

Coauthored with <u>Nat Logar</u>

Today is the close of EPA's public <u>comment period</u> on its proposal to repeal the Clean Power Plan. Though EPA's decision to backtrack from the rule hardly seems in doubt, it is still important to state that repealing the Clean Power Plan is a terrible idea. My colleagues Ann Carlson, Nat Logar and I, together with William Boyd, submitted a <u>comment letter</u> making this argument with and on behalf of a group of electricity grid experts from around the country.

The Clean Power Plan is the regulation enacted by EPA, in its pre-Pruitt days, to limit emissions of greenhouse gases from existing fossil-fuel-fired power plants. It was one in a series of steps that EPA took to control climate pollution following the U.S. Supreme Court's holding that greenhouse gases are pollutants under the Clean Air Act. The Clean Power Plan exercises authority under the Clean Air Act Section 111 to control emissions of air pollutants that endanger health from certain classes of new and existing sources. (We have written pretty extensively about the rule on Legal Planet: see <u>here</u> and <u>here</u> for more background.) It was, and remains, the only significant federal regulation that directly limits carbon dioxide pollution from existing power plants. So obviously it has to go, under the Trump Administration and Pruitt's EPA. Early in his tenure, President Trump issued an <u>executive order</u> directing EPA to reconsider the Clean Power Plan, and EPA obligingly proposed its repeal.

Our comment letter (based in part on an <u>amicus brief</u> we filed in the related D.C. circuit litigation) defends the Clean Power Plan as a very well-designed approach to reducing carbon dioxide from existing power plants. We explain that the Clean Power Plan respects

and effectively harnesses the unique features of the electric grid and is consistent with the twin aims of the grid: power reliability and affordability for all consumers. The design of the Clean Power Plan is eminently sensible: it reflects the regional nature of the power system, facilitates familiar compliance approaches such as emissions trading, and gradually accelerates industry trends already underway, as aging coal-fired units are replaced with cheaper, cleaner natural gas and renewable energy generation. We argue that repeal of the Clean Power Plan would impede, not advance, power reliability and affordability. To support these arguments, we draw on the expertise of Brian Parsons, Benjamin F. Hobbs, Brendan Kirby, Kenneth J. Lutz, James D. McCalley, five national experts on the U.S. electricity grid. These signatories have expertise in the structure, operation, and economics of the U.S. power system; integration of low- and zero-carbon generation sources into the power system; power-system reliability and planning; and electric grid modernization.

In particular, our experts criticize EPA's proposed <u>alternative approach</u>. EPA remains legally obligated, by Supreme Court precedent and its own findings about the dangers of climate change, to control greenhouse gases under the Clean Air Act. EPA's path forward after repealing the Clean Power Plan, therefore, isn't clear. The agency has said that it is considering issuing a substitute rule that takes a different, and much more limited, approach to regulating carbon dioxide from power plants, one that relies only on tweaks to on-site equipment, such as making heat-rate improvements at coal-fired plants. Here's a key passage from our comment letter critiquing that tack:

If it proceeds with the proposed repeal using the rationale suggested in its notice, it appears EPA will limit itself to considering only certain on-site measures for achieving pollution reduction. EPA appears to be considering only changes to the physical equipment at generating units, such as heat-rate improvements at coal-fired power plants, in [designing its new rule]. This would exclude from discussion other on-site measures, such as reduced utilization of the dirtiest plants and co-firing/fuel switching, each of which can be accomplished on site but gets little attention in EPA's proposal.

The limited on-site measures that EPA focuses on would not sensibly and economically reduce power-sector  $CO_2$  emissions over the coming decades. Alone, they would influence the emissions intensity of individual units by only a few percentage points, and the precise amount of reduction would depend on the generators' marginal cost and resulting redispatch relative to other supply sources. In fact, use of heat-rate improvements alone could create an emissions "rebound effect," during which coal facilities implement emissions improvements but operate more frequently and for longer stretches, undermining pollution control efforts. Charles Driscoll et al., *US power plant carbon standards and clean air and health co-benefits*, 5 Nature Climate Change 535, 537 (May 4, 2015). Combining heat-rate improvements with incentives to reduce coal generation, as EPA did in the CPP, ensures more meaningful and cost-effective emissions reductions.

If EPA were to consider a more full range of site-constrained measures in designing the [replacement rule], such as carbon capture and sequestration, cofiring, fuel switching, heat rate improvements, and reduced utilization, the resulting rule could cause the same shifts among generation sources that EPA appears to be concerned about, but at potentially greater total cost than the CPP would impose.

The EPA may or may not be listening, but it's important to keep the facts straight: Controlling climate pollution from existing power plants is important and necessary, and EPA will be hard-pressed to create a more workable, effective, affordable way to do that than via the Clean Power Plan.