

# *Fordham Environmental Law Review*

---

*Volume 30, Number 2*

2018

*Article 3*

WINTER 2018

---

## The Affordable Clean Energy Rule and the Past, Present and Future of Climate Change Regulation of the U.S. Power Industry

David Zilberberg\*

\*Davis Polk & Wardwell LLP

Copyright ©2018 by the authors. *Fordham Environmental Law Review* is produced by The Berkeley Electronic Press (bepress). <https://ir.lawnet.fordham.edu/elr>

# THE AFFORDABLE CLEAN ENERGY RULE AND THE PAST, PRESENT AND FUTURE OF CLIMATE CHANGE REGULATION OF THE U.S. POWER INDUSTRY

*David Zilberberg\**

## INTRODUCTION

On August 31, 2018, the United States Environmental Protection Agency (“EPA”) published a proposed rule to replace the 2015 Obama-era Clean Power Plan<sup>1</sup> (“CPP”) with the Affordable Clean Energy Rule<sup>2</sup> (the “ACE Rule”). While both rules are designed to regulate the greenhouse gas (“GHG”) emissions from fossil fuel-fired power plants pursuant to EPA’s authority under Section 111(d) of the Clean Air Act<sup>3</sup> (“CAA”), they are dramatically different in scope and ambition: whereas the CPP proposed to limit GHG emissions by mandating fundamental shifts in the way the nation generates electricity, the ACE Rule is limited to measures aimed at improving

---

\* Mr. Zilberberg is counsel in the Corporate Department at Davis Polk & Wardwell LLP, practicing in the Environmental Group. He advises clients with respect to environmental, sustainability and mass tort liability issues in connection with all aspects of complex corporate and real estate transactions.

This article is based in part on a Davis Polk & Wardwell LLP memorandum by David Zilberberg, Loyti Cheng, Betty Moy Huber, and Michael Comstock entitled *EPA’s New Greenhouse Gas Emissions Rule for U.S. Power Sector – Legal Considerations and Business Impacts* (available at: <https://www.davispolk.com/publications/epa%E2%80%99s-new-greenhouse-gas-emissions-rule-us-power-sector-%E2%80%93-legal-considerations-and>) [<https://perma.cc/XPK5-R38J>].

1. Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662, 64,697 (Oct. 23, 2015) (to be codified at 40 C.F.R. pt. 60).

2. Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program, 83 Fed. Reg. 44,746 (proposed Aug. 31, 2018) (to be codified 40 C.F.R. pts. 51, 52, and 60).

3. 42 U.S.C. § 7411(d) (2012).

the efficiency and prolonging the lifespan of coal-fired power plants. EPA is currently considering the numerous comments submitted on the proposed rule during the sixty-day comment period that ended on October 31, 2018 and reportedly intends to finalize the rule by March 2019.<sup>4</sup>

This Article provides an overview of the CPP and ACE Rule, including a discussion of their history and key provisions, as well as a consideration of the possible future trajectory of federal climate change regulation of the power sector. Section I discusses the history of climate change regulation of power plants leading up to the publication of the CPP. Section II discusses the key provisions of the CPP and the legal challenges that led to a stay of the CPP. Section III provides an overview of the ACE Rule and the key legal considerations it raises. Section IV discusses the key legal issues likely to be addressed in future lawsuits challenging the ACE Rule. Finally, Section V discusses the implications of the ACE Rule for the environment and industry as well as the possible directions of climate change regulation of the power sector in the future.

## I. THE ROAD TO REGULATION OF CLIMATE CHANGE REGULATION OF POWER PLANTS

### *A. The 2006 new source performance standards for power plants*

The CPP and the ACE Rule have their roots in the decades-long efforts by states and environmental groups to compel EPA to regulate GHG emissions under the CAA that began in the late 1990s. In the mid-2000s, EPA began developing revised air emissions standards, known as “new source performance standards,” or NSPS, which are essentially emissions targets for power plants under Section 111(b) of the CAA. Section 111(b) of the CAA requires EPA to list categories of stationary sources that cause or contribute significantly to air pollution which may reasonably be anticipated to endanger public health and to issue NSPS for new or modified sources of emissions in such categories based on what EPA determines to be the “best system of emissions reduction,” or BSER. A group of states and organizations

---

4. Abby Smith, *Power Rule Repeal, Replacement Headed for Finish Line Early 2019*, BLOOMBERG LAW (October 17, 2018), <https://www.bna.com/power-rule-repeal-n73014483402/> [<https://perma.cc/EH2B-FSSH>].

supporting climate change regulation urged EPA to include NSPS for GHGs (such as CO<sub>2</sub>) in its power plant rules. However, the final rule, issued in 2006 (the “2006 Power Plant NSPS”), concluded that EPA did not have the legal authority under the CAA to regulate climate change.<sup>5</sup> The states and organizations sued.<sup>6</sup>

*B. The political and legal tides turn*

In the meantime, two important developments occurred. First, in 2007, the United States Supreme Court decided *Massachusetts v. EPA*,<sup>7</sup> which opened the door to EPA regulation of GHG emissions under the CAA by ruling that GHGs constitute “air pollutants” under Section 202(a) of the CAA, which relates to emissions from motor vehicles. The Supreme Court determined that under the CAA, EPA was required to regulate GHG emissions from vehicles if EPA determined that such emissions endanger the public health or welfare. Second, in 2008, Barack Obama was elected President on a platform that advocated regulation of climate change. In 2009, following the dictates of *Massachusetts v. EPA*, the EPA issued a finding that GHGs in the atmosphere from vehicle emissions are likely to endanger the public health and welfare (the “Endangerment Finding”), thereby triggering a requirement to regulate GHG emissions from vehicles.<sup>8</sup>

Against this backdrop, in 2010, EPA decided to settle the legal challenge to the 2006 Power Plant NSPS by agreeing to issue NSPS for GHG emissions from new and modified fossil fuel-fired power plants under Section 111(b) of the CAA.<sup>9</sup> EPA also agreed to formulate emissions guidelines for GHG emissions from *existing* fossil fuel-fired power plants under Section 111(d), a provision of the CAA which requires EPA to develop BSER for existing sources that are the subject of NSPS under Section 111(b). This second step put an

---

5. Standards of Performance for Electric Utility Steam Generating Units, Industrial-Commercial-Institutional Steam Generating Units, and Small Industrial-Commercial-Institutional Steam Generating Units, 71 Fed. Reg. 9,866, 9,869 (Feb. 27, 2006) (to be codified 40 C.F.R. pt. 60).

6. *See* *New York v. EPA*, No. 06–1322 (D.C. Cir. Sept. 24, 2007).

7. 549 U.S. 497 (2007).

8. Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496 (Dec. 15, 2009).

9. Proposed Settlement Agreement, Clean Air Act Citizen Suit, 75 Fed. Reg. 82,392 (Dec. 30, 2010).

exceedingly challenging problem on EPA's agenda: how to regulate GHG emissions from the nation's enormous and varied fleet of fossil fuel-fired power plants whose very design requires the combustion of carbon-based fuels?

## II. THE CPP

### A. Overview of the CPP

In August 2015, EPA issued both the CPP as well as NSPS for new fossil fuel-fired power plants (the "2015 Power Plant NSPS").<sup>10</sup> At that point, the Obama Administration, having failed to shepherd climate change legislation through Congress, considered the CPP to be a central element of its Climate Action Plan, which pulled together all of the administration's climate change initiatives into a single strategy document. According to EPA, the CPP would reduce CO<sub>2</sub> emissions from the power sector by thirty-two percent by 2030 relative to 2005 emissions.<sup>11</sup>

The CPP employed a novel approach to using Section 111(d) of the CAA to regulate GHG emissions from the power sector. Under Section 111(d), EPA is required to determine BSER in establishing emissions guidelines for existing sources in a regulated category, which the states are to use as the basis of a plan (subject to EPA approval) that establishes standards of performance for the emissions. Under the CPP, EPA determined that BSER for CO<sub>2</sub> emissions from the fossil fuel-fired power sector consisted of three measures, or "building blocks," that in combination would reduce emissions to meet the CPP's targets. These building blocks included the following:

1. Improving the "heat rate" of coal-fired power plants (i.e., lowering the amount of fuel combusted per unit of energy),

---

10. Standards of Performance for Greenhouse Gas Emissions From New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,510 (Oct. 23, 2015) (to be codified at 40 C.F.R. pts. 60, 70, 71, and 98). These standards require that new coal-fired power plants include carbon capture and sequestration ("CCS"), a new, expensive technology that has had limited commercial implementation, and that new natural gas-fired power plants include natural gas combined cycle ("NGCC") technology. *See id.* at 64513-64515.

11. *See FACT SHEET: Overview of the Clean Power Plan*, EPA <https://archive.epa.gov/epa/cleanpowerplan/fact-sheet-overview-clean-power-plan.html> [<https://perma.cc/J6G7-ANZN>] (last visited Dec. 9, 2018).

2. Shifting electricity generation from coal-fired power plants to lower emitting existing natural gas combined cycle plants, and

3. Shifting electricity generation from fossil fuel-fired power plants to new wind, solar and other renewable sources.

Notably, while the first building block entails emissions reduction measures that an individual power plant could implement (i.e., efficiency improvements), the second and third building blocks envision the shifting of electricity generation from one category of power plants (i.e., coal-fired plants) to other categories (i.e., natural gas combined cycle plants and renewables). Those latter measures effectively call for limiting the operation of an individual power plant (or shutting it down outright) and running another one instead, which can only be implemented on an industry-wide basis as a practical matter. EPA's decision to designate such "beyond the fence line" measures as BSER under Section 111(d) would be the basis of one of the key legal objections to the CPP identified by CPP opponents as discussed further below.

EPA then established interim and final CO<sub>2</sub> emission performance rates for two categories of power plants by applying these building blocks to the nation's fleet of power plants: (i) fossil fuel-fired steam generating units (generally coal- and oil-fired power plants); and (ii) natural gas combined cycle, or NGCC, units. The CPP translated these rates as three alternative standards, each of which were designed to achieve equivalent emissions reductions: as statewide rate-based emissions reduction targets (i.e., reductions in pounds of CO<sub>2</sub> emitted per megawatt of electricity generated), state-wide mass-based emissions reduction targets (i.e., reductions in the aggregate short tons of CO<sub>2</sub> emitted) or emissions performance targets applicable to individual power plants. States were given the option of choosing any of these targets.

In accordance with Section 111(d), the CPP required states to prepare and submit state implementation plans ("SIPs") to EPA for approval, describing how they intended to comply with the targets. States were given flexibility to develop their own strategies to meet the targets or use the building blocks identified by EPA. In addition, the CPP permitted states to participate in regional initiatives to meet the emissions targets, such as state or regional CO<sub>2</sub> emissions credit trading systems. Regulated sources were required to begin meeting interim targets by 2022 and to meet the final targets by 2030.

EPA also released a proposed federal implementation plan (“FIP”) for states that failed to prepare a SIP that complied with the CPP’s standards. The FIP consisted of emission caps directly applicable to regulated power plants, along with a trading system that allowed a power plant with GHG emissions above the cap to purchase credits from other participants. The FIP was also presented as a model for states to follow in designing their own SIPs.

The CPP also included a proposed incentive program rewarding states that develop wind or solar prior to the 2022 initial compliance date. States would have received emissions allowances based on the amount of electricity generated by wind or solar projects that meet the requirements of the program, which in turn were to be used as a credit against their CO<sub>2</sub> emissions.

### *B. Legal challenges to the CPP*

#### *i. The D.C. Circuit petition*

The day it was published in the Federal Register, over two dozen states and many industry groups, energy companies, utilities and public policy organizations filed petitions challenging the CPP in the United States Court of Appeals for the District of Columbia Circuit (the “D.C. Circuit”).<sup>12</sup> The petitioners were opposed by EPA as well as a comparably large number of states and other parties. While the thousands of pages of briefing addressed a myriad array of arguments, some general and some applicable to specific elements of the rule or individual parties, highlighted below are several of the central legal issues addressed in the litigation.

---

12. Many of the petitions challenging the Clean Power Plan have been consolidated into one case: *West Virginia v. EPA*, No. 15-1363 (D.C. Cir. docketed Oct. 23, 2015). Access to the docket is available through Public Access to Court Electronic Records (PACER), as well as the Climate Change Litigation Database, established by the Sabin Center for Climate Change Law of Columbia University in collaboration with Arnold & Porter Kaye Scholer LLP. *West Virginia v. EPA*, CLIMATE CHANGE LITIGATION DATABASE, <http://climatecasechart.com/case/west-virginia-v-epa/> [<https://perma.cc/JD8P-GCN6>] (last visited Dec. 9, 2018); *see also* LINDA TSANG, & ALEXANDRA M. WYATT, CONG. RESEARCH SERV., 7-5700 CLEAN POWER PLAN: LEGAL BACKGROUND AND PENDING LITIGATION IN WEST VIRGINIA V. EPA 1 n.3 (2017).

*a. Chevron deference*

Although agency interpretation of federal statutes is normally entitled to deference under *Chevron v. Natural Resources Defense Council, Inc.*,<sup>13</sup> petitioners argued that given the broad jurisdiction being asserted by the EPA, the significance of the economic and political impact of the CPP and the lack of clear congressional authorization of such a rule, deference to EPA interpretation is not called for. The respondents contended that the CPP falls squarely within EPA's authority to interpret the CAA and that *Chevron* is regularly applied to EPA regulations that are of comparable significance.

*b. "Beyond the fence line" emissions reduction measures under Section 111 of the CAA*

As noted above, under the CPP, EPA determined that BSER for existing fossil fuel-fired power plants includes "building blocks" that call for shifting electricity generation from coal to other types of energy sources, i.e., "beyond the fence line." Petitioners argued that the text and statutory context of Section 111(d) limit its scope to measures that can be implemented at a particular source. The respondents argued that the term "system" in the phrase "best system of emissions reductions" is intentionally broad to provide EPA with the flexibility to develop a range of methods to reduce emissions, including measures calling for shifting generation from a higher polluting source to a lower polluting source.

*c. The impact of Section 112 of the CAA on the scope of Section 111 of the CAA*

Due to an odd legislative glitch, the correct text of Section 111 of the CAA is subject to uncertainty due to the fact that the House and Senate versions of the 1990 amendments to the CAA were never reconciled. Petitioners argued that the House version of Section 111(d) (which they contend is the correct one) denies EPA the authority to regulate CO<sub>2</sub> emissions from existing power plants because it provides that source categories regulated under Section 112 of the CAA (which governs hazardous air pollutants) cannot be regulated under Section

---

13. 467 U.S. 837 (1984).



111(d).<sup>14</sup> Because power plants are already subject to regulation under Section 112, power plants are exempt from regulation under Section 111(d). The respondents argued that the Senate version provides that *pollutants* regulated under Section 112 cannot be regulated under Section 111(d). Given that CO<sub>2</sub> emissions have not been the subject of Section 112 regulation, 111(d) does not preclude the regulation of CO<sub>2</sub> emissions from existing power plants.<sup>15</sup>

Notwithstanding the thousands of pages of legal briefing, the CPP will most likely never be addressed by the federal courts nor go into effect due to a series of remarkable legal and political developments that followed.

#### ii. The Supreme Court stays the CPP

Many of the petitioners asked the D.C. Circuit to stay the CPP while their challenge was pending. In January 2016, a panel of the D.C. Circuit denied the stay on the basis that the “[p]etitioners have not satisfied the stringent requirements for a stay pending court review.”<sup>16</sup> Petitioners then appealed the decision to the United States Supreme Court, which in a 5–4 decision reversed the D.C. Circuit and stayed the CPP until a decision on the merits is reached.<sup>17</sup> Some observers noted that the U.S. Supreme Court had never before overruled a decision by a lower court to deny staying a final agency rule.<sup>18</sup>

### III. THE 2016 ELECTION AND THE NEW ADMINISTRATION’S REVERSAL ON CLIMATE CHANGE REGULATION

#### A. *The Trump Administration’s pro-fossil fuel agenda*

The election of Donald J. Trump as President in 2016 presaged a dramatic shift in the federal government’s approach to climate change regulation. As a candidate, Trump advocated an economic platform focused on boosting domestic fossil fuel-based industries, including

---

14. 42 U.S.C. § 7411(d)(1)(A)(i). The House version of the amendment was passed as Pub. L. No. 101–549, § 302(a), 104 Stat. 2399, 2574 (1990) and is reflected in the version published in the United States Code.

15. *See* Pub. L. No. 101–549, § 108(g), 104 Stat. 2399, 2467 (1990).

16. *West Virginia v. EPA*, No. 15-1363, slip op. at 2 (D.C. Cir. Jan. 21, 2016).

17. *See West Virginia v. EPA*, 136 S. Ct. 1000 (Feb. 9, 2016).

18. *See* CONG. RESEARCH SERV., CLEAN POWER PLAN, *supra* note 12, at 18 n.127.

coal, oil, and natural gas. A central plank in his platform was a pledge to roll back President Obama's climate change agenda.

Shortly after his inauguration, in March 2017 President Trump signed a sweeping executive order aimed at reversing signature portions of the Obama Administration's key climate change initiatives.<sup>19</sup> Framed as a series of measures to bolster American energy independence, economic growth, and job creation, the executive order pledged to undo nearly two dozen Obama-era regulations, executive actions, policies, and guidance documents, among them the CPP as well as the 2015 Power Plant NSPS.<sup>20</sup>

In light of its plan to repeal the CPP, EPA and the other petitioners challenging it convinced the D.C. Circuit to hold the litigation in abeyance as the rulemaking process played out. With the CPP stayed, and the litigation challenging it indefinitely on hold, there was effectively no meaningful chance that the CPP would ever go into effect.

In the wake of the order, EPA faced a number of options on how to proceed with respect to the CPP as well as other climate change rules targeted by the order, including the 2015 Power Plant NSPS. Would it reverse the Endangerment Finding and adopt the position taken by the Bush administration that EPA has no authority to regulate climate change and simply repeal the CPP as well as the NSPS? Given the factual record compiled by the EPA in support of the Endangerment Finding, reversing it would seem to be an uphill battle. Would it repeal the CPP only and adopt the position of the petitioners in the CPP litigation that the House version of Section 111(d) precludes regulation of CO<sub>2</sub> from existing power plants? Courts may question EPA's "about face" (as EPA previously interpreted the CAA in precisely the opposite manner in promulgating the CPP) or simply reject this reading of the CAA as unreasonable. Or would it replace the CPP with a more modest version?

---

19. Exec. Order No. 13783, 3 C.F.R. 312 (2017).

20. *Id.*

*B. The CPP repeal proposal*

EPA foreshadowed its approach in its proposal to repeal the CPP published in a Federal Register notice in late 2017.<sup>21</sup> In the notice, EPA explained that it now believed that under Section 111 of the CAA, BSER is limited to measures “that can be applied to or at the source and not something that the source’s owner or operator can implement on behalf of the source at another location.”<sup>22</sup> Accordingly, “beyond the fence line” measures such as those set forth in the CPP should not constitute BSER. EPA made a number of arguments in support of its position. First, EPA asserted, the key statutory phrases of Section 111, and in particular the phrase “establishes standards of performance for any existing source” suggests measures that can be implemented at the source of emissions.<sup>23</sup> Second, EPA asserted that this interpretation of BSER is supported by Section 111’s legislative history, EPA’s own prior interpretations of Section 111, and other provisions of the CAA.<sup>24</sup> Finally, EPA asserted that its interpretation of BSER avoids involving EPA in energy policy, which is the primarily the responsibility of FERC and the states.<sup>25</sup>

The implication of the repeal proposal was clear: EPA did not intend to revisit its authority to regulate climate change by reconsidering the Endangerment Finding or assert that it could not regulate GHG emissions from existing power plants due to the existence of regulations of the source category under Section 112. Instead, EPA planned on regulating existing power plants but limiting BSER to “within the fence line” measures.

---

21. Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 82 Fed. Reg. 48,035 (Oct. 16, 2017) (to be codified at 40 C.F.R. pt. 52).

22. *Id.* at 48,039.

23. *Id.*

24. *Id.* at 48,040-48,042.

25. *Id.* at 48,042.

*C. The ACE Rule*

## 1. BSER under the ACE Rule

EPA published the ACE Rule on August 31, 2018.<sup>26</sup> As telegraphed in the CPP repeal proposal, the ACE Rule departs from the CPP by proposing to achieve GHG emissions reductions by establishing exclusively “within the fence line” measures for individual power plants. It does this by establishing BSER based on source-specific heat rate improvements (“HRIs”) to be implemented at coal-fired power plants. The ACE Rule identifies a number of “candidate technologies,” including various smart technologies and improved maintenance practices.<sup>27</sup> EPA believes these are the most effective HRI measures, meaning they are most likely to reduce the energy used to generate electricity, and describes the amount of emissions reductions it believes is achievable for each.

## 2. Obligations of states

Beyond identifying technologies as BSER and providing information regarding these technologies, including the emissions reductions they would achieve, the ACE Rule does not establish actual concrete reduction targets or guidelines. Unlike the CPP, which set state-wide GHG emissions targets, responsibility for establishing targets would be delegated to states. States would be required to submit plans that establish “standards of performance” for each emissions source (i.e., power plant subject to the rule) in its jurisdiction (expressed as pounds of CO<sub>2</sub> per MWh rate), which will be evaluated

---

26. On December 6, 2018, EPA also issued a proposed rule replacing the 2015 Power Plant NSPS applicable to new, modified and reconstructed coal-fired power plants. Most significantly, the published rule would replace the 2015 Power Plant NSPS requirement that twenty new coal power plants employ carbon capture and sequestration. The 2015 Power Plant NSPS applicable to new, modified and reconstructed natural gas-fired power plants remain unchanged. *See Review of Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units*, 83 Fed. Reg. 65,424 (Dec. 20, 2018) (to be codified at 40 C.F.R. pt. 60).

27. *Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program*, 83 Fed. Reg. 44,746, 44,759 (Aug. 31, 2018) (to be codified 40 C.F.R. pts. 51, 52, and 60).

by EPA.<sup>28</sup> However, unlike the CPP, the criteria for evaluation focus entirely on process: the plans have to demonstrate that the state considered each of the HRI technologies designated by EPA for each emissions source in establishing the standards and that the standards are “quantifiable, verifiable, non-duplicative, permanent, and enforceable.”<sup>29</sup> The criteria do not impose any substantive benchmarks or targets, and the ACE Rule explicitly notes that states will be granted considerable flexibility in both establishing and implementing standards.<sup>30</sup> According to EPA, this approach, in contrast with the approach taken in the CPP, is more in line with Section 111(d)’s text, which EPA asserts reflects a “spirit of cooperative federalism.”<sup>31</sup>

### 3. Scope

The ACE Rule is narrower in scope than the CPP in other important respects. The ACE Rule would be applicable only to fossil fuel-fired electric utility steam generating units, which generally consist of coal-fired power plants, and explicitly carves out, among other emitters, municipal waste combustor units, commercial or industrial solid waste incineration units and integrated gasification combined cycle units.<sup>32</sup> EPA also notes in the ACE Rule that it does not have sufficient information to develop a BSER for natural gas-fired simple-cycle turbines or combined cycle turbines.<sup>33</sup> As a result, those turbines are currently not covered by the ACE Rule, although EPA is soliciting comments as to whether the proposed scope of the ACE Rule is appropriate.

### 4. Changes to the New Source Review program

Unlike the CPP, the ACE Rule also proposes changes to the New Source Review program (“NSR”), which imposes preconstruction permitting and pollution control requirements on “major

---

28. *Id.* at 44,808-09.

29. *Id.* at 44,809.

30. *Id.* at 44,765

31. *Id.* The ACE Rule also includes revised implementation regulations for future rulemaking under Section 111(d) that reflect the rule’s approach to establishing standards of performance for CO<sub>2</sub> emissions from power plants. *Id.* at 44765.

32. *Id.* at 44,810.

33. *Id.* at 44,755.

modifications” to existing industrial facilities, including power plants. Under current regulations, NSR is triggered when a facility’s overall emissions increase above a certain amount. Under the changes proposed by the ACE Rule, NSR would be triggered when a power plant subject to the rule increases its hourly emissions rate above a certain amount.<sup>34</sup> This means that increases to overall emissions would not trigger a potentially expensive NSR review unless they also involve an increase to the hourly emissions rate. While the purpose of this change is to lower the likelihood that modifications made by power plants to comply with the ACE Rule engage NSR review, the modification to the NSR regulations would apply to all power plants subject to the NSR regulations, not just coal-fired EGUs, and would apply to all regulated pollutants, not just GHGs. This proposal, which has no counterpart in the CPP, is a reflection of the stark difference of philosophy between the two rules: while the CPP envisioned a gradual phase out of coal-fired power plants over time, the ACE Rule seeks to maintain coal-fired power plants while making them more efficient.

### 5. Timelines

The proposed timelines under the ACE Rule will mean that regulatory uncertainty with respect to regulation of GHG emissions from power plants will continue at least for the near future. The ACE Rule gives states three years from date of publication of the final rule to submit their standards of performance to EPA.<sup>35</sup> EPA then has a year to evaluate each state’s standards, and if a proposed standard does not meet EPA’s criteria or if a state fails to submit a standard, EPA has an additional two-year period to put into place a federal plan.<sup>36</sup> Additionally, the ACE Rule does not provide any timing requirements for the implementation of the states’ standards of performance. The potential six-year wait for implementation of the ACE Rule, if finalized, may mean, however, that a future administration and Congress could enact alternative GHG legislation or regulations or generally adopt a different approach to emissions and energy policy from the current administration and Congress.

---

34. *Id.* at 44,803.

35. *Id.* at 44,771.

36. *Id.*

## 6. Key legal considerations

In its issuance of the ACE Rule, EPA seems to be walking a tightrope between the aggressive and novel use of CAA Section 111(d) encompassed in the broad-based ambitions of the CPP and not regulating power plant GHG emissions at all. On the one hand, the ACE Rule’s focus on “within the fence line” measures would seem to insulate it from the key legal vulnerabilities of the CPP. In fact, during oral arguments over challenges to the CPP, the newest member of the Supreme Court, then-Judge Brett Kavanaugh, expressed skepticism regarding the consistency of the CPP’s “beyond the fence line” approach with the text of the CAA.<sup>37</sup> Judge Kavanaugh also questioned whether the CAA gave EPA the authority to enact such an ambitious and broad rule, a view likely shared by conservative members of the U.S. Supreme Court. The more modest approach reflected in the ACE Rule seems calibrated to address these concerns.

At the same time, EPA did not choose to forgo regulating power plant GHG emissions altogether by either overturning its Endangerment Finding, which serves as the basis for much of EPA’s climate change rulemaking activity, or concluding that CAA Section 111(d) does not authorize regulation of GHG emissions from existing power plants. Although some industry groups and policymakers have advocated either or both approaches, such approaches would certainly have been challenged in light of prior U.S. Supreme Court precedent and EPA rulemaking activity. In addition, abandoning GHG regulation altogether could have made the power industry more vulnerable to climate change–based common law lawsuits. In *American Electric Power Co. v. Connecticut*,<sup>38</sup> the U.S. Supreme Court rejected such a lawsuit on the basis that EPA’s authority to regulate power sector GHG emissions displaces the right of parties to bring common law claims, such as nuisance. EPA’s decision to continue to regulate power sector GHG emissions would seem to preserve the ability of the power industry to assert that common law claims should be barred.

---

37. Transcript of Oral Argument at 43–44, *West Virginia v. EPA* (2016) (No. 15-1363).

38. 564 U.S. 410 (2011).

## IV. POTENTIAL LEGAL CHALLENGES TO THE ACE RULE

The ACE Rule is likely to be the subject of substantial litigation; in fact, environmental activist groups and certain states have already announced an intention to challenge it once finalized. Comments recently submitted by such groups to EPA provide a clear picture of the key legal issues likely to arise in lawsuits challenging the ACE Rule once it is finalized.<sup>39</sup>

*A. EPA's designation of HRIs as best system of emissions reduction under Section 111(d) of the CAA*

Opponents of the ACE Rule are sure to assert that it does not meet EPA's obligation under Section 111(d) of the CAA to identify the "best system of emissions reductions" of GHG's from the power sector as the BSER "building blocks" designated in the CPP would have resulted in greater emissions reductions and are therefore superior to the measures identified in the ACE Rule. Furthermore, merely identifying various HRI technologies without establishing any concrete numerical or other targets that states are required to meet, or any substantive criteria for state plans, is not considered BSER as it does not constitute a "system of emissions reduction," and certainly not one that is "best."

*B. EPA's modelling of the impact of the ACE Rule*

Opponents of the ACE Rule will no doubt question EPA's modeling regarding the effectiveness of efficiency measures to meaningfully reduce emissions. In doing so, opponents will likely point to the

---

39. *See, e.g.*, Joint Comments of Environmental and Public Health Organizations on the Best System of Emission Reduction and Other Issues in EPA's Proposed Emission Guidelines for Greenhouse Gas Emissions, Doc. No. EPA-HQ-OAR-2017-0355 (October 31, 2018); Comments of the Attorneys General of New York, California, Connecticut, Delaware, Illinois, Iowa, Maine, Maryland, Massachusetts, Minnesota (by and through its Minnesota Pollution Control Agency), New Mexico, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont, Virginia, Washington, and the District of Columbia, and the cities of Boulder (CO), Chicago, Los Angeles, New York, Philadelphia, and South Miami (FL), and Broward County (FL) on the Environmental Protection Agency's Proposed Emission Guidelines for Greenhouse Gas Emissions, Doc. No. EPA-HQ-OAR-2017-0355 (October 31, 2018) [hereinafter State Attorneys General Comments].



“rebound effect,” which is the tendency of efficiency measures alone to backfire in reducing emissions because applying such measures to a pollution source can result in lower costs, which can lead to more use of the source, thereby cancelling out some or all of the emissions reduction that might otherwise be expected. While EPA asserts in the Federal Register notice accompanying the ACE Rule that it appropriately accounts for the “rebound effect,”<sup>40</sup> as recently as last year EPA indicated that the efficiency measures included as the first building block in the CPP “cannot stand on its own” due to the “rebound effect.”<sup>41</sup>

*C. Consistency of the change to the NSR program with the CAA*

Another potential target of legal challenges are the changes to the NSR program, which will allow fossil fuel-fired plants to continue their operations for longer periods of time. In addition to increases in carbon dioxide emissions, EPA models predict increases to other pollutants harmful to human health, including sulfur dioxide, nitrogen dioxide and mercury.<sup>42</sup> A number of proposals in the 2000s by EPA to relax NSR rules were first rejected by courts and ultimately abandoned and opponents of the ACE Rule are likely to resurrect those challenges again.<sup>43</sup>

*D. The role of Chevron deference*

A key legal issue in any litigation regarding the ACE Rule will be the degree of deference to grant EPA’s interpretations of the CAA. As noted above, the doctrine of *Chevron* deference provides that where Congress has been silent or ambiguous regarding administrative agency authority under certain statutes, courts must defer to such agencies’ interpretation of those statutes. EPA will be expected to assert that its interpretations of the CAA should be subject to *Chevron* deference. However, in recent years, some federal judges have

---

40. 83 Fed. Reg. at 44,756, n.17.

41. Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 82 Fed. Reg. 48,035, 48,039, n.5 (Oct. 16, 2017) (to be codified at 40 C.F.R. pt. 52).

42. 83 Fed. Reg. at 44,783–44,785.

43. *See id.* at 44,776–44,783; *see also* State Attorneys General Comments, *supra* note 39, at 104–126.

questioned the validity of *Chevron* and advocated limiting its application.<sup>44</sup> If courts decide that the ACE Rule is not entitled to *Chevron* deference as a result of this legal trend, the relevant provisions of the CAA would be reviewed *do novo* by courts, which would increase the likelihood that the EPA's interpretation of the CAA that undergird the ACE Rule would be rejected.

#### V. ENVIRONMENTAL, BUSINESS AND POLITICAL IMPLICATIONS

According to EPA's own analysis, the ACE Rule will result in the emission of between forty-four and fifty-five million metric tons more CO<sub>2</sub> from the power sector compared to a scenario where the CPP remains in place (an approximately three percent increase) and eleven and twenty-two million metric tons less CO<sub>2</sub> compared to a no regulation scenario (an approximately one percent decrease).<sup>45</sup> The backdrop to these numbers is the dramatic recent trend towards decarbonization in the power sector, which has been occurring over the past several years due to improvements in the economics of natural gas and renewables, impacts of other clean air regulations and initiatives by institutional investors, which has helped to place the power sector on track to meet the CPP's emissions reduction goals.<sup>46</sup> In fact all of the scenarios reviewed by EPA in its ACE Rule regulatory analysis (i.e., a CPP scenario, a range of ACE Rule scenarios and a no regulation scenario) project that emissions from the power sector by 2030 will meet or exceed the original emissions reduction goals set

---

44. Justice Brett Kavanaugh has called *Chevron* as "nothing more than a judicially orchestrated shift of power from Congress to the Executive Branch." Judge Brett M. Kavanaugh, *Book Reviews: Fixing Statutory Interpretation*, 129 HARV. L. REV. 2118, 2150 (2016). In *Gutierrez-Brizuela v. Lynch*, Justice Gorsuch wrote in a concurring opinion that *Chevron* "permit[s] executive bureaucracies to swallow huge amounts of core judicial and legislative power." 834 F.3d 1142, 1149 (10th Cir. 2016) (Gorsuch, J., concurring).

45. 83 Fed. Reg. at 44,783–44,785.

46. While the CPP targeted a 32% reduction of CO<sub>2</sub> emissions relative to 2005 levels, the power sector has already reduced CO<sub>2</sub> emissions **by 28%**. See *Carbon dioxide emissions from the U.S. power sector have declined 28% since 2005*, U.S. ENERGY INFORMATION ADMINISTRATION ("EIA") (October 29, 2018), <https://www.eia.gov/todayinenergy/detail.php?id=37392> [<https://perma.cc/7BL6-D78C>]. By contrast, in 2015 the EIA estimated that in the absence of any regulation, CO<sub>2</sub> emissions from the power sector would only decline **by 10% by 2030** relative to 2005 levels. See EIA, ANNUAL ENERGY OUTLOOK 2015 (2015).

forth in the CPP.<sup>47</sup> However, due mainly to other pollutants associated with coal-fired power plants, EPA estimates that as compared to the CPP, the ACE Rule will cause an additional 470 to 1,400 premature deaths as well as tens of thousands of additional cases of medical conditions such as asthma.<sup>48</sup>

The immediate impact of the ACE Rule on the power sector, if finalized, is likely to be relatively modest. While EPA estimates that the ACE Rule would reduce the compliance burden on the fossil fuel-fired power sector by \$400 million in comparison to the CPP, it is important to bear in mind that industry has been operating for several years on the assumption that the CPP was never likely to become effective law. In addition, as noted above, power companies have been shifting their generation portfolios away from coal due to a variety of factors. It appears unlikely that the ACE Rule alone will significantly impact this trend in the near term and initial reactions by utilities to the ACE Rule indicate that it is not impacting their power generation decisions.<sup>49</sup>

The long-term outlook on the power sector (and related commodity pricing), however, is somewhat murkier. The Trump administration has been a strong advocate for coal and has suggested a variety of measures to support coal-fired power generation, including loosening the 2015 Power Plant NSPS with respect to new coal-fired power plants as well as price supports and mandates to grid operators to purchase power from identified coal-fired power plants. Should the Trump administration succeed in putting these measures into place, such measures combined with the ACE Rule (and particularly its NSR reform proposal) may slow the trend away from coal, thereby potentially impacting the prices of fossil fuels. To be sure, any push to revive coal-fired power generation is likely to be complicated by the

---

47. See EPA, REGULATORY IMPACT ANALYSIS FOR THE PROPOSED EMISSION GUIDELINES FOR GREENHOUSE GAS EMISSIONS FROM EXISTING ELECTRIC UTILITY GENERATING UNITS; REVISIONS TO EMISSION GUIDELINE IMPLEMENTING REGULATIONS; REVISIONS TO NEW SOURCE REVIEW PROGRAM 3-15 (2018) (showing emissions reductions by 2030 relative to 2005 ranging from 33% in a no regulation scenario to 36% in a CPP scenario) [hereinafter ACE RULE RIA].

48. *Id.* at 4-32-35.

49. Darren Sweeney et al., *Trump Power Plan Unlikely to Make Case for Coal*, *Utilities Say*, S&P GLOBAL MARKET INTELLIGENCE (Sept. 11, 2018), <https://platform.mi.spglobal.com/web/client?auth=inherit#news/article?id=46412604&ccid=A-46412604-13615> [<https://perma.cc/3WFB-ADHZ>].

market forces discussed above as well as regulatory initiatives at the state level and low-carbon initiatives by institutional investors and other stakeholders.

However, as noted above, the timelines of the ACE Rule extend well into the next decade. Accordingly, the fate of the ACE Rule will most likely depend on which party succeeds at the polls in upcoming Presidential and Congressional elections.

While a future administration could be tempted to simply send the EPA to the drawing board once again, opting for a different approach to climate change regulation after the decade-plus long efforts to regulate power plant GHG emissions through rulemaking under the EPA's existing authority under the CAA, policymakers might be tempted to revisit another approach: federal climate change legislation. Federal legislation seems unlikely in the polarized political climate of today's Washington. However, a number of trends, including continued development of a patchwork of climate change regulation at the state level, increased high-profile adverse weather events, and growing voluntary adoption of climate initiatives by industry and investors suggest that some sort of bipartisan legislative consensus on climate change at the federal level may be possible down the road. While politically complicated, policymakers may decide that such efforts may ultimately be a more effective path to the regulation of GHG emissions from the power sector than an impermanent and uncertain rulemaking process.