COLUMBIA LAW SCHOOL

SABIN CENTER FOR CLIMATE CHANGE LAW

PERSISTENT REGULATIONS: A DETAILED ASSESSMENT OF THE TRUMP ADMINISTRATION'S EFFORTS TO REPEAL FEDERAL CLIMATE PROTECTIONS

By Jessica Wentz and Michael B. Gerrard

June 2019

The Sabin Center for Climate Change Law develops legal techniques to fight climate change, trains law students and lawyers in their use, and provides the legal profession and the public with up-to-date resources on key topics in climate law and regulation. It works closely with the scientists at Columbia University's Earth Institute and with a wide range of governmental, non-governmental and academic organizations.

Sabin Center for Climate Change Law
Columbia Law School
435 West 116th Street
New York, NY 10027
Tel: +1 (212) 854-3287
Email: columbiaclimate@gmail.com
Web: http://www.ColumbiaClimateLaw.com
Twitter: @ColumbiaClimate
Blog: http://blogs.law.columbia.edu/climatechange

Preparation of this paper was funded by the Climate Leadership Council (CLC), but the CLC did not exercise editorial control, and the CLC does not necessarily endorse its contents.

About the Authors

Jessica Wentz is a Senior Fellow and Associate Research Scholar at the Sabin Center for Climate Change Law.

Michael B. Gerrard is the Andrew Sabin Professor of Professional Practice at Columbia Law School and Faculty Director of the Sabin Center for Climate Change Law.

EXECUTIVE SUMMARY

The Trump administration has undertaken a sweeping portfolio of actions aimed at weakening federal climate protections and promoting the development and use of fossil fuels, primarily in support of President Trump's "energy dominance" agenda, and consistent with his views that humans are not causing serious climate change and that environmental regulations confer many costs and few benefits. Acting pursuant to the President's orders, federal agencies have initiated the process of reviewing and potentially revising or rescinding all of the major regulations enacted by the Obama administration to curtail greenhouse gas emissions from stationary and mobile sources. The administration has also sought to withdraw the U.S. from the Paris Agreement, expand and expedite fossil fuel development on federal lands and waters, delay and withdraw energy efficiency standards, and bail out the failing coal industry.

From the outside, it appears that the administration is flexing its powers to implement President Trump's agenda. But the power of the executive branch is not absolute, and the administration can only go so far before courts, legislators, or other factors outside of its control prevent it from achieving its goals. In fact, the administration has achieved far less progress in implementing its deregulatory agenda than many assume.

This paper takes a critical look at what the Trump administration has actually accomplished in terms of repealing and modifying greenhouse gas emission standards and otherwise advancing its pro-fossil fuel agenda. As detailed herein and summarized in Figures 1 and 2, the scope of the efforts taken pursuant to this agenda is extremely broad – there are dozens of different deregulatory actions underway at various agencies, most notably the Environmental Protection Agency (EPA). But in most cases, the pace of these efforts has been quite slow. This is particularly true for efforts to repeal or revise major regulations like the Clean Power Plan and the motor vehicle greenhouse gas emission and fuel economy standards, as the administration must adhere to notice-and-comment procedures and must also justify any changes to these rules in light of the statutory provisions it is implementing.

The administration has been able to quickly rescind and replace internal policy documents that are not subject to the same procedural requirements as formal regulations, but the practical

effect of these internal policy changes remains unclear. In many instances, President Trump's policies are directly at odds with statutory mandates and therefore unlikely to have a significant or enduring effect on agency practices. The many deregulatory processes that have been initiated are also consuming a large amount of federal government resources and creating significant uncertainty for regulated industries – consequences which are direct conflict with the President's stated goals of reducing regulatory inefficiencies and supporting regulated industries such as the power sector.

Ultimately, the Trump administration will face many barriers in actually effectuating its goals of lifting regulatory burdens and achieving "energy dominance" through greater reliance on fossil fuels. Courts have already shot down many of the administration's initial efforts to undermine existing regulations, and there is a reasonable chance that some of the final rules to repeal or replace those regulations will also be vacated by the courts. Even if the administration is successful in repealing critical climate regulations, the real-world effect of these repeals may be limited by external legal, social, and economic drivers. A future administration could also reverse course and reinstate regulation.

Meanwhile, many state and local governments and private actors are moving forward with their own actions to address climate change. This situation is deeply problematic for regulated entities that need policy coherence and predictability. Companies typically prefer uniform federal standards to the complicated and conflicting state and local laws that are emerging in the absence of clear federal regulations.

The deregulatory strategies deployed by President Trump and federal agencies can be summarized as follows:

White House: President Trump has rescinded almost all of the executive orders and policy documents issued by the Obama administration to provide guidance to federal agencies on climate change mitigation, energy efficiency, and sustainability. President Trump has also issued executive orders aimed at supporting fossil fuel development or use (without serious efforts to find ways to use them relatively cleanly, such as through carbon capture, use and sequestration). This effort has included orders directing agencies to take swift action to review and repeal or replace any regulations, guidance documents, and internal policies that could

burden the development or use of domestically-produced fossil fuels. This effectively encompasses all actions taken to mitigate greenhouse gas emissions from fossil fuels, otherwise control the externalities of fossil fuels, and reduce energy consumption. As part of his broader deregulation agenda, President Trump has also issued several orders that are aimed at encouraging regulatory repeals and preventing the issuance of new regulations.

Environmental Protection Agency: EPA has initiated notice-and-comment rulemakings to review and revise or rescind the regulations issued by the Obama administration to control greenhouse gas emissions from stationary and mobile sources. This is a lengthy multi-year process, as the agency must issue a proposal to replace or repeal the original rule, accept public comment on that proposal, consider the comments, and then issue a final rule. EPA is moving most vigorously with its plans to repeal and replace the Clean Power Plan (establishing emission standards for existing power plants), the greenhouse gas emission standards for light-duty vehicles, and the methane emission standards for new sources in the oil and gas sector; it has already issued proposals to repeal or significantly revise each of these rules. Once EPA issues final rules to repeal or replace these standards, they will almost certainly be challenged in court and subjected to judicial scrutiny to determine whether they comport with the requirements of the Clean Air Act, the Administrative Procedure Act, and other statutes. In the meantime, EPA has sought to delay the effective date of certain rules during its review process, but courts have struck down most of these attempts. As a result, many of the rules that are under review remain in place today.

EPA has also acted to roll back other rules aimed at controlling the externalities of fossil fuel-fired combustion, either through notice-and-comment proceedings to modify those rules, or by simply failing to implement and enforce those rules. The enforcement failures have already been challenged in court, and any formal modifications to the rules will likely be the subject of litigation as well.

Department of Interior (DOI): DOI has taken several actions to remove barriers to fossil fuel development, including: the issuance of a final rule repealing key provisions of the Methane Waste Prevention Rule (which established methane emission standards for oil and gas sources on federal lands); terminating the moratorium on and programmatic review of the federal coal

leasing program; revising its operating procedures to streamline fossil fuel permitting; curtailing environmental reviews of fossil fuel-related proposals; and removing protections for endangered species. DOI has also expanded the public lands and waters available for fossil fuel development, in part by working with the President to remove protections for national monuments. Multiple lawsuits have been filed challenging these actions as well.

Department of Energy (DOE): DOE has delayed and withdrawn energy efficiency standards that were in development or finalized at the end of the Obama administration. Some of these delays were successfully challenged in court and DOE was compelled to finalize and enforce the standards. DOE has also sought to use its authority as an energy regulator to subsidize the failing coal industry but has run up against opposition from the Federal Energy Regulatory Commission (FERC) and would likely be sued if it adopts any final action to this effect. Finally, DOE and FERC have made efforts to expedite approvals of applications for natural gas transportation infrastructure and to curtail the scope of environmental reviews for those applications.

State Department: The State Department has implemented President Trump's orders to withdraw from the Paris Agreement. However, due to the rules for withdrawing from that agreement, the State Department has only been able to issue notification of U.S. intent to withdraw when eligible to do so late in 2020, an action that a subsequent president could reverse at any time. The U.S. remains a party to the United Nations Framework Convention on Climate Change (UNFCCC) and the administration has made no effort to withdraw from that agreement.

Figure ES-1 (next page) summarizes the status of deregulatory efforts with respect to formal regulations issued by the Obama administration and now under review by the Trump administration. Figure ES-2 (page vi) lists the legal challenges which have been filed in response to the deregulatory actions summarized in Figure ES-1.

Figure ES-1: Status of Deregulatory Efforts

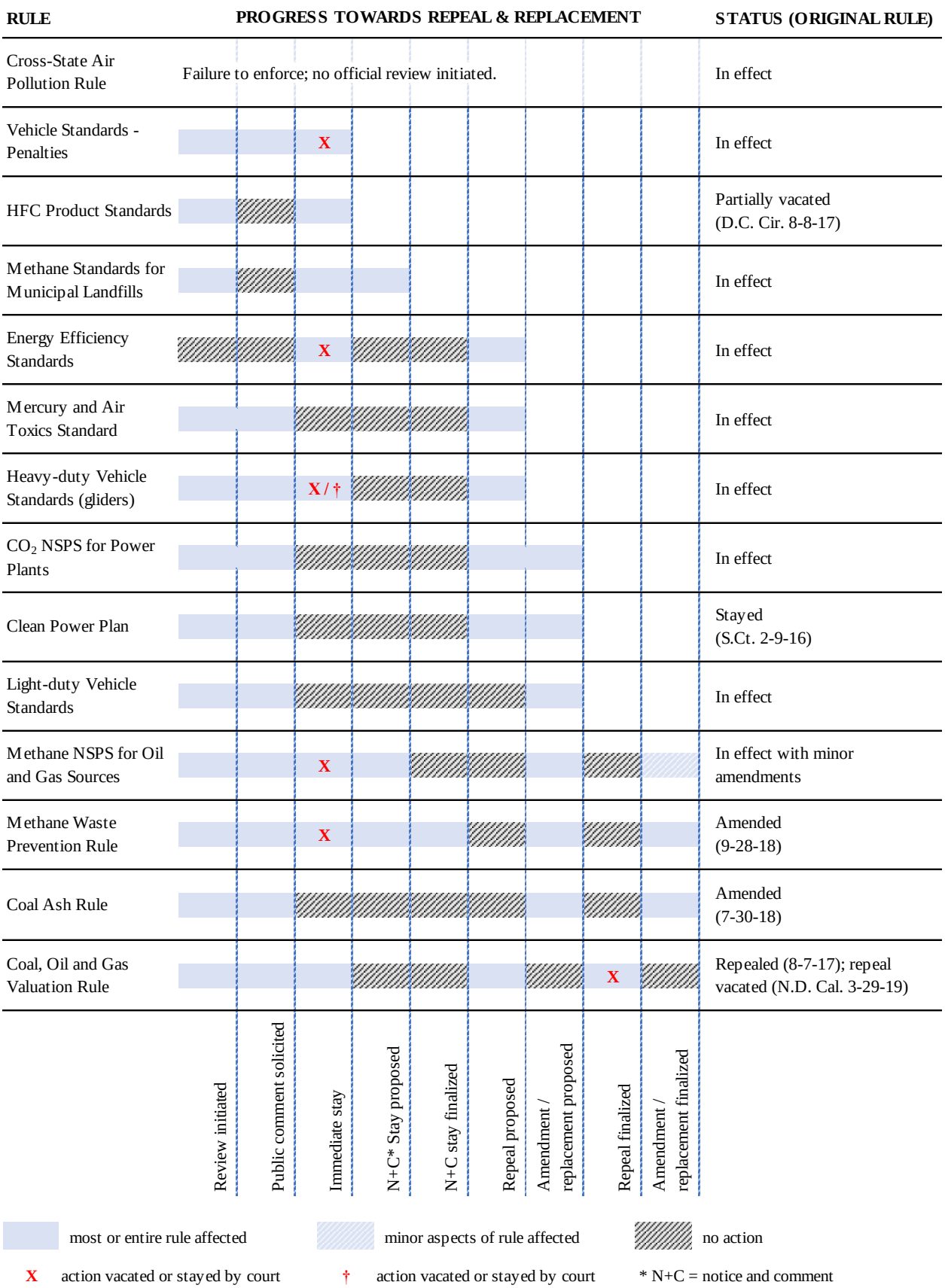

Figure ES-2: Lawsuits Challenging Deregulatory Actions

RULE	RELATED CASES*	CASE STATUS
Cross-State Air Pollution Rule	**Delaware v. EPA, No. 17-1099 (3d. Cir. Mar. 23, 2017):** Challenging EPA failure to respond to state petition seeking enforcement of rule.	Dismissed (8-31-18).
	Delaware v. EPA, No. 17-1099 (D.C. Cir. Mar. 24, 2017): Same.	Open.
	Connecticut v. Pruitt, No. 3:17-cv-00796 (D. Conn. May 16, 2017): Same.	Court ordered EPA to respond (2-7-18); EPA denied petition (4-13-18).
	Maryland v. EPA, No. 1:17-cv-02873 (D. Md. Sept. 27, 2017): Same.	Court ordered EPA to respond (6-13-18); EPA denied petition (10-5-18).
	New York et al. v. EPA, No. 18-406 (S.D.N.Y. Jan 17, 2018): Same.	Court ordered EPA to respond (6-12-18).
	New York et al. v. EPA, No. 19-1019 (D.C. Cir. Jan. 30, 2019): Challenging EPA determination on adequacy of existing CSAPR rule.	Open.
Vehicle Standards - Penalties	**NRDC v. NHTSA, No. 17-280 (2d Cir. Sept. 7, 2017):** Challenging NHTSA's delay of rule establishing penalties for non-compliance with vehicle emission standards.	Court vacated rule which delayed effective date of penalties (4-23-18).
HFC Product Standards	**NRDC v. Wheeler, No. 18-1172 (D.C. Cir. June 26, 2018):** Challenging EPA decision to suspend enforcement of HFC rule.	Open.
	New York v. Wheeler, No. 18-1174 (D.C. Cir. June 26, 2018): Same.	Open.
Methane Standards for Municipal Landfills	**NRDC v. Pruitt, No. 17-1157 (D.C. Cir 2017):** Challenging EPA's administrative stay of performance standards and emission guidelines for municipal solid waste landfills.	Petitioners agreed to voluntary dismissal after stay expired (2-1-18).
Energy Efficiency Standards	**New York et al. v. Perry, No. 17-918 (2d Cir. Mar. 31, 2017):** Challenging DOE decision to delay energy efficiency standards for ceiling fans.	Resolved when DOE issued standards (5-24-17)
	NRDC v. Perry, No. 4:17-cv-03404 (N.D. Cal. June 13, 2017): Challenging DOE failure to issue final efficiency standards for air compressors, walk-in coolers/freezers, uninterruptable power supplies, portable A/C units, and commercial packaged boilers.	Court held DOE failure violated EPCA (2-15-18).
	NRDC v. DOE, No. 1:170-cv-06989 (S.D.N.Y. Sept. 14, 2017): Challenging temporary suspension of efficiency test procedures for air conditioners and heat pumps.	Court held suspension was unlawful (2-22-19).
Mercury and Air Toxics Standard	N/A (no final action)	

* Does not include legal challenges to rules issued by Obama administration.

Continued on next page…

Figure ES-2: Lawsuits Challenging Deregulatory Actions (continued)

RULE	RELATED CASES*	CASE STATUS
Heavy-duty Vehicle Standards (gliders)	**Environmental Defense Fund v. EPA, No. 18-1190 (D.C. Cir. July 17, 2018):** Challenging EPA's "no action assurance" re: enforcement of heavy-duty vehicle GHG emission / fuel economy standards for small manufacturers of glider kits and vehicles.	Court stayed "no action assurance" (7-18-18) and EPA revoked it (7-26-18).
CO_2 NSPS for Power Plants	N/A (no final action)	
Clean Power Plan	N/A (no final action)	
Light-duty Vehicle Standards	**California v. EPA, No. 18-1114 (D.C. Cir. May 1, 2018):** Challenging EPA's revocation and re-issuance of its final determination re: the appropriateness of light-duty vehicle emission standards MY 2022-2025.	Open.
Methane NSPS for Oil and Gas Sources	**Clean Air Council v. Pruitt, 862 F.3d 1 (D.C. Cir. June 5, 2017):** Challenging EPA's administrative stay of methane NSPS.	Court vacated administrative stay (7-3-17).
Methane Waste Prevention Rule	**California v. BLM, No. 3:17-cv-03804 (N.D. Cal. Jul. 5, 2017):** Challenging BLM's administrative stay of the methane waste prevention rule.	Court vacated administrative stay (10-4-17).
	California v. BLM, No. 3:17-cv-07186 (N.D. Cal. Dec. 19, 2017): Challenging BLM's "suspension rule" which delayed the effective date of methane waste prevention rule for 1 year.	Court issued preliminary injunction of rule (2-22-18); BLM appealed (4-32-18).
	California v. Zinke, No. 3:18-cv-05712 (N.D. Cal. Sept. 18, 2018): Challenging final amendments to rule.	Open.
	Sierra Club v. Zinke, No. 3:18-cv-05984 (N.D. Cal. Sept. 28, 2018): Same.	Open.
Coal Ash Rule	N/A	
Coal, Oil and Gas Valuation Rule	**California et al v. DOI et al, No. C17-5948 (N.D. Cal. Oct. 7, 2017):** Challenging repeal of rule as arbitrary and capricious under APA.	Court vacated repeal (3-29-19).

* Does not include legal challenges to rules issued by Obama administration.

CONTENTS

I. Introduction

During his campaign for the presidency, Donald Trump made it clear that he believed climate change was a "hoax" and intended to use the power of the Executive Branch to dismantle the regulatory architecture established by the Obama administration to address climate change. The president argued that lifting unnecessary regulatory burdens, reviving the U.S. coal industry, and achieving American energy dominance would stimulate economic growth and create jobs for American workers. Since then, his administration has made considerable efforts to repeal or modify a wide array of regulations, policies, and guidance aimed at curtailing greenhouse gas emissions and otherwise controlling the use and externalities of fossil fuels. The Trump administration has also supplemented its deregulatory efforts with new policies and proposals aimed at further promoting and subsidizing the development and use of fossil fuels.

The administration has been able to pursue such a sweeping deregulatory agenda, at least in part, because the regulatory framework to address climate change was put into place through executive action rather than congressional action. But the administration's authority to modify this framework is nonetheless constrained by statutory mandates and other factors outside of its control. These constraints include the substantive mandates of statutes such as the Clean Air Act (which provided the original basis for many of the policies that President Trump now seeks to unravel) as well as procedural requirements that agencies must adhere to when modifying or repealing existing regulations.[1] Due to these constraints, the process of deregulation has been a slow one, and will likely continue to move at a slow pace for the remainder of the Trump presidency. Once rules and other actions are finalized, they will be subject to judicial review and may be annulled by the courts.[2]

[1] For an in-depth overview of procedural requirements governing regulatory rollbacks, see Bethany A. Davis Noll & Denise A. Grab, *Deregulation: Process and Procedures That Govern Agency Decisionmaking in an Era of Rollbacks*, 38 ENERGY L.J. 269 (2017).

[2] As detailed herein, many lawsuits have already been filed challenging the administration's failure to implement and enforce existing rules, and several decisions have been issued holding that agencies abrogated their duties in this context. Lawsuits have also been filed challenging new policies issued by the Trump administration, but these lawsuits have been less successful due to the lack of a "final agency action" to challenge. More legal challenges will come once the administration does issue final actions with respect to specific regulations like the Clean Power Plan. For a more detailed discussion of litigation during the first year of the Trump administration, see Dena P. Adler, *U.S. Climate Change Litigation in the Age of Trump: Year One* (Sabin Center for Climate Change Law 2018).

Even if President Trump's rollbacks are upheld in court, they could be reversed by a future president or Congress. In the meantime, his deregulatory agenda is prompting a proliferation of state and local actions aimed at reducing greenhouse gas emissions, including legal actions aimed at curbing fossil fuel development. This is leading to a patchwork of state policies that is less than optimal for the goal of protecting the climate and that is potentially burdensome for many American companies. In sum, the administration is expending an enormous amount of resources on a deregulatory agenda that may accomplish very little other than delaying action on climate change and creating a huge amount of regulatory uncertainty for regulated entities. This is not a "small government" approach, nor does it serve the long-term interests of industries that need to start preparing for a transition to a low-carbon economic future.

This paper assesses what the Trump administration has actually accomplished in terms of rolling back or amending emission standards, other regulations, and climate policies, taking into account administrative hurdles as well as judicial challenges faced by agencies.[3] Part II describes some of the overarching policies issued by President Trump and the White House to guide deregulatory efforts. Part III describes the actions undertaken by EPA to roll back rules aimed at reducing greenhouse gas emissions and otherwise addressing externalities associated with fossil fuel use. Part IV describes the actions undertaken by the Department of Interior to remove barriers to fossil fuel development on public lands and waters. Part V describes the Department of Energy's efforts to delay energy efficiency standards and support fossil fuel-fired utilities. Part VI describes the State Department's role in the President's intended withdrawal from the Paris Agreement. Part VII concludes that the current situation is untenable for both regulated entities and the American public and that a cohesive federal policy, preferably enacted by Congress, would better serve all interests.[4]

[3] This paper focuses on policies and regulations that deal with climate change *mitigation* – i.e., the reduction of greenhouse gas emissions. It does not address the policies and regulations that deal with climate change *adaptation.*

[4] The Climate Leadership Council and others have advocated for congressional legislation to create a carbon tax and dividend program based on studies suggesting that this would have a greater emissions impact and be more efficient than the current framework of regulations. *See* David Bailey & Greg Bertelsen, *A Winning Trade: How Replacing the Obama-Era Climate Regulations With a Carbon Dividends Program Starting at $40/Ton Would Yield Far Greater Emission Reductions* (Climate Leadership Council 2018). *See also* Justin Gundlach, *To Negotiate a Carbon Tax: A Rough Map of Interactions, Tradeoffs, and Risks*, 43(S) COLUMBIA JOURNAL OF ENVIRONMENTAL LAW 269 (2018).

II. Executive Policy Framework under the Trump Administration

In the late-2000s, there was a strong push for federal action on climate change. More than a decade had passed since the United Nations Framework Convention on Climate Change (UNFCCC) had entered into force, the nations of the world had recognized that climate change was one of the most pressing environmental problems of our time, and yet greenhouse gas emissions and fossil fuel use were still on the rise. Congress failed to enact a legislative solution to the problem, and so the Obama administration used its authority to enact a broad suite of policies and regulations to curtail greenhouse gas emissions and fossil fuel use. While some of President Obama's policies were issued solely on the basis of his executive authority, the most significant actions – specifically, greenhouse gas emission standards for power plants, motor vehicles, and other source categories – were promulgated under the authority of the Clean Air Act and other federal statutes. These regulations are thus tethered to legal requirements that cannot be modified or repealed by executive fiat.

Upon taking office, President Trump made it clear that he intended to reverse course and dismantle the regulatory architecture that his predecessor had put in place, consistent with his campaign promises. He published his "America First Energy Plan" in which he promised to exploit the country's "vast untapped domestic energy reserves" and remove "burdensome regulations" including "harmful and unnecessary policies such as the Clean Power Plan."[5] He also promised to "reviv[e] America's coal industry" and otherwise support and promote domestic fossil fuel development and use.[6]

President Trump then issued a series of executive orders aimed at solidifying his deregulatory agenda. First came two overarching orders on deregulation: Executive Order 13771, "Reducing Regulation and Controlling Regulatory Costs," instructed agencies to identify two existing regulations to be repealed for every one regulation that is proposed and to ensure that the incremental costs of new regulations finalized in the year are no greater than zero.[7] Executive

[5] Exec. Office of the President, *An America First Energy Plan* (2017), *available at* https://perma.cc/Z7UG-UGCC.
[6] *Id.*
[7] Exec. Order No. 13771 of January 30, 2017: Reducing Regulation and Controlling Regulatory, 82 Fed. Reg. 9339 (Feb. 3, 2017).

Order 13777, "Enforcing the Regulatory Reform Agenda," directed agencies to designate Regulatory Reform Officers and establish Regulatory Reform Task Forces to evaluate and identify regulations for repeal.[8] The legality of these orders is dubious, as they direct agencies to consider impermissible factors (i.e., factors not specified in statutes) when making regulatory decisions.[9] Plaintiffs have not yet been able to establish a concrete "injury" which would give rise to standing to bring a lawsuit challenging the executive orders, but that situation could change as agencies take concrete action to implement these directives.[10]

These broad deregulatory orders were followed by more specific orders pertaining to climate change and energy. Executive Order 13783, "Promoting Energy Independence and Economic Growth," laid the foundation for the administration's attack on climate change regulations. It directed agencies to review all actions that potentially "burden the development or use of domestically produced energy resources, with particular attention to oil, natural gas, coal and nuclear energy resources," and to rescind or revise any actions which do burden the development or use of those resources.[11] It explicitly called for the review of all major greenhouse gas emissions standards, including the Environmental Protection Agency (EPA)'s Clean Power Plan (which established carbon pollution guidelines for existing power plants), EPA's carbon pollution standards for new power plants, EPA's methane emission standards for oil and gas sources, and the Bureau of Land Management (BLM)'s methane waste rule.

In addition, the order directly repealed certain presidential and regulatory actions pertaining to energy and climate, including President Obama's Climate Action Plan, which was established with the goals of reducing greenhouse gas emissions, preparing the U.S. for the

[8] Exec. Order No. 13777 of February 24, 2017: Enforcing the Regulatory Reform Agenda, 82 Fed. Reg. 12285 (Mar. 1, 2017).

[9] *See* Michael Burger & Jessica Wentz, *Trump's Executive Order on Regulatory Costs is Not Only Arbitrary; It is Also Against the Law*, CLIMATE LAW BLOG (Feb. 1, 2017).

[10] *See* Pub. Citizen, Inc. v. Trump, 297 F. Supp. 3d 6, 13 (D.D.C. 2018) (holding that plaintiffs lacked standing to challenge the legality of the executive orders when they were first issued, but acknowledging that plaintiffs may be able to establish standing in the future).

[11] Exec. Order No. 13783 of March 28, 2017: Promoting Energy Independence and Economic Growth, 82 Fed. Reg. 16093 (Mar. 31, 2017). This order broadly defined "burden" as "unnecessarily obstruct, delay, curtail, or otherwise impose significant costs on the siting, permitting, production, utilization, transmission, or delivery of energy resources." *Id.* at §2(b).

impacts of climate change, and leading international efforts to address climate change;[12] various memoranda and reports that were issued by President Obama to further flesh out the actions his administration would take to address climate change;[13] and the technical guidance establishing the social cost of carbon (SC-CO_2), methane (SC-CH_4), and nitrous oxide (SC-N_2O) metrics to be used by federal agencies in regulatory actions.[14] Notably, the order did not expressly prohibit agencies from using the SC-CO_2, SC-CH_4, and SC-N_2O metrics – rather, it called for a review of those metrics and instructed agencies to "ensure… that any estimates [of the social cost of greenhouse gas emissions] are consistent with guidance contained in OMB Circular A-4" in the meantime.[15]

President Trump's order also contained directives to specific agencies to rescind guidance, policies, and other decisions pertaining to climate change. In particular, it directed the Council on Environmental Quality (CEQ) to rescind its "Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews,"[16] and it directed the Department of Interior (DOI) to terminate its programmatic environmental review of the federal coal leasing program as well as its moratorium on the issuance of new coal leases.[17] Finally, the order directed all agencies to identify any additional actions related to or arising from the rescinded policies, memoranda, and

[12] Exec. Office of the President, *The President's Climate Action Plan* (June 2013), *available at* https://perma.cc/7U9P-7GVE.

[13] The revoked memoranda and reports included: Presidential Memorandum of June 25, 2013: Power Sector Carbon Pollution Standards, 78 Fed. Reg. 39535 (July 1, 2013); Presidential Memorandum of November 3, 2015: Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment, 80 Fed. Reg. 68747 (Nov. 6, 2015), Presidential Memorandum of September 21, 2016: Climate Change and National Security; Exec. Office of the President, *Climate Action Plan Strategy to Reduce Methane Emissions* (March 2014).

[14] Interagency Working Group on the Social Cost of Greenhouse Gases, Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 (May 2013, Revised August 2016); Interagency Working Group on the Social Cost of Greenhouse Gases, Addendum to Technical Support Document on Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866: Application of the Methodology to Estimate the Social Cost of Methane and the Social Cost of Nitrous Oxide (Aug. 2016).

[15] Exec. Order No. 13783, *supra* note 11, § 5.

[16] CEQ, *Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act* Reviews (Aug. 1, 2016), *available at* https://perma.cc/F7BR-E6WX. *See also* CEQ, Notice of Final Guidance, 81 Fed. Reg. 51866 (Aug. 5, 2016).

[17] DOI Secretarial Order No. 3338: Discretionary Programmatic Environmental Impact Statement to Modernize the Federal Coal Program (Jan. 15, 2016), *available at* https://perma.cc/JVT4-J7VR.

orders issued by President Obama and to suspend, rescind, or revise those actions as soon as practicable.

Since then, President Trump has issued additional orders further elaborating on his energy policy agenda. Executive Order 13795, "Implementing an America-First Offshore Energy Strategy," called upon DOI to establish procedures for expanding and streamlining offshore oil and gas development.[18] Executive Order 13807, "Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects," contained directives aimed at expediting the federal approval of major infrastructure projects (defined to include energy production and generation, electricity transmission, and pipeline projects).[19] Executive Order 13834, "Efficient Federal Operations," established general goals on energy, water and resource efficiency, while simultaneously revoking an Obama-era order that required agencies to set specific energy efficiency and greenhouse gas reduction goals.[20] Most recently, Executive Order 13868, "Promoting Energy Infrastructure and Economic Growth", and Executive Order 13867, "The Issuance of Permits with Respect to Facilities and Land Transportation Crossings at the International Boundaries of the United States", both contained provisions aimed at removing barriers to and expediting federal approvals for energy infrastructure, particularly oil and gas pipelines.[21]

The administration is also moving forward with efforts to change and potentially curtail the analysis of greenhouse gas emissions and climate change-related considerations in environmental reviews conducted under the National Environmental Policy Act (NEPA). In 2018, CEQ issued an advanced notice of proposed rulemaking (ANPR) in which it announced that it was considering updating the implementing regulations for NEPA to "ensure a more efficient,

[18] Exec. Order No. 13795 of April 28, 2017, *Implementing an America-First Offshore Energy Strategy*, 82 Fed. Reg. 20815 (May 3, 2018).
[19] Exec. Order No. 13807 of August 15, 2017: Establishing Discipline and Accountability in the Environmental review and Permitting Process for Infrastructure Projects, 82 Fed. Reg. 40463 (Aug. 24, 2017).
[20] Exec. Order No. 13834 of May 17, 2018: Efficient Federal Operations, 83 Fed. Reg. 23771 (May 22, 2018) (revoking Exec. Order No. 13693 of March 19, 2015: Planning for Federal Sustainability in the Next Decade).
[21] Exec. Order No. 13868 of April 10, 2019: Promoting Energy Infrastructure and Economic Growth (Apr. 10, 2019); Exec. Order No. 13867 of April 10, 2019: The Issuance of Permits with Respect to Facilities and Land Transportation Crossings at the International Boundaries of the United States (Apr. 10, 2019).

timely, and effective" review process.[22] CEQ has also been quietly working on revised guidance on the consideration of greenhouse gas emissions in NEPA documentations – it submitted a draft of the guidance to OIRA on February 6, 2019,[23] but it has not yet solicited any public input on the draft or published any information about the scope and content of the guidance.

While some of the policy changes introduced by President Trump did take immediate effect, the directives with the most significant consequences – specifically, those to review and repeal or replace major climate regulations – can only be implemented by agencies in accordance with the notice-and-comment procedures established by the Administrative Procedure Act (APA) and the substantive statutory mandates under which these regulations were initially promulgated. These laws provide an important constraint on the administration's ability to move forward with its deregulatory agenda.

Moreover, to the extent that the administration has enacted immediate changes in policy, these changes have not necessarily had the intended effect. The rescission of CEQ guidance on climate change and environmental reviews is a good example: that guidance did not impose any new requirements on agencies, it simply reflected pre-existing legal obligations outlined in NEPA, as fleshed out by the implementing regulations and judicial decisions. As such, the rescission of this guidance had no legal effect on the scope of agency obligations under NEPA and only a limited practical effect on how agencies conduct NEPA analysis.[24] However, the rescission does add to uncertainty over how to treat greenhouse gas emissions in the NEPA process.

The administration has also sought to scale back or wholly eliminate federal funding for programs involving climate change science, mitigation, and adaptation, with only limited success. For example, President Trump's budget request for FY2018 proposed major cuts to EPA's

[22] CEQ, ANPR: Update to the Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, 83 Fed. Reg. 28591 (June 20, 2018).
[23] OIRA, Pending EO 12866 Regulatory Review: RIN: 0331-ZA03, EO 12866 Meetings, https://www.reginfo.gov/public/do/eoDetails?rrid=128676 (last visited May 16, 2019).
[24] As discussed in Part IV, some agencies have attempted to curtail their analysis of greenhouse gas emissions in NEPA reviews so as to avoid reaching a determination that those emissions are a "significant impact" under NEPA. Nonetheless, agency reviews still comport with almost all of the recommendations contained in the guidance (e.g., agencies are accounting for direct and indirect greenhouse gas emissions as well as the impacts of climate change on proposals undergoing NEPA review). And the rescission of the guidance appears to have had no effect on how courts interpret agency obligations under NEPA.

Clean Air and Climate programs, the earth science programs managed by the National Oceanic and Atmospheric Administration (NOAA) and the National Aeronautics and Space Administration (NASA), and the clean energy research programs managed by the Department of Energy (DOE). Congress rejected most of these proposed cuts in the FY2018 spending package and actually increased funding for the DOE clean energy research programs.[25] The administration has been more successful with its efforts to scale back international climate finance, as Congress did adopt the President's FY2018 proposal to eliminate funding to the UNFCCC, the Intergovernmental Panel on Climate Change (IPCC), and the Green Climate Fund (GCF).[26] However, Congress rejected proposed cuts to other sources of international climate finance and allocated nearly $140 million in FY2018 to the Global Environmental Facility (GEF), which is one of financial mechanisms for the UNFCCC.[27]

For these reasons, there is considerably less than meets the eye with respect to the administration's progress towards rolling back the existing portfolio of rules and policies developed agencies to address climate change and reduce greenhouse gas emissions. Below, we describe the status of specific deregulatory efforts, focusing first on efforts at EPA and then turning to other agencies.

III. Environmental Protection Agency

A. Cross-cutting Policies and Proposals

Under Scott Pruitt and (since his departure) Andrew Wheeler, EPA has played a pivotal role in implementing Trump's deregulatory agenda. In addition to initiating the review of all major greenhouse gas emission standards (discussed below), EPA has also introduced several overarching policies and proposals that have cross-cutting implications for future regulatory processes, including actions to revoke, amend, or reinstate emission standards.

[25] For a more detailed comparison of President Trump's proposed budget cuts and final budget decisions in the FY2018 omnibus spending package, see Rob Cowin, *How Did Climate and Clean Energy Programs Fare in the 108 Federal Budget?* UNION OF CONCERNED SCIENTISTS BLOG (Mar. 23, 2018), https://perma.cc/6EAP-MHBK.
[26] For an overview of cuts to international climate finance, see Joe Thwaites, *US 2018 Budget and Climate Finance: It's Bad, but Not As Bad As You Might Think*, WRI BLOG (Mar. 23, 2018), https://perma.cc/RYX8-2SC2.
[27] *Id.*

Shortly after Pruitt was appointed EPA Administrator, he announced what he called a "back-to-basics" agenda, a central tenet of which was "creating sensible regulations that enhance economic growth."[28] The agenda was announced at a press conference with coal miners, where Pruitt expressed strong support for revitalizing the coal industry after it "was nearly devasted by years of regulatory overreach."[29] Pruitt cited the review of the Clean Power Plan as a prime example of how this agenda would benefit the coal industry.[30] This set the tone for EPA's subsequent review of greenhouse gas emission standards and other rules affecting the fossil fuel industry. While Pruitt has since stepped down as EPA administrator, his acting successor Andrew Wheeler is continuing with the same course of action pursuant to the President's orders.

EPA has also undertaken two cross-cutting regulatory initiatives with important implications for climate-related rulemakings. The first was a proposal to restrict the use of scientific evidence in rulemaking. The proposed rule, misleadingly labeled "Strengthening Transparency in Regulatory Science," would bar EPA from using scientific studies in the development of significant new regulations unless the underlying data "are publicly available in a manner sufficient for independent validation."[31] The chief concern with this proposal is that it will block the use of much valid, peer-reviewed, and highly relevant research on pollution and public health effects, because many studies depend on data that cannot legally be made public. For example, the proposal would prevent EPA from using studies that rely on confidential patient information, which is a critical element of studies showing the health impacts of pollutants.[32]

The EPA Science Advisory Board has pushed back against these efforts to restrict science in rulemaking and has requested an opportunity to weigh in on the proposed rule before the administration proceeds further.[33] In the letter requesting review, the Board noted that the rule

[28] Press Release, EPA, EPA Launches Back-To-Basics Agenda at Pennsylvania Coal Mine (Apr. 13, 2017), https://perma.cc/DSF6-LYUW.
[29] *Id.*
[30] *Id.*
[31] EPA, Proposed Rule: Strengthening Transparency in Regulatory Science, 83 Fed. Reg. 18768 (Apr. 30, 2018).
[32] For further explanation, see The Medical Society Consortium on Climate & Health, *Talking Points on Proposed Rule "Strengthening Transparency in Regulatory Science"* (June 21, 2018), https://perma.cc/4WJE-N2XY
[33] Science Advisory Board, EPA Office of the Administrator, Letter to EPA Administrator Scott Pruitt re: Science Advisory Board (SAB) Consideration of EPA Proposed Rule: Strengthening Transparency in Regulatory Science (June 28, 2018), *available at*: https://perma.cc/RLM5-PMWX.

could have far reaching consequences and urged EPA to heed public input on this matter.[34] The Board also published an internal memorandum in which it noted certain concerns about the proposal, including the fact that it "fails to mention that there are various ways to assess the validity of the prior epidemiologic studies without public access to data and analytic methods," that it "oversimplifies" arguments in favor of the rule, and that it overlooks key reasons for why data (particularly patient data) may need to be kept confidential.[35]

The second initiative with important implications for climate-related rulemakings is EPA's ANPR soliciting comment on whether and how it should promulgate regulations "clarifying" its approach to cost-benefit analysis under the Clean Air Act, the Clean Water Act, and other environmental statutes.[36] In the press release accompanying the ANPR, Pruitt stated that EPA was undertaking this action due to concerns that the "previous administration inflated the benefits and underestimated the costs of its regulations through questionable cost-benefit analysis."[37] If EPA proceeds with this proposal, it could have implications for how EPA will weigh costs and benefits in future rulemakings. EPA has already modified its cost-benefit analysis for several rules to justify the repeal of those rules and may seek to codify these changes in the regulation. For example, to support its proposal to repeal the Clean Power Plan (discussed below), EPA adopted a new cost-benefit analysis wherein it: (i) confined its estimates of the social cost of carbon to "domestic bounds" and increased the discount rate applied to those estimates, dramatically reducing the projected costs of CO_2 emitted in the year 2030 from $50 to $1 per ton, (ii) downplayed or ignored the air pollution co-benefits of climate regulations, and (iii) inflated the estimated compliance costs by changing how it accounts for energy savings.[38]

It remains to be seen how EPA will proceed with these two rulemakings or whether they will be upheld in court, as there is no clear statutory basis for either of them. In the meantime, as

[34] *Id.* at 3.
[35] Alison Cullen, Chair, EPA Science Advisory Board (SAB) Work Group on EPA Planned Actions for SAB Consideration of the Underlying Science, Memorandum re: Preparations for Chartered SAB Discussions of Proposed Rule: Strengthening Transparency in Regulatory Science RIN 2080-AA14 (May 12, 2018), *available at* https://perma.cc/9C87-2QJB.
[36] EPA, ANPR: Increasing Consistency and Transparency in Considering Costs and Benefits in the Rulemaking Process, 83 Fed. Reg. 27524 (June 13, 2018).
[37] Press Release, EPA Headquarters, EPA Administrator Pruitt Proposes Cost-Benefit Analysis Reform (June 7, 2018), https://perma.cc/JC38-KLSM.
[38] See EPA, *Regulatory Impact Analysis for the Review of the Clean Power Plan: Proposal* (Oct. 2017).

discussed below, EPA continues to move forward with efforts to repeal and otherwise undermine existing protections – including greenhouse gas emission standards for stationary and mobile sources, product standards for hydrofluorocarbons (a particularly potent class of greenhouse gas emissions), and other environmental standards aimed at internalizing externalities associated with fossil fuel use.

B. Greenhouse Gas Emission Standards for Stationary and Mobile Sources

EPA possesses the authority to regulate greenhouse gas emissions under the Clean Air Act. This issue was decided by the Supreme Court in *Massachusetts v. EPA* – a lawsuit brought by twelve states and several cities challenging EPA's failure to act on a petition to regulate greenhouse gases from motor vehicles under section 202 of the Act.[39] The critical questions in that case were: (i) whether plaintiffs had standing to sue, (ii) whether greenhouse gases qualified as "air pollutants" that EPA was authorized to regulate under the Act, and (iii) whether EPA could decline to exercise that authority "because regulation would conflict with other administration priorities."[40] The Supreme Court found that the State of Massachusetts, at least, had standing to sue. It concluded that greenhouse gases did qualify as "air pollutants" within the meaning of the Act, and thus EPA had authority to regulate those emissions if it concluded that they endangered public health and welfare, and EPA could not decline to regulate these emissions based on political, social, or economic considerations not enumerated in the statutory text.[41] The Supreme Court reaffirmed EPA's authority to regulate greenhouse gas emissions in *American Electric Power v. Connecticut*, where it held that the Clean Air Act grant of authority displaced federal common law nuisance claims pertaining to greenhouse gas emissions.[42]

Thus, the Supreme Court has made it clear that the Clean Air Act is an available tool for regulating greenhouse gas emissions. Granted, in *Massachusetts v. EPA*, the Court did not explicitly hold that greenhouse gases from motor vehicles or any other source category *do* endanger public health and welfare (as this issue was remanded to EPA to decide). However, to

[39] Massachusetts v. EPA, 549 U.S. 497 (2007).
[40] *Id.* at 527.
[41] *Id.* at 530-35.
[42] American Electric Power v. Connecticut, 564 U.S. 410 (2011).

establish jurisdiction, the Court had to analyze whether the failure to regulate emissions gave rise to a sufficiently imminent and concrete injury for the purposes of Article III standing. The Court concluded that such an injury did exist and cited various facts and concessions to support this conclusion. For example, Justice Stevens, writing for the majority, noted that:

> The harms associated with climate change and serious and well recognized. Indeed, [a 2001 National Research Council Report] – which EPA regards as an 'objective and independent assessment of the relevant science,' – identifies a number of environmental changes that have already inflicted significant harms, including 'the global retreat of mountain glaciers, reduction in snow-cover extent, the earlier spring melting of ice on rivers and lakes, [and] the accelerated rate of rise of sea levels during the 20th century relative to the past few thousand years…'."[43]

Justice Stevens further noted that EPA (then under the administration of President George W. Bush) did not dispute the causal connection between anthropogenic greenhouse gas emissions and global warming, and thus, at a minimum, EPA's refusal to regulate such emissions "contribute[d] to the petitioners' injuries."[44] The Court dismissed the argument that this contribution was too insignificant to provide a basis for standing because EPA regulations would only target a small proportion of overall global emissions. The Court explained that "accepting this premise would doom most challenges to regulatory actions" because regulations frequently only deal with a piece of a larger overall problem.[45] The Court's standing analysis put EPA on notice that the Court understood the dangers of greenhouse gas emissions and it was therefore highly unlikely that the Court (at least as then constituted) would uphold a subsequent finding from EPA of no endangerment.

On remand from that case, EPA issued a formal endangerment finding in which it concluded that six greenhouse gases – CO_2, CH_4, N_2O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6) – threatened public health and welfare.[46] In the same action, EPA issued a separate finding that emissions from motor vehicles caused or

[43] Massachusetts v. EPA, 549 U.S. at 521.
[44] *Id.* at 523.
[45] *Id.* at 524. The Court also noted that "reducing domestic automobile emissions is hardly a tentative step" in light of the significant quantities of greenhouse gases produced by U.S. motor vehicles each year. *Id.* at 524-25.
[46] EPA, Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act; Final Rule, 74 Fed. Reg. 66496 (Dec. 15, 2009).

contributed to the threat to public health and welfare associated with climate change.[47] While the "cause or contributes" finding was specific to motor vehicles, the endangerment finding was broadly worded such to encompass all sources of greenhouse gas emissions, and EPA was therefore able to use it as the basis for regulating emissions from multiple source categories. The endangerment finding was upheld by a unanimous panel of the U.S. Court of Appeals for the D.C. Circuit, and the Supreme Court accepted its validity.[48] By the end of the Obama administration, EPA had promulgated greenhouse gas emissions standards for motor vehicles, power plants, oil and gas facilities, and municipal landfills.

A regulatory approach was not the Obama administration's first choice for controlling greenhouse gas emissions from stationary sources. The administration proposed to amend the Clean Air Act to adopt an economy-wide cap-and-trade program – a way to use a market mechanism to induce greenhouse gas reductions. This program was incorporated into the American Clean Energy and Security Act, better known as the Waxman-Markey Bill. It passed the House of Representatives by a vote of 219-212 on June 26, 2009. However, the companion bill died in the Senate in 2010, and the outcomes of the subsequent Congressional elections made it clear that no climate legislation could be achieved during President Obama's time in office. Thus, lacking the ability to pursue its preferred market-based approach, the administration pivoted to the use of the command-and-control techniques provided by the existing Clean Air Act. The statute is not well suited to control of greenhouse gas emissions, particularly from existing sources (such as coal-fired power plants). The Obama EPA did its best to thread the needle in drafting the Clean Power Plan and other greenhouse gas regulations. However, this approach attracted serious legal and political opposition, both from affected industries and from a number of states. As noted below, while legal challenges to the Clean Power Plan were pending before the D.C. Circuit Court of Appeals, the Supreme Court in February 2016 took the unprecedented step of staying implementation of the Clean Power Plan.

---

[47] *Id.*

[48] Coal. for Responsible Regulation, Inc. v. E.P.A., 684 F.3d 102, 108 (D.C. Cir. 2012), aff'd in part, rev'd in part sub nom. Util. Air Regulatory Grp. v. E.P.A., 134 S. Ct. 2427 (2014), and amended sub nom. Coal. for Responsible Regulation, Inc. v. Envtl. Prot. Agency, 606 F. App'x 6 (D.C. Cir. 2015).

The Trump administration has since initiated the process of reviewing and reconsidering these rules and has already proposed to repeal or replace certain standards, most notably the emission standards for existing power plants. However, despite the urgings of some, the administration has not taken any steps to repeal the 2009 endangerment finding. In the years since 2009 the scientific evidence supporting the endangerment finding has become considerably stronger.

1. *Clean Power Plan (CO_2 Emission Guidelines for Existing Power Plants)*

The Clean Power Plan, finalized in 2015, established CO_2 emission guidelines for existing fossil fuel-fired power plants under section 111(d) of the Clean Air Act.[49] This rule, which sought to control one of the largest emission sources in the country, was heralded as the centerpiece of the Obama administration's efforts to address climate change.

Under Section 111(d), EPA may set performance standards for existing sources within a particular source category.[50] The performance standards must reflect "the degree of emission limitation achievable through the application of the best system of emissions reduction [BSER] taking into account the cost of achieving such reduction and any non-air quality health and environmental impact and energy requirements."[51] EPA has the authority under this section to issue "emission guidelines" setting forth the performance level that is achievable applying the BSER (e.g., expressed as an emissions rate) as well as procedural requirements that states must follow when implementing section 111(d).[52] States would then submit plans for meeting these standards. EPA can reject state plans and even substitute a federal implementation plan if needed to control emissions under this provision.[53]

[49] EPA, Carbon Pollution Emission Guidelines for Existing Stationary Sources; Electric Utility Generating Units; Final Rule, 80 Fed. Reg. 64662 (Oct. 23, 2015) (hereinafter "Clean Power Plan").
[50] Clean Air Act § 111(d), 42 U.S.C. § 7411(d).
[51] Clean Air Act § 111 (a)(1), 42 U.S.C. § 7411(a)(1).
[52] Franz T. Litz et al., *What's Ahead for Power Plants and Industry? Using the Clean Air Act to Reduce Emissions, Building on Existing Regional Programs* (World Resources Institute 2011); Christopher E. Van Atten, *Structuring Power Plan Emissions Standards Under Section 111(d) of the Clean Air Act – Standards for Existing Power Plants* (M.J. Bradley & Associates LLC, 2013).
[53] Daniel P. Selmi, *Federal Implementation Plans and the Path to Clean Power*, 637 GEORGETOWN ENVTL. L. REV. 637 (2016).

For existing fossil fuel-fired power plants, EPA determined that the BSER consisted of on-site heat rate improvements at power plants as well as fuel switching to natural gas and zero-emitting renewable energy sources. Based on that BSER definition, EPA calculated regional CO_2 emission performance rates for coal plants and natural gas power plants and then used this information to calculate statewide emission reduction targets based on the mix of energy sources within the state and region. EPA anticipated that the rule would reduce CO_2 emissions from existing power plants 32% below 2005 levels by 2030, resulting in public health and climate benefits worth an estimated $34 - $54 billion per year by 2030.[54]

Industry groups and states immediately challenged the final rule in the D.C. Circuit Court of Appeals, arguing that it exceeded EPA's authority.[55] In February 2016, the Supreme Court put the rule on hold pending the outcome of that case.[56] The judicial stay has remained in effect since then.

Throughout his campaign, Trump promised to repeal the Clean Power Plan. Just over two months after the inauguration, on April 4, 2017, EPA announced plans to reconsider the rule, pursuant to the directives contained in Executive Order 13783.[57] That same day, EPA withdrew proposed rules for a Model Trading Program and Clean Energy Incentive Program that would have assisted states in implementing the Clean Power Plan.[58] EPA also asked the D.C. Circuit Court of Appeals to hold the rule litigation in abeyance during its reconsideration process.[59] The court granted that initial request as well as all subsequent abeyance requests, and the litigation remains on hold.[60]

---

[54] EPA, *Regulatory Impact Analysis for the Clean Power Plan Final Rule*, EPA-452/R-15-003 (Aug. 2015), *available at* https://perma.cc/HE2S-EV3J.
[55] West Virginia v. EPA, No. 15-1363 (D.C. Cir. 2015).
[56] Order in Pending Case, West Virginia v. EPA, No. 15A773 (S. Ct. Feb. 9, 2016).
[57] EPA, Review of the Clean Power Plan, 82 Fed. Reg. 16329 (Apr. 4, 2017).
[58] EPA, 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. 16144 (Apr. 3, 2017).
[59] Notice of Executive Order, EPA Review of Clean Power Plan and Forthcoming Rulemaking, And Motion to Hold Case in Abeyance, West Virginia v. EPA, No. 15-1363 (D.C. Cir. Mar. 28, 2017), *available at* https://perma.cc/32LQ-PVRG.
[60] Order Granting Abeyance, West Virginia v. EPA, No. 15-1363 (D.C. Cir. Apr. 28, 2017), *available at* https://perma.cc/HC7Y-SS29; Order Issuing Continuing Abeyance, West Virginia v. EPA, No. 15-1363 (D.C. Cir. Aug. 8, 2017), *available at* https://perma.cc/B2R6-SVSC; Order Issuing Continuing Abeyance, West Virginia v. EPA, No. 15-1363 (D.C. Cir. Nov. 9, 2017), *available at* https://perma.cc/BL8X-6VKJ; Order Issuing Continuing Abeyance, West

On October 16, 2017, EPA published a proposal to repeal the Clean Power Plan, accompanied by a revised regulatory impact analysis (RIA) aimed at justifying the repeal.[61] EPA had originally estimated that the Clean Power Plan would generate $25 to $45 billion in net benefits per year by 2030, but in the new RIA, EPA concluded that the repeal of the plan could generate anywhere from $28.3 billion in net costs to $14 billion in net benefits by 2030.[62] Commentators have criticized EPA for manipulating its cost-benefit analysis to achieve these new results.[63]

On December 28, 2017, EPA issued an ANPR to replace the Clean Power Plan in which it solicited comment on what should be included in a new potential rule to regulate CO_2 from existing power plants under Section 111(d).[64] In August 2018, EPA published a proposed replacement rule for regulating greenhouse gas emissions from existing power plants, which it labeled the "Affordable Clean Energy" (ACE) rule.[65]

The proposed rule would require far fewer emission reductions. EPA is proposing to define the BSER as heat rate efficiency improvements that can be implemented on-site at existing power plants. This means that the performance standards issued pursuant to the rule would only reflect the emission reductions that can be achieved through on-site energy efficiency measures, and would not reflect the much greater emission reductions that could be achieved by replacing emission-intensive power sources with cleaner sources of power or actions aimed at improving end-use energy efficiency. It is possible that the administration's proposed approach will fail to

Virginia v. EPA, No. 15-1363 (D.C. Cir. Mar. 1, 2018), *available at* https://perma.cc/6MBB-LBG2; Order Issuing Continuing Abeyance, West Virginia v. EPA, No. 15-1363 (D.C. Cir. June 26, 2018), *available at* https://perma.cc/KG22-KTSQ.

[61] EPA, Proposed Rule: Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 82 Fed. Reg. 48035 (Oct. 16, 2017); EPA, *Regulatory Impact Analysis for the Review of the Clean Power Plan: Proposal* (Oct. 2017).

[62] For a discussion of how EPA altered its approach to cost-benefit analysis, see Kate Shouse, *EPA's Proposal to Repeal the Clean Power Plan: Benefits and Costs*, CRS Report No. 45119 (Feb. 28, 2018).

[63] *See, e.g.,* Alan J. Krupnick & Amelia Keyes, *Hazy Treatment of Health Benefits: The Case of the Clean Power Plan,* Resources for the Future Blog (Oct. 13, 2017), https://perma.cc/67AM-JDBR; Kevin Steinberger & Starla Yeh, *Pruitt Cooks the Books to Hide Clean Power Plan Benefits* (Oct. 10, 2017), https://perma.cc/5QAP-LH6S..

[64] EPA, ANPR: State Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units, 82 Fed. Reg. 61507 (Dec. 28, 2017).

[65] EPA, 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. 44746 (Aug. 31, 2018).

ensure any emissions reductions at all insofar as there may be a "rebound effect" wherein plants that implement heat-rate improvements may be called upon to run more hours, thus increasing the total amount of CO_2 generated (even if the rate of CO_2 emissions decreases).

The proposed rule also differs from the Clean Power Plan insofar as it does not contain any numerical targets for states, but rather leaves it up to states to establish their own performance standards based on the BSER definition. EPA is also proposing to let states set weaker standards based on their assessment of the plant's "remaining useful life". Many environmentalists are concerned that the rule essentially allows states to decide how much to cut emissions, if at all, rather than establishing enforceable quantitative targets.

EPA prepared another RIA for the proposed ACE rule in which it found that replacing the Clean Power Plan with the proposed rule would result in billions of dollars of net "foregone benefits" (i.e., costs) under every scenario it analyzed.[66] Notably, EPA reached this conclusion even after applying its new methodology for calculating costs and benefits in climate-related rulemakings.

As noted above, the original Clean Power Plan is not currently in effect due to the Supreme Court stay. But many of the objectives of the plan are nonetheless being met, as coal use in the U.S. continues to decline, and coal plants are being retired each year due to legal, social, and economic factors beyond the administration's control.[67] This trend will likely continue regardless of whether the administration is successful in replacing the Clean Power Plan.

2. *CO_2 Emission Standards for New Power Plants*

On the same day that EPA issued the Clean Power Plan, the agency also promulgated CO_2 emission standards for new and modified fossil fuel-fired power plants.[68] Section 111 of the Clean Air Act requires EPA to issue performance standards for both new and existing sources within

[66] 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*, EPA-452/R-18-006 (Aug. 2018).
[67] *See* Reid Wilson, *Coal Industry Mired in Decline Despite Trump Pledges*, THE HILL (Mar. 4, 2018), https://perma.cc/AY2P-MX2S; EIA, *Short-Term Energy Outlook: Coal* (July 10, 2018), https://perma.cc/9SYV-69E6.
[68] EPA, Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units; Final Rule, 80 Fed. Reg. 64510 (Oct. 23, 2015).

the same source category (and the term "new source" is defined to include modified facilities).[69] The language defining the basis for new source performance standards (NSPS) is the same as for existing sources – the standards must reflect application of the BSER, taking into account costs and non-air quality health and environmental impacts and energy requirements.[70] However, for new sources, EPA promulgates these standards directly rather than issuing emission guidelines for states to implement. And of course, the BSER may differ for new and modified sources as compared with existing sources.

EPA determined that the BSER for CO_2 emissions from new coal-fired power plants should include the installation of carbon capture and sequestration (CCS) equipment that would capture approximately 16-23% of the CO_2 emissions generated (depending on the type of coal) and set the corresponding NSPS for new coal-fired power plants at 1,400 lbs CO_2/MWh.[71] EPA established a less stringent NSPS for modified coal-fired power plants, limiting CO_2 emissions to the level of the facility's best historical annual performance from 2002 to the time of modification. For new natural gas-fired power plants, EPA set an NSPS of 1,000 lbs CO_2/MWh, reflecting application of efficient natural gas combined cycle (NGCC) technology.[72]

As with the Clean Power Plan, the standards were challenged immediately after they were issued.[73] One of the challengers' chief contentions was that CCS technologies were not "adequately demonstrated" and EPA therefore erred in its determination that the BSER should reflect the application of partial CCS.[74]

[69] *See* Clean Air Act § 111(b) (requiring performance standards for "new sources"), § 111(a)(2) (defining "new source" to include "any stationary source, the construction or modification of which is commenced after the publication of regulations), § 111(a)(4) (defining "modification" as "any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted).

[70] Clean Air Act § 111(a)(1), 42 U.S.C § 7411(a)(1).

[71] 80 Fed. Reg. at 64513.

[72] *Id.* at 64515.

[73] North Dakota v. EPA, No. 15-1381 (D.C. Cir. 2015). The Sabin Center for Climate Change Law filed an amicus brief in this case on behalf of carbon capture and sequestration experts in support of the performance standard. Brief for *Amici Curiae* Carbon Capture and Storage Scientists in Support of Respondents, North Dakota v. EPA, No. 15-1381 (D.C. Cir. Dec. 21, 2016), *available at* https://perma.cc/MQ9M-BFAM.

[74] Petitioner State North Dakota's Statement of Issues To Be Raised, North Dakota v. EPA, No. 15-1381 (D.C. Cir. Nov. 27, 2015), *available at* https://perma.cc/TWK6-QXB7.

Pursuant to Executive Order 13783, EPA announced on April 4, 2017, that it was reviewing the rule, and if appropriate, would initiate proceedings to suspend, revise, or rescind the rule.[75] EPA also submitted a request to the D.C. Circuit Court of Appeals to hold the litigation over this rule in abeyance pending the outcome of its review process.[76] The D.C. Circuit granted EPA's request and suspended the litigation indefinitely in August 2017.[77]

On December 6, 2018, EPA issued a proposed rule to weaken the NSPS, increasing the emissions rate for coal plants from 1,400 lbs CO_2/MWh to 1,900 lbs CO_2/MWh for larger units and 2,000 lbs CO_2/MWh for smaller units.[78] To justify this increase, the Trump EPA reversed course on the Obama EPA's determination that CCS is an adequately demonstrated technology. Instead, EPA has proposed to find that the BSER for this source category is the most efficient demonstrated steam cycle in combination with the best operating practices. EPA has also asserted that this proposal would result in "negligible changes" in total CO_2 emissions and compliance costs through 2026, since no new coal-fired power plants are expected to be constructed in that timeframe (as they have become uneconomical for other reasons).[79] In the meantime, the original CO_2 performance standards for new fossil fuel-fired power plants remain in effect.

3. Methane Emission Standards for New Oil and Gas Sources

The oil and gas sector is another major source of greenhouse gas emissions in the U.S. and a key contributor of methane (CH_4), which is a more potent greenhouse gas than CO_2. During the Obama administration, EPA used its authority under section 111(b) of the Clean Air Act to issue stationary source performance standards for the oil and gas sector as well as the power sector. EPA finalized NSPS for methane (CH_4), volatile organic compounds (VOCs), and toxic air

[75] EPA, Review of the Standards of Performance for Greenhouse Gas Emissions From New, Modified, and Reconstructed Stationary Sources: Electric Generating Units, 82 Fed. Reg. 16330 (Apr. 4, 2017).
[76] Notice of Executive Order, EPA Review of Rule and Forthcoming Rulemaking, and Motion to Hold Cases in Abeyance, North Dakota v. EPA, No. 15-1381 (D.C. Cir. Mar. 28, 2017), *available at* https://perma.cc/WMC8-PT5M.
[77] Order Issuing Continuing Abeyance, North Dakota v. EPA, No. 15-1381 (D.C. Cir. Aug. 10, 2017), *available at* https://perma.cc/8ANU-T3DK. *See also* Order Granting Abeyance, North Dakota v. EPA, No. 15-1381 (D.C. Cir. Apr. 28, 2017), *available at* https://perma.cc/NFX3-286T (initial stay of litigation for 60 days).
[78] EPA, Review of Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units (Pre-Publication Draft), EPA-HQ-OAR-2013-0495; RIN 2060-AT56 (Dec. 6, 2018).
[79] *Id.* at 112.

pollutants from the oil and gas sector on June 3, 2016.[80] The NSPS rule established different performance standards for a variety of oil and gas facilities, including well sites, gathering and boosting stations, processing plants, and compressor stations. These standards consisted of emission reduction targets (e.g., 95% reduction in methane emissions from centrifugal compressors) as well as operational standards (e.g., requiring capture of methane emissions at well completion, and requiring monitoring for fugitive emissions and repair of leaks).[81] EPA estimated that the rule would reduce 510,000 short tons of methane (11 million tons CO_2e) per year by 2025, yielding corresponding climate benefits of $690 million per year which would outweigh the estimated costs of $530 million per year.[82] As with the other greenhouse gas standards, the final rule was challenged by industry groups and states on the grounds that it exceeded EPA's authority.[83]

The Trump EPA announced that it was reviewing the rule pursuant to Executive Order 13783 on the same day that it announced the reconsideration process for the power sector standards.[84] EPA also successfully moved to have the initial lawsuit against the rule held in abeyance pending its review of the rule.[85]

EPA subsequently issued a *Federal Register* notice stating that it was granting reconsideration of certain requirements in the NSPS, specifically the well site pneumatic pump standards and the requirements for certification by a professional engineer, and that it would stay

[80] EPA, Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources; Final Rule, 81 Fed. Reg. 35824 (June 3, 2016).
[81] For a summary of the standards, see 81 Fed. Reg. at 35826.
[82] EPA, *EPA's Actions to Reduce Methane Emissions from the Oil and Natural Gas Industry: Final Rules and Draft Information Collection Request* (2016), https://perma.cc/FA55-R3BR.
[83] North Dakota v. EPA, No. 16-1242 (D.C. Cir. 2016). *See also* American Petroleum Institute v. EPA, No. 13-1108 (D.C. Cir. 2013) (earlier challenge to 2012 NSPS for oil and gas sector, which was consolidated with North Dakota v. EPA in 2017).
[84] EPA, Review of the 2016 Oil and Gas New Source Performance Standards for New, Reconstructed, and Modified Sources, 82 Fed. Reg. 16331 (Apr. 4, 2017). EPA also sent a separate letter to fossil fuel companies that had requested reconsideration of the fugitive emission standards stating that it would grant their request. Letter from EPA Administrator Scott Pruitt re: Convening a Proceeding for Reconsideration of Final Rule, "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed and Modified Sources," published June 3, 2016, 81 Fed. Reg. 35824 (Apr. 18, 2017), *available at* https://perma.cc/8PC3-QEF4.
[85] Order Granting Abeyance, American Petroleum Institute v. EPA, No. 13-1108 (D.C. Cir. May 18, 2017), *available at* https://perma.cc/2Y74-E6QS.

those requirements for three months pending reconsideration.[86] Environmental groups challenged the initial stay, and on July 3, 2017, the D.C. Circuit Court of Appeals held that EPA had exceeded its authority by issuing the stay without following the APA's notice and comment procedures and ordered EPA to begin implementing the rules.[87]

EPA followed the initial three-month stay with a proposed rule to stay the NSPS requirements for two years.[88] EPA has not finalized the rule adopting the two-year stay. However, on March 12, 2018, EPA published a final amendment to the NSPS which would allow leaks to go unrepaired during unscheduled or emergency shutdowns, and which would also remove monitoring survey requirements for well sites located on the Alaskan North Slope.[89] Notably, although EPA did solicit comment on these issues in the proposal for the two-year stay, there was no formal proposal which preceded this final rule. This raises the question of whether EPA failed to comply with APA notice-and-comment requirements when promulgating the March 12 rule.

On October 15, 2018, EPA published a proposed rule to revise the oil and gas NSPS.[90] The proposal would rescind or modify many of the key requirements embedded in the original NSPS, particularly those pertaining to methane leak detection and repair.[91] Two of the key changes include reductions in how frequently oil and gas operators would be required to survey for methane leaks, and an extension of time provided for leak repair. EPA has estimated that, if these proposed changes are implemented, methane emissions from oil and natural gas facilities will

[86] EPA, Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources; Grant of Reconsideration and Partial Stay, 82 Fed. Reg. 25730 (June 5, 2017).
[87] Clean Air Council v. Pruitt, 862 F.3d 1 (D.C. Cir. 2017).
[88] EPA, Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources: Stay of Certain Requirements; Proposed Rule, 82 Fed. Reg. 27645 (June 16, 2017). *See also* EPA, Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources: Stay of Certain Requirements; Notice of Data Availability, 82 Fed. Reg. 51788 (Nov. 8, 2017) (providing supplemental information in support of the stay); EPA, Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources: Three Month Stay of Certain Requirements; Proposed Rule, 82 Fed. Reg. 27641 (June 16, 2017) (proposing an additional 3-month stay to ensure that there is no gap between the initial 3-month stay and the start of the 2-year stay) EPA, Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources: Three Month Stay of Certain Requirements; Notice of Data Availability, 82 Fed. Reg. 51794 (Nov. 8, 2017) (providing supplemental information in support of the 3-month stay).
[89] EPA, Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources; Amendments; Final Rule, 83 Fed. Reg. 10628 (Mar. 12, 2018).
[90] EPA, Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources; Proposed Rule, 83 Fed. Reg. 52056 (Oct. 15, 2018).
[91] For a more detailed description of the proposed rule, see Romany Webb, *Five Important Points About EPA's Revised New Source Performance Standards for the Oil and Gas Industry,* CLIMATE LAW BLOG (Sept. 11, 2018).

increase by 380,000 – 480,000 short tons between 2019 and 2015, equivalent to a 4-5% increase in total industry methane emissions.[92]

Apart from the specific provisions addressed in the March 12 rule, most aspects of the methane NSPS for the oil and gas sector remain in effect, pursuant to the D.C. Circuit's order. A lawsuit has not yet been filed to challenge the March 12 rule, possibly due to its limited scope.

4. *Methane Emission Standards for Existing Oil and Gas Sources*

EPA had commenced work on 111(d) emission guidelines for methane from existing sources the oil and gas sector during the Obama administration but had not finalized these guidelines by the time President Trump took office. Specifically, on November 10, 2016, EPA issued a final Information Collection Request (ICR) to the oil and gas industry seeking information on the availability and cost of emissions controls for existing sources within this sector.[93] The ICR was the first step in the regulatory process: the intent was to then proceed with the promulgation of proposed emission guidelines for this source category.

The Trump administration reversed course on the development of this rule. On March 2, 2017, EPA withdrew the ICR and instructed oil and gas companies that they were no longer required to respond to the queries contained therein.[94] Since no formal proposal or rule had been issued, EPA did not initiate a formal review process like it has for finalized regulations.

On April 5, 2018, fifteen states and the City of Chicago sued EPA for failing to regulate methane emissions from existing oil and gas operations, arguing that EPA had violated the Clean Air Act by unreasonably delaying the promulgation of this rule.[95] The case was filed with the D.C. Circuit Court of Appeals. Oral arguments have not yet been scheduled.

5. *Greenhouse Gas Emission Standards for Motor Vehicles*

Section 202(a) of the Clean Air Act requires EPA to issue performance standards for emissions of air pollutants from motor vehicles which, in EPA's judgment, cause or contribute to

[92] *Id.*
[93] EPA, *Background on the Information Request for the Oil and Natural Gas Industry*, https://perma.cc/9FYK-LQL9.
[94] EPA, Notice Regarding Withdrawal of Obligation to Submit Information, 82 Fed. Reg. 12817 (Mar. 7, 2017).
[95] New York et al. v. Pruitt, 1:18-cv-00773 (D.C. Cir. 2018).

air pollution which may reasonably be anticipated to endanger public health or welfare.[96] As discussed above, *Massachusetts v. EPA* specifically dealt with EPA's authority and obligation to regulate greenhouse gas emissions under this section. The positive endangerment finding issued by EPA following that decision triggered a legal obligation for EPA to promulgate performance standards for greenhouse gas emissions from motor vehicles.

A separate statute requires the National Highway Traffic Safety Administration (NHTSA) to establish fuel economy standards for motor vehicles.[97] Due to the close relationship between fuel economy and greenhouse gas emissions, during the Obama administration EPA and NHTSA cooperated in a rulemaking process to promulgate joint greenhouse gas emission and corporate average fuel economy (CAFE) standards for motor vehicles. These standards were harmonized with California's fuel economy standards so as to promote nationwide consistency, and California was also granted two waivers under section 209 of the Clean Air Act which provided the state with independent legal authority to issue the fuel economy standards and also authorized the state to adopt additional requirements for vehicles as part of its Advanced Clean Cars Program.[98]

a. Light Duty Vehicles

On October 16, 2016, EPA and NHTSA adopted joint emission and CAFE standards for light duty vehicles model years 2017-2025 which increase over time and are expected to result in an average industry fleetwide level of 163 grams / mile of CO_2 by model year 2025, equivalent to a fuel economy of 54.5 miles per gallon.[99] EPA estimated that the standards would reduce

[96] Clean Air Act § 202, 42 U.S.C. § 7522.
[97] 49 U.S.C. § 32902 ("Average Fuel Economy Standards").
[98] EPA, California State Motor Vehicle Pollution Control Standards; Notice of Decision Granting a Waiver of Clean Air Act Preemption for California's 2009 and Subsequent Model year Greenhouse Gas Emission Standards for new Motor Vehicles; Notice, 74 Fed. Reg. 32744 (Jul. 8, 2009); EPA, California State Motor Vehicle Pollution Control Standards; Notice of Decision Granting a Waiver of Clean Air Act Preemption for California's Advanced Clean Car Program and a Within the Scope Confirmation for California's Zero Emission Vehicle Amendments for 2018 and Earlier Model Years, 78 Fed. Reg. 2112 (Jan. 9, 2013).
[99] EPA & DOT, 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards; Final Rule, 77 Fed. Reg. 62623 (Oct. 15, 2012).

greenhouse gas emissions by approximately 2 billion metric tons over the lifetime of the vehicles sold in these years, resulting in net benefits to society ranging from $326 to $451 billion.[100]

The light-duty rule called for a mid-term evaluation to determine whether the standards should be revised for light duty vehicles MY 2022-2025. In January 2017, just before President Trump took office, EPA completed its mid-term evaluation and issued a final determination in which it concluded that no change was warranted for the MY 2022-2025 standards.[101] Many in the industry criticized the determination for being rushed, as it came in the final days of the Obama administration, several months before the expected date offered in the public timeline.

On March 15, 2017, the Trump EPA and NHTSA announced their intention to revisit the conclusion from the mid-term evaluation.[102] On August 10, 2017, EPA and NHTSA announced that they were opening a public comment period on the reconsideration of the light-duty emission standards for MY 2022-2025, and that they would take comment on whether the MY 2021 standards were appropriate as well.[103] On April 13, 2018, EPA published a notice stating that it had completed its reconsideration of the mid-term evaluation, that it was withdrawing the Obama administration's final determination in the mid-term evaluation because the current standards were "based on outdated information" and "may be too stringent," and that it intended to initiate a new notice-and-comment rulemaking proceeding to revise them.[104]

In May 2018, seventeen states, the District of Columbia, and several environmental groups filed a lawsuit challenging EPA's decision to withdraw the Obama administration's final

---

[100] EPA Office of Transportation and Air Quality, *Regulatory Announcement: EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks,* EPA-420-F-12-051 (Aug. 2012), *available at* https://perma.cc/STR4-QVX3.

[101] EPA, *Final Determination on the Appropriateness of the Model Year 2022-2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation*, EPA-420-R-17-001 (Jan. 2017), *available at* https://perma.cc/34ML-M6F5.

[102] NHTSA & EPA, Notice of Intention To Reconsider the Final Determination of the Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022-2025 Light Duty Vehicles, 82 Fed. Reg. 14671 (Mar. 22, 2017).

[103] EPA Press Release: EPA, DOT Open Comment Period on Reconsideration of GHG Standards for Cars and Light Trucks (Aug. 10, 2017), https://perma.cc/LF7B-PCVP. *See also* NHTSA & EPA, Request for Comment on Reconsideration of the Final Determination of the Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022-2025 Light-Duty Vehicles; Request for Comment on Model Year 2021 Greenhouse Gas Emissions Standards, 82 Fed. Reg. 39551 (Aug. 21, 2017).

[104] EPA, Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022-2025 Light-Duty Vehicles, 83 Fed. Reg. 16077 (Apr. 13, 2018).

determination from the midterm evaluation and issue a new final determination reaching the opposite conclusion on the reasonableness of the vehicle standards.[105] EPA and industry intervenors have moved to dismiss the case, arguing that the revised final determination was not a "final agency action" subject to judicial review. The light-duty emission standards remain in effect pending review by the administration and the outcome of this case. On November 21, 2018, the D.C. Circuit Court of Appeals issued an order allowing the case to proceed without ruling on the motions to dismiss.[106]

In August 2018, EPA and NHTSA published a proposed rule to weaken the light-duty vehicle emission and fuel economy standards. The proposal – entitled the "Safer and Affordable Efficient Vehicles Proposed Rule for Model years 2021-2026" – would freeze the light-duty vehicle standards for MY 2021-2026 at 2020 levels, rather than having the standards become more stringent over time as provided for in the original rule.[107] It would also revoke the waiver allowing California to establish more stringent standards which other states can then adopt. As indicated by the title of the proposal, the administration's primary justification for the rule is that it will make new vehicles more affordable and save lives by increasing access to those new vehicles. Many governmental and non-governmental organizations have expressed opposition to the rule and raised serious questions about the underlying economic and safety analyses, and twenty states have already signaled their intent to sue if the proposal is finalized.[108]

b. Medium- and Heavy-Duty Vehicles

EPA and NHTSA also promulgated joint CAFE and emission standards for medium- and heavy-duty vehicles (e.g., large trucks and vans). The standards for heavy-duty vehicles MY 2018-2027 were finalized in August 2016.[109] EPA anticipated that the standards would reduce CO_2

[105] California v. EPA, No. 18-1114 (D.C. Cir. 2018).
[106] Order, California v. EPA, No. 18-1114 (D.C. Cir. Nov. 21, 2018).
[107] EPA & NHTSA, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model years 2021-2026 Passenger Cars and Light Trucks, 83 Fed. Reg. 32817 (Aug. 24, 2018).
[108] See, e.g., Press Release, Union of Concerned Scientists, Trump Administration Attacks Consumers, Climate, and States with Indefensible new Vehicle Proposal (Aug. 2, 2018), https://perma.cc/DGW2-JTSK; Press Release, New York State Attorney General, A.G. Underwood: We Will Sue Over EPA Rollback of Clean Car Rule (Aug. 2, 2018) (containing joint statement from 20 state attorney generals expressing their intent to sue if this rule is finalized).
[109] EPA & NHTSA, Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2; Final Rule, 81 Fed. Reg. 73478 (Oct. 25, 2016).

emissions by approximately 1.1 billion tons over the lifetime of vehicles built in these years, saving vehicle owners an estimated $170 billion in avoided fuel costs and $230 billion in net benefits to society.[110]

The Trump Administration has not announced plans to review and potentially revise or repeal these standards as a general matter. However, responding to industry concerns, EPA issued a proposal on November 16, 2017 to repeal the emissions standards set for heavy-duty glider vehicles, glider engines, and glider kits based on a proposed re-interpretation under which these items would be found not to constitute "new motor vehicles" under the Clean Air Act.[111] (Glider vehicles employ old engines in new chasses.) This action was taken in direct response to a petition for review of the application of the rule to gliders submitted by several glider manufacturing companies on July 11, 2017. EPA also issued a notice to small manufacturers and suppliers of glider vehicles assuring them that it would not take action to enforce the rule for these manufactures on July 6, 2018, but this "no action assurance" was immediately stayed by the D.C. Circuit Court of Appeals and then revoked by the Acting EPA Administrator.[112]

The Trump administration may also soon take action to address another industry challenge – specifically, with respect to the application of the rule to trailers – which was filed by several trailer manufacturers in the D.C. Circuit Court of Appeals on December 22, 2016.[113] The D.C. Circuit has granted motions to hold the case in abeyance pending the administration's review of that aspect of the rule, and has also stayed the application of the rule to trailers pending judicial resolution of the case.[114]

---

[110] EPA Office of Transportation and Air Quality, *Regulatory Announcement: EPA and NHTSA Adopt Standards to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles for Model Year 2018 and Beyond*, EPA-420-F-16-044 (Aug. 2016), *available at* https://perma.cc/KQK3-JLQ2.

[111] EPA, Proposed Rule; Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits, 82 Fed. Reg. 53442 (Nov. 16, 2017).

[112] *See* EPA, Conditional No Action Assurance Regarding Small Manufactures of Glider Vehicles (July 6, 2018), https://perma.cc/2GZC-65YR; Order Granting Administrative Stay, Environmental Defense Fund v. EPA, No. 18-1190 (D.C. Cir. July 18, 2018), https://perma.cc/WN82-574U; EPA, Withdrawal of Conditional No Action Assurance Regarding Small Manufacturers of Glider Vehicles (July 26, 2018), https://perma.cc/8XKJ-VA7E.

[113] Truck Trailer Manufacturers Association, Inc. v. EPA, No. 16-1430 (D.C. Cir. 2016).

[114] Order Granting Abeyance, Truck Trailer Manufacturers Association, Inc. v. EPA, No. 16-1430 (D.C. Cir. May 8, 2017), *available at* https://perma.cc/XJL3-TRMK; Order Continuing Abeyance, Truck Trailer Manufacturers Association, Inc. v. EPA, No. 16-1430 (D.C. Cir. Oct. 27, 2017), *available at* https://perma.cc/8WAN-3PAP.

c. Penalties for Non-Compliance

In addition to the new emissions and fuel economy standards, the Obama administration also promulgated regulations which increased penalties on automakers that do not comply with the standards. NHSTA published a final rule on December 28, 2016, which increased the maximum fines from $5.50 to $14 for every tenth of an mpg and allowed adjustments for inflation between the publication date and the assessment of the violation.[115] The rule was issued in direct response to a law passed by Congress in 2015 requiring agencies to adjust fines for inflation.[116]

The Trump administration has since initiated its review of this rule. On July 12, 2017, NHTSA announced that it would indefinitely delay the effective date of the rule increasing penalties,[117] and in a separate notice, NHTSA announced that it would reconsider and potentially revise the rule.[118] The stated rationale for reconsideration was that the final rule did not adequately account for potential negative economic impacts caused by increasing the fines.[119]

Several states and environmental groups filed a lawsuit challenging NHTSA's delay of the original rule.[120] On April 23, 2018, the Second Circuit Court of Appeals granted the petitioners' request and vacated the rule which delayed the effective date for the increased penalties.[121] That initial order was followed by an opinion, dated June 29, 2018, in which the Second Circuit panel explained that NHTSA lacked authority to indefinitely delay the adjustments to the civil penalties that were called for by the 2015 statute.[122] The panel confronted the Trump administration's argument that agencies possess "inherent authority" to reconsider final rules published in the *Federal Register*, noting that the agency must always abide by the notice-and-comment provisions of the APA before taking formal regulatory action of this nature (e.g., delaying, modifying, or rescinding a rule). In addition, the panel disagreed that it was "in the public interest" for NHTSA

[115] NHTSA, Civil Penalties; Final Rule, Response to Petition for Reconsideration; Response to Petition for Rulemaking, 81 Fed. Reg. 95489 (Dec. 28, 2016).
[116] Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015, Pub. L. 114-74 (2015).
[117] NHTSA, Civil Penalties; Final Rule; Delay of Effective Date, 82 Fed. Reg. 32139 (July 12, 2017).
[118] NHTSA, Civil Penalties; Reconsideration of Final Rule; Request for Comments, 82 Fed. Reg. 32140 (July 12, 2017).
[119] *Id.* at 32142.
[120] NRDC v. NHTSA, No. 17-2780 (2d Cir. 2017).
[121] Order Granting Petitions, NRDC v. NHTSA, No. 17-2780 (2d Cir. Apr. 23, 2017).
[122] NRDC v. NHTSA, 2018 WL 3189321 (2d Cir. 2018)

to suspend the rule without taking comment, reasoning that the public interest would best be served through adherence to notice-and-comment procedures.

6. *Methane Standards for Municipal Solid Waste Landfills*

The Obama EPA issued NSPS and existing source guidelines for municipal solid waste (MSW) landfills on August 29, 2016.[123] The rules require large landfills[124] to install and operate a gas collection system within 30 months after the landfill gas emissions reach a certain threshold.[125] The rules also contain provisions pertaining to emissions monitoring and capping and removing the landfill gas collection-and-control system when the landfill is closed or no longer generating substantial quantities of emissions. EPA anticipated that the standards would reduce 334,000 tons CH_4 (8.2 million tons CO_2e) and 303,000 tons of CO_2 per year by 2025.

Industry groups filed an initial challenge to the rule in October 2016.[126] The D.C. Circuit has since granted EPA's requests to hold the case in abeyance pending its reconsideration of the rule.[127]

On May 5, 2017, the Trump EPA announced that it would reconsider certain provisions of the methane standards for new and existing landfills in response to a petition from industry groups raising objections to those provisions.[128] Specifically, EPA planned to reconsider requirements for emission monitoring, reporting, and corrective actions, among other things.[129] On May 22, 2017, EPA announced a 90-day administrative stay of both standards pending its

[123] EPA, Standards of Performance for Municipal Solid Waste Landfills; Final Rule, 81 Fed. Reg. 59332 (Aug. 29, 2016).
[124] "Large landfills" are those with a capacity of at least 2.5 million metric tons and at least 2.5 million cubic meters of waste. 81 Fed. Reg. at 59333.
[125] Specifically, the requirement kicks in when emissions of non-methane organic compounds reach a threshold of 34 metric tons or more per year. 81 Fed. Reg. at 59334.
[126] National Waste & Recycling Association v. EPA, No. 16-1371 (D.C. Cir. 2016).
[127] Order Granting Abeyance, National Waste & Recycling Association v. EPA, No. 16-1371 (D.C. Cir. June 14, 2017); Order Continuing Abeyance, National Waste & Recycling Association v. EPA, No. 16-1371 (D.C. Cir. Sept. 26, 2017).
[128] Letter from EPA Administrator Scott Pruitt re: Convening a Proceeding for Reconsideration of final rules entitled "Standards of Performance for Municipal Solid Waste Landfills," 81 Fed. Reg. 59332 and "Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills," 81 Fed. Reg. 59276, both published August 29, 2016 (May 5, 2017), https://perma.cc/7S5D-PPC5.
[129] *Id.* at 2.

reconsideration of the rules pursuant to President Trump's Executive Order on Energy Independence.[130] The 90 day stay expired on August 29, 2017, so the standards remain in effect.

On June 16, 2017, environmental and conservation groups filed a lawsuit challenging EPA's decision to stay the landfill methane standards.[131] The petitioners eventually agreed to voluntary dismissal of the case after the stay had expired and EPA withdrew its plans for further delay in implementation of the standards. The petitioners stipulated that they consented to the dismissal on the basis of EPA's representations that the stay only affected deadlines that would have applied during the 90 days the stay was in effect, that EPA was not aware of new landfills affected by the stay, and that the stay did not affect deadlines for existing landfills or for EPA obligations.

Eight states filed a lawsuit in the Northern District of California on May 31, 2018, alleging that EPA had failed to fulfill its statutory duty to implement and enforce the emission guidelines for existing sources.[132] More specifically, petitioners alleged that "instead of working to support and ensure compliance with the Emission Guidelines, EPA has worked to undermine—for example, by communicating that it has no intent to respond to state plans or to impose a federal plan on states that did not impose a state plan—in clear derogation of its statutory and regulatory duties."[133] To support this allegation, the petitioners cited several examples of EPA's implementation failure: (i) EPA had not yet approved any state plans,[134] (ii) EPA had failed to review their state plan submissions or respond to their queries about the development of these plans,[135] (iii) after failing to respond to multiple inquiries from the California Air Resources Board (CARB), EPA sent a letter to CARB stating that "at this time we do not plan to prioritize the review of submitted state plans nor are we working to issue a Federal Plan for states that failed to submit a state plan" and suggesting that it would not prioritize these issues until after it had completed

[130] EPA, Stay of Standards of Performance for Municipal Solid Waste Landfills and Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills, 82 Fed. Reg. 24878 (May 31, 2017).
[131] NRDC v. Pruitt, No. 17-1157 (D.C. Cir 2017).
[132] California v. EPA, No. 4:18-cv-03237 (N.D. Cal. 2018).
[133] States' Complaint for Declaratory and Injunctive Relief, ¶ 3, California v. EPA, No. 4:18-cv-03237 (N.D. Cal. May 31, 2018), *available at* https://perma.cc/W3L5-LBNN.
[134] *Id.* at ¶ 53.
[135] *Id.* at ¶¶ 49-50.

its reconsideration of the rule in 2020.[136] The district court has not yet issued any rulings in that case.

EPA has continued to move forward with plans to modify the emission guidelines. On October 30, 2018, EPA published a proposed rule which would postpone the due date for state plans promulgated pursuant to the methane emission guidelines from May 30, 2017 to August 29, 2019.[137] In that proposal, EPA also took comment on whether it should amend the guidelines to require states to resubmit their plans in accordance with new guidelines.

C. Product Standards for Hydrofluorocarbons

During the Obama administration, EPA also issued product standards aimed at reducing the production and use of hydrofluorocarbons (HFCs), a particularly potent class of greenhouse gas emissions. EPA had approved the use of HFCs as a substitute for ozone-depleting chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) in the 1990s, pursuant to its authority under Section 612 of the Clean Air Act. Section 612 establishes a "safe alternatives policy" which calls for the replacement of ozone depleting substances with alternatives that "reduce overall risks to human health and the environment."[138] To implement this policy, Section 612 directs EPA to evaluate the effects of potential substitutes to ozone depleting substances and to designate a list of approved (i.e., safe) alternatives to prohibited ozone depleting substances, as well as a list of prohibited alternatives.[139] This is known as the "Significant New Alternatives Policy" (SNAP) program.

Since EPA first approved the HFCs as a safe alternative for CFCs and HCFCs, it became clear that HFCs were not appropriate alternatives because they are potent greenhouse gases. In light of this new information, EPA issued a new SNAP rule in 2015 in which it moved certain HFCs with high global warming potential (GWP) from the approved list to the prohibited list and established deadlines for phasing out the use of these HFCs in applications such as air

[136] *Id.* at ¶ 52.
[137] EPA, Adopting Subpart Ba Requirements in Emission Guidelines for Municipal Solid Waste Landfills; Proposed Rule, 83 Fed. Reg. 54527 (Oct. 30, 2018).
[138] Clean Air Act § 612(a), 42 U.S.C. § 7671j(a).
[139] Clean Air Act § 612(c) , 42 U.S.C. § 7671j(c).

conditioning, retail food refrigeration, vending machines, aerosols, and foam blowing.[140] In the same rulemaking, EPA placed several climate-friendlier alternatives on the approved substances list.[141]

Two foreign manufacturers of products containing HFCs filed a lawsuit challenging the 2015 rule. The D.C. Circuit Court of Appeals issued a decision in favor of the petitioners on August 8, 2017.[142] The court upheld EPA's authority to move HFCs from the list of safe substitutes to the list of prohibited substitutes based on its assessment of public health and environmental risks, and in doing so, EPA could prohibit a manufacturer from replacing an ozone depleting substance with HFCs. However, the court found that Section 612 did not grant EPA the authority to require manufacturers to replace non-ozone depleting substances such as HFCs with more environmentally friendly alternatives. The court therefore vacated the rule "to the extent it requires manufacturers to replace HFCs with a substitute substance" and remanded to EPA for further proceedings.[143] The D.C. Circuit denied a rehearing of this case,[144] and the Supreme Court denied petitions for it to review the decision.[145]

On April 13, 2018, EPA announced that it would not enforce the HFC alternatives rule until it completed a supplemental rulemaking to address the D.C. Circuit's partial vacatur of the rule.[146] Eleven states, the District of Columbia, and NRDC filed a lawsuit challenging EPA's decision to suspend enforcement of the HFC restrictions, arguing that EPA could not suspend the rule in its entirety in response to a partial vacatur.[147]

---

[140] EPA, Protection of Stratospheric Ozone: Change of Listing Status for Certain Substitutes Under the Significant New Alternatives Policy Program; Final Rule, 80 Fed. Reg. 42870 (July 20, 2015).
[141] *Id.*
[142] Mexichem Fluor, Inc. v. Envtl. Prot. Agency, 866 F.3d 451 (D.C. Cir. 2017).
[143] *Id.* at 454.
[144] Order Denying Petition for Rehearing, Mexichem Fluor, Inc. v. Envtl. Prot. Agency, No. 15-1328 (D.C. Cir. Jan. 26, 2018).
[145] Certiorari – Summary Dispositions, NRDC v. Mexichem Fluor, Inc. et al., No. 18-0002 (S. Ct. Oct. 9, 2018); Certiorari – Summary Dispositions, Honeywell International v. Mexichem Fluor, Inc. et al., No. 17-1703 (S. Ct. Oct. 9, 2018).
[146] EPA, Protection of Stratospheric Ozone: Notification of Guidance and a Stakeholder Meeting Concerning the Significant New Alternatives Policy (SNAP) Program, 82 Fed. Reg. 18431 (Apr. 27, 2018).
[147] NRDC v. Wheeler, No. 18-1172 (D.C. Cir. 2018); New York v. Wheeler, No. 18-1774 (D.C. Cir. 2018).

D. Other Environmental Standards Affecting Fossil Fuel Use

The environmental rules targeted for deregulation by the Trump administration are not limited to rules aimed at reducing greenhouse gas emissions. There are other environmental standards currently under review or revision that have important implications for fossil fuel use and the corresponding greenhouse gas emissions. These standards help to internalize some of the externalities associated with fossil fuel use (e.g., by requiring operators of coal-fired plants and coal ash facilities to pay for pollution control measures) and as a result they create a more level playing field for other energy sources to compete with fossil fuels. Three examples are discussed below: The Mercury and Air Toxics Standard and the Coal Ash Rule, both of which are currently under review, and the Cross-State Air Pollution Rule, which is not being enforced. All three rules would increase the costs of operating coal-fired power plants, and thus accelerate their retirement and their replacement by cleaner sources of electricity, reducing greenhouse gas emissions. They are therefore important components of the efforts to cause the closure of existing coal-fired power plants, which was a major objective of the Clean Power Plan.

1. Mercury and Air Toxics Standard

EPA issued the National Emission Standards for Hazardous Air Pollutants (NESHAP) for coal and oil-fired power plants, commonly referred to as the Mercury and Air Toxics Standards (MATS) rule on February 16, 2012.[148] The MATS rule requires facilities to achieve an emissions rate for mercury and air toxics consistent with the implementation of the maximum available control technology (MACT) for those pollutants. In the same rulemaking, EPA also established NSPS for criteria pollutants (PM, NO_x, and SO_2) from fossil fuel-fired electric utility, industrial, commercial, and institutional steam generating units.

In *Michigan v. EPA*, the Supreme Court ruled that EPA had improperly failed to consider compliance costs at the outset of developing the MATS rule. The rule was remanded to EPA for

[148] EPA, 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; Final Rule, 77 Fed. Reg. 9304 (Feb. 16, 2012).

further analysis of costs but remained in effect during the remand.[149] On April 25, 2016, EPA issued a supplemental finding in which it considered compliance costs and concluded that the MATS rule was appropriate and necessary.[150] Industry opponents again sued EPA, arguing that the rule exceeded EPA's authority.[151]

EPA made it clear that it intended to review and potentially revise the rule when it requested that the D.C. Circuit delay oral arguments in the case noted above to give it time to review the rule. EPA subsequently requested that the litigation be put on hold pending its review of the rule, and on April 27, 2017, the D.C. Circuit suspended the case indefinitely.[152] On February 7, 2019, EPA published a proposed rule to revise the supplemental cost finding that it had issued in response to *Michigan v. EPA*. Completely reversing course from its 2016 finding, EPA is proposing to determine that the MATS rule is not "appropriate and necessary" based on a revised analysis in which it has found that the costs of the rule outweigh its benefits.[153]

2. *Coal Ash Rule*

On April 17, 2015, the Obama EPA issued a rule regulating the disposal of coal combustion residuals from electric utilities (commonly known as the "Coal Ash" rule), pursuant to its authority under Subtitle D of the Resource Conservation and Recovery Act (RCRA).[154] The rule established requirements pertaining to the operation of coal ash facilities, structural integrity of coal ash impoundments, groundwater monitoring and corrective actions, closure and post-closure, and record keeping and public disclosures. While the rule did not regulate emissions from power plants, it did have the effect of internalizing some of the externalities associated with coal use (thereby creating additional operating costs for many coal plants).

[149] Michigan v. EPA, 135 S.Ct. 2699 (2015).
[150] EPA, Supplemental Finding That It Is Appropriate and Necessary To Regulate Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units; Final Rule, 81 Fed. Reg. 24420 (Apr. 25, 2016).
[151] Murray Energy Corp. v. EPA, No. 16-1127 (D.C. Cir. 2016).
[152] Order Granting Abeyance, Murray Energy Corp. v. EPA, No. 16-1127 (D.C. Cir. Apr. 27, 2017), *available at* https://perma.cc/Q55X-FA83.
[153] EPA, Proposed Rule: National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units-Reconsideration of Supplemental Finding and Residual Risk and Technology Review, 84 Fed. Reg. 2670 (Feb. 7, 2019).
[154] EPA, Hazardous and Solid Waste Management Systems: Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule, 80 Fed. Reg. 21302 (Apr. 17, 2015).

The rule was challenged by industry groups, environmental groups, and municipalities who felt that the rule was either too stringent or not stringent enough.[155] After President Trump took office, industry challengers petitioned EPA to reconsider specific provisions of the rule, including but not limited to provisions at issue in the case. EPA sent a letter to the challengers announcing that EPA would reconsider the provisions addressed in their petitions,[156] and subsequently asked the D.C. Circuit Court of Appeals to postpone oral arguments until it had an opportunity to review and potentially revise the rule.[157] The D.C. Circuit granted EPA's request, but not indefinitely.[158]

During the litigation, EPA has also taken a number of steps to delegate control over coal ash disposal to state regulators. EPA is taking these actions pursuant to the Water Infrastructure Improvements for the Nation (WIIN) Act, enacted in 2016, which authorizes EPA-approved state permitting programs to regulate coal ash disposal, so long as the state program is as protective as EPA's promulgated standards.[159] EPA issued interim final guidance for state permit programs for coal ash disposal on August 15, 2017.[160] EPA also published a preliminary approval of Oklahoma's application to regulate coal ash in lieu of the federal program on January 16, 2018 (Oklahoma was the first state to seek approval).

On March 1, 2018, EPA proposed amendments to the coal ash rule that would "incorporate flexibilities" for utilities and states – for example, by allowing state regulators to make determinations about compliance with coal ash disposal standards. The move towards granting state regulators greater flexibility and control of the program raises environmental concerns because many of the states with coal ash contaminated sites and histories of coal ash spills do not have good track records with respect to implementing and enforcing environmental protections.[161] EPA issued a final rule promulgating many of the proposed amendments on July

[155] Utility Solid Waste Activities, et al v. EPA, No. 15-1219 (D.C. Cir. 2015).
[156] Letter from EPA Administrator Scott Pruitt re: Petitions Concerning Coal Combustion Residuals Rule (Sept. 13, 2017), *available at* https://perma.cc/C8QZ-XNZR.
[157] Respondents' Motion to Continue Oral Argument and Hold These Proceedings in Abeyance, Utility Solid Waste Activities, et al v. EPA, No. 15-1219 (D.C. Cir. Sept. 18, 2017), *available at* https://perma.cc/UG9W-ASPG.
[158] Order Granting Abeyance, Utility Solid Waste Activities, et al v. EPA, No. 15-1219 (D.C. Cir. Sept. 27, 2017).
[159] Water Infrastructure Improvements for the Nation Act, Pub. L. 114-332 (Dec. 16, 2016).
[160] EPA Office of Land and Emergency Management, *Coal Combustion Residuals State Permit Program Guidance Document; Interim Final* (Aug. 2017), *available at* https://perma.cc/N36N-UTYK.
[161] Earthjustice, *Coal Ash Contaminated Sites*, https://perma.cc/G9CQ-DNSS.

30, 2018.[162] EPA has stated that it intends to initiate a second rulemaking to amend other provisions of the rule not addressed in this action.[163]

A legal challenge has not yet been filed in opposition to the final rule amending the coal ash regulations. However, the D.C. Circuit Court of Appeals did issue a decision in the lawsuit challenging the original coal ash rule which has implications for the amendments issued by the Trump administration.[164] The court held that the original rule was not sufficiently protective of public health and welfare because it did not require adequate protections for unlined and partially-lined coal ash pits and some storage facilities were improperly exempted. The court also rejected all industry claims that the rule was too stringent. EPA thus has a legal obligation to make the rule *more stringent* than that which was enacted by the Obama administration, which is exactly the opposite of what EPA accomplished through the March amendments. Shortly after that decision was issued, Hurricane Florence caused the release of large amounts of coal ash in North Carolina; this event may make it even more difficult for the Trump administration to weaken the standards for coal ash containment.[165]

3. Cross-State Air Pollution Rule

The Cross-State Air Pollution Rule (CSAPR) was issued by EPA on August 8, 2011, to help protect interstate air quality.[166] The rule establishes a framework for controlling cross-state emissions of nitrogen oxides (NO_x), sulfur dioxide (SO_2) from power plants in upwind states that contribute to the formation of particulate matter (PM) and ozone pollution in downwind states, thereby interfering with the downwind states' ability to attain the National Ambient Air Quality Standards (NAAQS) for those pollutants.[167] CSAPR allows a downwind state to file a "section 126 petition" asking EPA to regulate pollution from sources in another state when that pollution is

[162] EPA, Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Amendments to the National Minimum Criteria (Phase One, Part One), 83 Fed. Reg. 36435 (July 30, 2018).
[163] *Id.* at 36436.
[164] Utility Solid Waste Activities Group et al. v. EPA, No. 15-1219 (D.C. Cir. Aug. 21, 2018).
[165] Sharon Lerner, *Hurricane Florence Released Tons of Coal Ash in North Carolina. Now the Coal Industry Wants Less Regulation.* THE INTERCEPT (Sept. 28, 2018).
[166] EPA, Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals; Final Rule, 76 Fed. Reg. 48207 (Aug. 8, 2011).
[167] *Id.*

impairing air quality in the petitioning state. If EPA determines action is necessary, it can direct the polluting state to address the problem in its State Implementation Plan (SIP) or impose its own federal implementation plan (FIP). EPA has since issued several updates to the program, and in a 2016 update, it recognized that additional action would likely be needed to fully address upwind states' obligations to control interstate pollution under the Clean Air Act.[168]

The Supreme Court upheld the validity of this rule, reversing a D.C. Circuit Court of Appeals decision vacating the rule.[169] Following that decision, EPA began implementing Phase I of the CSAPR in 2014, and was scheduled to begin implementing Phase II – which required additional emission reductions – in 2017.

The Trump EPA has not taken any formal measures to review and repeal the rule, but it has also not taken measures to implement and enforce the rule (particularly the Phase II requirements). Most notably, EPA has not been responding to section 126 petitions in a timely manner and has rejected or proposed to reject the petitions that it has finally responded to after lengthy delays.[170] Delaware, New York, Connecticut, and Maryland have all sued EPA for delaying its responses to Section 126 petitions.[171] Multiple orders have been issued in these cases

[168] In December 2011, EPA supplemented the final rule to cover additional states for certain pollution. EPA has also issued minor revisions to the rule's compliance deadlines since it has been finalized. As of January 2017, the CSAPR requires 28 states in the eastern United States to reduce power plant emissions of SO_2, annual NO_x, and ozone seasonal NO_x affecting downwind states. *See* EPA, Federal Implementation Plans for Iowa, Michigan, Missouri, Oklahoma, and Wisconsin and Determination for Kansas Regarding Interstate Transport of Ozone, 76 Fed. Reg. 80760 (Dec. 27, 2011); EPA, Rulemaking To Affirm Interim Amendments to Dates in Federal Implementation Plans Addressing Interstate Transport of Ozone and Fine Particulate Matter, 81 Fed. Reg. 13275 (Mar. 14, 2016).

[169] EPA v. EME Homer City Generation, L.P., 134 S. Ct. 1584 (2014).

[170] For a detailed timeline of state petitions, EPA extensions and responses, and lawsuits, see Harvard Regulatory Rollback Tracker, *Cross-State Air Pollution Rule and Section 126 Petitions*, https://perma.cc/3LDW-79TK. *See also* EPA, Response to June 1, 2016 Clean Air Act Section 126(b) Petition From Connecticut; Notice of Final Action, 83 Fed. Reg. 16064 (Apr. 13, 2018); EPA, Response to Clean Air Act Section 126(b) Petitions From Delaware and Maryland; Notice of Proposed Action, 83 Fed. Reg. 26666 (June 8, 2018).

[171] Maryland v. EPA, No. 1:17-cv-02873 (D. Md. 2017); Delaware v. EPA, No. 17-1099 (D.C. Cir. 2017); Delaware v. EPA, No. 17-1644 (3d Cir. 2017); New York et al. v. EPA, No. 18-cv-00406 (S.D.N.Y. 2018); Connecticut v. Pruitt et al., No. 3:17-cv-00796 (D. Conn. 2017).

requiring EPA to respond to the petitions,[172] but EPA has thus far responded to the court orders by rejecting the petitions from Connecticut, Delaware, and Maryland.[173]

EPA has taken several other noteworthy actions with respect to the CSAPR rule. On July 10, 2018, following up on its prior finding that additional revisions to the rule would likely be needed to address certain states' obligations regarding interstate air pollution, EPA published a proposed determination that the rule fully addresses those states' obligations and that "with the CSAPR fully implemented, these states are not expected to contribute significantly to nonattainment in, or interfere with maintenance by, any other state with regard to the 2008 ozone NAAQS."[174] In other words, EPA is arguing that there is no need for any updates to the CSAPR program, despite the implementation and enforcement problems outlined above. Downwind states have already expressed opposition to this determination.[175] On December 21, 2018, EPA issued a final determination containing the same conclusion.[176] Shortly thereafter, the states of New York, Connecticut, Delaware, Maryland, Massachusetts, and New Jersey, and the City of New York filed a lawsuit challenging this final determination on the grounds that it was unlawful, arbitrary, and capricious and must therefore be vacated.[177]

EPA has also sought to modify CSPAR procedures with revised guidance. On August 31, 2018, EPA issued a memorandum in which it recommended that regional offices use a higher threshold level when determining whether ozone in an upwind state contributes significantly to

[172] *See* Memorandum, Maryland v. EPA, No. 1:17-cv-02873 (D. Md. June 13, 2018), *available at* https://perma.cc/B9K4-W5F2; Opinion and Order, New York et al. v. Pruitt, No. 18-cv-00406 (S.D.N.Y. June 12, 2018); Order, Connecticut v. Pruitt et al., No. 3:17-cv-00796 (D. Conn. Feb. 7, 2018).

[173] *See, e.g.,* EPA, Response to June 1, 2016, Clean Air Act Petition from Connecticut; Notice of Final Action on Petition, 83 Fed. Reg. 16064 (Apr. 13, 2018); EPA, Response to Clean Air Act Section 126(b) Petitions from Delaware and Maryland; Notice of Final Action on Petition, 83 Fed. Reg. 50444 (Oct. 5, 2018).

[174] EPA, Determination Regarding Good Neighbor Obligations for the 2008 Ozone National Ambient Air Quality Standard, 83 Fed. Reg. 31915 (July 10, 2018).

[175] *See, e.g.,* Press Release: Statement from Senator Tom Carper (D-Del) on EPA's Decision to Deny Further Action on Cross-State Air Pollution (June 29, 2018). EPA also decided not to revisit a 2015 rule governing state implementation of primary and secondary ozone NAAQS despite prior statements from the Trump Administration indicating that it would revisit that rule. Sonal Patel, *EPA Will Not Revisit Obama-Era NAAQS for Ozone*, POWER MAGAZINE (Aug. 2, 2018)

[176] EPA, Determination Regarding Good Neighbor Obligations for the 2008 Ozone National Ambient Air Quality Standard, 83 Fed. Reg. 65878 (Dec. 21, 2018).

[177] New York et al. v. EPA, No. 19-1019 (D.C. Cir. 2019).

nonattainment in a downwind state.[178] Specifically, the memorandum recommends using a threshold of 1 part per billion (ppb) instead of 0.70 ppb – an increase of nearly 50 percent.

E. Biomass and Wood Burning Stove Policies

On April 23, 2018, then-Administrator Scott Pruitt issued a policy memorandum which stated that EPA would treat CO_2 emissions associated with the use of forest biomass for energy by stationary sources as carbon neutral in future regulatory actions and EPA programs.[179] EPA adopted this policy despite the fact that EPA's own science advisors warned that this policy is "inconsistent with the underlying science" showing that forest biomass generates net CO_2 emissions.[180] The new policy is consistent with a directive contained in the *Consolidated Appropriations Act of 2018* (H.R. 1625) instructing EPA and other agencies to establish policies that "reflect the carbon-neutrality of forest bioenergy and recognize biomass as a renewable energy source."[181]

On November 1, 2018, EPA, DOE, and USDA sent a letter to Congress outlining how they are carrying out the Congressional mandate mentioned above to ensure that policies "reflect the carbon-neutrality of forest bioenergy and recognize biomass as a renewable energy source." The letter states that these agencies "will encourage the use of biomass as an energy solution, striving for consistency across federal policies and programs."[182] EPA is currently preparing to propose a slate of changes to existing emissions standards for new wood stoves and other wood-fired heating appliances, but the precise details of these changes have not yet been released.[183]

---

[178] EPA, *Memorandum: Analysis of Contribution Thresholds for Use in Clean Air Act Section 110(a)(2)(D)(i)(I) Interstate Transport State Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards* (Aug. 1, 2018).
[179] EPA's Treatment of Biogenic Carbon Dioxide (CO2) Emissions from Stationary Sources that Use Forest Biomass for Energy Production (April 23, 2018); Press Release: Administrator Pruitt Promotes Environmental Stewardship with Forestry Leaders and Students in Georgia (April 23, 2018).
[180] EPA Science Advisory Board (SAB), *SAB Review of Framework for Assessing Biogenic CO_2 Emissions from Stationary Sources* (2014). *See also* Jennifer Dlouhy, *Trump Backs Wood Power Scientists Call Dirtier Than Coal,* BLOOMBERG (Nov. 1, 2018); Chelsea Harvey & NiinaHeikkinen, *Congress Says Biomass is Carbon Neutral But Scientists Disagree*, SCIENTIFIC AMERICAN (Mar. 23, 2018).
[181] Consolidated Appropriates Act, H.R. 1625, 115th Cong. § 431 (2018).
[182] Letter from EPA Acting Administrator Andrew Wheeler and others to Chairman Richard C. Shelby and others (November 1, 2018), *available at* https://perma.cc/N5FP-6STZ.
[183] Sean Reilly, *White House Clears EPA Wood Stove Proposals*, E&E NEWS (Nov. 19, 2018). The White House Office of Information and Regulatory Affairs (OIRA) has completed appraisals of two related rulemakings: a proposed rule to

IV. Department of Interior

A. Cross-Cutting Policies and Programs

DOI is responsible for managing and the use and conservation of natural resources and public lands the U.S., including the production of fossil fuels on federal lands and waters. The Obama administration took a number of actions impacting fossil fuel production on federal land, often justified by climate considerations.[184] The Trump administration has sought to reverse the direction of policy under the DOI. More specifically, under the Trump administration, DOI has used its authority to remove barriers to and promote the development of the nation's energy resources under the mantra of "energy dominance."[185] It has issued several cross-cutting policies to guide implementation at its constituent agencies. These include:

Secretarial Order 3349, issued on March 29, 2017, implements the directive from President Trump's Executive Order on Energy Independence and Economic Growth to "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." The order calls for a reexamination of the mitigation and climate change policies and guidance that the Department of Interior issued

postpone compliance dates for the wood burning stove emission standards, and an ANPR to solicit comment on "issues raised by the public" with respect to the standards.

[184] There is an active debate about whether supply-side measures aimed at restricting fossil fuel production will actually reduce fossil fuel consumption and the corresponding greenhouse gas emissions. Those who favor supply-side restrictions argue that constraints on the supply of fossil fuels will increase the price of fossil fuels, thereby decreasing demand for and consumption of fossil fuels vis-à-vis cleaner energy sources. They also argue that supply-side restrictions can help avoid fossil fuel "lock-in" (i.e., investments in fossil fuel infrastructure and ongoing reliance on fossil fuels for energy needs). Those who oppose supply-side restrictions argue that such measures will not meaningfully affect fossil fuel consumption or greenhouse gas emissions because other sources of fuels (e.g., from private land or other countries) would serve as a substitute if the federal reserves are not exploited. Some have also argued that increasing federal oil and gas production may even reduce greenhouse gas emissions because: (i) lifecycle emissions for U.S. oil and gas are lower than lifecycle emissions from foreign oil and gas (particularly oil and gas imports); and (ii) the availability of cheaper natural gas will result in the substitution of natural gas for coal.

[185] *See* DOI, *About: Mission*, https://www.doi.gov/whoweare (last visited June 3, 2019) ("promot[ing] energy dominance" is the first major goal outlined for DOI).

during the Obama administration, as well as all regulations related to U.S. oil and natural gas development.[186]

Secretarial Order No. 3351, issued on May 1, 2017, establishes a new position (Counselor to the Secretary for Energy Policy) to help implement policies related to energy development, whose duties include: "[d]eveloping and coordinating strategies, policies, and practices that promote responsible development of all types of energy on public lands managed and administered by the Department;" "[i]dentifying regulatory burdens that unnecessarily encumber energy exploration development, production, transportation; and developing strategies to eliminate or minimize these burdens;" and "[p]romoting efficient and effective processing of energy-related authorizations, permits, regulations, and agreements."[187]

Secretarial Order 3360, issued on December 22, 2017, rescinds the DOI's climate and mitigation policies, including the Departmental Manual on Climate Change Policy, Departmental Manual on Landscape-Scale Mitigation Policy, the Bureau of Land Management (BLM) Mitigation Manual, and BLM Mitigation Handbook. The order also directs BLM to review the Draft Regional Mitigation Strategy for the National Petroleum Reserve-Alaska and begin revisions to ensure it is consistent with the administration's energy dominance goals.[188]

Some of the more targeted actions undertaken by DOI and its constituent agencies to implement these policies are discussed below.

B. Removing Barriers to Fossil Fuel Development

1. Moratorium and Programmatic Review of Federal Coal Leasing

During the Obama administration, serious concerns were raised about the cumulative effects of the federal coal leasing program and whether the program was serving the public interest. Responding to these concerns, DOI issued Sectorial Order 3338 on January 15, 2016, which directed the Bureau of Land Management (BLM) to prepare a Programmatic

[186] DOI Secretarial Order No. 3349: American Energy Independence (Mar. 29, 2017), *available at* https://perma.cc/9N8A-FGL3.
[187] DOI Secretarial Order No. 3351: Strengthening the Department of Interior's Energy Portfolio (May 1, 2017), *available at* https://perma.cc/T7WP-LH63.
[188] DOI Secretarial Order No. 3360: Rescinding Authorities Inconsistent with Secretary's Order 3349, "American Energy Independence" (Dec. 22, 2017), *available at* https://perma.cc/6FKY-LH4U.

Environmental Impact Statement (PEIS) analyzing the cumulative effects of the program as well as potential leasing and management reforms that could be enacted to mitigate adverse effects.[189] One key issue to be addressed in the PEIS was the effect of federal coal leasing on greenhouse gas emissions, including emissions from the production and consumption of federal coal, and how the program should be updated to account for those impacts. DOI also announced a moratorium on federal coal leasing during the environmental review and reform process.[190] BLM commenced the environmental review process in early 2016 and published a scoping document in January 2017 outlining the key issues to be considered in the PEIS.[191]

President Trump's Executive Order 13771 directed DOI to "take all steps necessary and appropriate to amend or withdraw" Secretarial Order 3338, consistent with the President's goals of promoting domestic energy production and revitalizing the coal industry. The order also directed DOI to "lift any and all moratoria on Federal land coal leasing activities related to Order 3338." On March 29, 2017, DOI issued Secretarial Order 3348, which revoked Order 3338 and terminated both the moratorium on federal coal leasing and the programmatic environmental review process that had been initiated by BLM.[192]

By terminating the programmatic review, DOI revived a 2014 lawsuit aimed at compelling the federal government to conduct a programmatic review of the coal leasing program.[193] The plaintiffs argued that a PEIS was required by NEPA because BLM had not comprehensively analyzed the environmental impacts of the coal leasing program since 1979 and the 1979 analysis was insufficient because it "only briefly discussed the then-nascent science of the effects of greenhouse gas emissions and the federal coal management program's emissions."[194] In 2015, the case was dismissed by a district court judge who reasoned that there was no ongoing major

[189] DOI Secretarial Order No. 3338 (2016), *supra* note 17.
[190] DOI, *Fact Sheet: Modernizing the Federal Coal Program* (Jan. 16, 2016), *available at* https://perma.cc/UGX3-X6FS.
[191] BLM, Federal Coal Program Programmatic Environmental Impact Statement – Scoping Report (Jan. 2017), *available at* https://perma.cc/J2DJ-WVN2 (Vol. 1) and https://perma.cc/T7E2-LENY (Vol. 2).
[192] DOI Secretarial Order No. 3348: Concerning the Federal Coal Moratorium (Mar. 29, 2017), *available at* https://perma.cc/7QLC-J888.
[193] Western Organization of Resource Councils v. Jewell, No. 14-cv-1993 (D.C. Cir. 2014).
[194] Complaint for Declaratory and Injunctive Relief, Western Organization of Resource Councils v. Jewell, No. 14-cv-1993 (D.C. Cir. Nov. 24, 2014), *available at* https://perma.cc/Q2ZZ-MUKU.

federal action that triggered the requirement for supplemental review.[195] The petitioners appealed to the D.C. Circuit but the case was placed in abeyance when DOI announced that it would prepare a PEIS for the program. It was subsequently revived after DOI reversed course and terminated the PEIS.

On June 19, 2018, the D.C. Circuit Court of Appeals affirmed the district court's original decision and held that NEPA did not require a supplemental programmatic analysis because the relevant "major Federal action" was completed in 1979 and no new action had been proposed.[196] The panel noted that the plaintiffs had raised a "compelling argument" that BLM "should now revisit the issue" of climate change and "adopt a new program or supplement its PEIS analysis" but concluded that the plaintiffs would have to pursue this goal through other channels – for example, by challenging specific licensing decisions that are tiered to the outdated 1979 PEIS.[197]

However, on April 14, 2019, a district court in Montana held that the administration's decision to terminate the federal coal leasing moratorium (specifically Secretarial Order 3348) was a major federal action which triggered NEPA requirements.[198] The court found that the administration had "circumvented an environmental analysis by characterizing the [order] as a mere policy shift and return to the status quo" and that this was a final agency action which would have immediate, real-world consequences including potentially significant environmental impacts. The court did not specify what form the NEPA review should take but rather remanded to DOI to determine, in the first instance, how to comply with their NEPA obligations.[199]

[195] Memorandum Opinion, Western Organization of Resource Councils v. Jewell, No. 14-cv-1993 (D.C. Cir. Aug. 27, 2015), *available at* https://perma.cc/ZM6E-Y8FT.
[196] Western Organization of Resource Councils v. Zinke, 892 F.3d 1234 (D.C. Cir. 2018).
[197] *Id.* at 1244.
[198] Citizens for Clean Energy v. DOI, No. 4:17-cv-00030 (D. Mont. April 19, 2019).
[199] One month after that decision, BLM published a draft environmental assessment for lifting the federal coal leasing moratorium it which it claims that this action does not have significant environmental impacts because it is simply reinstating coal leasing earlier than it otherwise would have (the assumption being that the moratorium would have ended by March 2019 upon completion of a PEIS) and thus its action only changes the timing of impacts. BLM only provided a 15-day comment period for the draft EA. *See* BLM, *Lifting the Pause on the Issuance of New Federal Coal Leases for Thermal (Steam) Coal: Environmental Assessment*, DOI-BLM-WO-WO2100-2019-0001-EA (May 22, 2019).

2. *Methane Emission Controls for Oil and Gas Sources*

During the Obama administration, DOI also took steps to address greenhouse gas emissions from oil and gas development on federal lands. The most notable climate protection was BLM's Methane Waste Prevention Rule, published on November 18, 2016.[200] The rule aimed to reduce waste of natural gas (methane) from oil and gas production activities on federal and tribal land by imposing new requirements for flaring, capture, leak detection, and venting. BLM projected that the rule could eliminate 175,000-180,000 tons of methane (4.4-4.5 million tons CO_2e) annually. These requirements were complementary to the requirements set forth in EPA's methane NSPS for the oil and gas sector, one key difference being the scope of the two rules: the EPA rule applies to new and modified sources regardless of where they are located, whereas the BLM rule applies to all types of sources (new, modified, and existing) located on federal lands.

The BLM rule was challenged by states and industry groups when it was first issued.[201] On April 4, 2018, the district court in Wyoming reviewing the rule agreed to put the case on hold pending the administration's review of the rule.[202] The district court also stayed implementation of certain provisions of the rule during this time, specifically the rules pertaining to:

- Gas capture and percentage requirements[203]
- Measuring and reporting volumes of gas vented or flared[204]
- Equipment requirements for pneumatic controllers,[205] pneumatic diaphragm pumps,[206] and storage vessels[207]
- Leak detection and repairs[208]

The district court's order was appealed to the Tenth Circuit Court of Appeals but the appeal was dismissed as moot when BLM issued a final rule to replace the 2016 rule.[209]

---

[200] BLM, Waste Prevention, Production Subject to Royalties, and Resource Conservation; Final Rule, 81 Fed. Reg. 83008 (Nov. 18, 2016).
[201] Wyoming vs. U.S. Dept. of Interior, No. 2:16-CV-00285 (D. Wyo. 2016).
[202] Order Staying Implementation of Rule Provisions and Staying Action Pending Finalization of Revision Rule, Wyoming vs. U.S. Dept. of Interior, No. 2:16-CV-00285 (D. Wyo. Apr. 4, 2018).
[203] 43 CFR § 3179.7.
[204] 43 CFR § 3179.9.
[205] 43 CFR § 3179.201.
[206] 43 CFR § 3179.202.
[207] 43 CFR § 3179.203.
[208] 43 CFR §§ 3179.301 – 3179.305.
[209] Wyoming v. U.S. Dept. of Interior, No. 18-8027 (10th Cir. 2019).

The methane waste rule also came under attack by federal legislators. On February 3, 2017, the House of Representatives passed a resolution to repeal the rule using the Congressional Review Act (CRA).[210] However, the Senate ultimately voted against this resolution.[211]

Shortly thereafter, the Trump administration initiated proceedings to revise or repeal the rule. President Trump's Executive Order on Energy Independence explicitly called for the review of this rule. DOI Secretarial Order 3349 (March 29, 2017) therefore instructed BLM to review the methane waste prevention rule and report on whether the rule is fully consistent with the executive order's policy of promoting domestic energy production.

On June 15, 2017, BLM issued a *Federal Register* notice announcing that it was temporarily postponing the compliance dates for certain provisions of the rule pending the outcome of litigation over the rule.[212] States successfully challenged this initial postponement of the rule – a district court in the northern district of California held that the postponement was unlawful under the APA.[213] Despite the court ruling, the BLM continued with its course of action: on October 5, 2017, BLM issued a formal proposal to suspend key requirements of the rule until January 17, 2019,[214] and on December 8, 2017, BLM finalized that proposal.[215] States also challenged this suspension rule, and the district court in the northern district of California issued a preliminary injunction against the rule.[216]

As litigation has progressed, BLM has continued to move forward with proposed revisions to the rule. On February 22, 2018, BLM published a proposal to rescind several major

[210] H.J. Res. 36, Providing for congressional disapproval under chapter 8 of title 5, United States Code, of the final rule of the Bureau of Land Management relating to "Waste Prevention, Production Subject to Royalties, and Resource Conservation", 115th Congress (2017-2018).
[211] S.J.Res.11 - A joint resolution providing for congressional disapproval under chapter 8 of title 5, United States Code, of the final rule of the Bureau of Land Management relating to "Waste Prevention, Production Subject to Royalties, and Resource Conservation", 115th Congress (2018-2018).
[212] BLM, Waste Prevention, Production Subject to Royalties, and Resource Conservation; Postponement of Certain Compliance Dates, 82 Fed. Reg. 27430 (June 15, 2017).
[213] California v. BLM, No. 3:17-cv-03804 (N.D. Cal. 2017).
[214] BLM, Waste Prevention, Production Subject to Royalties, and Resource Conservation; Delay and Suspension of Certain Requirements; Proposed Rule, 82 Fed. Reg. 46458 (Oct. 5, 2017).
[215] BLM, Waste Prevention, Production Subject to Royalties, and Resource Conservation; Delay and Suspension of Certain Requirements; Final Rule, 82 Fed. Reg. 58050 (Jan. 8, 2018).
[216] California v. BLM, No. 3:17-cv-07186 (N.D. Cal. 2017). The government appealed this decision to the Ninth Circuit Court of Appeals but then requested voluntary dismissal of the appeal after publishing the final rule amendments. California v. BLM, No. 18-15711 (9th Cir. 2018).

provisions, including those governing leak detection and repair and the preparation of methane waste minimization plans, and to substantially revise other provisions, including those dealing with the amount of methane that can be released through venting and flaring.[217] The amendments would effectively gut the 2016 rule and reinstate the less stringent standards that were in place for oil and gas operations prior to its issuance. BLM issued a final rule implementing these changes on September 28, 2018.[218]

States and environmental groups filed a lawsuit challenging BLM's decision to repeal key provisions of the rule, alleging violations of the APA, the Mineral Leasing Act, and NEPA.[219] The chief allegations are that BLM violated the APA by failing to offer a reasoned explanation for reversing its previous determination that the Methane Waste Prevention Rule was necessary to fulfill its statutory mandates, the revised metrics that BLM used to calculate the social cost of methane in order to justify the amendments were not based on the best available science, and BLM's conclusion that the repeal would not have significant environmental impacts violated NEPA.

3. *Streamlining Fossil Fuel Permitting*

During the Trump administration, DOI and its constituent agencies have also implemented internal policy changes aimed at streamlining its approval of fossil fuel leases. The cross-cutting Secretarial Order 3351 and 3360, discussed above, laid the groundwork for these internal changes. In particular, Secretarial Order 3351 established the Counselor to the Secretary for Energy Policy and tasked this new official with "[p]romoting efficient and effective processing of energy-related authorizations, permits, regulations, and agreements,"[220] and Secretarial Order 3360 withdrew DOI's climate and mitigation policies (which contained procedural and substantive requirements aimed at mitigating harmful environmental effects from DOI land use

[217] BLM, Proposed Rule; Waste Prevention, Production Subject to Royalties, and Resource Conservation; Rescission or Revision of Certain Requirements, 83 Fed. Reg. 7924 (Feb. 22, 2018).
[218] BLM, Final Rule; Waste Prevention, Production Subject to Royalties, and Resource Conservation; Rescission or Revision of Certain Requirements, 83 Fed. Reg. 49184 (Sept. 28, 2018).
[219] California v. Zinke, No. 3:18-cv-05712 (N.D. Cal. Sept. 18, 2018); Sierra Club v. Zinke, No. 3:18-cv-05984 (N.D. Cal. Sept. 28, 2018).
[220] DOI Secretarial Order 3351 (2017), *supra* note 187.

decisions, including effects on climate).[221] BLM subsequently implemented Secretarial Order 3360 by publishing a new instruction memorandum which prohibits BLM from requiring compensatory mitigation from public land users except where the law specifically requires – a policy change which will ultimately make it easier and less costly to develop fossil fuels on federal lands.[222]

DOI has also issued two orders specifically aimed at expediting fossil fuel leasing on federal lands and waters:

- **Secretarial Order No. 3350**, which directs the Bureau of Ocean Energy Management (BOEM) to develop a new five-year plan for oil and gas exploration in offshore waters and to reconsider a number of regulations governing those activities, pursuant to President Trump's Executive Order Implementing an America-First Offshore Energy Strategy.
- **Secretarial Order No. 3354**, which directs BLM to "support and improve implementation" of quarterly oil and gas lease sales, to "identify options to improve the Federal onshore oil and gas leasing program… as well as identify additional steps to enhance exploration and development of Federal onshore oil and gas resources," and "develop an effective strategy to address permitting applications efficiently and effectively as well as develop clear and actionable goals for reducing the permit processing time."[223]

Pursuant to Order No. 3354, BLM issued an instruction memorandum to its field offices on January 31, 2018, which establishes a BLM policy "to simplify and streamline the leasing process [for oil and gas] to alleviate unnecessary impediments and burdens, to expedite the offering of lands for lease, and to ensure quarterly oil and gas lease sales are consistently held."[224] The memorandum eliminates the use of Master Leasing Plans (MLPs) — a planning approach introduced by the Obama Administration to manage oil and gas activity on sensitive landscapes,

[221] DOI Secretarial Order 3360 (2017), *supra* note 188.
[222] BLM Instruction Memorandum No. 2019-094: Compensatory Mitigation (July 24, 2018).
[223] DOI Secretarial Order 3354: Strengthening and Improving the Federal Onshore Oil and Gas Leasing Program and Federal Solid Mineral Leasing Program (July 5, 2017), *available at* https://perma.cc/AH4H-A6QE.
[224] BLM Instruction Memorandum No. 2018-034: Updating Oil and Gas Leasing Reform – Land use Planning and Lease Parcel Reviews (Jan. 31, 2018), *available at* https://perma.cc/YNP2-4KSW. The U.S. Forest Service has also signaled its intent to modify its regulations in order to streamline and expedite the issuance of oil and gas permits on National Forest lands. *See* USFS, Oil and Gas Resources; ANPR, 83 Fed. Reg. 46458 (Sept. 13, 2018).

such as national parks, and avoid harmful impacts to sensitive resources.[225] The MLPs were used to identify and resolve conflicts with resource values such as watersheds and wildlife habitats through scientific assessment and stakeholder engagement.[226] Prior to the introduction of MLPs, BLM made leasing decisions based on Resource Management Plans (RMPs) which specified appropriate uses for BLM land units. RMPs are also based on scientific assessment and stakeholder engagement. However, RMPs are only updated every 20-30 years, they apply to large geographic areas, and they manage many different land uses. BLM therefore introduced the MLP process to provide a more tailored and efficient framework for evaluating and managing fossil fuel leasing decisions. Since the MLP process was eliminated, BLM has returned to using RMPs for this purpose.

The instruction memorandum also reduces the amount of time that BLM field offices have to review environmental impacts and receive public feedback. It limits the timeframe for parcel review for a specific lease sale to six months and limits the amount of time allotted for public protest of lease sales to ten days after notice is posted. It also seeks to eliminate opportunities for public review and disclosure of environmental impacts from oil and gas development on public lands. Specifically, the memorandum states that, where a lease is offered in conformance with an approved resource management plan (RMP) that underwent NEPA review, field officers can issue a Determination of NEPA Adequacy (DNA) in lieu of preparing an environmental assessment (EA) or EIS.[227] As discussed below, agencies within DOI have also sought to curtail the scope of climate change analysis in NEPA reviews.

BLM attempted to apply this new policy in issuing oil and gas leases in the habitat of the sage grouse – a bird that is in decline across North America due to habitat loss, but which the federal government declined to list as endangered or threatened under the Endangered Species Act (ESA) on the grounds that existing RMPs covering sage grouse habitat on federal lands

[225] *Id.*

[226] The decision to eliminate the use of MLPs was based on a report issued by the Department of Interior last fall which outlined regulatory "burdens" to energy development (which included the MLPs). The report was prepared in order to comply with President Trump's President Trump's Executive Order on Promoting Energy Independence and Economic Growth. See DOI, FINAL REPORT: REVIEW OF THE DEPARTMENT OF INTERIOR ACTIONS THAT POTENTIALLY BURDEN DOMESTIC ENERGY (Oct. 24, 2017), *available at* https://perma.cc/G6JR-K6C7.

[227] BLM Instruction Memorandum No. 2018-034 (2018), *supra* note 224, at § 4.

provided adequate protections for the birds. Environmental groups filed suit, alleging, among other things, that the application of the new BLM leasing policy in this context was unlawful. The U.S. District Court for the District of Idaho issued a preliminary injunction on September 21, 2018 prohibiting BLM from applying the new policy to oil and gas leases in sage grouse habitat.[228]

4. Curtailing Greenhouse Gas Emissions Analyses in Environmental Reviews

As noted above, DOI terminated the PEIS for the federal coal leasing program, and BLM adopted guidance seeking to reduce the number of EISs and EAs prepared for fossil fuel leasing decisions – both actions are indicative of the current administration's desire to avoid environmental reviews of fossil fuel-related proposals

DOI and its constituent agencies have also attempted to curtail their analysis of greenhouse gas emissions in NEPA reviews for fossil fuel-related proposals to avoid issuing findings that these decisions have a significant impact on greenhouse gases. Granted, even if the agencies concluded that leasing decisions did have a significant impact on greenhouse gases, NEPA does not require the agencies to mitigate that impact or select a more environmentally friendly action. But a finding of significant impact could have political ramifications and could also affect future determinations about how and whether to proceed with federal fossil fuel leasing in light of environmental and social concerns.

There are several ways in which DOI agencies have limited the greenhouse gas analysis in NEPA documents. One approach has been to simply ignore indirect emissions from the processing, transportation, and consumption of fuels produced on federal lands (often referred to as "downstream emissions"). This was common practice across many agencies even during the Obama administration, but there are now numerous court decisions challenging that practice.[229]

---

[228] Western Watersheds Project v. Zinke, No. 1:18-cv-00187 (D. Idaho Sept. 21, 2018).

[229] For a review of court decisions through 2016, see Michael Burger & Jessica Wentz, *Downstream and Upstream Greenhouse Gas Emissions: The Proper Scope of NEPA Review*, 41 HARVARD ENVTL. L.J. 109 (2017). *See also* WildEarth Guardians v. United States Bureau of Land Mgmt., 870 F.3d 1222outerc (10th Cir. 2017); Montana Environmental Information Center v. U.S. Office of Surface Mining, 274 F.Supp.3d 1074, 1097-99 (D. Mt. Aug. 14, 2017); Western Organization of Resource Councils v. BLM, No. CV 16-21-GF-BMM, 2018 WL 1475470 (D. Mont. Mar. 26, 2018); San Juan Citizens All. v. United States Bureau of Land Mgmt., No. 16-CV-376-MCA-JHR, 2018 WL 2994406 (D.N.M. June

In the wake of those decisions, it is legally risky for agencies to ignore downstream emissions. However, there are other arguments for "disregarding" downstream emissions. In particular, the agencies that conduct reviews for fossil fuel leasing (primarily BLM and BOEM) have argued in these reviews that fossil fuels would be produced and consumed at similar rates regardless of whether the federal government authorizes production of fuels on public lands, and thus the net emissions impact of a federal leasing decision is very small or nonexistent. Courts have rejected unsubstantiated assumptions that federal coal leasing has *no effect* on emissions due to "perfect substitution" of other coal resources (because economic data suggests that an increase in federal production would have some impact on coal prices and consumption),[230] but agencies are now using economic models to support their conclusions that fossil fuel leasing has minor net emissions impacts.[231] Opponents of fossil fuel development have raised serious concerns about the assumptions underpinning these models and the lack of transparency in the agency analysis, particularly the assumptions about energy substitutes.[232] They have also raised questions about whether it makes sense to look at "net emissions" in this fashion, given the inherent uncertainties in the analysis, as opposed to simply calculating the total downstream emissions generated by the processing, transportation, and use of fossil fuels produced from federal lands and waters.

Agencies have also avoided issuing significance determinations for greenhouse gas emissions from fossil fuel leases by arguing that: (i) there is no defined threshold for gauging the significance of those emissions, and (ii) the emissions are relatively small in proportion to overall global, national, state, or sectoral emissions. There are in fact tools that agencies could use to assess the significance of emissions – these include the significance criteria outlined in the NEPA regulations;[233] EPA's threshold which it uses to identify major emitters for the purposes of

14, 2018); Wilderness Workshop v. United States Bureau of Land Mgmt., No. 1:16-cv-01822-WYD (D. Colo. Oct. 17, 2018).

[230] WildEarth Guardians v. United States Bureau of Land Mgmt., 870 F.3d 1222, 1235 (10th Cir. 2017); High Country Conservation Advocates v. United States Forest Serv., 52 F. Supp. 3d 1174, 1197 (D. Colo. 2014).

[231] *See, e.g.,* E. WOLVOVSKY & W. ANDERSON, OCS OIL AND NATURAL GAS: POTENTIAL LIFECYCLE GREENHOUSE GAS EMISSIONS AND SOCIAL COST OF CARBON, BOEM OCS Report 2016-065 (2016).

[232] Consider the example of natural gas production: if an agency assumes that the produced natural gas would offset the use of renewables as well as other fossil fuels, then the net emissions will be much higher than if the agency only looks at offsetting effects on fossil fuels.

[233] The NEPA regulations instruct agencies to consider both the context and intensity of the emissions. Intensity could be assessed using the other tools noted in this paragraph. Contextual factors which are relevant to any proposal which would increase the production of fossil fuels include: (i) the fact that climate change is such a massive

greenhouse gas emission reporting (25,000 tons CO_2e per year);[234] the metrics for calculating the social cost of carbon, methane, and nitrous oxide (which have been upheld by courts for use in regulatory and environmental analyses, though the Trump administration has been moving away from use of these metrics);[235] and EPA's GHG Equivalencies Calculator (which could be used to compare emissions from the proposal with, e.g., emissions from household electricity use or vehicle miles driven).[236] However, no courts have yet addressed the issue of whether agencies' failure to issue significance determinations for greenhouse gas emissions constitutes a violation of NEPA.

These issues are not unique to DOI reviews – DOE and FERC, which are responsible for conducting reviews of natural gas transportation infrastructure and export terminals, have adopted similar arguments in their reviews.[237]

5. *Rescinding the Coal, Oil, and Gas Valuation Rule*

In 2016, the Office of Natural Resources Revenue (ONRR) within DOI issued a rule aimed at improving valuation of coal, oil, and gas produced from federal leases and coal produced from Indian leases. [238] The original rule sought to ensure that states and the federal government would receive the full value of royalties due for oil, gas, and coal extracted from public lands by amending a provision that allowed companies to avoid royalty payments in certain contexts.[239]

---

environmental problem; (ii) the broad scope of interests that will be adversely affected by this problem, and (iii) the compelling need to rapidly reduce dependency on fossil fuels to address this problem. 40 CFR § 1508.27.

[234] EPA, GHG Reporting Program Facts and Figures, https://www.epa.gov/ghgreporting/key-facts-and-figures

[235] *See* Interagency Working Group on the Social Cost of Greenhouse Gases, Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 (May 2013, Revised August 2016); Interagency Working Group on the Social Cost of Greenhouse Gases, Addendum to Technical Support Document on Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866: Application of the Methodology to Estimate the Social Cost of Methane and the Social Cost of Nitrous Oxide (Aug. 2016). See also Zero Zone Inc. v. Dept. of Energy, 832 F.3d 654 (7th Cir. 2016) (upholding use of the metrics derived by the Interagency Working Group on the Social Cost of Carbon); Montana Environmental Information Center v. U.S. Office of Surface Mining, 274 F.Supp.3d 1074 (D. Montana 2017) (requiring disclosure of GHG costs in NEPA review where benefits were also disclosed, and citing the federal Social Cost of Carbon as an available disclosure tool); High Country Conservation Advocates v. U.S. Forest Service, 52 F.Supp.3d 1174 (D. Colo. 2014) (same).

[236] EPA, GHG Equivalencies Calculator, https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.

[237] See *infra* section V.

[238] ONRR, Consolidated Federal Oil & Gas and Federal & Indian Coal Valuation Reform Final Rule, 81 Fed. Reg. 43337 (July 1, 2016).

[239] *Id.*

ONRR estimated that the rule would increase royalty collections by between $71.9 million and $84.8 million annually.[240]

ONRR quickly reversed course on the rule after President Trump took office. On February 27, 2017, ONRR published a *Federal Register* notice stating that "justice require[d] it" to postpone the effective date of the valuation rule, citing the fact that lawsuits challenging the rule raised "serious questions concerning the validity or prudent of certain provisions."[241] ONRR then published a proposal to "repeal the [rule] in its entirety" on April 4, 2017,[242] and a final rule to this effect on August 7, 2017.[243]

California and New Mexico filed a lawsuit challenging the postponement as a violation of the APA. The reviewing judge agreed that it violated the APA but declined to vacate the notice in light of ONRR's decision to repeal the rule (which had been finalized before the court issued its decision).[244] California and New Mexico also filed a lawsuit challenging the repeal of the valuation rule. On March 29, 2019, a district court in the Northern District of California held that the repeal was arbitrary and capricious because DOI had failed to explain the inconsistencies between its prior findings in enacting the valuation rule and its decision to repeal the rule.[245] In the wake of this decision, ONRR officials are reported to have signaled that they may propose a replacement rather than a full repeal of the valuation rule.[246]

6. Removing Protections for Endangered Species

On July 19, 2018, the Fish and Wildlife Service (FWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS) published a proposal to amend their implementing regulations for the Endangered Species Act (ESA).[247] The proposed

---

[240] *Id.* at 43359.
[241] ONRR, Postponement of Effectiveness of the Consolidated Federal Oil & Gas and Federal & Indian Coal Valuation Reform 2017 Valuation Rule, 82 Fed. Reg. 11823 (Feb. 27, 2017).
[242] ONRR, Proposed Rule: Repeal of Consolidated Federal Oil & Gas and Federal & Indian Coal Valuation Reform Final Rule, 82 Fed. Reg. 16323 (Apr. 4, 2017).
[243] Repeal of Consolidated Federal Oil & Gas and Federal & Indian Coal Valuation Reform Final Rule, 82 Fed. Reg. 36834 (Aug. 7, 2017).
[244] Becerra v. U.S. Dept. of the Interior, 276 F. Supp. 3d 953, 967 (N.D. Cal. 2017).
[245] California et al v. DOI et al, No. C17-5948 (N.D. Cal. 2019).
[246] Pamela King, *Courts Derail Trump's March to 'Energy Dominance'*, E&E NEWS (Apr. 29, 2019).
[247] FWS & NMFS, Proposed Rule; Endangered and Threatened Wildlife and Plants; Revision of the Regulations for Listing Species and Designating Critical Habitat, 83 Fed. Reg. 35193 (July 25, 2018); FWS & NMFS, Proposed Rule;

amendments would modify key requirements pertaining to listing determinations, critical habitat designations, interagency consultations, and taking prohibitions, ultimately weakening protections for species and making it easier for public and private projects to proceed despite the potential for adverse impacts on threatened and endangered species (or species which would be listed as such prior to these amendments). For example, the proposed amendments would repeal language which required that agencies make listing determinations "without reference to the possible economic or other impacts of such determinations" (thus allowing agencies to consider economic impacts in listing decisions).[248] The amendments would also limit agency discretion to rely on future impacts as a basis for listing decisions and to designate habitat outside of the species' present range, thus making it harder to for agencies to account for climate change in listings and critical habitat designations.[249]

The Trump administration has not formally acknowledged any nexus between the proposed ESA amendments and the President's energy agenda, but the amendments, if adopted, would make it easier to develop fossil fuels on both public and private lands by removing barriers associated with the protection of threatened and endangered species. Recognizing this, the fossil fuel industry has long lobbied for the weakening of ESA regulations.[250] It should also be noted that other parties have also sought modifications to the ESA, and ESA requirements can impede not only fossil fuel infrastructure but also renewable energy facilities and other projects aimed at mitigating and adapting to the effects of climate change.

Endangered and Threatened Wildlife and Plants; Revision of Regulations for Interagency Cooperation, 83 Fed. Reg. 35178 (July 15, 2018); FWS & NMFS, Proposed Rule; Endangered and Threatened Wildlife and Plants: Revision of the Regulations for Prohibitions to Threatened Wildlife and Plants, 83 Fed. Reg. 35174 (July 25, 2018).

[248] 83 Fed. Reg. at 35194.

[249] 83 Fed. Reg. at 35195; 35197-98. *See also* Jessica Wentz, *Proposed Amendments to Endangered Species Act Regulations Could Curtail Protections for Species Imperiled by Climate Change*, CLIMATE LAW BLOG (Sept. 19, 2018), http://blogs.law.columbia.edu/climatechange/2018/09/19/proposed-amendments-to-endangered-species-act-regulations-could-curtail-protections-for-species-imperiled-by-climate-change/.

[250] *See* Dan Spinelli, *This Is Why Lawmakers Want to Gut the Endangered Species Act*, MOTHER JONES (July 25, 2018); Rebecca Bowe, *What's Behind Attacks on the Endangered Species Act? Lots of Money*, EARTHJUSTICE BLOG (July 18, 2017).

C. Expanding Land Available for Fossil Fuel Development

1. *Expanding Offshore Oil and Gas Leasing*

As noted above, Secretarial Order No. 3350 directed the Bureau of Ocean Energy management (BOEM) to develop a new five-year plan for oil and gas exploration in offshore waters and to reconsider a number of regulations governing those activities, pursuant to President Trump's Executive Order Implementing an America-First Offshore Energy Strategy. That order also purported to revoke two actions taken by the Obama administration to withdraw approximately 125 million acres of the Outer Continental Shelf (OCS) from leasing (including most of the Beaufort Sea and all of the Chukchi Sea in the Arctic).[251]

On January 4, 2018, BOEM issued a proposed OCS Leasing Program for 2019-2024, which would make over ninety percent of the OCS available for future oil and gas exploration and development.[252] In comparison, the 2017-2022 offshore leasing program (which would be superseded by this new program) puts ninety-four percent of the OCS off-limits to oil and gas development. The Draft Proposed Program (DPP) includes 47 potential lease sales in 25 of 26 planning areas – which, according to DOI, is the largest number of lease sales ever proposed for the OCS 5-year lease schedule.[253] DOI has not yet published a draft EIS or final rule for this program.

In the meantime, the administration has continued to move forward with expanding offshore oil and gas production under the existing OCS program. As of September 2018, the administration had offered 81,324,267 acres of publicly owned waters to oil and gas companies.[254] However, the administration was recently blocked from moving forward with its plans to open up the Beaufort and Chukchi seas for oil and gas leasing. On March 29, 2019, a district court in the District of Alaska found that President Trump's order to re-open the areas of the OCS for oil

[251] *See* Exec. Order 13795 (2018), *supra* note 18, at §§ 4(c), 5.
[252] DOI Press Release: Secretary Zinke Announces Plan For Unleashing America's Offshore Oil and Gas Potential (Jan. 4, 2018), https://perma.cc/8RZB-GC37; BOEM, DRAFT PROPOSED PROGRAM: 2019-2024 NATIONAL OUTER CONTINENTAL SHELF OIL AND GAS LEASING (Jan. 2018), *available at* https://perma.cc/Q683-6S5V; BOEM, Notice of Availability of the 2019-2024 Draft Proposed Outer Continental Shelf Oil and Gas Leasing Program and Notice of Intent To Prepare a Programmatic Environmental Impact Statement, 83 Fed. Reg. 829 (Jan. 8, 2018);
[253] *Id.*
[254] The Wilderness Society, *Trump's Land Grab – In 7 Maps* (2018), https://wilderness.maps.arcgis.com/apps/Cascade/index.html.

and gas leasing that had been withdrawn by President Obama violated the Outer Continental Shelf Lands Act (OCSLA) because the act only authorizes Presidents to withdraw areas from the national oil and gas leasing program (and thus the authority to add areas remains with Congress).[255] The following month, DOI Secretary David Bernhardt announced that the department had indefinitely paused its plans to expand offshore oil and gas production in view of the ruling.[256]

2. *Removing Protections for National Monuments*

The Trump administration has also sought to increase the land available for fossil fuel development by removing protections that would bar such development, such as those provided for national monuments designated under the Antiquities Act of 1906.

On April 26, 2017, President Trump issued Executive Order 13792, Review of Designations Under the Antiquities Act, which established a policy recognizing that national monuments "have a substantial impact on the management of Federal lands and the use and enjoyment of neighboring lands" and that such designations may "create barriers to achieving energy independence, restrict public access to and use of Federal lands, burden State, tribal, and local governments, and otherwise curtail economic growth."[257] The order directed DOI to conduct a review of all National Monuments designated or expanded since 1996 where the designation or expansion covers more than 100,000 acres or where DOI believes the designation or expansion was made without adequate public outreach, to determine whether each designation or expansion confirms with this policy.[258]

On May 11, 2017, DOI announced plans to conduct the review called for in the Executive Order and to formulate recommendations for Presidential actions, legislative proposals, or other appropriate actions to carry out that policy.[259] The notice identified twenty-seven National

[255] League of Conservation Voters v. Trump, 363 F.Supp.3d (D. Alaska 2019).
[256] Timothy Puko, *Trump's Offshore Oil-Drilling Plan Sidelined Indefinitely*, THE WALL STREET JOURNAL (Apr. 25, 2019).
[257] Exec. Order. No. 13792 of April 26, 2017, Review of Designations Under the Antiquities Act, § 1, 82 Fed. Reg. 20429 (May 1, 2017).
[258] *Id.* at § 2.
[259] DOI, Review of Certain National Monuments Established Since 1996; Notice of Opportunity for Public Comment, 82 Fed. Reg. 22016 (May 11, 2017).

Monuments under review and invites comments to inform the review.[260] On August 24, 2017, DOI released a summary of findings from its public outreach during this review process, in which it recognized that the "[c]omments received were overwhelmingly in favor of maintaining existing monuments."[261] On December 5, 2017, DOI released a final report in which it recommended maintaining all national monuments as federal lands, adding three new national monuments, but also modifying the boundaries and management of four monuments and expanding access for hunting and fishing.[262]

Acting on these recommendations, President Trump issued proclamations reducing the size of two national monuments in Utah: the Bears Ears National Monument was reduced from 1.35 million acres to just over 200,000 acres,[263] and the Grand Staircase-Escalante National Monument was reduced from 1.8 million acres to approximately 860,000 acres.[264] These were the most significant reductions of National Monuments by any president.[265] Emails obtained from a FOIA request showed that the availability of oil and coal on these lands was a key part of the decision to reduce the size of the monuments.[266]

Multiple tribes and conservation organizations sued over the reduction of the monuments, arguing that the Antiquities Act only authorizes a President to designate monuments – it does not grant authority to revoke or modify a monument. The lawsuits have been consolidated into two cases – one for Grand Staircase and one for Bears Ears – but briefing schedules have not yet been set.[267] In the meantime, DOI has already opened the land removed

---

[260] *Id.*

[261] DOI Press Release: Secretary Zinke Sends Monument Report to the White House (Aug. 24, 2017), https://perma.cc/7JP4-BM5B.

[262] DOI Memorandum: Final Report Summarizing Findings of the Review of Designations Under the Antiquities Act (Dec. 5, 2017), *available at* https://perma.cc/HLE3-SCGK.

[263] Presidential Proclamation 9681 of December 4, 2017: Modifying the Bears Ears National Monument, 82 Fed. Reg. 58081 (Dec. 4, 2017).

[264] Presidential Proclamation 9682 of December 4, 2017: Modifying the Grand Staircase-Escalante National Monument, 82 Fed. Reg. 58089 (Dec. 8. 2017).

[265] Juliet Eilperin, *Trump to Cut Bears National Monument by 85 Percent, Grand Staircase-Escalante by Half, Documents Show*, Washington Post (Nov. 30, 2017).

[266] Eric Lipton & Lisa Friedman, *Oil Was Central in Decision to Shrink Bears Ears Monument, Emails Show,* N.Y. Times (Mar. 2, 2018); Brian Maffly, *Oil and Coal Drove Trump's Call to Shrink Bears Ears and Grand Staircase, According to Insider Emails Released by Court Order*, The Salt Lake Tribune (Mar. 3, 2018).

[267] Wilderness Society et al v. Trump et al, Docket No. 1:17-cv-02587 (D.D.C. Dec. 4, 2017) (Grand Staircase Escalante National Monument); Hopi Tribe et al. v. Trump et al, Docket No. 1:17-cv-02590 (D.D.C. Dec 04, 2017) (Bears Ears National Monument).

from the monuments for mining and fossil fuel development,[268] and as of June 2018, more than 51,000 acres had been leased to oil companies[269] and at least 20 mining claims totaling 460 acres had been had staked on those lands.[270]

3. *Expanding Fossil Fuel Leasing on Other Lands*

DOI and its constituent agencies have also taken a number of steps to expand fossil fuel leasing on other federal lands. As of September 2018, the administration had offered 13,667,241 acres of publicly owned land to oil and gas companies (more than the size of Maryland and New Jersey combined).[271] BLM also recently opened 9 million acres of sage grouse habitat to drilling and mining through revisions to the RMPs covering that habitat.[272] This is a particularly controversial action because, as noted above, as the federal government relied upon protections in the existing RMPs as the basis for determining that the sage grouse need not be listed under the ESAAs noted above, a district court in Idaho recently issued a preliminary injunction prohibiting BLM from applying its policy on streamlining oil and gas permitting in the sage grouse habitat. The administration is also moving forward with plans for oil and gas leasing in the Arctic National Wildlife Refuge (ANWR) after Congress passed legislation in late 2017 which opened the ANWR for drilling, and recently published a proposal to open anywhere from 66 to 100% of the 1.5 million-acre ANWR coastal plain for leasing.[273]

---

[268] J. Weston Phippen, *Bears Ears Officially Opens to Oil and Gas Development*, Outside (Feb. 2, 2018), https://perma.cc/M75F-GASD.

[269] Miranda Green, *Drillers Snag Leases Near Bears Ears Monument*, The Hill (Mar. 21, 2018), https://perma.cc/23E8-ULML.

[270] Chris D'Angelo, *20 Mining Claims Have Been Staked On Land Trump Cut From Monument Protection*, Huffington Post (June 26, 2018), https://perma.cc/C8S7-MPSM.

[271] The Wilderness Society, *Trump's Land Grab – In 7 Maps* (2018), *supra* note 254.

[272] The revised RMPs are available at: DOI, *Notice of Intent to Amend the Greater Sage-Grouse Resource Management Plan Revisions and Amendment(s)*, https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=134121 (last visited May 16, 2019).

[273] DOI, *Coastal Plain Oil and Gas Leasing Proposed RMP and EIS*, https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=renderDefaultPlanOrProjectSite&projectId=102555&dctmId=0b0003e8810d09e5 (last visited May 16, 2019. *See also* Steve Eder & Henry Fountain, *The Race for Alaskan Oil: 6 Key Takeaways*, NEW YORK TIMES (Dec. 3, 2018).

V. Department of Energy

The Department of Energy (DOE) has also played a role in President Trump's agenda for promoting fossil fuels and rolling back climate-related protections. There are two key areas in which DOE has assisted with these efforts: (i) by rolling back certain energy efficiency standards, and (ii) by participating in Trump's attempt to revive the coal industry.

A. Energy Efficiency Standards

When President Trump first took office, he issued a Presidential Memorandum, "Regulatory Freeze Pending review," which directed all agencies to postpone the publication of new and pending regulations to give the administration time to review those regulations. Acting pursuant to this memorandum, DOE postponed the publication of several energy efficiency standards that it had recently finalized but not yet published in the *Federal Register*, including standards for portable air conditions, uninterruptible power supplies, walk-in-cooler and freezer systems, commercial packaged boilers, air compressors, and pool pumps.[274] DOE also postponed the effective date of five efficiency-related rules that had been published in the *Federal Register* until March 21, 2017, including test procedures for walk-in coolers and freezers, test procedures for central air conditioners and heaters, test procedures for compressors, energy conservation standards for ceiling fans, and energy efficient construction standards for federal buildings.[275] On

[274] DOE, Energy Conservation Program: Energy Conservation Standards for Portable Air Conditioners; Final Rule, RIN 1904-AD02 (Dec. 2016), https://perma.cc/2HBF-TKN6; DOE, Energy Conservation Program: Energy Conservation Standards for Walk-in Cooler and Freezer Refrigeration System; Final Rule, RIN 1904-AD59 (Dec. 2016), https://perma.cc/U2YD-ZUVW; DOE, Energy Conservation Program: Energy Conservation Standards for Commercial Packaged Boilers; Final Rule, RIN 1904-AD01 (Dec. 2016), https://perma.cc/C57Y-VG5B; DOE, Energy Conservation Program: Energy Conservation Standards for Dedicated-Purpose Pool Pumps; Final Rule, RIN 1904-AD52 (Dec. 2016), https://perma.cc/3WWP-UR36; DOE, Energy Conservation Program: Energy Conservation Standards for Uninterruptible Power Supplies; Final Rule, RIN 1904-AD69 (Dec. 2016), https://perma.cc/X4RM-3BE9; DOE, Energy Conservation Program: Energy Conservation Standards for Air Compressors; Final rule, RIN 1904-AC83 (Dec. 2016), https://perma.cc/LC4J-837Z.

[275] DOE, Energy Conservation Program: Test Procedure for Walk-in Coolers and Walk-in Freezers; Final Rule; Delay of Effective Date, 82 Fed. Reg. 8805 (Jan. 31, 2017); DOE, Energy Conservation Program: Energy Conservation Standards for Ceiling Fans; Final Rule; Delay of Effective Date, 82 Fed. Reg. 8806 (Jan. 31, 2017); DOE, Energy Conservation Program: Test Procedures for Central Air Conditioners and Heat Pumps; Final Rule; Delay of Effective Date, 82 Fed. Reg. 8985 (Feb. 2, 2017); DOE, Energy Conservation Program: Test Procedures for Compressors; Final Rule; Delay of Effective Date; 82 Fed. Reg. 8985 (Feb. 2, 2017); DOE, Energy Efficiency Standards for the Design and

March 21, 2017, DOE further postponed the effective date for those five rules to new dates in June, July and September 2017.[276]

On March 31, 2017, a coalition of states filed a petition challenging the administration's decision to delay the energy efficiency standards for ceiling fans.[277] The plaintiffs included California, Connecticut, Illinois, Maine, Massachusetts, New York State, New York City, Oregon, Vermont, and Washington, and the Pennsylvania Department of Environmental Protection. Two months later, DOE published notice that the ceiling fans rule would be finalized and would go into effect on September 30, 2017, thus ending the dispute over the ceiling fans.[278] DOE also issued a notice that it would finalize standards and set compliance dates for residential central air conditioners and heat pumps.[279]

On June 13, 2017, the same coalition of states and several NGOs filed suit over DOE's failure to finalize five other energy efficiency standards – specifically those for air compressors, walk-in coolers and freezers, uninterruptable power supplies, portable air conditioners, and commercial packaged boilers.[280] On February 15, 2018, the U.S. District Court for the Northern District of California held that DOE's failure to publish the efficiency standards violated its duties under the Energy Policy and Conservation Act.[281] The court therefore granted the plaintiff's motion for summary judgment and ordered DOE to publish the standards.

The Natural Resources Defense Council filed a separate lawsuit challenging DOE's temporary suspension of efficiency test procedures for air conditioners and heat pumps. Plaintiffs

---

Construction of New Federal Low-Rise Residential Buildings' Baseline Standards Update; Final Rule; Delay of Effective Date, 82 Fed. Reg. 9343 (Feb. 6, 2017).

[276] DOE, Test Procedure for Walk-in Coolers and Walk-in Freezers; Final Rule; Further Delay of Effective Date, 82 Fed. Reg. 14426 (Mar. 21, 2017); DOE, Test Procedures for Central Air Conditioners and Heat Pumps; Final Rule; Further Delay of Effective Date, 82 Fed. Reg. 14425 (Mar. 21, 2017); DOE, Test Procedures for Compressors; Final Rule; Further Delay of Effective Date, 82 Fed. Reg. 14426 (Mar. 21, 2017); DOE, Energy Conservation Standards for Ceiling Fans; Final Rule; Delay of Effective Date, 82 Fed. Reg.14427 (Mar. 21, 2017); DOE, Energy Efficiency Standards for the Design and Construction of New Federal Low-Rise Residential Buildings' Baseline Standards Update; Final Rule; Delay of Effective Date, 82 Fed. Reg. 14427 (Mar. 21, 2017).

[277] New York et al. v. Perry, No. 17-918 (2d Cir. 2017) https://ag.ny.gov/sites/default/files/2017_03_31_petition_and_rules_final.pdf

[278] DOE, Energy Conservation Standards for Ceiling Fans; Final Rule, 82 Fed. Reg. 23723 (May 24, 2017).

[279] DOE, Energy Conservation Standards for Residential Central Air Conditioners and Heat Pumps; Final Rule; 82 Fed. Reg. 24211 (May 26, 2017).

[280] NRDC v. Perry, No. 3:17-cv-03404 (N.D. Cal. 2017).

[281] NRDC v. Perry, 302 F. Supp. 3d 1094, 1096 (N.D. Cal. 2018).

were successful with this challenge as well. On February 22, 2019, a district court in the Southern District of New York held that the suspension violated the APA because it had been issued without adherence to notice and comment procedures.[282]

DOE also withdrew a rule to establish energy conservation standards for manufactured housing (which was called for by the Energy Independence and Security Act of 2007).[283] The proposed rule had been published in the *Federal Register* in June 2016,[284] and DOE submitted the final rule to the Office of Information and Regulatory Affairs (OIRA) for review and publication on November 1, 2016. But the final rule was not finalized as of January 21, 2017 (the date of the regulatory freeze) and was therefore withdrawn in its entirety. The withdrawn rule would have established requirements related to duct leakage; heating, ventilation, air conditioning (HVAC); service hot water systems; mechanical ventilation fan efficacy; and heating and cooling equipment sizing, as well as requirements related to climate zones and the building thermal envelope of manufactured homes. According to the DOE, the new energy efficiency standards would have reduced total CO_2 emissions by 60.5 and 97.6 million metric tons, from single-section and multi-section homes, respectively, purchased between 2017-2046. The DOE also calculated the net economic impact of the standards and concluded that they would generate $5.29-$8.93 billion in net consumer benefits and $11.52-$31.95 billion in net nationwide benefits over a 30-year period. The nationwide benefits are much larger because they include the environmental impacts of the anticipated CO_2 and NO_x reductions.

On February 11, 2019, DOE issued a proposal to repeal another energy efficiency rule – specifically, regulations that expanded the number of light bulbs subject to energy efficiency standards which go into effect next year.[285] The regulations that DOE has proposed to repeal redefined the term "general service lamps" to include certain light bulbs that were previously considered to be so specialized that they should not be subject to standard rules, primarily bulbs

[282] NRDC v. DOE, No. 1:17-cv-06989 (S.D.N.Y. 2019).
[283] DOE, Energy Efficiency Standards for Manufactured Housing, RIN 1904-AC11 (2016).
[284] DOE, Energy Conservation Standards for Manufactured Housing; Proposed Rule, 81 Fed. Reg. 39756 (June 17, 2016).
[285] DOE, Proposed Rule: Energy Conservation Program: Energy Conservation Standards for General Service Lamps, 84 Fed. Reg. 3120 (Feb. 11, 2019).

known as incandescent reflector lamps. Commentators have noted that this rollback could cost U.S. consumers billions of dollars in lost energy savings.[286]

B. Support for Coal Power Generation Facilities

In the summer of 2017, DOE conducted a grid vulnerability study to assess whether changing energy market conditions were affecting grid reliability and resilience. DOE's final report on the topic contained many positive findings about "variable renewable energy" (VRE) resources (primarily wind and solar) – specifically, that they actually made the electricity grid more flexible and reliable, made bulk power less expensive, and performed a "price stabilizing role."[287] But DOE also found that the dispatch of VRE "has negatively impacted the economics of baseload plants" – specifically, coal and nuclear plants – and expressed concerns that this *could* adversely affect grid reliability (despite the other findings in the report indicating that greater penetration of VRE may improve reliability).[288]

Based on that concern, DOE proposed a Resiliency Pricing Rule on September 28, 2017, which would have subsidized nuclear- and coal- fired generation in three wholesale power markets where other sources of generation are more economically competitive.[289] Specifically, the proposal purported to direct FERC to use its authority under the Federal Power Act to require wholesale electricity market operators to provide a special discounted rate for generators that demonstrate "reliability and resiliency attributes" such as a 90-day fuel supply and the ability to provide ancillary reliably services (essentially, attributes of baseload coal and nuclear facilities).[290] FERC issued an order on January 8, 2018 rejecting the rule, finding that it did not satisfy the requirements of the Federal Power Act – in particular, the requirement to make a showing that

[286] Alliance to Save Energy, *DOE Proposal to Roll Back Lightbulb Efficiency Would Hurt Consumers, Innovation* (Feb. 6, 2019).
[287] DOE, STAFF REPORT TO THE SECRETARY ON ELECTRICITY MARKETS AND RELIABILITY (Aug. 2017), *available at* https://perma.cc/5Q4F-V6NU. These findings are embedded within the report in an apparent attempt to obscure the benefits of renewable energy. For analyses of the report findings, see EDF, ANALYSIS OF DRAFT U.S. DEPARTMENT OF ENERGY GRID STUDY (2017), *available at* in issu; David Roberts, *Rick Perry and His Own Grid Study Are Saying Very Different Things,* Vox (Aug. 24, 2017), https://perma.cc/9D7W-XTDL.
[288] DOE Grid Reliability Study, *supra* note 287, at 13.
[289] DOE, Grid Resiliency Pricing Rule; ANPR, 82 Fed. Reg. 46940 (Oct. 10, 2017).
[290] *Id.*

existing rates are "unjust, unreasonable, unduly discriminatory, or preferential."[291] In that same order, FERC initiated its own proceeding to evaluate bulk power system resilience on a more holistic basis, looking not only at the impacts of fuel supply but also market rules and coordination, transmission planning, and reliability standards.[292] This proceeding is still ongoing.

Despite this setback, the administration moved forward with its efforts to provide preferential treatment to coal and nuclear facilities. On June 1, 2018, the White House announced that President Trump had asked DOE to take immediate steps to prevent retirement of coal and nuclear power generation facilities.[293] On that same day, a draft memo dated May 29, 2018, was leaked which outlined actions for DOE to take on this matter.[294] According to that memo, DOE planned to exercise its emergency authority under the Defense Production Act of 1950 and the Federal Power Act to direct grid operators to purchase power from a designated list of nuclear and coal power plants. This system would remain in place for two years while the federal government conducts research on vulnerabilities in U.S. energy delivery systems, including those associated with the transition from fossil fuels to renewables. The memo confirmed earlier reports that DOE was looking to use its emergency authority to support coal and nuclear operations.[295] However, in June 2019, DOE Secretary Rick Perry announced that DOE does not have the "regulatory or statutory ability" to create economic incentives for coal or nuclear plants and that the administration would need to rely on FERC to move forward with its plans.[296]

C. Expediting and Curtailing Reviews for Natural Gas Infrastructure Approvals

DOE and FERC have also undertaken efforts to streamline and expediate approvals of natural gas transportation infrastructure, including pipelines and liquified natural gas (LNG) terminals. On September 1, 2017, DOE proposed a rule to provide for automated approval of

[291] FERC Order Terminating Rulemaking Proceeding, Initiating New Proceeding, and Establishing Additional Procedures, 162 FERC ¶ 61,012 (Jan. 8, 2018).
[292] *Id.*
[293] Avery Anapol, *Trump Considering Emergency Authority to Boost Coal Plants*, The Hill (June 1, 2018).
[294] DOE Addendum, Draft (5/29/18), *available at* https://perma.cc/2XLL-3DT2.
[295] Emma Foehringer Merchant, *The Trump Administration Just Hatched Another Plan to Buoy Coal and Nuclear*, GREEN TECH MEDIA (Apr. 20, 2018), https://perma.cc/9VHM-EZY4.
[296] Catherine Morehouse, *DOE Has No 'Regulatory or Statutory Ability' to Create Coal, Nuclear Bailout, Says Perry*, UTILITY DIVE (June 12, 2019). *See also* Eric Wolff & Darius Dixon, *Rick Perry's Coal Rescue Runs Aground at White House*, POLITICO (Oct. 15, 2018).

applications for small-scale exports of natural gas (of a volume up to and including 0.14 billion cubic feet (Bcf) per day) to countries with which the U.S. has not entered into a free trade agreement and with which trade is not prohibited by U.S. law or policy.[297] DOE published a final rule for that proposal on July 25, 2018.[298]

Some have argued that expanding natural gas infrastructure may actually reduce greenhouse gas emissions because natural gas will replace coal as an energy source. However, expanding this infrastructure also locks in the use of natural gas as opposed to cleaner energy sources, and recent studies have found that natural gas infrastructure emits significantly more methane than previously estimated (which raises questions about the actual magnitude of the emission reduction benefits associated with switching from coal to natural gas).[299] DOE and FERC have also received criticism for failing to analyze the effect of expanding natural gas transportation infrastructure on fossil fuel consumption, greenhouse gas emissions, and climate change. FERC, in particular, has resisted public requests to fully evaluate upstream and downstream emissions generated as a result of its pipeline approvals. In 2017, the D.C. Circuit Court of Appeals held that an analysis of downstream emissions was required for a pipeline project where FERC knew that the natural gas would be transported to and consumed at domestic power plants.[300] However, since that decision, FERC has declined to analyze downstream emissions for other natural gas transportation projects on the basis that it "does not have meaningful information about future power plants, storage facilities, or distribution networks" that it can use to forecast those emissions.[301]

VI. State Department

The State Department has been responsible for implementing Trump's agenda with respect to foreign policy on climate change. The Department has taken measures to reduce U.S.

[297] DOE, Proposed Rule; Small-Scale Natural Gas Exports, 82 Fed. Reg. 41570 (Sept. 1, 2017).
[298] DOE, Final Rule: Small-Scale Natural Gas Exports, 83 Fed. Reg. 35106 (July 25, 2018).
[299] *See, e.g.*, Ramón A. Alvarez et al., *Assessment of Methane Emissions from U.S. Oil and Gas Supply Chain*, 361 SCIENCE 186 (2018).
[300] Sierra Club v. FERC, 867 F.3d 1357 (D.C. Cir. 2017).
[301] FERC Order Denying Rehearing, 163 FERC ¶ 61,128 (May 18, 2018).

participation in international discussions occurring under the UNFCCC – for example, by reducing the number of staff in its Office of Global Change and by eliminating the special envoy for climate change.[302] Its most significant role of course has been in carrying out President Trump's plans to withdraw from the Paris Agreement.

A. Withdrawal from the Paris Agreement

President Trump announced his intention to withdraw from the Paris Agreement on June 1, 2017.[303] In that announcement, he stated that the U.S. would "cease all implementation of the Paris Agreement" including the implementation of our Nationally Determined Contribution (NDC) and contributions to the Green Climate Fund.[304] On August 4, 2017, the State Department submitted a formal communication to the UNFCCC Secretariat expressing its intent to withdraw from the Paris Agreement "as soon as it is eligible to do so."[305]

Notably, the Paris Agreement does not allow parties to submit their notice of withdrawal until three years after its entry into force (November 4, 2016). Once a party does submit such notice, there is a one-year period before the withdrawal becomes effective. Thus, the U.S. withdrawal cannot become effective until November 4, 2020 (the day after the next presidential election). The agreement does not explicitly address the procedures for rejoining the agreement after exiting, but a future President could re-join the agreement, as there is no bar on re-entry.

President Trump and the State Department have not made any formal effort to withdraw from the UNFCCC parent agreement. That agreement was ratified by the Senate in 1992 and the U.S. is still bound to adhere to the commitments contained therein. There is an unsettled legal debate as to whether a President can unilaterally withdraw from a treaty that was ratified by the

[302] Karl Mathiesen, *US State Department to Abolish Climate Change Envoy*, Climate Home News (Aug. 29, 2017), https://perma.cc/PL6J-WDSE.
[303] Exec. Office of the White House, Statement by President Trump on the Paris Climate Accord (June 1, 2017), https://perma.cc/MR53-SGN8.
[304] Under the agreement, the U.S. had previously submitted a Nationally Determined Contribution (NDC) in which we committed to reducing the country's greenhouse gas emissions by 26-28% below 2005 levels by 2025.
[305] Karl Mathiesen, *Trump Letter to UN on Leaving Paris Climate Accord – In Full*, Climate Home News (July 8, 2017), https://perma.cc/EAT8-QL2Q. *See also* U.S. Dept. of State, *Media Note: Communication Regarding Intent to Withdraw from Paris Agreement* (Aug. 4, 2017); Susan Biniaz, *The U.S. Communication Regarding Intent to Withdraw from the Paris Agreement: What Does It Mean?* Climate Law Blog (Aug. 6, 2017), https://perma.cc/V88P-UX38.

Senate, but many scholars believe that the consent of the Senate is legally required in this context.[306]

B. Approval of Transboundary Pipelines

The State Department has the authority to issue Presidential Permits for transboundary oil pipelines and other infrastructure intended to export or import oil.[307] The State Department must determine that such infrastructure is in the public interest before issuing a permit, taking into account factors such as safety, environment, and economic impacts. During the Obama Administration, the State Department reviewed and ultimately denied the application for the Keystone XL pipeline based on a determination that it would not serve the public interest.[308] The "critical factor" cited in this decision was the department's determination that "moving forward with this project would significantly undermine our ability to continue leading the world in combatting climate change."[309]

President Trump issued a Presidential Memorandum on January 24, 2017, in which he invited the pipeline developer, TransCanada, to re-submit its application and directed the Secretary of State to "take all actions necessary and appropriate" to expedite the approval of this application.[310] The State Department approved the Keystone XL pipeline application on March 23, 2017.[311] Environmental and tribal groups challenged the approval in court, alleging violations of the APA, NEPA, Endangered Species Act, Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act. On November 8, 2018, the Montana District Court issued a decision in favor of petitioners and enjoined TransCanada from engaging in any activity in furtherance of the construction and operation of the pipeline.[312] The court held that the State Department had violated the APA by failing to provide a reasoned explanation for reversing course on the pipeline

[306] For a discussion of this unresolved legal issue, see Stephen P. Mulligan, *Withdrawal from International Agreements: Legal Framework, the Paris Agreement, and the Iran Nuclear Agreement*, CRS Research Paper No. R44761 (Feb. 9, 2017).
[307] *See* Exec. Order. No. 13337, 3 C.F.R. § 1(g) (2004).
[308] Department of State, Notice of a Decision to Deny a Presidential Permit to TransCanada Keystone Pipeline LP fo the Proposed Keystone XL Pipeline, 80 Fed. Reg. 76611 (Dec. 9, 2015).
[309] Press Statement from Secretary of State John Kerry: Keystone XL Pipeline Permit Determination (Nov. 6, 2015).
[310] Presidential Memorandum Regarding Construction of the Keystone XL Pipeline (Jan. 24, 2017).
[311] Department of State, Notice of Issuance of a Presidential Permit to TransCanada Keystone Pipeline, L.P., 82 Fed. Reg. 16467 (Apr. 4, 2017).
[312] Indigenous Environmental Network v. United States Department of State, No. 4:17-cv-00029 (D. Mont., Nov. 8, 2018).

application, and that the State Department had also erred in its NEPA analysis by failing to analyze the cumulative effects of this and another connected pipeline project on climate change.

VII. Conclusion

Upon coming into office, the Trump administration promised to roll back many of the regulatory measures the Obama administration had put in place to protect the climate and to reduce greenhouse gas emissions. As detailed above, however, most of the deregulatory actions undertaken by the Trump administration with respect to climate change and fossil fuels are incomplete or stalled in the courts. The administration has been able to quickly repeal and revise policy statements and guidance documents, but modifying regulations has proven to be a much lengthier and more challenging process. To date, only four of the notice-and-comment rulemakings identified in this paper have resulted in final agency action (amendments to the Methane Waste Prevention Rule, amendments to the Coal Ash Rule, minor amendments to the Methane NSPS for Oil and Gas Sources, and repeal of the Coal, Oil, and Gas Valuation Rule). All of the other rulemakings are either still in the preliminary stages of review or at the proposed rule stage. It could be months or years before the administration promulgates a final action in those proceedings, and if and when that occurs, the actions will most likely be challenged in court.

There are also the prospects that courts may vacate final rules issued by the Trump administration to repeal and revise climate change protections or that the next President will reverse course and reinstate or even strengthen those protections. All of this regulatory back-and-forth consumes a tremendous amount of administrative resources and creates significant uncertainty for regulated entities. For all these reasons, Trump's deregulatory efforts are not likely to achieve their results.

Ultimately, this situation is untenable for both regulated entities and an American public that wants effective action to reduce the risk of global climate change. There is a compelling need for a coherent and cohesive federal policy on climate change that will protect the public's welfare while also providing the clarity and predictability that regulated entities require. President Trump's deregulatory agenda undermines both of these goals and should itself be replaced.