



Electric
Reliability
Coordinating
Council

2001 M Street, NW
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February 26, 2018

Hon. Scott Pruitt, Administrator
Environmental Protection Agency
1200 Pennsylvania Ave NW
Washington, DC 20460

**Re: State Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units
Docket ID No. EPA-HQ-OAR-2017-0545**

Dear Administrator Pruitt:

The following comments on the Environmental Protection Agency's (EPA) Advanced Notice of Proposed Rulemaking (ANPRM) on *State Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units* (EGUs) are filed on behalf of the Electric Reliability Coordinating Council (ERCC).¹ In the notice, EPA solicits comment on a number of questions dealing with whether and how to replace the Clean Power Plan (CPP).

ERCC is a group of power-generating companies that serve millions of businesses and households across the United States. ERCC and its members are dedicated to a balanced energy portfolio that ensures reliable and affordable electric power—an essential prerequisite for the protection of the environment, public health, and the economy. ERCC members work with businesses, household consumers, and government to improve energy efficiency and otherwise manage energy use.

As recent experience has shown, market forces have been a very effective way of reducing emissions of carbon dioxide (CO₂) from the U.S. power sector, and ERCC believes that market principles are the soundest basis upon which to sustainably reduce CO₂ emissions.² Even so, ERCC supports the development of a CPP replacement rule that is consistent with the authority that Congress has given EPA under section 111(d) of the Clean Air Act (CAA). Constructed properly, such a rule would further the considerable CO₂ emission reductions that have already been achieved by the nation's power sector while safeguarding system reliability.

I. Proper Application of Clean Air Act Section 111(d)

As ERCC will discuss in its upcoming comments on EPA's separate proposal to revoke the CPP, EPA went well beyond its statutory authority when it promulgated the Clean Power Plan – a fact that the Supreme Court obviously recognized when it stepped in to put the CPP on hold before it could be implemented.

¹ State Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units, 82 Fed. Reg. 61,507 (December 28, 2017) (hereinafter the "ANPRM"). Online at: <https://www.gpo.gov/fdsys/pkg/FR-2017-12-28/pdf/2017-27793.pdf>

² Jeffrey J. Anderson et al, Will We Always Have Paris? CO₂ Reduction without the Clean Power Plan, *Environmental Science & Technology* (2018)

Perhaps the most serious legal flaw was EPA's remarkable assertion that it had authority under section 111(d) to force the shutdown of existing coal-fired power plants and the construction of other kinds of electric-generating facilities favored by EPA (mostly wind and solar) to replace them. This assertion is flatly inconsistent with the language and structure of the CAA, with more than 40 years of regulatory history, and with a number of Supreme Court cases.

To be legally defensible and effective, a CPP replacement rule must be based on emission reductions that can be achieved by cost-effective physical or operational changes that can be made at a regulated power plant. Consistent with section 111(d), EPA should identify the best system of emission reduction (BSER) that can be used to control emissions from existing fossil fuel power plants and then allow states to set standards of performance based on this BSER.

A replacement rule must explicitly provide, as Congress intended, that states have discretion to consider a variety of factors, including costs and the remaining useful life of individual power plants, when they establish standards of performance for the existing plants within their borders. ERCC urges EPA to amend the current 111(d) general provisions to make it clear that EPA does *not* have authority to mandate any minimum level of emission reductions that a state must achieve. To have a satisfactory 111(d) state plan, a state must provide a reasonable explanation of the standards it has established – not show that such standards will comply with an EPA-mandated level of emission reduction. This is clearly what Congress intended when it adopted Section 111(d) back in 1970.

II. Calculation of Emissions Reduction Benefits

In the larger context of developing the replacement for the CPP, EPA must take care to ensure that the emission reduction benefits of the replacement rule are accurately represented. In the CPP as finalized in 2015, EPA substantially overstated the benefits that it would achieve by (1) using an inflated value for the "Social Cost of Carbon" (SCC); and (2) claiming health benefits of reducing concentrations of fine particulate matter (PM_{2.5}) below the levels that EPA itself has found sufficient to protect public health with an adequate margin of safety.

The Social Cost of Carbon (SCC)

ERCC understands that, in order to conduct an appropriate benefit-cost analysis, EPA must develop a methodology for estimating the benefits of reducing CO₂ emissions. However, the SCC that was used to promote the CPP is a one-sided assessment under which the mere allusion to CO₂ reductions can confer large benefits, even if the proposed action will have no meaningful effect on global warming and related environmental endpoints.

Given that the sole reason for regulating CO₂ is to reduce the risks posed by climate change, EPA must at the very least estimate the reduction in predicted average global temperatures and in sea level rise that would result from a replacement rule. This will make it possible for all Americans to understand whether the cost of the rule is justified by the extent to which it will reduce the risks of climate change.

If EPA also chooses to develop an SCC that places a dollar value on every ton of CO₂ reduced, then it must ensure the methodology for developing the value follows the long-standing, bipartisan OMB guidelines

for conducting benefit-cost analysis in Circular A-4. This means, among other things, that the Agency must utilize appropriate discount rates, focus on both the benefits and the costs that will occur in the U.S. (rather than comparing U.S. costs to worldwide benefits), and recognize the uncertainties associated with all the models used to estimate a SCC.

As a general matter, the SCC is a highly uncertain method for estimating the monetary value of CO² emissions reductions. Specifically, CO² damage functions, a key element of SCC models, are inherently arbitrary and unreliable. As Robert Pindyck, Professor of Economics at the MIT Sloan School of Management, has stated, the models used to calculate a SCC “allow the modeler to obtain almost any desired result because key inputs can be chosen arbitrarily.”³

To that end, ERCC supports the analysis undertaken in EPA’s Regulatory Impact Analysis (RIA) of the proposed repeal of the CPP, which recognizes the uncertainties associated with the SCC and estimates a wide range of possible values using appropriate discount rates. Furthermore, ERCC supports EPA’s use of the current SCC only as an “interim measure” until a more reliable metric is developed.⁴

PM2.5

Although the CPP was promoted as a rule to deal with climate change, the largest portion of the benefits that EPA claimed for the rule came from the supposed “co-benefits” of reducing concentrations of PM2.5 in the ambient air. PM2.5 has long been acknowledged as a pollutant that, at elevated levels, has adverse impacts on human health. For this reason, PM2.5 is stringently regulated as a “criteria pollutant” under Section 109 of the Clean Air Act (CAA). Under Section 109, EPA is required to go through a comprehensive scientific review every 5 years to establish national ambient air quality standards (NAAQS) for all criteria pollutants, including PM2.5. By law, EPA must set the NAAQS at levels that are “requisite to protect public health with an adequate margin of safety.”

Under the Obama Administration, EPA claimed that the CPP would save thousands of lives and provide enormous health benefits by reducing PM2.5 concentrations below the levels that the Obama EPA itself had found to be protective of public health with an adequate margin of safety. Going forward, as EPA develops a CPP replacement to regulate CO² emissions, it must evaluate the benefits of the rule by focusing on the benefits of reducing CO² emissions and not inflate the benefit estimates by counting reductions of PM2.5 below the level of the NAAQS.

Susan Dudley, a professor of regulatory studies at George Washington University, and a former senior OMB official, put it this way:

To a large extent the EPA gets its huge benefits by assigning high dollar values to reductions in emissions of fine particles that it models will occur as a side-effect of the

³ Pindyck, Robert S. “Climate Change Policy: What Do the Models Tell Us?” NBER Working Paper No. 19244, July 2013. Online at: <http://www.nber.org/papers/w19244>

⁴ “Regulatory Impact Analysis for the Review of the Clean Power Plan: Proposal.” EPA, October 2017, pg. 42. Online at: https://www.epa.gov/sites/production/files/2017-10/documents/ria_proposed-cpp-repeal_2017-10.pdf

required controls. These fine particles are already regulated through other EPA mandates, including standards the EPA updates regularly based solely on public health considerations. Yet, through what is essentially an accounting trick, the EPA calculates almost all of its monetary benefits for this rule from particle reductions well below the levels it has established as safe...Contrary to the EPA's claim that the rule will provide particular benefits to children, the premature deaths the EPA says will be averted are modeled to accrue to people with an average age of 80 years, who would live weeks or months longer, if at all, as a result of the regulations. This modeling is also suspect, because the EPA assumes causality where none can be explained, and makes other assumptions that overstate effects."⁵

Public Health Tradeoffs

Should any resulting replacement rule result in significantly increased energy costs, it will actually make public health worse. This is true in two ways: by increasing the cost of medical care and treatment; and, by imposing real threats on human health by suppressing economic growth and the improved health it brings.

With respect to treatment costs, U.S. hospitals spend \$8.5 billion annually on energy, often equaling between one and three percent of a hospital's operating budget. Furthermore, EPA estimates, in the U.S., the health sector is the second most energy-intensive commercial sector overall. Hospital administrators will have no choice but to pay attention to the cost of energy as surging energy costs will squeeze hospital budgets like never before. Without an adequate supply of affordable power, the healthcare sector and the American public can expect increasing costs that consumers can ill-afford.

Any replacement rule must avoid the potential for unemployment impacts present in the CPP. Heritage Foundation analysts used a derivative of the federal government's National Energy Modeling System to estimate just how much the Clean Power Plan would cost Americans by 2035. The CPP could have resulted in an overall average annual shortfall of nearly 400,000 jobs — more than half of them in manufacturing, and increases of 13 percent to 20 percent in household electricity expenditures.⁶

Undermining economic recovery and job creation is detrimental to public health. A report to Congress' Joint Economic Committee by Dr. Harvey Brenner showed the impacts of unemployment on public health. Brenner found that a one percent increase in the unemployment rate was associated with a two percent increase in premature deaths. In 2004, Brenner used his econometric models to estimate the public health

⁵ See: <http://thehill.com/blogs/congress-blog/energy-a-environment/200539-epas-risks-outweigh-rewards-for-new-mercury-rule>

⁶ Nicolas Loris, Clean Power Plan Did Little to Help the Environment; Good Riddance, April 17, 2017, at <http://www.heritage.org/environment/commentary/clean-power-plan-did-little-help-the-environment-good-riddance>

results from reducing coal-generated electricity. For example, with a substantial reduction in coal-fired power, Brenner found the result would be between 170,000 and 300,000 premature deaths.⁷

III. New Source Review (NSR)

In the ANPRM, EPA requests comment on the impact that the New Source Review (NSR) program could have on a replacement rule.⁸ Established as part of the 1977 Clean Air Act (CAA) Amendments, NSR is a permitting program intended to protect and maintain air quality standards while still allowing for construction or expansion of manufacturing facilities, power plants, and other industrial facilities.

This program is relevant to existing power plants because such plants are required to go through a long, costly, and uncertain NSR permitting process if they make a physical or operational change that will cause a significant increase in emissions.

It is anticipated that a CPP replacement rule will require existing power plants to make physical or operational changes that will improve their efficiency *and thus reduce their emission rates*. Yet the current NSR program is a significant impediment to energy efficiency projects because EPA, in a number of NSR enforcement cases, has argued that energy efficiency projects will actually increase emissions and trigger NSR because efficient plants will be less costly to operate and will thus operate more frequently.

As a result, the owners and operators of power plants are discouraged from making improvements that would increase the efficiency of their plants. The National Coal Council (NCC), a federal advisory committee to the U.S. Secretary of Energy, reported on the importance of improving efficiency of existing power plants: “Improving the efficiency of existing power plants plays an important role in meeting economic and environmental objectives. Improving thermal efficiency can provide two important benefits that lower operating costs: the reduction of fuel consumption and the reduction of emissions.”⁹ NCC has found that the very uncertainty created by misapplication of NSR “works as a powerful disincentive for utilities... to conduct research necessary to develop additional efficiency innovations.”¹⁰ NCC concluded:

Achieving the most significant improvements in efficiency may be deterred by concern that the required equipment modifications and improvements will be characterized a “major modification” under NSR regulations, and result in additional environmental requirements that would be costly and reduce the efficiency gains.¹¹

Former EPA Administrator Christine Todd Whitman also observed that a more reasonable approach to applying NSR “will promote energy efficiency, plant safety, and modernization at refineries, power plants,

⁷ For more, see <http://www.electricreliability.org/ercc-comments-submitted-epa-new-source-performance-standards-power-plant-carbon-emissions>

⁸ ANPRM at 61509

⁹ The Burdens of New Source Review, National Coal Council, 2017, at 1

¹⁰ *Id.*

¹¹ *Id.* at 2

and other industrial facilities across the country.”¹² For any rule requiring efficiency upgrades of existing EGUs to be feasible, there must be clarity that energy efficiency improvements are not subject to NSR; otherwise the cost of making such improvements could be substantially greater.

ERCC has always believed in the singular importance of policies that ensure electric reliability and resilience. The independent, non-profit Regional Transmission Organization for New England emphasized the point in no uncertain terms: “A reliable supply of electricity is a foundation of our prosperity and quality of life. Without it, our world literally grinds to a halt – businesses cannot plan and operate productively, hospitals and schools cannot provide their essential services, and residents cannot depend on the electricity they need simply to live their daily lives. Without reliable electricity, the financial and societal costs would be enormous.”¹³

According to the Centers for Disease Control and Prevention, the question of adequate electric reliability likewise is “essential for food safety, safe drinking water, and protection against health consequences of extreme heat and cold.”¹⁴

As EPA develops a rule to replace the CPP, the Agency must consider the roadblocks and unintended consequences of the NSR program as it has been implemented in recent years. While Congress is investigating options for legislative relief, we support EPA’s continued efforts to address the shortcomings of the current program through administrative action. ERCC looks forward to working with EPA to examine avenues for improving the NSR program.

¹² Hayward, Steven E. “Making Sense of ‘New Source Review.’” American Enterprise Institute, Environmental Policy Outlook, July-August 2003.

¹³ Energy Consumers Relief Act: Legislative Hearing before the Committee on Energy and Commerce, Subcommittee on Energy and Power, U.S. House of Representatives, 113th Cong. at 181 (April 12, 2013) (statement of the Electric Reliability Coordinating Council)(ERCC statement citing ISO-New England and independently concluding, “The downside impacts of reduced electric reliability are substantial and must be taken into account in any responsible analysis” of environmental policy)

¹⁴ Letter from Hon. Andrew P. Harris, MD, Member of Congress, et al., to Gina McCarthy, Administrator, U.S. EPA at 2-3 (Mar. 11, 2014).

IV. Conclusion

ERCC is pleased to offer these comments. We support EPA's effort to craft a CPP replacement rule that focuses on cost-effective emissions reduction measures applied at the source. Should EPA develop such a rule while avoiding the pitfalls of the original CPP, EPA will further the emissions reductions achieved by the nation's power generation sector and safeguard the reliability of our electricity supply.

Respectfully Submitted,

A handwritten signature in black ink, reading "Scott Segal", with a stylized flourish at the end.

Scott H. Segal, Director
Electric Reliability Coordinating Council