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The Fate of The Clean Power Plan and U.S. Greenhouse Gas Emissions in the Trump Era

*Robert L. Glicksman**

Abstract

The Obama Administration's signature effort to abate greenhouse gases (GHGs) that contribute to climate change was its Clean Power Plan (CPP), an innovative effort to rein in GHGs from existing fossil fuel-fired power plants, the U.S.'s largest source of stationary source emissions. The CPP never went into effect, however, the victim of an unusual stay issued by the United States Supreme Court before its effective date. Subsequently, a lower court halted the litigation attacking the CPP at the request of the Trump Administration to allow it to review (and presumably repeal) the CPP and put its own stamp on climate policy. This article discusses the review process the U.S. Environmental Protection Agency has embarked upon, its potential outcome, and the extent to which regulatory policies and market considerations are likely to shape GHG emissions from the U.S. electric power sector in the foreseeable future.

I. Introduction

Until the Administration of Barack Obama, neither Congress nor the executive branch took meaningful action to address climate change. The House of Representatives passed the American Clean Energy and Security Act of 2009, also known as the Waxman-Markey bill, by a slim seven vote margin.¹ The centerpiece of the bill was a cap-and-trade program for greenhouse gas (GHG) emissions. The bill was never brought to the Senate floor, however, and no subsequent piece of federal climate legislation came close to enactment. The George W. Bush Administration refused to take binding regulatory action to mitigate GHG emissions, notwithstanding litigation seeking to require it to do so. Beginning in 2009, President Obama quickly and forcefully relied on the Clean Air Act (CAA) to reduce the U.S.'s carbon footprint from both mobile and stationary sources. The centerpiece of that effort was the Clean Power Plan (CPP), a set of regulations issued by the U.S. Environmental Protection Agency (EPA) directed at the source category responsible for the largest share of GHG emissions in the U.S., existing electric utility plants that burn fossil fuel to generate power.² The CPP immediately came under vigorous attack from the utility industry as well as from states that either produce coal, oil, and gas, or that rely largely on fossil fuels to generate the electricity for their end users. Those interests convinced the U.S. Supreme Court to halt the CPP in its tracks before it even went into effect, pending a decision on its legality by the lower federal courts.³

The election of Donald Trump as President in November 2016 sharply altered the trajectory of the CPP. Reflecting deep-seated hostility to this regulatory venture (as well as a host of other climate-related initiatives pursued by the Obama Administration), the President quickly ordered

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¹ H.R. 2454, 111th Cong. (2009-2010).

² Carbon Pollution Emission Guidelines for Existing Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,661 (Oct. 23, 2015).

³ *Basin Elec. Power Corp. v. EPA*, 136 S. Ct. 998 (2016).

EPA to review the CPP and take appropriate responsive action.⁴ Although the exact dimensions of the outcome of that process are uncertain, one thing is absolutely clear: the CPP will not survive in anything close to its original form, if it survives at all. The Trump Administration's commitment to scuttling the CPP, as Trump promised to do throughout his campaign, is obvious. Less certain is the extent to which legal constraints may require EPA to retain at least some elements of the Obama EPA's approach to reducing GHG emissions from the power sector. Moreover, even if EPA is able to defend complete or near complete repeal of the CPP, state regulators and market forces may shift electric power production in the U.S. in the same direction that the CPP was intended to achieve anyway, away from reliance on fossil fuels to meet the nation's power needs.

This article summarizes the history of the CPP and assesses the likely post-CPP landscape under the Trump Administration and beyond. It concludes that, to some extent, market forces and utility industry perceptions of the future of climate regulation will continue to drive electric generating capacity away from coal as a fuel source. Progressive state regulation will push in the same direction, at least as long as it is not preempted, as the Trump Administration has contemplated supporting for state renewable portfolio standards. States with significant coal production industries or heavily dependent on coal-fired generating facilities could follow the Trump Administration's lead, however, and adopt policies that prolong the useful life of coal-fired plants and exacerbate the impacts of their GHG emissions on climate change.

II. The Clean Power Plan

The U.S. Congress has never enacted a comprehensive statute addressing climate change mitigation. As a result, the most relevant statute is the CAA, upon which EPA has relied in enacting regulations, including the CPP, to reduce GHG emissions from mobile and stationary sources. EPA's rollout of these regulations has been anything but smooth, and its most ambitious effort, the CPP, has been the subject of vigorous attacks in both the political and legal arenas. The election of Donald Trump appears to have doomed the CPP, at least as a binding emission reduction mechanism.

1. Adoption

The George W. Bush Administration refused to adopt binding GHG emission limits under the CAA. Environmental non-governmental organizations (NGOs) filed a petition with EPA to regulate GHG emissions from new motor vehicles, but Bush's EPA denied that petition, claiming that it lacked legal authority to regulate under the CAA because GHGs do not qualify as "air pollutants" under the statute. It also reasoned that, even if the CAA authorizes regulation, granting the petition would have been unwise as a policy matter. The Supreme Court rejected both sets of arguments, essentially ordering EPA to initiate a rulemaking to regulate GHG emissions from motor vehicles unless it could demonstrate that those emissions do not cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare.⁵

⁴ Exec. Order No. 13783, Promoting Energy Independence and Economic Growth, 82 Fed. Reg. 16093 (Mar. 31, 2017).

⁵ *Massachusetts v. EPA*, 549 U.S. 497 (2007) (construing 42 U.S.C. § 7521(a) (2012)).

In 2009, with the Obama Administration now in office, EPA issued a finding that mobile source GHG emissions do cause or contribute to such an endangerment.⁶ That finding triggered EPA's statutory duty to regulate mobile source GHG emissions, which it did in 2010 by issuing fuel efficiency standards jointly with the Department of Transportation's National Highway Traffic Safety Administration (NHTSA).⁷ Industry judicial challenges to the endangerment finding failed,⁸ as did challenges to the joint EPA-NHTSA tailpipe emission standards.⁹

The court's approval of the endangerment finding was critical to EPA's efforts to regulate not only mobile source, but also stationary source GHG emissions. Section 111(b) of the CAA requires EPA to compile a list of categories of stationary sources which cause or contribute to "air pollution which may reasonably be anticipated to endanger public health or welfare."¹⁰ The agency must then adopt technology-based standards of performance that limit emissions for new or modified sources in each listed category.¹¹ Relying on the 2009 endangerment finding and updated information, EPA in 2015 established these new source performance standards (NSPS) for GHG emissions from newly constructed, modified, and reconstructed fossil fuel-fired electric utility generating units (EGUs).¹² As EPA pointed out, "[f]ossil fuel-fired EGUs are by far the largest emitters of GHGs among stationary sources in the U.S., primarily in the form of [carbon dioxide (CO₂)]. Among fossil fuel-fired EGUs, coal-fired units are by far the largest emitters. . . . CO₂ emissions from fossil fuel-fired EGUs are nearly three times as large as the total reported GHG emissions from the next ten largest emitting industrial sectors" in the database of reported emissions on which EPA relied.¹³ The 2009 endangerment finding, coupled with more recent scientific information, thus allowed EPA to expand its climate-related regulatory efforts from mobile to stationary sources.

On the same day it issued its NSPS for EGUs, EPA issued the CPP, which addressed GHG emissions from existing fossil fuel-fired EGUs. EPA's authority to adopt the existing source standards depends on the existence of valid NSPS for the same source category. Section 111(d) of the CAA mandates that EPA adopt regulations that allow states to submit plans to EPA that establish standards of performance for any existing source of air pollutant "to which [an NSPS issued under § 111(b)] would apply if such existing source were a new source."¹⁴ The Act

⁶ 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); *see also* EPA's Denial of the Petitions to Reconsider the Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act, 75 Fed. Reg. 49,556 (Aug. 13, 2010).

⁷ Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, 75 Fed. Reg. 25,324 (May 7, 2010). The two agencies subsequently issued additional standards. *See, e.g.*, 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards, 77 Fed. Reg. 62,624 (Oct. 15, 2010).

⁸ *Coal. for Responsible Regulation v. EPA*, 684 F.3d 102, 116-26 (D.C. Cir. 2012), *reh'g en banc denied*, 2012 WL 6621785 (D.C. Cir. 2012), *aff'd in part, rev'd in part* sub nom. *Util. Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427 (2014).

⁹ *Id.* at 126-29.

¹⁰ 42 U.S.C. § 7411(b)(1)(A) (2012).

¹¹ *Id.* § 7411(b)(1)(B); *see also id.* § 7411(a)(1) (defining standard of performance).

¹² 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).

¹³ *Id.* at 64,522, 64,523.

¹⁴ 42 U.S.C. § 7411(d)(1).

authorizes EPA to adopt a federal plan if a state fails to submit a satisfactory plan of its own and to enforce an approved state plan if the state fails to do so.¹⁵ The term “standard of performance” has the same meaning for existing source as for new source regulations. It is an emission standard “which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account [cost] . . .) the Administrator determines has been adequately demonstrated.”¹⁶

EPA explained that the CPP “will achieve significant reductions in CO₂ emissions by 2030, while offering states and utilities substantial flexibility and latitude in achieving these reductions.”¹⁷ According to EPA, the CPP set a CO₂ emission performance rate for fossil fuel-fired electric steam generating units and stationary combustion turbines based on the best adequately demonstrated system of emissions reduction (BSER) for CO₂ from the power sector. The CPP also established state-specific rate-based and mass-based goals that reflected the subcategory-specific CO₂ emission performance rates and each state’s mix of affected EGUs. State plans could achieve these goals “either directly by means of source-specific emission standards or other requirements, or through measures that achieve equivalent CO₂ reductions from the same group of EGUs.”¹⁸

EPA premised its determination of BSER for existing EGUs on three “building blocks”: (1) improvements in the heat rate at affected coal-fired steam EGUs (i.e., more efficient generation); (2) substitution of increased generation from lower-emitting existing natural gas combined cycle units for generation from higher-emitting affected steam generating units (i.e., switching out coal for natural gas generating equipment); and (3) substitution of increased generation from new zero-emitting renewable energy generating capacity (e.g., wind and solar facilities) for generation from affected fossil fuel-fired generating units. The CPP allows EGUs to rely on the building blocks through direct investment, operational shifts, or emissions trading (provided the relevant state incorporates emissions trading into its plan). But EGUs are not limited to these options and may resort to other emission reduction techniques in addition to or in lieu of the building blocks.¹⁹

2. Judicial Challenges

The issuance of the CPP generated immediate hostile reaction from the utility industry and states that either produce coal or rely on it to generate a significant share of their power load. These litigants claimed that, for several reasons, the CPP exceeded EPA’s statutory authority. They

¹⁵ *Id.* § 7411(d)(2). EPA proposed a model federal plan in 2015. Federal Plan Requirements for Greenhouse Gas Emissions from Electric Utility Generating Units Constructed on or Before January 8, 2014; Model Trading Rules; Amendments to Framework Regulations, 80 Fed. Reg. 64,966 (Oct. 23, 2015). After President Trump’s election, however, EPA withdrew the proposal, purportedly to “ensure that interested parties have a full opportunity to comment on proposals that reflect the Agency’s most up-to-date and relevant thinking.” Withdrawal of Proposed Rules: Federal Plan Requirements for Greenhouse Gas Emissions From Electric Utility Generating Units Constructed on or Before January 8, 2014; Model Trading Rules; Amendments to Framework Regulations; and Clean Energy Incentive Program Design Details, 82 Fed. Reg. 16,144, 16,146 (Apr. 3, 2017).

¹⁶ 42 U.S.C. § 7411(a)(1).

¹⁷ 80 Fed. Reg. at 64,663.

¹⁸ *Id.* at 64,664.

¹⁹ *Id.* at 64,663-64, 64,666-67.

argued that (1) the NSPS for new sources were invalid because they relied on carbon sequestration, which did not qualify as an adequately demonstrated BSER, thereby vitiating the agency's ability to adopt § 111(d) standards for existing EGUs;²⁰ (2) EPA's regulation of mercury emissions from existing EGUs under § 112 of the CAA precludes regulation of those same sources under § 111(d);²¹ (3) the CAA does not provide EPA with the authority to regulate beyond individual facility "fencelines," which is what the CPP does by aggregating EGU emissions in a single statewide cap; (4) the CPP amounts to the adoption of a federal renewable portfolio standard (RPS), which Congress has considered but refused to adopt;²² and (5) the CPP amounts to an impermissible intrusion on state sovereignty in violation of the Tenth Amendment in its effort to control state regulatory decisions on the appropriate energy generation mix.

The litigants filed their challenges in the Court of Appeals for the District of Columbia Circuit, which has exclusive jurisdiction under the CAA to hear appeals from § 7411 standards of performance.²³ The D.C. Circuit denied some litigants' request to stay the rule pending its decision on the merits.²⁴ Instead of filing a petition for certiorari or challenging the D.C. Circuit's decision denying a stay, the litigants challenged the CPP itself in the Supreme Court, requesting a stay pending initial judicial review of the rule in the D.C. Circuit.²⁵ In an extraordinary move,²⁶ several days before Justice Scalia's death, the Court, by a 5-4 vote, granted the stay. It provided no explanation for why it did so. The stay would remain in effect "pending disposition of the applicants' petitions for review in the [D.C. Circuit] and disposition of the applicants' petition for writ of certiorari, if such writ is sought."²⁷

The next strange twist in the case occurred when, on remand to the D.C. Circuit, the court skipped the usual panel resolution and moved directly to a review by the full en banc court. Oral arguments were held in September 2016, but after President Trump's election, the Department of Justice (DOJ), representing EPA, urged the court to halt the case before addressing the issues to avoid interfering with the administrative review of the CPP in which the new

²⁰ The Trump Administration proposed an 85% cut in funding for research by the Energy Department into carbon capture and storage technologies. Ari Natter, *Trump Dumps 'Clean Coal' Research Despite Lauding Its Potential*, 48 ENV'T REP. 997 (May 26, 2017).

²¹ The argument is based on an interpretation of § 111(d)(1)(i), whose intended meaning is complicated by the fact that Congress enacted two differing versions of that provision in the 1990 CAA amendments.

²² An RPS, which many states have adopted, requires that utilities generate at least a certain percentage of their power from renewable energy sources. See ROBERT L. GLICKSMAN ET AL., ENVIRONMENTAL PROTECTION: LAW AND POLICY 1247-50 (7th ed. 2015).

²³ 42 U.S.C. § 7607(b)(1) (2012).

²⁴ Order Denying the Motions for Stay, *West Virginia v. EPA*, No. 15-1363 (D.C. Cir. Jan. 21, 2016), https://web.law.columbia.edu/sites/default/files/microsites/climate-change/files/order_denying_stay.pdf.

²⁵ See Lisa Heinzerling, *The Supreme Court's Clean-Power Power Grab*, 28 GEO. ENVTL. L. REV. 425, 425 (2016).

²⁶ According to Professor Heinzerling, "[i]n staying EPA's Clean Power Plan, the Supreme Court for the first time stopped a nationally applicable agency regulation prior to an initial decision on the merits of the rule in a lower court. Equally notable, it appears that the Court may have used its general equitable authority, not to respond to a potentially erroneous decision from an inferior court, but to directly order the federal executive branch to stand down." *Id.* at 425-26. See also Joshua Linn, Dallas Burtraw & Kristen McCormack, *The Supreme Court's Stay of the Clean Power Plan: Economic Assessment and Implications for the Future*, 46 ENVTL. L. REP. (ELI) 10859 (Oct. 2016) (analyzing the likely economic impacts of the CPP and the weakness of the contention that irreparable injury would have occurred absent the Court's stay).

²⁷ *Basin Elec. Power Co-op. v. EPA*, 136 S. Ct. 998, 998-99 (2016).

administration intended to engage.²⁸ The D.C. Circuit acceded to this request, issuing a brief order “hold[ing] the cases in abeyance for sixty days and requesting further briefing on whether the cases should be remanded to EPA instead of being held in abeyance.”²⁹ The difference is that a remand would terminate the litigation instead of the court maintaining jurisdiction pending further action on the CPP by EPA.³⁰ A challenge to the agency’s action on remand would have to proceed in an entirely new lawsuit.

The court’s order was significant because had it proceeded to issue a decision on the legality of the CPP based on the extensive briefing and oral arguments that had already been conducted, its rulings may have constrained EPA’s efforts to review and revise or rescind the CPP after further rulemaking proceedings.³¹ An agency that changes positions taken in a previous final action such as issuance of a rule must acknowledge and explain its change of direction to avoid reversal for having engaged in arbitrary and capricious decisionmaking.³² As the Supreme Court has explained, “[a]gencies are free to change their existing policies as long as they provide a reasoned explanation for the change. . . . In such cases it is not that further justification is demanded by the mere fact of policy change; but that a reasoned explanation is needed for disregarding facts and circumstances that underlay or were engendered by the prior policy.”³³ The court’s delay in

²⁸ See Abby Smith, *Stressing Deference, EPA Argues Court Ruling Would ‘Prejudice’ CPP Review*, ENVTL. POL’Y ALERT 28 (Apr. 26, 2017), <https://insideepa.com/daily-news/stressing-deference-epa-argues-court-ruling-would-prejudice-cpp-review>. The same court, at the Administration’s behest, canceled oral arguments on the legality of the NSPS for EGUs. Andrew Childers, *Power Plant Arguments Canceled as Trump EPA Seeks Lawsuit Pause*, 48 ENV’T REP. 590 (Mar. 31, 2017).

²⁹ *West Virginia v. EPA*, No. 15-1363 (D.C. Cir. Apr. 28, 2017). The court also paused litigation challenging the NSPS for EGUs. *North Dakota v. EPA*, No. 15-1381 (D.C. Cir. Apr. 28, 2017).

³⁰ This result is what is sometimes referred to as a “voluntary remand,” which may be accompanied by an order vacating the challenged action. According to Professor Parillo, “[b]y the standards of American law, voluntary remand is extraordinary in that the lawsuit can end without the consent of one side and without an adjudication by the court.” Nicholas R. Parillo, NOTICE & COMMENT (May 5, 2017), <http://yalejreg.com/nc/the-fate-of-the-clean-power-plan-case-hold-in-abeyance-or-remand-by-nicholas-r-parrillo/>.

³¹ See Abby Smith, *D.C. Circuit Ruling Could Determine Trump EPA Options for Revising CPP*, ENVTL. POL’Y ALERT 22 (Mar. 1, 2017), <https://insideepa.com/daily-news/dc-circuit-ruling-could-determine-trump-epa-options-revising-cpp> (quoting attorney for environmental NGO, who asserted that if the court were to reject some of the challenger’s legal positions, “that will narrow the scope of what the new administrator can do. He will not have the full range of options open to him.”).

³² *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009); see also *Perez v. Mortg. Bankers Ass’n*, 135 S. Ct. 1199, 1209 (2015) (confirming that the federal Administrative Procedure Act (APA) “requires an agency to provide more substantial justification when ‘its new policy rests upon factual findings that contradict those which underlay its prior policy; or when its prior policy has engendered serious reliance interests that must be taken into account. It would be arbitrary and capricious to ignore such matters.’”). That standard would present an obstacle to any attempt by EPA to revoke the endangerment finding, as some right-leaning NGOs have urged it to do. See Keith Goldberg, *EPA Pushed to Reconsider GHG Endangerment Finding*, LAW360 (May 2, 2017), <https://www.law360.com/articles/919577>. Conservative think tanks have petitioned EPA to initiate a rulemaking to repeal the endangerment finding. Petition of the Competitive Enterprise Institute and the Science and Environmental Policy Project for Rulemaking on the Subject of Greenhouse Gases and Their Impact on Public Health and Welfare, in Connection with EPA’s 2009 Endangerment Finding, 74 FR 66,496 (Dec. 15, 2009) (submitted Feb. 17, 2017), <https://cei.org/sites/default/files/CEI%20Petition%20for%20Rulemaking%20on%20Endangerment%202017%20corrected.pdf>.

³³ *Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117, 2125-26 (2016).

addressing (or decision not to address) the legal issues that had already been thoroughly fleshed out prevented it from addressing the purely legal questions (such as whether EPA's regulation of mercury emissions from EGUs precludes regulation under § 111(d)) that are likely to arise in any future efforts by this or a subsequent administration to address climate change under that CAA provision.

III. The Road to Repeal

The Trump Administration's disdain for and determination to scrap the CPP has long been obvious. The President initiated the process of eliminating the CPP in its original form by issuing an executive order terminating or setting in motion processes for terminating virtually every important Obama Administration initiative on climate change.³⁴ The order declared that "[i]t is in the national interest to promote clean and safe development of our Nation's vast energy resources, while at the same time avoiding regulatory burdens that unnecessarily encumber energy production, constrain economic growth, and prevent job creation."³⁵ The order therefore enunciated a policy that agencies "immediately review existing regulations that potentially burden the development or use of domestically produced energy resources and appropriately suspend, revise, or rescind those that unduly burden the development of domestic energy resources beyond the degree necessary to protect the public interest or otherwise comply with the law."³⁶

The executive order took particular and pointed aim at the CPP. It directed the EPA Administrator, E. Scott Pruitt, to "immediately take all steps necessary to review" the CPP and related regulations (including the NSPS for EGUs and the proposed federal § 111(d) plan) and, consistent with the order's policies, "if appropriate, . . . as soon as practicable, . . . publish for notice and comment proposed rules suspending, revising, or rescinding those rules."³⁷ Based on any such actions, the Attorney General may request that any court with jurisdiction over the affected rules stay or delay further litigation or seek "other appropriate relief consistent with this order."³⁸ While the order does not (and cannot) itself terminate the CPP, which EPA can only revise using potentially lengthy rulemaking procedures dictated by the CAA,³⁹ it sets EPA on a

³⁴ The president of the World Resources Institute characterized the order as "taking a sledgehammer to U.S. climate action." Nathan Rott & Merritt Kennedy, *Trump Takes Aim at a Centerpiece of Obama's Climate Legacy*, NPR, THE TWO-WAY (Mar. 28, 2017), <http://www.npr.org/sections/thetwo-way/2017/03/28/519003733/trump-takes-aim-at-a-centerpiece-of-obamas-environmental-legacy>. One initiative that survived was President Obama's executive order seeking to protect public infrastructure from rising sea levels and extreme weather events. Exec. Order No. 13,690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input, 80 Fed. Reg. 6425 (Jan. 30, 2015).

³⁵ Exec. Order 13783, Promoting Energy Independence and Economic Growth, § 1(a), 82 Fed. Reg. 16,093, 16,093 (Mar. 31, 2017). At the signing ceremony, Vice President Pence, in introducing the President, declared that "[t]he war on coal is over," while Trump promised coal miners in attendance that "[y]ou're going back to work." Kevin Bogardus & Robin Bravender, *Fanfare at EPA as Trump heralds 'new energy revolution'*, E&ENewSPM (Mar. 28, 2017), <https://www.eenews.net/stories/1060052221>.

³⁶ Exec. Order 13873, § 1(c), 82 Fed. Reg. at 16,093.

³⁷ *Id.* § 4(a), 82 Fed. Reg. at 16,095. The order also directed EPA to "take lawful action to suspend, revise, or rescind, as appropriate and consistent with law," EPA's legal analysis and justification for the CPP. *Id.* § 4(c), 82 Fed. Reg. at 16,095.

³⁸ *Id.* § 4(d), 82 Fed. Reg. at 16,095.

³⁹ 42 U.S.C. § 7607(d) (2012).

path toward eliminating or radically revising a rule that, because of the Supreme Court stay, never took effect in the first place.

Shortly after issuance of the executive order, EPA published notices that it had begun review of the CPP⁴⁰ and the NSPS for EGUs,⁴¹ and that it was withdrawing the proposal for a federal plan to implement the GHG emission guidelines for existing fossil fuel-fired EGUs, the model emission trading rules, and for amendments to the CAA § 111(d) framework regulations.⁴² EPA referred to its “inherent authority to reconsider past decisions and to rescind or revise a decision to the extent permitted by law when supported by a reasoned explanation.”⁴³ It claimed that “EPA’s interpretations of statutes it administers ‘are not carved in stone’ but must be reevaluated ‘on a continuing basis,’ ” and that such revised decisions “need not be based upon a change of facts or circumstances,” but rather may be the result of a change in administrations.⁴⁴ One significant possibility is that EPA will reinterpret § 111(d) as blocking regulation of EGUs whose mercury emissions are already regulated under § 112, and defend that analysis as a proper interpretation of the ambiguity arising from the two conflicting versions of § 111(d) adopted in 1990. EPA would then argue that its interpretation of the law is entitled to deference under the *Chevron* test for judicial review of agency statutory interpretations.⁴⁵ If endorsed in court, this approach would eliminate EPA’s authority to adopt the CPP or any other regulations limiting GHG emissions from the affected sources.⁴⁶

While EPA’s assertions properly describe the agency’s discretion to alter its policy preferences, those changes must remain consistent with the policies reflected in the statutes from which it derives its regulatory authority. Moreover, as noted above, EPA would have “to provide more substantial justification” if “its new policy rests upon factual findings that contradict those which underlay its prior policy It would be arbitrary and capricious to ignore such matters.”⁴⁷ Thus, if EPA were to attempt to reverse the 2009 and subsequent endangerment findings (which Trump’s executive order did not mention) as a means of removing its authority to regulate GHG emissions under the CAA, it would have to convince a court addressing a challenge to that effort that the factual findings on which the endangerment findings were based were flawed from the start or that new information had made them no longer accurate. Given the overwhelming scientific consensus on the links between GHG emissions, climate change, and the resulting risks to public health and welfare, it is highly unlikely that reversal of the endangerment findings would pass

⁴⁰ Review of the Clean Power Plan, 82 Fed. Reg. 16,329 (Apr. 4, 2017).

⁴¹ Review of the Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Generating Units, 82 Fed. Reg. 16,330 (Apr. 4, 2017).

⁴² Withdrawal of Proposed Rules: Federal Plan Requirements for Greenhouse Gas Emissions from Electric Generating Units Constructed on or Before January 8, 2014; Model Trading Rules; Amendments to Framework Regulations; and Clean Energy Incentive Program Design Details, 82 Fed. Reg. 16,144 (Apr. 3, 2017).

⁴³ 82 Fed. Reg. at 16,330.

⁴⁴ *Id.*

⁴⁵ *Chevron U.S.A. Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837 (1984).

⁴⁶ See Ethan G. Shenkman, Jonathan Martel & Laura Cottingham, *Trump’s EO: What’s Next for Energy, Enviro and Climate?*, LAW360 (Mar. 31, 2017), <https://www.law360.com/articles/907247/trump-s-eo-what-s-next-for-energy-enviro-and-climate>.

⁴⁷ *Perez v. Mortg. Bankers Ass’n*, 135 S. Ct. 1199, 1209 (2015).

judicial muster, particularly in light of the D.C. Circuit’s highly deferential review of the finding and the Supreme Court’s refusal to review that determination.⁴⁸

Retention of (or judicial reversal of an effort by EPA to scuttle) the endangerment finding would impose additional legal constraints on EPA’s options. Section 7411(b) of the CAA provides that EPA “shall” list source categories which cause or contribute significantly to “air pollution which may reasonably be anticipated to endanger public health or welfare.”⁴⁹ Once EPA lists a source category, it “shall” issue NSPS for the category.⁵⁰ The adoption of NSPS for a source category such as EGUs, in turn, requires EPA to adopt existing source standards of performance under § 111(d). Section 111(d) provides that EPA “shall prescribe regulations” that require states to submit plans establishing standards of performance for air pollutant emissions from any existing source not regulated under the national ambient air quality standards or the hazardous air pollutant provisions of § 112 and “to which a standard of performance would apply if such existing source were a new source.”⁵¹ Further, the regulations must “provide for the implementation and enforcement of such standards of performance.”⁵² Complete repeal of the CPP followed by inaction under § 111(d) would likely trigger citizen suits under the CAA alleging that EPA had failed to perform a nondiscretionary duty to implement § 111(d).⁵³

A safer course for EPA is therefore to revise, not repeal the CPP. If EPA decides on review to concede that it has the legal authority to regulate GHG emissions from fossil fuel-fired EGUs, and to revise rather than repeal, there is little doubt that it will weaken restrictions on those emissions. One possibility is that it will rely exclusively on the first of the three building blocks that provided the foundation for the CPP, heat rate efficiency, foregoing efforts to induce utilities to switch from coal-fired generation to natural gas or renewable sources. Such a switch would achieve only a fraction of the emission reductions projected to occur as a result of compliance with the CPP. Pruitt proposed a plan before becoming EPA Administrator that sought to reduce GHG emissions from the power sector exclusively through market-driven efficiency improvements. According to prior EPA estimates, the CPP would reduce CO₂ emissions from utilities by more than 30% from 2005 levels by 2030, while heat rate improvements would enable EGUs to reduce emissions in the range of 2 to 4% nationwide.⁵⁴

⁴⁸ *Coal. for Responsible Regulation v. EPA*, 684 F.3d 102, 122 (D.C. Cir. 2012), *reh’g en banc denied*, 2012 WL 6621785 (D.C. Cir. 2012), *aff’d in part, rev’d in part* sub nom. *Util. Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427 (2014) (“Petitioners are asking us to re-weigh the scientific evidence before EPA and reach our own conclusion. This is not our role.”). The U.S. Chamber of Commerce, among others, sought review of the D.C. Circuit’s approval of the endangerment finding, asking the Court to address “[w]hether EPA’s determination that greenhouse gases ‘may reasonably be anticipated to endanger public health or welfare’ and otherwise are regulable under section 202(a)(1) of the Clean Air Act, 42 U.S.C. § 7521(a)(1), was ‘not in accordance with law’ or was ‘arbitrary, capricious, [and] an abuse of discretion . . .’” *Petition for Writ of Certiorari*, No. 12-1272, 2013 WL 1752521 (filed Apr. 19, 2013). The Supreme Court granted certiorari, however, only on the question of “[w]hether EPA permissibly determined that its regulation of [GHGs] from new motor vehicles triggered permitting requirements under the [CAA] for stationary sources that emit greenhouse gases.” *Util. Air Regulatory Grp. v. EPA*, 134 S. Ct. 418 (2013).

⁴⁹ 42 U.S.C. § 7411(b)(1)(A) (2012).

⁵⁰ *Id.* § 7411(b)(1)(B).

⁵¹ *Id.* § 7411(d)(1).

⁵² *Id.*

⁵³ *Id.* § 7604(a)(2).

⁵⁴ Andrew Childers, *Is Pruitt’s Plan a Blueprint for Carbon Rule Replacement*, 48 ENV’T REP. 590 (Mar. 31, 2017).

IV. The Aftermath

How much of a difference is EPA's follow up to President Trump's executive order likely to have on the long-term mix of the fuels used to power the nation's electric grid? Some observers have predicted that, whatever the ultimate fate of the CPP in the courts and EPA rulemaking processes, utilities are unlikely to increase reliance on coal to generate electric power, either because it is economically irrational to do so or because they anticipate future regulation to mitigate GHG emissions under a future administration.⁵⁵ Some utilities have already invested in facilities with a lower carbon footprint and some will be reluctant to funnel money into generating technology likely to be subject to future regulation to limit not only GHGs, but conventional pollutants such as particulates and sulfur dioxide, and hazardous air pollutants such as mercury and other heavy metals, when the political winds shift. Indeed, some prominent utility executives have bemoaned the uncertainty resulting from the executive order. In the shorter term, elimination or significant weakening of the CPP may extend the shelf life of some coal-fired plants or weaken incentives to invest in efforts to reduce their GHG emissions.⁵⁶ It also will allow some utilities to spend more time accumulating the money needed to invest in lower carbon fuel alternatives. Trade associations representing publicly owned utilities have indicated that new generation will nevertheless take the form of natural gas or renewables.⁵⁷

Market dynamics have already achieved some results consistent with the CPP's goal of decreasing GHG emissions from the power sector. According to the International Energy Agency (IEA), in 2016, during which the CPP was stayed, the biggest drop in CO₂ emissions occurred in the United States (a 3% decline during a period in which the economy grew by about the same amount). The IEA concluded that the decline was driven largely by increased supplies of natural gas made available through hydrofracking technologies and by declines in the cost of producing energy through renewable sources.⁵⁸ Similarly, a report issued by the Department of Energy in 2017 concluded that "[t]he biggest contributor to coal and nuclear plant retirements [in the U.S. since 2002] has been the advantaged economics of natural gas-fired generation."⁵⁹

⁵⁵ Andrew Childers, *Court Unlikely to Guide EPA as it Unwinds Clean Power Plan*, 48 ENV'T REP. 854 (May 5, 2017).

⁵⁶ See Shenkman, Martel & Cottingham, *supra* note ___.

⁵⁷ Andrew Childers & Rebecca Kern, *Utilities Counting on Carbon Regulation to Return*, 48 ENV'T REP. 591 (Mar. 31, 2017).

⁵⁸ Richard J. Pierce, Jr., *The Effects of President Trump's Reversal of President Obama's Climate Policies are Greatly Exaggerated*, GWU Law School Public Law Research Paper No. 2017-29; GWU Legal Studies Research Paper No. 2017-29, at 1 (forthcoming), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2952416. The IEA reported that U.S. CO₂ emissions declined by 33% between 2008 and 2014. *Id.* at 2. The price of natural gas fell to its lowest levels in 20 years in 2016. *Id.*

⁵⁹ U.S. DEP'T OF ENERGY, STAFF REPORT TO THE SECRETARY ON ELECTRICITY MARKETS AND RELIABILITY 13 (Aug. 2017), <https://energy.gov/staff-report-secretary-electricity-markets-and-reliability>. The report elaborated:

In 2016, natural gas was the largest source of electricity generation in the United States—overtaking coal for the first time since data collection began.²⁰ The increased use of natural gas in the electric sector has resulted in sustained low wholesale market prices that reduce the profitability of other generation resources important to the grid. The fact that new, high-efficiency natural gas plants can be built relatively quickly, compared to coal and nuclear power, also helped to grow gas-fired generation. Production costs of coal and nuclear plants remained somewhat flat, while the new and existing, more flexible, and relatively lower-operating cost natural gas plants drove down wholesale market prices to the point that some formerly profitable nuclear and coal facilities began operating at a loss. The development of

A recent survey of 32 utility executives in 26 states revealed that 20 took the position that Trump's executive order would not influence their investments, and that a majority of the surveyed utilities have invested billions of dollars to move away from coal. The respondents attributed these decisions to low natural gas prices, declining renewable energy costs, and state regulation, as well as uncertainty about the fate of the CPP.⁶⁰ For example, coal's share of power generation in Ohio fell from 86 to 58% between 2006 and 2016, with at least six new gas-fired plants planned in the Ohio River Valley in the next few years.⁶¹ Developments in two large coal-producing states are especially telling. The leading utility in West Virginia has recently closed three coal-fired plants and converted two others to natural gas. The utility's President responded to the Governor's suggestion that the company build a new coal-fired plant by stating that "[w]e're not going to build another coal plant."⁶² Utilities in Wyoming, the nation's largest coal producing state by a wide margin, are shifting from coal to renewables in response to demands by large customers such as Microsoft that the power they purchase be derived from clean energy sources. Utilities in other states are responding to customer preferences in similar fashion.⁶³

Notwithstanding these developments, the Energy Information Administration in 2016 projected slightly rising levels of CO₂ emissions from the power sector between 2016 and 2040 in the absence of the CPP and emission levels considerably higher than they would be if the CPP were implemented.⁶⁴ But Bloomberg New Energy Finance has projected that power sector coal consumption will drop by 45% by 2040 as coal plants are retired and replaced by cheaper plants fueled by natural gas or renewables. Largely as a result of that shift, it also projected that U.S. power sector GHG emissions in 2030 will be 30% below 2005 levels, precisely the amount targeted by the CPP.⁶⁵

abundant, domestic natural gas made possible by the shale revolution also has produced significant value for consumers and the economy overall.

Id. The report added that "[f]alling demand for coal due to coal plant retirements and capacity factor reductions, a regional shift in coal production, and automation in mining have led to a reduction in coal production jobs." *Id.* at 23. It also stated that while environmental regulations "were not the sole cause of observed coal retirements," they have been "a contributing factor." *Id.* at 39.

⁶⁰ 32 utilities were asked. Just one said Trump is saving coal, CLIMATEWIRE (May 5, 2017), <https://www.eenews.net/climatewire/2017/05/05/stories/1060054086>. One executive commented that "the reprieve" provided by the order might take pressure off near-term decisions such as whether to retrofit or retire older plants, but that it will be short-lived. *Id.*

⁶¹ Naureen S. Malik & Tim Loh, *Coal is Losing an Appalachian Stronghold – Trump Can't Stop It*, 48 ENV'T REP. 601 (Mar. 31, 2017).

⁶² Diane Cardwell & Clifford Krauss, *Coal Country's Power Plants Are Turning Away From Coal*, N.Y. TIMES, May 27, 2017), <https://www.nytimes.com/2017/05/26/business/energy-environment/coal-power-renewable-energy.html>.

⁶³ *Id.*

⁶⁴ U.S. Energy Information Adm'n, *Clean Power Plan implementation decisions affect CO₂ emissions and electricity prices* (June 21, 2016), <https://www.eia.gov/todayinenergy/detail.php?id=26752> (last visited June 6, 2017). Even without the CPP, the EIA projected that emission levels from the power sector would be 19% below 2005 levels (as compared to 45% under some version of the CPP). *Id.*

⁶⁵ Bloomberg also projects that only 35% of new coal plants planned across the globe will ever get built and that the levelized cost of new electricity from solar photovoltaic systems will drop by 66% by 2040. Bloomberg New Energy Finance, *New Energy Outlook 2017*, #NEO2017, Executive Summary at 2,4 (June 2017).

One problem with eliminating meaningful regulatory constraints is that energy prices are notoriously volatile, so that natural gas prices will not necessarily retain their current advantage. If they do not, and neither EPA nor the states have required GHG emission reductions through vehicles like the CPP, GHG emissions from the utility sector may increase again.⁶⁶ For example, even a slight rise in natural gas prices in early 2017 resulted in an increase in coal plant utilization from 35.6% to 45.4 % compared to the previous year, with natural gas plant utilization falling from 50.8% to 48.1% over the same period.⁶⁷ That kind of shift may be assisted by elimination of other regulatory constraints on the coal industry by the Trump Administration and its congressional allies, such as the repeal of the Obama Administration’s stream protection rule⁶⁸ under the Congressional Review Act.⁶⁹ EPA also has made clear its intention to reconsider a 2012 Obama EPA regulation (the so-called MATS rule)⁷⁰ limiting mercury, lead, and other hazardous air pollutants emissions from power plants, even though industry has already largely complied with the rule. If successful, these and other efforts to end EPA’s so-called “war on coal” and unshackle fossil fuel-fired generating facilities from environmental regulatory constraints will significantly reduce the obligations of coal-fired plants to limit not only CO₂ emissions but also the associated sulfur dioxide, oxides of nitrogen, and other emissions that damage health, welfare, and the environment that have long been a by-product of coal combustion. If so, the market advantage of natural gas may shrink, making coal-fired investments more attractive, or at least reducing incentives to retire existing coal plants in favor of cleaner alternatives.

Aside from market dynamics, state policymakers will influence the future energy mix. Some state efforts are designed to combat the Trump-Pruitt EPA’s apparent commitment to moving toward effective deregulation of the coal industry. The attorney generals of 16 states and

⁶⁶ Benjamin Storrow, *Have markets rendered KXL, Clean Power Plan irrelevant?*, CLIMATEWIRE (Mar. 28, 2017), www.eenews.net/climatewire/2017/03/28/stories/1060052174 (noting that the CPP’s repeal “also leaves the door open for a coal rebound should natural gas prices rise.”). By one estimate, even a penny increase in natural gas prices results in one million tons of additional coal demand. *Id.*

⁶⁷ Benjamin Storrow, Dylan Brown & Niina Heikkinen, *Scott Pruitt and the truth about coal*, CLIMATEWIRE (June 6, 2017), <https://www.eenews.net/stories/1060055588>.

⁶⁸ Stream Protection Rule, 81 Fed. Reg. 93,066 (Dec. 20, 2016). The rule restricted discharges of overburden resulting from practices like mountaintop removal mining in nearby streams to protect water quality and aquatic ecosystems.

⁶⁹ Pub. L. No. 115-5, 131 Stat. 10 (2017).

⁷⁰ National Emission Standards for Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units, 77 Fed. Reg. 9304 (Feb. 16, 2012). The Supreme Court in *Michigan v. EPA*, 135 S. Ct. 2699 (2015), remanded the rule to EPA due to the agency’s failure to factor cost considerations into the decision of whether to issue the rule. On remand, EPA concluded that “a consideration of cost does not cause us to change our determination that regulation of hazardous air pollutant (HAP) emissions from coal- and oil-fired EGUs is appropriate and necessary and that EGUs are, therefore, properly included on the CAA section 112(c) list of sources that must be regulated under CAA section 112(d).” Supplemental Finding That It Is Appropriate and Necessary To Regulate Hazardous Air Pollutants from Coal- and Oil-Fired Electric Utility Steam Generating Units, 81 Fed. Reg. 24,420, 24,420 (Apr. 25, 2016). EPA is reviewing that finding, and the D.C. Circuit postponed oral arguments in a challenge to the agency’s action on remand pending the outcome of that review. Juan Carlos Rodriguez, *3 Questions EPA Must Tackle in Mercury Rule Cost Review*, LAW360 (May 10, 2017), <https://www.law360.com/articles/922435/3-questions-epa-must-tackle-in-mercury-rule-cost-review>; *Murray Energy Corp. v. EPA*, No. 16-1127 (D.C. Cir. Apr. 27 2017), <https://dlbjbjzgnk95t.cloudfront.net/0918000/918216/mats.pdf>.

the District of Columbia have begun coordinating efforts to challenge the executive order and its fallout and to pursue the CPP's goals.⁷¹ Several eastern states filed petitions with EPA in 2016 under § 126 of the CAA⁷² requesting a finding that power plants in upwind states are emitting ozone precursors such as oxides of nitrogen in sufficient amounts to prevent them from complying with the national ambient air quality standard (NAAQS) for ozone.⁷³ If EPA grants the petitions, the upwind states would have to amend their state implementation plans to prevent their utility sources from contributing significantly to nonattainment with or interfering with maintenance by a petitioning state with the ozone NAAQS.⁷⁴ If EPA denies them, the states will likely seek relief in the courts.

Some states are also determined to continue pursuing the regulatory strategies for reducing GHG emissions from electric generating facilities that they began devising in response to the CPP, regardless of EPA's efforts to scale back the stringency if not eliminate state emission reduction targets. The CAA authorizes states to adopt and enforce regulatory standards more stringent than EPA's,⁷⁵ and progressive states such as California, which has committed to a 40% reduction in GHG emissions below 1900 levels by 2030,⁷⁶ will undoubtedly do so. The California Air Resources Board in July 2017 approved a plan to comply with the CPP based largely on implementation of its cap-and-trade program.⁷⁷ The Board's chairwoman, Mary Nichols, explained that the approval "communicate[s] to the world at large that reductions called for in that plan can be accomplished and we have a way to do it."⁷⁸

The existence of state authority to adopt more ambitious emission reduction approaches than the federal government requires provides only a limited backstop to the jettisoning of the Obama Administration's efforts to require the electric power sector to make meaningful contributions to effective climate change mitigation. Some states have adopted laws barring regulators from imposing regulatory controls more stringent than EPA's.⁷⁹ Moreover, the Trump Administration's unflagging support for enhanced reliance on coal as an energy source has spurred industry to lobby state legislators and regulators to roll back regulatory duties and cut back on state-provided support for competitive fuel sources, such as solar and wind power. Policymakers

⁷¹ Hannah Hess, *States vow to defend rule*, E&ENewsPM (Mar. 28, 2017), <https://www.eenews.net/eenewspm/2017/03/28/stories/1060052217>.

⁷² 42 U.S.C. § 7426 (2012).

⁷³ Patrick Ambrosio, *States Keep Pushing for Utility Pollution Cuts from Trump's EPA*, 48 ENV'T REP. 845 (May 5, 2017).

⁷⁴ 42 U.S.C. § 7426(c).

⁷⁵ *Id.* § 7416.

⁷⁶ See *The 2017 Climate Change Scoping Plan Update: The Proposed Strategy For Achieving California's 2030 GHG Target*, CAL. AIR RES. BD., ES1 (Jan. 20, 2017), https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf.

⁷⁷ California's Compliance Plan for the Federal Clean Power Plan under Clean Air Act Section 111(d) (July 27, 2017), <https://www.arb.ca.gov/cc/powerplants/meetings/07272017/final-proposed-plan.pdf>.

⁷⁸ Debra Kahn, *In a blast from the past, state approves Clean Power Plan*, ClimateWire, July 28, 2017, <https://www.eenews.net/climatewire/2017/07/28/stories/1060058067>.

⁷⁹ See Jerome M. Organ, *Limitations on State Agency Authority to Adopt Environmental Standards More Stringent than Federal Standards: Policy Considerations and Interpretational Problems*, 54 MD. L. REV. 1373 (1995); William W. Buzbee, *Clean Air Act Dynamism and Disappointments: Lessons for Climate Legislation to Prompt Innovation and Discourage Inertia*, 32 WASH. U. J.L. & POL'Y 33, 45 (2010); Douglas R. Williams, *Toward Regional Governance in Environmental Law*, 46 AKRON L. REV. 1047, 1052 (2013).

in coal-producing or coal-dependent states such as West Virginia and Indiana are responding.⁸⁰ In states such as Ohio and Kentucky, pending legislation would eliminate or weaken energy efficiency requirements through revisions to RPS legislation.⁸¹ Secretary of Energy Rick Perry has even floated the idea of federal preemption of state RPSs, asserting that these requirements adversely affect the adequacy of baseload power capacity, thereby threatening national security,⁸² notwithstanding the Trump Administration's professed commitment to federalism values on environmental policy matters.⁸³

This divergent set of state responses to the Trump Administration's new tack on climate policy, and on the CPP in particular, is a dramatic departure from the uniformity that Congress wished some CAA programs, including the § 111 standards of performance, to provide. Among other things, Congress chose to require EPA to adopt nationally uniform, technology-based standards under § 111 because it regarded ambient standards as unreliable and sought to eliminate regional pollution havens and hot spots that might result if states were allowed to engage in a race to the bottom.⁸⁴ If EPA decides to repeal the NSPS for EGUs and the CPP, that mandatory federal floor will disappear, creating exactly the conditions that Congress feared in 1970. At best, a weakening of these regulatory vehicles will lower the floor, creating more space for states so inclined to facilitate the renewed growth of coal as an energy source, with accompanying increases in GHG emissions.

V. Conclusion

President Trump and his EPA Administrator have made no secret of their determination to undermine the CPP's goals, even if EPA's review of the rule does not result in its complete elimination as a result of the persistence of the endangerment finding and the legal duties to regulate that it triggers. The impact of whatever actions result from EPA's review of the CPP are harder to assess. On the one hand, market forces, driven by relatively low natural gas prices, growing demands by several major companies that their energy come from renewable sources, and the falling costs of renewable energy production, have reduced the utility sector's reliance on coal as a fuel source even apart from the CPP. The conviction among utility executives that meaningful

⁸⁰ See Ari Natter, *States Move to Roll Back Environmental Rules in Trump's Wake*, 48 ENV'T REP. 911 (May 12, 2017) (discussing Oklahoma law accelerating termination of a wind tax credit and Indiana's efforts to cut payments to rooftop solar facility owners who sell excess power to the grid).

⁸¹ See Christopher Martin & Ryan Collins, *In Coal Country, States Feel Emboldened to Cut Energy Efficiency*, 48 ENV'T REP. 550 (Mar. 24, 2017). California, New York, and Massachusetts, on the other hand, have sought to expand renewable energy mandates. *Id.*

⁸² Benjamin Storrow, *Coal industry pushes market reforms to aid ailing plants*, CLIMATEWIRE (May 1, 2017), <https://www.eenews.net/climatewire/stories/1060053822>; Keith Goldberg, *State Clean Power Policies Seen as Tough to Upend*, LAW360 (May 9, 2017), <https://www.law360.com/articles/921841/state-clean-power-policies-seen-as-tough-to-upend>.

⁸³ Cf. Exec. Order No. 13778, *Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the "Waters of the United States" Rule*, § 1, 82 Fed. Reg. 12,497, 12,497 (Feb. 28, 2017) ("It is in the national interest to ensure that the Nation's navigable waters are kept free from pollution, while at the same time promoting economic growth, minimizing regulatory uncertainty, and showing due regard for the roles of the Congress and the States under the Constitution.").

⁸⁴ GLICKSMAN ET AL., *supra* note 22, at 483.

regulatory efforts to abate climate change will return after the Trump Administration disappears have dissuaded many from making significant investments in new coal-fired plants.

On the other hand, energy markets have long been volatile, raising the possibility that natural gas's price advantages may not continue at current levels, and making at least a partial revival of coal-fired power (or a slowing of its demise) possible. EPA's moves to weaken or repeal a host of regulatory programs under the CAA and the Clean Water Act, together with congressional repeal of the Interior Department's stream protection rule adopted in 2016 under the Surface Mining Control and Reclamation Act, could significantly lower the costs of producing coal and using it to power electric generating facilities. If so, utilities may decide to leave existing coal plants, the target of the CPP, in operation longer than they otherwise would have, prolonging the contributions that their GHG emissions will make to climate change.

A reduction in the federal role in mitigating climate change will increase the importance of state energy and environmental initiatives. Some states, following the lead of climate policy leaders such as California, will step into the breach and pursue climate mitigation vigorously, in some instances pushing beyond what the CPP would have required. Other states, however, will see EPA's repudiation of the CPP in its current form as an opportunity to promote coal production and use, as some have already begun to do. The result will be a welter of policies that undercut the CAA's thrust toward providing a uniform level of air quality and environmental protection regardless of location and an invitation to commence a race to the bottom that Congress thought it had halted decades ago.