Guest Bloggers Alice Kaswan and Kirsten Engel: Untapped Potential: Emissions Reduction Initiatives Beyond Clean Power Plan Are Warranted, Workable | 1

Guest post by <u>Alice Kaswan</u> (University of San Francisco School of Law), <u>Kirsten H. Engel</u> (University of Arizona School of Law)

It's been a month since the D.C. Circuit heard oral arguments on the Clean Power Plan, and the nation is in wait-and-see mode. But our report, <u>Untapped Potential: The Carbon Reductions Left Out of EPA's Clean Power Plan</u>, released today by the Center for <u>Progressive Reform</u>, shows that, even if the Plan is upheld, continued climate initiatives to control existing power plant emissions are warranted and workable.

Our analysis demonstrates that EPA identified numerous available reduction opportunities that were not incorporated into the Clean Power Plan's requirements. By 2030, these opportunities could have reduced emissions from existing sources by almost 400 million tons of carbon per year in comparison with the Clean Power Plan's requirements.

Whether EPA should or shouldn't have incorporated them into the Clean Power Plan is not the point. What is the point: given the pressing risks of climate change and extensive data on achievable reduction opportunities, policymakers should not just "wait-and-see" what happens to the Clean Power Plan. Continued administrative and legislative efforts to reduce emissions, including emissions from existing power plants, are needed regardless of the Clean Power Plan's fate.

Our report focuses on a little-discussed methodological choice that had significant ramifications for the Clean Power Plan's stringency: EPA's decision to establish relatively weak uniform national performance rates for coal and natural gas plants that left out significant reduction opportunities in the western states.

In developing the Plan, EPA initially assessed regional opportunities, focusing on the nation's regional grids: the Eastern, Western, and Texas Interconnections. Based on the opportunities it identified, EPA developed achievable regionally tailored performance rates, rates that diverged dramatically given much greater reduction opportunities in the west. EPA determined that, in the western states and Texas, coal-fired power plants could reduce their effective emissions rates significantly by taking advantage of extensive opportunities to shift generation to much less polluting natural gas plants and by developing available renewable energy opportunities.

As a result, after taking into account these reduction opportunities, the effective emissions performance rates for coal-fired power plants was 360 pounds of carbon dioxide per megawatt hour of electricity generated (lbs CO₂/MWh) in the Western Interconnection and just 237 lbs CO₂/MWh in the Texas Interconnection. By comparison, fewer reduction

opportunities in the Eastern Interconnection resulted in much higher allowable emissions: an effective emissions rate of 1,305 lbs CO_2/MWh in the Eastern Interconnection.

Instead of applying the regionally tailored performance rates, EPA selected the least stringent regional rates – from the Eastern Interconnection – and applied them nationwide. In other words, even though EPA had determined that coal-fired power plants could sharply reduce their effective emissions – down to $360~\rm lbs~CO_2/MWh$ – in the western states, these states and their utilities are allowed, under the Clean Power Plan, to emit at much higher levels. Most importantly, the Clean Power Plan does not incorporate or incentivize many of the achievable reductions, through shifts to natural gas or investments in renewables, that EPA had identified.

The gap between what EPA required and what EPA determined could be done has important implications for the U.S. electric power sector and U.S. climate policy:

- Had EPA applied regional performance rates rather than weak uniform rates, 2030 carbon emissions would have been 52 percent below 2005 baseline emissions, rather than the 38 percent below 2005 emissions to be achieved by the Clean Power Plan. Our report indicates that, if regional rates incorporating available reduction mechanisms had been used, 2030 carbon emissions from existing sources would be 1,283 million tons, rather than the 1,670 million tons achieved by the Plan, a difference of almost 400 million tons of carbon per year.
- The weak requirements mean that the Clean Power Plan will not sufficiently induce states and utilities to take advantage of existing opportunities for cleaner energy. EPA identified extensive opportunities to shift to natural gas and develop renewables in the western states, but because EPA did not use the performance rates premised on these opportunities, they are not reflected in state targets. For example, EPA explicitly observes that 160 million MWh of achievable renewable energy opportunities were not incorporated into the performance rates.
- Western state claims that the existing Clean Power Plan is too onerous should be taken with a grain of salt. While the targets may be challenging to some individual states, these states should be aware that, had EPA applied the regionally tailored performance rates, their targets would have been substantially more demanding.
- If it is upheld by the courts, the Clean Power Plan provides an important first step, but not a final fix for power plant emissions. Federal, state, and local climate initiatives, including further measures to address power plant emissions,

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remain essential in the struggle to reduce climate change and its devastating impacts.

In terms of next steps, we do not argue that the Clean Power Plan should be re-opened; EPA undertook a major effort and EPA and the states should move forward with its important contribution. Nor do we think that the regional rates would necessarily have been the ideal strategy: EPA would have encountered potential legal questions in applying regional rather than uniform rates, and would most certainly have encountered withering political opposition from the western states, which would have received much more demanding targets.

Instead, our "what if" analysis of the use of regional rates is designed to highlight the gap between the reduction opportunities available on our regional grids and the reductions actually expected from the Clean Power Plan. The analysis shows that, even if not doable through the Clean Power Plan, we can do more to reduce existing source emissions.

At the regional level, states and regions should continue to explore emission-reducing strategies that go beyond the Clean Power Plan. A critical component of such strategies, however, will be ensuring that regional reductions beyond Clean Power Plan goals are "retired," so they do not simply enter into national allowance pools and end up being purchased by utilities choosing to maintain heavy carbon emissions. If "extra" reductions in one place merely enable more emissions elsewhere, then extra regional efforts will not result in effective net emissions reductions.

At the federal level, congressional climate action, however remote it may appear at present, remains critical. We are not "done" with power sector emissions, and policymakers should continue to explore national strategies to require or incentivize the opportunities that were revealed but not incorporated into the Clean Power Plan.

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