793 (Apr. 13, 2017); Docket ID No. EPA-HQ-OA-2017-0190

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The American Coalition for Clean Coal Electricity (ACCCE) appreciates the opportunity to provide comments regarding EPA's efforts to evaluate regulations pursuant to Executive Order 13777, *Enforcing the Regulatory Reform Agenda*.[1] ACCCE is a national trade organization whose mission is to advocate on behalf of the coal fleet and coal-fired electricity.[2]

To provide some context for our comments, the coal fleet is one of the nation's principal sources of baseload electricity. Baseload electricity sources are the foundation of the electricity grid because they can be counted on 24/7. Thus, the coal fleet helps to ensure the electricity grid is both reliable and resilient. Unfortunately, EPA regulations have been a major factor in the retirement, so far, of 451 coal-fired electric generating units in 37 states that represent a total of more than 75,000 megawatts (MW) of electric generating capacity.[3] These EPA-caused retirements represent almost one quarter of the U.S. coal fleet. Basically, recent EPA regulations have become a threat to a reliable and resilient electricity grid.

Our comments below offer recommendations on eight regulations: Clean Power Plan (CPP); carbon dioxide (CO_2) New Source Performance Standards (NSPS) for new coal-fired power plants; effluent limitations guidelines (ELGs); coal combustion residuals (CCR) rule; New Source Review (NSR) program; Cross-State Air Pollution Rule (CSAPR) Update

rule; the recent regulations to amend the regional haze program; and the startup, shutdown, and malfunction (SSM) SIP call.

CLEAN POWER PLAN

EPA should repeal the Clean Power Plan.

There are three fundamental flaws with the CPP.[4] First, the CPP is unlawful because EPA is prohibited from regulating CO_2 emissions from coal-fired power plants under Section 111(d) of the Clean Air Act (CAA or Act) since EPA already regulates coal-fired power plants under Section 112 of the Act. Second, EPA has exceeded its authority under Section 111(d) by setting CO_2 performance standards based on emissions reductions that are only achievable by measures undertaken outside the boundaries of power plants ("outside the fence"). Third, the CPP impermissibly infringes on states' inherent sovereign authority to regulate electricity by requiring the generation of electricity to shift from coal-fired power plants to natural gas and renewable energy resources.

In addition, the CPP is an expensive program that would impose annual compliance costs (according to EPA's estimate) of up to $8.4 billion per year, while having a trivial effect on climate change.[5] For example, the CPP would reduce global average temperature increase by 0.01°F and sea level rise by the thickness of two sheets of paper.[6]

If EPA determines it is necessary to regulate CO_2 emissions from existing power plants under Section 111(d), the CPP should be replaced with guidelines that give states the authority to set reasonable CO_2 performance standards based on measures that are achievable "inside the fence" at each power plant.

NEW SOURCE PERFORMANCE STANDARDS

EPA should repeal the NSPS.

The CO_2 NSPS requires new coal-fired power plants to be equipped with carbon capture and storage (CCS) technology.[7] This requirement has the effect of banning new coal-fired power plants because current CCS technology is not yet commercially available and adding CCS to new coal-fired plants at this time would make them prohibitively expensive to build and operate.

In the past few years, new coal-fired plants have been built in the U.S. that are both highly efficient and clean. These new high-efficiency, low-emissions (HELE) power plants reduce major air pollutants by as much as 99% or more, and their efficiencies enable them to achieve CO_2 emission rates 20% lower than the existing coal fleet.[8] If EPA determines it is necessary to replace the NSPS, the agency should promulgate new NSPS based on HELE technology, not on CCS.

EFFLUENT LIMITATIONS GUIDELINES

EPA should revise the ELG rule.

EPA's ELG rule imposes stringent requirements on wastewater discharges from coal-fired power plants.[9] EPA has announced it is reconsidering the ELG rule in response to petitions for reconsideration filed by the Utility Water Act Group (UWAG) and the Small Business Administration. In addition, EPA has administratively stayed the compliance deadlines of the ELG rule while the Agency completes its review of the ELG rule.[10]

The ELG rule, if it remains in place, is projected to cost electricity generators hundreds of millions to billions of dollars and, in combination with the Coal Combustion Residuals (CCR) rule, is already causing coal-fired power plant retirements. For example, Santee Cooper in South Carolina estimates the cost of the two rules to exceed $700 million for just two coal-fired plants; and Northern Indiana Public Service Company projects the total cost for the ELG and CCR rules to be as much as $830 million and be a major driver in the retirement of four coal-fired electric generating units.[11]

In contrast to its cost, the ELG rule would have minimal water quality benefits. According to EPA's cost-benefit analysis of the ELG rule, its projected cost, $470 million to $480 million per year, exceeds its projected water quality benefits of $150 million to $180 million per year. And EPA projected human health benefits of only $11 million to $17 million per year.[12]

Therefore, EPA should undertake a new ELG rulemaking that revises the zero discharge limit for bottom ash transport waters because, for example, it relies to a large extent on outdated data, and because bottom ash

transport waters pose minimal environmental risks. EPA should also revise the stringent and potentially unachievable treatment requirements for scrubber wastewater.[13]

Finally, environmental groups have filed a lawsuit challenging EPA's administrative stay of the ELG rule. ACCCE supports EPA in its defense of the stay and its efforts to proceed with reconsideration of the ELG rule in an expeditious manner.

COAL COMBUSTION RESIDUALS

EPA should revise the CCR rule.

The CCR rule establishes new requirements for the location, design, structural integrity, and operation of ash ponds and landfills that receive CCR.[14] Many of these requirements are inflexible and prescriptive because at the time of promulgation of the CCR rule, federal statute did not provide EPA or the states with the authority to implement or enforce the requirements of the rule.[15]

Last December, Congress enacted legislation to correct this problem by authorizing states to implement and enforce the requirements of the CCR rule through state permitting programs.[16] With the passage of this legislation, these inflexible and prescriptive CCR requirements are no longer needed or justified because there is now a regulatory authority that can oversee the implementation of the program and consequently avoid any potential abuses that could have resulted under a self-implementing program. For example, the existing CCR rule contains prescriptive provisions for the placement of groundwater monitors, even though their placement can best be determined by state authorities on a case-by-case basis.[17]

Furthermore, the CCR rule contains other inflexible, overly prescriptive requirements that preclude the tailoring of the rule's requirements based on site-specific conditions. One notable example is the inflexibility of the closure requirements of the final rule. For example, the failure to meet many of the rule's requirements immediately triggers an obligation to close existing CCR disposal facilities, even though other corrective action measures may be available at considerably less cost for ensuring the

protection of human health and the environment based on site-specific circumstances at the particular disposal facility.[18]

These inflexible requirements are precisely the type of requirements that justify replacement and modification under President Trump's recent Executive Orders for regulatory reform. Accordingly, EPA should now initiate a new rulemaking which revises the substantive requirements of the CCR rule and removes those that are no longer necessary due to the fact that state agencies and EPA itself can implement the rule. A new CCR rule can address these and other inflexible CCR requirements to reduce costs and continue to ensure that human health and the environment are protected.

Finally, EPA has already taken steps to improve the administration of CCR program through EPA-approved state permit programs, as authorized under the new legislation. This is reflected by a recent EPA announcement that it is working on guidance that is intended to facilitate prompt development and EPA approval of state programs to implement the CCR rule.[19] ACCCE commends EPA for developing this guidance and urges the Agency to expeditiously approve state CCR programs as they are submitted.

NEW SOURCE REVIEW

EPA should revise its NSR regulations.

EPA's NSR program has been the subject of litigation and controversy for decades. The Agency has taken the position that certain projects that improve the reliability, efficiency, and safety of power plants are "non-routine," cause (according to EPA's calculations) emissions increases, and therefore subject the power plants to NSR. Because NSR typically requires lengthy permitting reviews and the installation of the most advanced (and costly) emissions control technology available, EPA's NSR program has been a major deterrent to otherwise-beneficial projects at power plants that, in many cases, would have resulted in emissions decreases, increased electric reliability, and enhanced worker safety.[20]

In addition, the NSR program has resulted in almost 20 years of costly and protracted litigation between the EPA and electric utilities. Unfortunately,

neither EPA nor the courts have able to resolve the basic question as to what is a "modification" that triggers NSR permit review. As a result, considerable uncertainty remains as to whether a particular power plant project to maintain or enhance efficiency or to enhance the plant's reliability or safety is exempted from NSR review as a "routine" change. Nor do the NSR regulations establish a clear and straightforward emissions increase test for determining whether a non-routine change results in a significant net emissions increase that triggers NSR.

To remedy these problems, EPA should revise its regulations to make it clear that reliability, efficiency, and safety improvement projects performed routinely within the electric power sector – as opposed to projects solely performed routinely at the specific power plant – are deemed to be "routine" and, therefore, are not subject to NSR review. In addition, EPA's revised rules should establish a less complicated emissions increase test for determining whether non-routine projects trigger NSR. That emissions increase test should be based on maximum hourly emissions, the same test EPA uses in its NSPS regulations. In this way, a non-routine change would not cause an emissions increase that triggers NSR unless that change results in an increase in maximum achievable hourly emissions.

CSAPR UPDATE

EPA should revise the CSAPR Update rule.

In 2016, EPA issued the CSPAR Update rule to help achieve attainment of the 2008 ozone NAAQS.[21] There are several major problems with this Update rule. For example, EPA made a policy decision that upwind states that are contributing very tiny amounts of pollution to downwind nonattainment areas (1% of the standard) in other states, based on emissions from all sources, must reduce emissions from power plants, which represent only a fraction of the emissions from all sources that contribute to the 1% threshold. This policy decision by EPA was not specifically addressed, let alone statutorily mandated, by the CAA. As a result, it is appropriate for EPA reevaluate this decision, particularly given that it is imposing very costly controls on coal-fired power plants for minimal air quality improvements.

These and other problems with the rule are detailed in pending industry petitions for reconsideration of the Update rule.[22] EPA should grant these pending petitions and initiate a new rulemaking that corrects the methodological problems identified in the petitions and should specifically reconsider the portions of the rule that resulted in ozone-season NO_x budgets more stringent than those established for states under Phase 2 of the original CSAPR.

REGIONAL HAZE

EPA should revise its regional haze regulations and reconsider its regional haze FIPs.

Shortly before President Trump's inauguration, EPA finalized revisions to its regional haze regulations.[23] While these new regulations have one favorable provision – a 3-year extension of the deadline for states to submit SIPs for the second regional haze planning period – the regulations include provisions that exceed EPA's authority under the Clean Air Act.

For example, states must now first establish a long-term strategy to reduce regional haze *before* adopting visibility-based goals for reasonable progress toward elimination of man-made visibility impairment. This cart-before-the-horse approach, as well as other troubling aspects of the new regional haze regulations, must be corrected.[24] Therefore, EPA should grant the pending industry petitions for reconsideration and replace the unlawful aspects of its regional haze regulations, while maintaining the extended 2021 deadline for the second planning period.[25] The new replacement regulations should re-establish state primacy in developing regional haze plans and give states broad discretion in determining reasonable glide paths to reduce visibility impairment. In addition, the replacement regulations should establish a more objective and even-handed methodology for setting the emissions reduction levels that states must achieve to meet their reasonable progress goals during the second and subsequent planning periods of the regional haze program.

In addition, the Obama Administration imposed FIPs on a number of states. EPA has already begun to reconsider several of those FIPs. ACCCE commends EPA for these actions, and urges EPA to review other Obama-

era FIPs to determine if reinstatement of state-developed SIPs is the correct approach in each of those cases.

STARTUP, SHUTDOWN, AND MALFUNCTION

EPA should revise its SSM policies.

EPA has long recognized that emissions controls often do not operate at optimal removal efficiency during startup and shutdown conditions, and the Agency has also recognized that unavoidable malfunctions can occur despite best operational and maintenance practices. For that reason, EPA has historically recognized these issues in its federal emissions standards, for example under the NSPS and MACT programs, and has also approved SIPs that recognize these realities. However, over the past few years, EPA began rulemakings to remove these exclusions from the NSPS and MACT regulations. And in 2015, EPA issued a SIP call to 36 states requiring them to remove their previously EPA-approved SSM provisions. These EPA policy changes can unnecessarily increase operating costs and could increase the risk of further coal retirements, with little to no environmental or human health benefit.

There are two steps that EPA can take immediately to minimize the regulatory burdens being imposed on coal-fired power plants with regard to SSM. First, EPA should repeal the SSM SIP call and reaffirm the authority of states to determine how to deal with SSM. Second, EPA should establish work practice standards that apply during SSM periods for the NSPS and MACT programs.

In conclusion, we commend EPA for undertaking this review and urge the Agency to move quickly to change these regulations and policies.

Sincerely,

/s/

Paul Bailey
President and Chief Executive Officer

[1] See 82 Fed. Reg. 17,793 (April 13, 2017) (EPA notice requesting submission of comments on existing regulations pursuant to Executive Order 13777).

[2] ACCCE's members include electricity generators, coal producers, railroads, barge lines, and equipment suppliers.

[3] ACCCE, *Retirement of Coal-Fired Electric Generating Units as of February 25, 2017*.

[4] 80 Fed. Reg. 64,662 (Oct. 23, 2015).

[5] EPA, *Regulatory Impact Analysis for the Clean Power Plan Final Rule*, August 2015.

[6] ACCCE, Climate Effects of EPA's Final Clean Power Plan, August 6, 2015; Lomborg, Bjorn, "Impact of Current Climate Proposals," *Global Policy* (2015) doi: 10.1111/1758-5899.12295.

[7] 80 Fed. Reg. 64,510 (Oct. 23, 2015).

[8] *See, for example*, EPA, "Documentation for EPA Base Case v.5.13 Using the Integrated Planning Model" (November 2013), Tables 5-5 and 3-12, showing SO_2 removal of 96%, NO_x removal of 90%, mercury removal of 90%, and HCl removal of 99%. Particulate matter removal by electrostatic precipitators is well over 99%. (See Babcock and Wilcox, "Electrostatic Precipitator Delivers Maximum Efficiency," http://www.babcock.com/library/Documents/ps-422.pdf (2015)). And, regarding CO_2 emission rates, *see* Cichanowicz, J. Edward and Michael C. Hein, *Evaluation of CO_2 Emissions Rates from State-of-art Coal-fired Electric Generating Units (EGUs)*, February 26, 2014 (showing CO_2 emissions rates for supercritical coal units entering commercial operation since 2007 and burning bituminous and subbituminous coal of 1,700 - 1,900 lb./MWh). EIA, "Frequently Asked Questions," "How much carbon dioxide is produced per kilowatt-hour when generating electricity with fossil fuels"? (Last updated February 29, 2016). https://www.eia.gov/tools/faqs/faq.cfm?id=74&t=11 (showing 2014 average emissions rates for existing bituminous and subbituminous coal units of 2,070 lb./MWh and 2,160 lb./MWh, respectively).

[9] 80 Fed. Reg. 67,838 (Nov. 3, 2015). The Steam Electric ELGs apply to all steam-electric power plants, including nuclear and oil and gas-fired power plants. Our discussion is limited to coal-fired power plants.

[10] 82 Fed. Reg. 19,005 (Apr. 25, 2017).

[11] NIPSCO, *Northern Indiana Public Service Company 2016 Integrated Resource Plan*, November 1, 2016, Appendix A, Exhibit 3 (page 405 of pdf). South Carolina Public Service Authority, *$52,400,000 Santee Cooper: Revenue Obligations, 2016 Tax-Exempt Refunding Series C*, October 6, 2016, page 44.

[12] EPA, *Benefit and Cost Analysis for the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category*, September 2015.

[13] *See Utility Water Act Group Petition for Reconsideration of EPA's "Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category: Final Rule," 80 Fed. Reg. 67,838 (Nov. 3, 2015)*, March 24, 2017.

[14] 80 Fed. Reg. 21,302 (April 17, 2015).

[15] *See* 80 Fed. Reg. at 21,311-12 and 21,332-25.

[16] This CCR legislation was included in section 2301 of the Water Infrastructure Improvements for the Nation Act (WIIN Act), which was enacted into law on December 19, 2016.

[17] *See* 80 Fed. Reg. 21302, 21396-97 (April 17, 2015) (declining to adopt certain provisions for tailoring the groundwater and corrective action requirements).

[18] *See* 40 C.F.R. §257.101(a)(1) (imposing closure requirements for any violation of a groundwater protection standard).

[19] See EPA press release, "EPA Promotes Cooperation with States to Facilitate Safe Disposal of Coal Ash," May 1, 2017.

[20] For example, installation of state-of-the-art air emissions controls for a 500-MW coal unit would cost over half a billion dollars. See EPA, Documentation for Base Case v.5.13 Using the Integrated Planning Model: Emission Control Technologies, November 2013. The cost of retrofitting a scrubber on a 500 MW, 10,000 Btu/kWh heat rate coal-fired unit is reported to be $544/kW, while an SCR costs $266/kW, and a baghouse costs $202/kW. All three figures are in 2011$. We adjusted these costs to 2015$ using the Bureau of Economic Analysis Gross Domestic Product Implicit Price Deflator, yielding $580/kW for a scrubber, $280/kW for an SCR, and $213/kW for a baghouse. The total cost would be approximately $1,080/kW, or $540 million for a 500 MW unit.

[21] 81 Fed. Reg. 74,504 (Oct. 26, 2016).

[22] *See Petition for Reconsideration and Partial Stay of the Utility Air Regulatory Group, in the Matter of: Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS (81 Fed. Reg. 74504 (Oct. 26, 2016); EPA Docket No. EPA-HQ-OQR-2015-0500* (December 23, 2016) and Midwest Ozone Group, *Petition for Administrative Reconsideration of Updated Cross State Air Pollution Rule* (December 21, 2016).

[23] 82 Fed. Reg. 3078 (Jan. 10, 2017).

[24] *See, for example*, Petitioner Utility Air Regulatory Group's Nonbinding Statement of Issues, *Utility Air Regulatory Group v. United States Environmental Protection Agency*, No. 17-075, D.C. Circuit (Apr. 14, 2017).

[25] See, for example, *Petition of the Utility Air Regulatory Group to the Administrator of the United States Environmental Protection Agency for Partial Administrative Reconsideration of the Final Rule: Protection of Visibility: Amendments to Requirements for State Plans: Final Rule. 82 Fed. Reg. 3078 (Jan. 10, 2017)*, March 13, 2017.