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Chevronizing Around Cost-Benefit Analysis

Jonathan S. Masur & Eric A. Posner¹

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ABSTRACT

The Trump administration's efforts to weaken regulations are in tension with cost-benefit analysis, which in many cases supports those regulations or otherwise fails to support the administration's deregulatory objectives. Rather than attempting to justify its actions as a matter of policy preferences, the administration has responded on multiple occasions by using *Chevron* to interpret statutes so as to evade cost-benefit analysis. The statutory interpretation route, which we call "*Chevronizing*" around cost-benefit analysis, creates novel challenges for courts, as it pits traditional *Chevron* deference against a trend in favor of requiring agencies to regulate based on cost-benefit analysis as a matter of sound public policy. We evaluate these efforts and conclude that in many of these cases, the Trump administration's attempts to leverage *Chevron* deference as a weapon against cost-benefit analysis (and sensible policymaking) will expose it to significant legal risk. We expect that courts will reject several of these efforts. In the process, the Trump administration's machinations may have the effect of contorting how future courts apply *Chevron* deference and how future administrations deploy it.

INTRODUCTION

The Trump administration has launched the most significant effort to deregulate the economy since the Reagan administration.² The parallels

¹ Thanks to Kathrine Gutierrez, Jennifer Nou, Cass Sunstein, and workshop participants at the University of Chicago for helpful comments and suggestions, and to Alex Aparicio, Merav Bennett, Megan Delurey, Ugonna Eze, Adam Hassanein, Meghan Holloway, Angel Russell-Johnson, and Justin Taleisnik for excellent research assistance.

² David R. Henderson, *Trump's Deregulatory Successes*, The Hoover Institution: Research (July 7, 2019), at <https://www.hoover.org/research/trumps-deregulatory-successes>. *But see*, Institute for Policy Integrity, *Roundup: Trump-Era Agency Policy in the Courts*, New York University School of Law, at <https://policyintegrity.org/trump-court-roundup> (last visited

between the two administrations are significant, but there are many differences as well. Ronald Reagan ran for office on a promise to deregulate the economy, but he also benefited from political tailwinds.³ A bipartisan consensus held that the economy was overregulated and major deregulatory legislation had already been enacted during the Carter administration.⁴ Once in office, Reagan appointed anti-regulatory officials to the regulatory agencies, and, working through the Office of Management and Budget, strengthened the White House's control over the agencies.⁵ His most significant achievement was the creation of centralized regulatory review that required agencies to use cost-benefit analysis to evaluate regulatory options.⁶ The genius of this move was that cost-benefit analysis appeared to be a neutral tool of policy analysis and yet seemed likely to produce a deregulatory effect because it was widely believed, by people in both parties, that the agencies regulated excessively.⁷

But while cost-benefit analysis remained in place through the next four presidential administrations, it stopped exerting as much deregulatory pressure after Reagan left office. It is possible that subsequent presidents put

Jan. 19, 2020) (observing that the Trump administration has lost 90% of litigation over deregulation).

³ Henry Olsen, "The Working-Class Republican: Ronald Reagan and the Return of Blue-Collar Conservatism," (New York: Broadside Books, 2017).

⁴ "While the Republicans had a head start and a better public image on the issue of deregulation, Democrats strived to catch up. By the 1976 election, Jimmy Carter was on the offensive about deregulation, talking of sunset provisions for regulations and zero-based budgeting as means to control the federal beast." Abner J. Mikva, *Deregulating Through the Back Door: The Hard Way to Fight a Revolution*, 57 U. Chi. L. Rev. 521, 524 (1990); see also, John Howard Brown, *Jimmy Carter, Alfred Kahn, and Airline Deregulation: Anatomy of a Policy Success*, 19 *The Independent Review* 85, 91-92 (Summer 2014).

⁵ See Jim Tozzi, *OIRA's Formative Years: The Historical Record of Centralized Regulatory Review Preceding OIRA's Founding*, 63 *Admin. L. Rev.* 37, 63-67 (2011); see also, Andrew Rudalevige, *Beyond Structure and Process: The Early Institutionalization of Regulatory Review*, 30 *J. of Pol. Hist.* 577 (2018); Edward P. Fuchs and James E. Anderson, *The Institutionalization of Cost-Benefit Analysis*, 10 *Public Productivity Review* 25 (Summer 1987). But see, Martin Tolchin, *The Rush to Deregulate*, *The New York Times*, Apr. 21, 1983, at <https://www.nytimes.com/1983/08/21/magazine/the-rush-to-deregulate.html> (last visited Jan. 19, 2020).

⁶ See Exec. Order 12,291, 46 *Fed. Reg.* 13,193 (Feb. 17, 1981). For a scholarly assessment, see Frank B. Cross, *Executive Orders 12,291 and 12,498: A Test Case in Presidential Control of Executive Agencies*, 4 *J.L. & Pol.* 483 (1988); see also, Elena Kagan, *Presidential Administration*, 114 *Harv. L. Rev.* 2245, 2279 (2001).

⁷ As Senator Ted Kennedy (D-Mass.) once said, "Regulators all too often encourage or approve unreasonably high prices, inadequate service, and anti-competitive behavior. The cost of this regulation is always passed on to the consumer. And that cost is astronomical." See, Senator Edward M. Kennedy, U.S. Senate, Hearings before the Subcommittee on Administrative Practice and Procedure of the Committee on the Judiciary, *Oversight of Civil Aeronautics Board Practices and Procedure*, 94th Cong. 1 (1975). [Link](#).

less priority on deregulation; that regulations that survived the Reagan-era housecleaning satisfied cost-benefit tests; and that, as new problems emerged, from climate change to financial instability, it turned out that additional regulation was cost-justified. While deregulation would continue in some sectors, new regulations were found necessary in others.⁸

In the years leading up to Donald Trump's electoral victory, regulated industries expressed frustration with regulatory developments, including financial regulation in the wake of the financial crisis, environmental and energy regulation in response to climate change, and health care regulation pursuant to the Affordable Care Act. Candidate Trump promised to deregulate, and once in office, he initiated a deregulatory agenda.

But in a major irony from the standpoint of the Reagan era, cost-benefit analysis now seems to be a hindrance to deregulation. The deregulations that the Trump administration has proposed appear to violate cost-benefit analysis—primarily because the Obama-era regulations that the Trump administration seeks to repeal are backed by plausible cost-benefit analyses.⁹ This represents a startling turn from the role that cost-benefit analysis has typically played, and one that runs directly counter to the caricatured notion of cost-benefit analysis as necessarily anti-regulatory.¹⁰

On previous occasions, when a new presidential administration has decided to alter or undo the regulations promulgated by its predecessors, the new administration has simply announced that it has different policy priorities.¹¹ But here, the cost-benefit infirmities of Trump's deregulations seem to have changed the equation. Whether due to the political cost of deregulating in a cost-benefit unjustified manner, or to concern that the regulations will be struck down by the courts, the Trump administration has not appeared willing to bite the bullet and acknowledge that it has chosen

⁸ Jonathan S. Masur & Eric A. Posner, *Unquantified Benefits and Regulation Under Uncertainty*, 102 CORNELL L. REV. 7 (2016).

⁹ A recent Council of Economic Advisers report claims that “the Trump Administration’s new regulatory approach” has and will generate massive gains for the public. See Council of Economic Advisors, *The Economic Effects of Federal Deregulation Since January 2017: An Interim Report 2* (2019). We are skeptical of this claim, which is based on a small number of regulatory actions (that are supposedly representative of all of them) as well as statutes and other actions outside the scope of this paper. But in any event the Report does not discuss any of the deregulatory actions that we address in this paper, and so our conclusions are not inconsistent with any of the specific claims that the Report attempts to document.

¹⁰ *E.g.*, FRANK ACKERMAN & LISA HEINZERLING, *PRICELESS: ON KNOWING THE PRICE OF EVERYTHING AND THE VALUE OF NOTHING* (2005).

¹¹ *E.g.*, *National Association of Motor Vehicle Manufacturers v. State Farm*, 463 U.S. 29, 59 (1983) (Rehnquist, C.J., concurring in part and dissenting in part) (“A change in administration brought about by the people casting their votes is a perfectly reasonable basis for an executive agency’s reappraisal of the costs and benefits of its programs and regulations.”).

policies that fail cost-benefit analysis. Instead, it has responded in several different ways. In a few cases, it has simply proposed implausible cost-benefit analyses that do not survive serious scrutiny. But its most important innovation has been to argue, in several important instances, that deregulation is not merely a policy choice but is *legally required* by the underlying regulatory statute. This approach has involved the manipulation of *Chevron* deference—under which agencies have discretionary authority to set policy when statutes are vague—to deprive agencies of the power to take into account certain benefits generated by regulations. We refer to this tactic as “Chevronizing around cost-benefit analysis.”

In the balance of this Article, we discuss the Trump administration’s deregulatory approach, with a focus on Chevronizing around cost-benefit analysis. In Part I, we describe four of the Trump administration’s most significant deregulatory efforts and illustrate the various tactics used to justify. In Part III, we evaluate these methods, assess their legality, and discuss possible policy justifications for the Trump administration’s approach. We conclude that the Trump administration’s approach—and in particular, its efforts to Chevronize around CBA—is suspect from the standpoint of law and policy.

I. TRUMP’S MAJOR DEREGULATIONS

Since taking office, President Trump has sought to roll back many of the regulatory actions undertaken by the Obama administration. This deregulatory effort has primarily involved notice-and-comment rulemaking by administrative agencies that either reverses Obama-era regulations or replaces them with substantially weaker rules. Most of this activity has involved the environmental and power sectors. This includes Obama-era rules on automobile fuel economy, hazardous pollutants, energy efficiency, and—most notably—the Clean Power Plan, which was designed to reduce greenhouse gas emissions through regulation of electricity generation. These are areas in which the Trump administration has thus far made the most progress in reversing Obama-era policy. In addition, unlike some of Trump’s other deregulatory efforts,¹² they involve Obama-era regulations that were justified from a cost-benefit perspective. In this Part, we examine the four most significant of these deregulations. Our goal is to expose the legal mechanisms that the Trump administration has deployed to eliminate or weaken these cost-benefit-justified regulations.

¹² For example, Trump’s reversal of the Obama-era net neutrality rules. Restoring Internet Freedom Act, 83 Fed. Reg. 7852 (Feb. 22, 2018). The Obama FCC never undertook a cost-benefit analysis of the net neutrality rules.

A. *Mercury Regulation*

The Trump administration's effort to deregulate mercury emissions from power plants is the latest step on a long and twisting path.¹³ In 1990, Congress passed an amendment to the Clean Air Act, which required EPA to regulate mercury emissions among other hazardous pollutants that it had neglected. By the end of the 1990s, EPA had placed power plants on a list of significant sources of mercury emissions, triggering a provision of the law requiring these plants to be regulated under the demanding Maximum Achievable Control Technology (MACT) standard. Before EPA had a chance to promulgate a rule based on MACT for those plants, the Clinton administration ended. The Bush EPA reversed course. Rather than issue MACT standards, EPA delisted the power plants, which meant that MACT was not required. The EPA proposed a more relaxed regulatory regime known as the Clean Air Mercury Rule (CAMR), which imposed a cap-and-trade system. However, in 2008 the Bush rule was struck down by the D.C. Circuit because EPA had not complied with the legally required procedure for delisting a source of hazardous emissions.¹⁴

In 2012, the now-Obama EPA revived the Clinton approach and issued MACT-based mercury-emission rules for coal- and oil-fired power plants. These are known as the Mercury and Air Toxics Standards (MATS), but we will call it the mercury rule in order to avoid acronym overload. The rule was based on studies that indicated that mercury emitted by power plants found its way into water bodies, where it was consumed by fish that were eaten by consumers. The mercury levels in these fish posed a threat to the neurological development of fetuses carried by women who consumed the fish. Thus, the EPA concluded that it was "appropriate and necessary" to issue regulations, a finding required by section 112(n)(1)(A) of the Clean Air Act. The mercury rule limited the amount of mercury emissions as well as emissions of other hazardous substances, and imposed restrictions on the operation of the power plants. In 2015 the Supreme Court struck down the mercury rule.¹⁵ The problem was now that the EPA had failed to consider cost when it determined that it was "appropriate and necessary" to regulate the power plants back in 2000 and again in 2012 when it affirmed the earlier

¹³ For two useful overviews, see Keith Harley, *Mercurial But Not Swift—U.S. EPA's Initiative to Regulate Coal Plant Mercury Emissions Changes Course again as It Enters a Third Decade*, 86 CHI-KENT L. REV. 277 (2011); James L. Simpson, *Why EPA's Mercury and Air Toxics Standards Matter—History and Health*, 49 A.B.A. TRENDS 5 (Nov./Dec. 2017).

¹⁴ *New Jersey v. EPA*, 517 F.3d 574, 577–78 (D.C. Cir. 2008).

¹⁵ *Michigan v. EPA*, 135 S. Ct. 2699, 2711–12 (2015).

determination.¹⁶ After conducting additional review, the EPA concluded that the rule was lawful because, even taking costs into account, the benefits were large enough to justify the regulation.¹⁷

This set the stage for the Trump administration. The Trump EPA might have re-delisted power plants from the list of hazardous sources, but, fearing a repetition of the Bush EPA's debacle, it chose a different deregulatory approach. Instead of delisting power plants, the Trump EPA proposed to rescind its earlier finding that the mercury rule was "appropriate and necessary."¹⁸ Back in 2011, the Obama administration had issued a cost-benefit analysis that showed that the rule generated benefits of \$37 to \$90 billion per year and costs of \$9.6 billion.¹⁹ In 2016, it cited that cost-benefit analysis to satisfy the Supreme Court's requirement that the EPA consider cost when it made its "appropriate and necessary" determination.²⁰ The Trump EPA concluded that the cost-benefit analysis in fact showed that the regulation would not be "appropriate and necessary."²¹ The reason was that the benefit from the reduction of mercury emissions alone was only \$4 to \$6 million per year; the vast bulk of the total benefit was due to the reduction in particulate matter emissions²² that would be generated by the same regulation.²³ Health benefits caused by reductions in particulate matter are called "co-benefits," because they result from the regulation but not from

¹⁶ *Id.* at 2711 ("The Agency must consider cost—including, most importantly, cost of compliance—before deciding whether regulation is appropriate and necessary.").

¹⁷ U.S. Env'tl. Prot. Agency, Supplemental Finding That It Is Appropriate and Necessary To Regulate Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units, 81 Fed. Reg. 24,420, 24,420–01 (Apr. 25, 2016) [hereinafter Supplemental Finding].

¹⁸ Env'tl. Prot. Agency, 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, 2670 (proposed Feb. 7, 2019) [hereinafter Mercury Reconsideration].

¹⁹ U.S. ENVTL. PROT. AGENCY, REGULATORY IMPACT ANALYSIS FOR THE FINAL MERCURY AND AIR TOXICS STANDARDS, ES-1 (Dec. 2011), https://www3.epa.gov/ttn/ecas/docs/ria/utilities_ria_final-mats_2011-12.pdf.

²⁰ Supplemental Finding, *supra* note 17, at 24,425.

²¹ Mercury Reconsideration, *supra* note 18, at 2670 ("After considering the cost of compliance relative to the HAP benefits of regulation, the EPA proposes to find that it is not 'appropriate and necessary' to regulate HAP emissions from coal- and oil-fired EGUs, thereby reversing the Agency's prior conclusion under CAA section 112(n)(1)(A) and correcting flaws in the Agency's prior response to Michigan v. EPA.").

²² "Particulate matter" is the catch-all term for solid and liquid particles found in the air. When inhaled, particulate matter can be extremely hazardous to human health. *Particulate Matter (PM) Basics*, ENVTL. PROT. AGENCY, <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics> (last visited Dec. 28, 2019). Reductions in particulate matter emissions thus lead to high levels of regulatory benefits, as in this regulation.

²³ See Mercury Reconsideration, *supra* note 18, at 2676–77.

reductions in the pollutant that is specifically being regulated. For decades, agencies have treated co-benefits on equal footing with other types of benefits when analyzing regulations. However, the Trump EPA argued to the contrary that the co-benefits of regulating mercury could not be taken into account. Without the co-benefits included, the cost of the regulation vastly exceeded the relevant benefit—the reduction in mercury emissions.²⁴ While the Trump EPA has not moved to rescind the regulation, it has laid the basis for a challenge by regulated parties.

The Trump EPA's conclusion was based on a legal interpretation of the Clean Air Act amendments rather than on a new cost-benefit analysis. Section 112(n)(1)(A) states:

The Administrator shall perform a study of the hazards to public health reasonably anticipated to occur as a result of emissions by electric utility steam generating units [that is, power plants] of pollutants listed under subsection (b) [mercury emissions] after imposition of the requirements of this Act. ... The Administrator shall regulate electric utility steam generating units under this section, if the Administrator finds such regulation is appropriate and necessary after considering the results of the study required by this subparagraph.²⁵

The Obama EPA confusingly argued that the requirement to perform a study of the health hazards resulting from mercury emissions after the imposition of other parts of the law meant that Congress understood that those other parts might have reduced harms caused by mercury emissions, and therefore that the EPA should take into account co-benefits whenever it regulated.²⁶ We are not sure we understand this argument, but the EPA was on firmer ground when it argued—citing the deference to which it is entitled under *Chevron*—that it was free to take into account co-benefits when determining whether a regulation was “appropriate and necessary.”²⁷ This was consistent with long-standing executive branch policy that favors taking co-benefits into account.²⁸ The Trump EPA argued back that the purpose of section

²⁴ See Mercury Reconsideration, *supra* note 18, at 2675–78.

²⁵ Clean Air Act § 112(n)(1)(A), 42 U.S.C. § 7412(n)(1)(A).

²⁶ Supplemental Finding, *supra* note 17, 81 Fed. Reg. at 24,438–39.

²⁷ Supplemental Finding, *supra* note 17, 81 Fed. Reg. at 24,439.

²⁸ Office of Management and Budget, Circular A-4, September 17, 2003, available at https://obamawhitehouse.archives.gov/omb/circulars_a004_a-4/ (“Your analysis should look beyond the direct benefits and direct costs of your rulemaking and consider any important ancillary benefits and countervailing risks. An ancillary benefit is a favorable impact of the rule that is typically unrelated or secondary to the statutory purpose of the

112(n)(1)(A) is to authorize regulation of mercury emissions that are needed to address the health hazards caused by those emissions.²⁹ If the main effect of the rule was to reduce particulate matter pollution, then it should have been issued under the section of the Clean Air Act that authorizes the EPA to regulate particulate matter. The agency presumably believed that a court, under *Chevron*, would ultimately give deference to this interpretation.

B. *The Clean Power Plan*

Thus far, the Trump administration's most controversial regulatory achievement is the EPA's repeal of the Obama EPA's Clean Power Plan³⁰ ("CPP") and its replacement with the Affordable Clean Energy (ACE) initiative. The CPP was Obama's most significant regulatory attempt to reduce the emission of carbon dioxide and other greenhouse gases, with the goal of slowing (or eventually stopping) climate change. The Clean Power Plan required states to drastically reduce the quantity of greenhouse gases emitted within their borders. Unlike other air pollutants such as sulfur dioxide or particulate matter, carbon dioxide cannot be "captured" or eliminated at the mouth of a smokestack or the tailpipe of a car. Once a fossil fuel has been burnt, there is no reliable means (given current technology) for eliminating the carbon dioxide produced. Accordingly, the CPP would have required states to switch the mixture of fuels used to produce electricity within their borders, decreasing the use of coal and increasing the use of (cleaner) natural gas and renewables.³¹

The benefits that would have been generated by the CPP fall into two categories. First, the CPP would have reduced total nationwide emissions of greenhouse gases, particularly carbon dioxide, thus decreasing the effects of climate change.³² The Obama EPA estimated the greenhouse gas reductions would produce approximately \$20 billion in annual benefits by 2030.³³ In

rulemaking (e.g., reduced refinery emissions due to more stringent fuel economy standards for light trucks)...").

²⁹ Mercury Reconsideration, *supra* note 18, 84 Fed. Reg. at 2676.

³⁰ U.S. Env'tl. Prot. Agency, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662 (Oct. 23, 2015).

³¹ See Daniel A. Farber, *Regulatory Review in Anti-Regulatory Times*, 94 CHI.-KENT L. REV. 383, 412 (2019) (describing and analyzing the Clean Power Plan).

³² U.S. ENVTL. PROT. AGENCY, REGULATORY IMPACT ANALYSIS FOR THE CLEAN POWER PLAN FINAL RULE, at ES-10 (Aug. 2015) [hereinafter RIA CLEAN POWER PLAN], https://www3.epa.gov/ttnecas1/docs/ria/utilities_ria_final-clean-power-plan-existing-units_2015-08.pdf.

³³ *Id.* at ES-20, Table ES-7. This is based on a 3% discount rate. The Obama RIA does not report cumulative benefits over a multi-year period. Instead, it reports only expected benefits for particular years in the future, which is why we refer to the benefits in 2030 in the text above.

addition, the overall reduction in coal-fired power plants would have reduced emissions of particulate matter and a number of other air pollutants that can be highly dangerous to health.³⁴ (As with the mercury regulation described above, these were considered co-benefits.) These additional emissions reductions were expected to yield approximately \$24 billion in annual benefits by the year 2030, for total of \$44 billion in annual benefits.³⁵ The Obama EPA further predicted that the CPP would generate roughly \$8.4 billion in annual costs.³⁶ It thus appeared that the CPP would generate benefits that substantially exceeded its costs.

Trump's ACE plan, promulgated in July 2019, reverses Obama's CPP.³⁷ Thus, in performing a cost-benefit analysis of the ACE plan, the Trump EPA effectively re-calculated all of the costs and benefits of the CPP in order to determine the economic effects of repealing that rule. Trump's economic analysis differed substantially from Obama's. First, the Trump EPA announced that it would include only domestic climate benefits in its analysis, not world-wide climate benefits. That is, it counted only the benefits that would be felt by people living within the United States.³⁸ The domestic costs of climate change are expected to be only a small fraction of the worldwide costs, in part because the United States has only a small fraction of the world's population and a small fraction of its economic activity.³⁹ Accordingly, the Trump EPA predicted that the CPP would have generated

³⁴ *Id.* at ES-10.

³⁵ RIA CLEAN POWER PLAN, *supra* note 32., at ES-20, Table ES-7. The EPA reported the expected total benefits as a range of \$34 to \$54 billion (using a 3% discount rate). We report the midpoint of that range here. Again, the Obama EPA did not calculate total estimated benefits, only annual benefits for certain years.

³⁶ *Id.* at ES-22, Table ES-9.

³⁷ U.S. Env'tl. Prot. Agency, Repeal of the Clean Power Plan; Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units; Revisions to Emission Guidelines Implementing Regulations, 84 Fed. Reg. 32,520 (July 08, 2019) [hereinafter Repeal of Clean Power Plan].

³⁸ U.S. ENVTL. PROT. AGENCY, 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, at ES-10 (2018) [hereinafter RIA FOR PROPOSED EMISSION GUIDELINES], https://www.epa.gov/sites/production/files/2018-08/documents/utilities_ria_proposed_ace_2018-08.pdf. See also Farber, *supra* note 31, at 415–17 (analyzing the requirement that agencies consider only domestic costs and benefits contained in Executive Order 13,783). See generally Arden Rowell, *Foreign Impacts and Climate Change*, 39 HARV. ENTL. L. REV. 371 (2015).

³⁹ Approximately 95% of the costs of climate change will likely be borne by people living outside of the United States. Jonathan S. Masur & Eric A. Posner, *Climate Regulation and the Limits of Cost-Benefit Analysis*, 99 CAL. L. REV. 1557, 1591 (2011).

only \$500 million in annual benefits, a 95% reduction from the Obama EPA's calculation.⁴⁰

In addition, the Trump EPA took a different approach from the Obama EPA in deciding how to count the benefits from reductions in particulate matter and other non-greenhouse gas pollutants. The Trump EPA did not treat the co-benefits from reducing these pollutants as zero, as in the mercury regulation. However, it counted an emissions reduction as a benefit only if that reduction would not have been required under existing law.⁴¹ The Obama EPA, by contrast, had counted an emissions reduction as a benefit if the CPP had required reductions below current pollution levels.⁴² In other words, imagine that the CPP would have effectively capped emissions of particulate matter in some area of the country at 50 units per year. If current law limited emissions to 100 units per year, but polluters were currently producing 150 units per year, the Obama EPA would have estimated the benefits of the CPP based on a reduction of 100 units per year (150-50), while the Trump EPA would have estimated those same benefits based on a reduction of 50 units per year (150-100).⁴³ After making this change, the Trump EPA estimated the annual benefits from these reductions at approximately \$8.1 billion, down from the \$24 billion estimated by the Obama EPA.⁴⁴

Despite these changes, the Trump EPA reported that its repeal of the Obama CPP would produce costs well in excess of benefits. Repealing the CPP was expected to produce net annual costs of approximately \$4.5 billion,⁴⁵ or \$54 billion in total costs through the year 2037.⁴⁶ The Trump EPA also offered a variety of different options involving partial repeals of the CPP; all of those options fail a cost-benefit test as well. Even despite the differences in CBA methodology, the Trump EPA could not escape the conclusion that the Obama CPP would produce benefits that exceeded its costs.

⁴⁰ RIA FOR PROPOSED EMISSION GUIDELINES, *supra* note 38, at ES-13, Table ES-9.

⁴¹ RIA FOR PROPOSED EMISSION GUIDELINES, *supra* note 38, at ES-11, ES-12.

⁴² See *supra* notes 32–35 and accompanying text.

⁴³ To be clear, it is entirely possible that the Trump EPA's approach—both with respect to greenhouse gases and non-greenhouse gases—is superior and better-justified. Our goal here is not to criticize the choices made by the Trump EPA in the course of its cost-benefit analysis. Rather, our objective is to examine the effects of the Trump EPA's decision on its overall cost-benefit analysis, as well as the EPA's legal approach in light of that cost-benefit analysis. See *infra*.

⁴⁴ RIA FOR PROPOSED EMISSION GUIDELINES, *supra* note 38, at ES-12, Table ES-9. Here, too, the EPA reported estimated annual benefits as a range from \$4.9 to \$11.4 billion, again using a 3% discount rate. We report the midpoint of that range.

⁴⁵ *Id.* at ES-16, Table ES-12. In between the promulgation of the CPP and Trump's re-estimation of its costs and benefits, the estimated costs also fell.

⁴⁶ *Id.* This is the midpoint of a range of \$3.1 to \$6.8 billion, using a discount rate of 3%.

To justify its deregulation, the Trump administration adopted a legal tactic reminiscent of its Chevronizing approach to the mercury regulation. The Clean Air Act directs the EPA to establish a “standard of performance . . . for any existing source”⁴⁷ and then defines “standard of performance” to mean:

a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.⁴⁸

The Obama EPA argued that a “system of emission reduction” was capacious enough to encompass plans that required electricity producers to switch some production from coal-fired power plants to natural gas-fired plants or renewable sources.⁴⁹ That is, the Obama EPA believed that it could set emissions guidelines “that would generally require power generators to change their energy portfolios,” rather than requiring “technological or operational measures that can be applied to or at a single source.”⁵⁰

The Trump EPA disagreed with this position. It argued instead that the text of the statute required that a “standard of performance” be applied only to each “existing source” individually, rather than involving the simultaneous shifting of capacity from “sources” (coal-fired plants) to “non-sources” (gas-fired plants and renewables). The EPA argued that this reading was compelled by both the reference to “any existing source” and by the use of the word “application,” which (it claimed) requires a particular object—an individual power plant—to which the system of emission reduction would be applied.⁵¹ Accordingly, the EPA concluded that the agency “is precluded from basing [its regulatory approach] on strategies like generation shifting and corresponding emissions offsets because these types of systems cannot be put into use at the regulated building, structure, facility, or installation.”⁵²

⁴⁷ 42 U.S.C. § 7411(d)(1).

⁴⁸ 42 U.S.C. § 7411(a)(1).

⁴⁹ See Repeal of Clean Power Plan, *supra* note 37, at 32,523.

⁵⁰ U.S. Env'tl. Prot. Agency, Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 82 Fed. Reg. at 48,037; see also U.S. Env'tl. Prot. Agency, 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. at 44,748. This is sometimes referred to as regulation “outside of the fence line.”

⁵¹ Repeal of Clean Power Plan, *supra* note 37, at 32,523.

⁵² *Id.* at 32,524.

It is notable that after initially invoking its authority under *Chevron v. NRDC*⁵³ to justify its changing interpretation,⁵⁴ the Trump EPA disclaimed any reliance on *Chevron* in announcing the final rule. Instead, the agency argued that the language of the Clean Air Act was unambiguous, and thus that there was “no interpretive room on which the EPA could seek deference for the CPP’s grid-wide management approach.”⁵⁵ That is, the agency argued that its hands were tied at *Chevron* Step 1: the statute did not permit the type of regulation the Obama EPA had promulgated.

C. CAFE Standards

1. Federal Fuel Economy Rules

In 2012, the National Highway Traffic Safety Administration (NHTSA) and EPA together promulgated new corporate average fuel economy standards (typically abbreviated as “CAFE” standards) that applied to cars and light trucks beginning in Model Year 2017.⁵⁶ CAFE standards are imposed on a manufacturer-by-manufacturer basis: each automobile manufacturer is required to meet a specified average fuel economy standard across all of the automobiles sold by that manufacturer in a given year. (Hence the “corporate” in “corporate average fuel economy.”) Manufacturers can improve their average fuel economy by improving the fuel economy of individual cars or simply by selling more small cars (which have higher fuel economy) and fewer large cars (with lower fuel economy). Under the DOT and EPA regulations, the formula for calculating the precise fuel economy standard was complex and depended upon the price of oil in a given year, but the effects were likely to be dramatic. The agencies anticipated that average fuel economy across a manufacturer’s entire fleet of passenger cars would rise from roughly 39 miles per gallon (“mpg”) in 2017 to roughly 55 mpg in 2025, and from roughly 29 mpg in 2017 for light trucks to roughly 40 mpg in 2025.⁵⁷

⁵³ 467 U.S. 837 (1984).

⁵⁴ Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 82 Fed. Reg. at 48,039.

⁵⁵ Repeal of Clean Power Plan, *supra* note 51, at 32,532. In legal terms, this means that the agency argued that the case should be decided at *Chevron* Step 1, whereby *Chevron* deference does not apply to unambiguous legislative commands.

⁵⁶ U.S. Envtl. Prot. Agency & Nat’l Highway Traffic Safety Admin., 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards, 77 Fed. Reg. 62,624 (Oct. 15, 2012).

⁵⁷ NAT’L HIGHWAY TRAFFIC SAFETY ADMIN., FINAL REGULATORY IMPACT ANALYSIS, CORPORATE AVERAGE FUEL ECONOMY FOR MY 2017-2025 PASSENGER CARS AND LIGHT

The heightened fuel economy standards were expected to produce significant net benefits. NHTSA estimated that the regulations would impose costs of roughly \$155 billion but create benefits of \$630 billion, thus producing net benefits of \$475 billion.⁵⁸ The majority of the costs were so-called “technology” costs—the costs of developing and installing more fuel-efficient engines.⁵⁹ But one of the consequences of improved fuel economy is that individuals who own cars are likely to drive them more because they are cheaper to operate. NHTSA thus estimated that the regulation would create an additional \$19 billion in costs from additional roadway congestion (due to cars being driven more miles) and \$9 billion in costs from additional automobile accidents.⁶⁰

On the benefits side, the primary expected benefit was a reduction in lifetime fuel expenditures by the owners of more fuel-efficient cars, on the order of \$485 billion.⁶¹ But NHTSA estimated that there would be significant additional benefits from the regulation as well, including benefits from reduced greenhouse gas emissions (\$49 billion) and reduced particulate matter and sulfur emissions (\$13 billion in total).⁶²

In 2018, Trump’s EPA and NHTSA announced a proposal to repeal the Obama-era CAFE standards rule with respect to Model Year 2021 and later automobiles.⁶³ Trump’s rule would effectively freeze the fuel efficiency standards in place at 2020 levels, leaving them at roughly 44 mpg for cars and 31 mpg for light trucks, rather than the continuing increases to 55 mpg (cars) and 40 mpg (light trucks) scheduled under the Obama Administration.⁶⁴ Given the overwhelming net benefits that the Obama-era rule was expected to produce, one might have imagined that a CBA of

TRUCKS, at 14-15 (Tables 3a & 3b) (Aug. 2012) [hereinafter OBAMA RIA], https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/fria_2017-2025.pdf

⁵⁸ This takes into account automobiles produced through Model Year 2025. *Id.* at 13 (Table 2).

⁵⁹ These accounted for roughly \$120 billion of the \$155 billion in total costs. *Id.* at 49 (Table 13).

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Id.* at 50 (Table 13).

⁶³ Env’tl. Prot. Agency and Nat’l Highway Traffic Safety Admin., The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks, 83 Fed. Reg. 42,986 (Aug. 24, 2018).

⁶⁴ ENVTL. PROT. AGENCY AND NAT’L HIGHWAY TRAFFIC SAFETY ADMIN., PRELIMINARY REGULATORY IMPACT ANALYSIS, THE SAFER AFFORDABLE FUEL-EFFICIENT (SAFE) VEHICLES RULE FOR MODEL YEAR 2021 – 2026 PASSENGER CARS AND LIGHT TRUCKS, at 18, 20 (Tables 1-7, 1-9) (Jul. 2018) [hereinafter TRUMP RIA], https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/ld_cafe_co2_nhtsa_2127-al76_epa_pria_181016.pdf.

Trump's repeal would have revealed expected costs—foregone benefits from repealing the Obama standards—greater than expected benefits—avoided technology costs and the like. But that is not what Trump's preliminary CBA claimed.

Instead, NHTSA and EPA calculated that repealing the Obama CAFE standards would avoid \$502 billion in costs and reduce benefits by only \$326 billion, for a net gain of \$176 billion.⁶⁵ The CBA conducted by Trump's agencies considers a slightly different time period than the one conducted by Obama's agencies, so the comparison is not quite one-to-one. (For instance, it is not necessarily significant that Trump estimated \$502 billion in cost savings while Obama estimated total costs of only \$155 billion.) These minor discrepancies aside, the end result was that the Obama EPA calculated that the regulation would produce significant net benefits while the Trump EPA calculated that the same regulation would produce significant net costs.

There are a number of overlapping reasons for this reversal. First, the Trump administration estimated significantly higher technology costs than Obama. For instance, the Obama NHTSA predicted roughly \$90 billion in technology costs for Model Year 2021-2025 automobiles.⁶⁶ By contrast, the Trump NHTSA estimated that technology costs would exceed \$123 billion across those five years.⁶⁷ Second, the Trump EPA calculates carbon emissions benefits and costs using the domestic cost of carbon, while the Obama EPA used the global cost of carbon. Accordingly, where the Obama EPA estimated benefits from higher CAFE standards of roughly \$36 billion across Model Years 2021-2025,⁶⁸ the Trump EPA calculated the cost of foregone climate benefits from those years as only \$2.6 billion.⁶⁹

Yet these discrepancies are not enough to account for the dramatic divergence between the Trump and Obama conclusions regarding the value of increased fuel economy standards. Instead, the difference is primarily driven by assumptions and calculations regarding the ways in which cars will be used and the number of miles they will be driven. Recall that the Obama administration calculated that the total number of automobile miles driven would increase slightly with higher fuel economy standards as automobiles became cheaper to operate. In the Trump administration's calculations, this slight difference becomes an enormous gap. In the Trump analysis, increasing fuel standards would lead to an enormous increase in the total number of miles that people drive their cars each year. It is this analysis of how

⁶⁵ *Id.* at 17 (Table 1-5). Avoided costs are effectively benefits, and foregone benefits are effectively costs, hence the positive overall impact in this calculation.

⁶⁶ OBAMA RIA, *supra* note 57, at 49 (Table 13).

⁶⁷ TRUMP RIA, *supra* note 64, at 84 (Table 1-73).

⁶⁸ OBAMA RIA, *supra* note 57, at 50 (Table 13).

⁶⁹ TRUMP RIA, *supra* note 64, at 85 (Table 1-73).

consumers will behave, and how many miles they will drive with looser or tighter fuel economy standards, that propelled the Trump administration's contrary conclusion.

Accordingly, the Trump EPA calculated that the benefits of stricter fuel standards (the Obama plan) would be much lower than the Obama EPA had estimated. Whereas the Obama EPA calculated the fuel cost savings from tighter fuel economy standards for Model Year 2021-25 automobiles at more than \$350 billion,⁷⁰ Trump's estimate comes in under \$82 billion.⁷¹ The reason, according to the Trump EPA, was that the benefits to consumers of better fuel economy would be nearly outweighed by the fuel costs of the additional miles those consumers would drive. The substantial reduction in driving from weakening the fuel economy standards would create other benefits as well, according to the Trump EPA.⁷² The Obama EPA estimated that tighter fuel economy standards would yield small reductions in fatalities from driving.⁷³ Individuals would drive somewhat more, but the cars they drove would be newer and smaller, and thus safer. By contrast, the Trump administration estimated that loosening the fuel economy standards would save 6,340 lives,⁷⁴ which it valued at an additional \$35.4 billion, because people would be less likely to drive cars that were more expensive to operate.⁷⁵

How did the Trump EPA arrive at estimates of how much individuals would drive that differed so widely from the Obama administration's estimates? According to the Trump EPA's analysis, weakening fuel economy standards would actually *decrease* the total number of cars on the road, even though new cars would be cheaper to purchase. The reason,

⁷⁰ OBAMA RIA, *supra* note 57, at 49 (Table 13).

⁷¹ TRUMP RIA, *supra* note 64, at 84 (Table 1-73).

⁷² If consumers would drive much more with stricter fuel standards (the Obama regulation) than they would with weaker fuel standards (the Trump deregulation), this should also mean that they gain much greater consumer surplus from driving with stricter fuel standards. If a driver owns a car with better fuel economy and chooses to drive 20 miles instead of 10, the driver must be getting some welfare benefit from the additional miles driven, despite the fact that she is paying for more gas to drive the additional miles. Accordingly, if the Trump EPA estimated that total vehicle miles driven would drop substantially under its deregulation, it should have also estimated that total consumer surplus from driving would drop substantially. But in fact, the Trump EPA's estimate of consumer surplus from driving was almost identical to the Obama EPA's estimate. Compare OBAMA RIA, *supra* note 57, at 49 (Table 13), with TRUMP RIA, *supra* note 64, at 84 (Table 1-73) (showing roughly identical numbers for consumer surplus in Model Years 2021-25). The Trump EPA does not attempt to explain or justify how it arrived at this calculation, so it is difficult to evaluate. But on its face, it appears implausible.

⁷³ OBAMA RIA, *supra* note 57, at 50 (Table 13).

⁷⁴ TRUMP RIA, *supra* note 64, at 92 (Table 1-77).

⁷⁵ *Id.* at 84 (Table 13).

according to the agency, is that the higher price of new cars (under the Obama rule) would make used cars more valuable, and so more people would choose to hold onto their used cars. That is, the Trump EPA estimated that higher fuel economy standards would make new cars more expensive, leading to fewer new cars on the road, which would in turn make used cars more valuable, leading to more used cars on the road and fewer used cars being scrapped. The net result, according to the Trump EPA, would be more total cars on the road in a world with stricter fuel economy standards. However, this conclusion contradicts basic principles of supply and demand.⁷⁶ When a product becomes more expensive, demand normally declines, and thus so does production. In addition, studies of consumer behavior in response to previous CAFE standards increases find that such increases typically reduce the number of cars on the road.⁷⁷

The Trump administration's analysis further assumed that the distance that a particular automobile is driven in a given year does not depend upon how many cars there are on the road. So, in Trump's analysis of the Obama regulation, there are more total cars on the road, and consumers drive each of those cars *just as much as they would if there were fewer cars*.⁷⁸ In other words, if the Obama regulation caused an individual to own two cars instead of one, the total number of miles that individual drove in a given year would double. This, too, runs contrary to both theory and evidence. The supply of automobiles is only one input to the production of miles driven (which one can think of as a good being produced). The supply of drivers is another input, and one that this regulation leaves unchanged. Similarly left unchanged by this regulation is the demand for driving. Thus, only if there were many excess drivers and much unmet demand for driving would we predict that the number of miles driven would increase linearly with the number of cars on the road. And again, studies have demonstrated that driving never increases one-for-one with increases in the number of automobiles.⁷⁹

⁷⁶ Alan Krupnick, Joshua Linn & Virginia McConnell, *Questions about the Trump Administration's Cost-Benefit Analysis for its Proposal to Freeze the CAFE Standards*, RESOURCES (Aug. 20, 2018), <https://www.resourcesmag.org/common-resources/questions-about-the-trump-administrations-cost-benefit-analysis-for-its-proposal-to-freeze-the-cafe-standards/>.

⁷⁷ *Id.*

⁷⁸ Institute for Policy Integrity, Comment Regarding The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks, https://policyintegrity.org/documents/Emissions_Standards_EPA_NHTSA_Comments_Oct_2018.pdf (October 26, 2018), at 79-80.

⁷⁹ *Id.* at 57.

These are hardly the only errors; the Trump EPA's analysis includes other implausible assumptions as well.⁸⁰

The agency's analysis is subject to judicial review under the "arbitrary and capricious" standard of section 706 of the Administrative Procedure Act.⁸¹ If an agency decided to regulate (or deregulate) on the basis of an obviously unjustified or nonsensical cost-benefit analysis—one that ignored big costs or benefits, incorporated an implausible value of life or discount rate, or exhibited any number of other problems—a court would certainly strike it down as arbitrary and capricious.⁸² But here, in order to understand why the Trump administration's analysis is arbitrary and capricious, a court must examine the economic modeling behind that analysis and evaluate the quantitative arguments for and against Trump's approach. This is at the outer limits of what courts have been willing to do in the past.⁸³ When courts have overturned regulations due to inadequate cost-benefit analysis, they have most frequently done so when the agency simply did not engage in a cost-benefit analysis at all⁸⁴ or when the cost-benefit analysis revealed on its face that the agency action was unjustified.⁸⁵ We have found instances in which a court has scrutinized an agency cost-benefit analysis at

⁸⁰ One example is the analysis of how many more miles individuals would drive if their automobiles were more fuel efficient. Trump's analysis assumes that they would drive far more miles than any existing study or data supports. Joshua Linn, *Missing Fuel Cost Savings: Some Clues Emerge*, RESOURCES (Oct. 9, 2018), <https://www.resourcesmag.org/common-resources/missing-fuel-cost-savings-some-clues-emerge/>. See also Joshua Linn, Alan Krupnick, Benjamin Leard, & Virginia McConnell, Comments to NHTSA and US EPA on the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026: Passenger Cars and Light Trucks (Oct. 25, 2018), https://media.rff.org/documents/Comments_10-25-18_EPA-NHTSA_final.pdf (unpaginated).

⁸¹ 5 U.S.C. § 706(2)(A); *Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Automobile Insurance Co.*, 463 U.S. 29 (1983). Other commentators agree with this stance. Institute for Policy Integrity, *supra* note 78, at 10.

⁸² Caroline Cecot & W. Kip Viscusi, *Judicial Review of Agency Cost-Benefit Analysis*, 22 GEO. MASON L. REV. 575 (2015) (surveying a large number of cases in which courts have evaluated agency cost-benefit analyses and finding that the appellate courts have rejected many of them for faulty CBAs).

⁸³ See Jacob Gersen & Adrian Vermeule, *Thin Rationality Review*, 114 MICH. L. REV. 1355, 1358 (2016) (finding that agencies have won 92% of arbitrariness challenges at the Supreme Court).

⁸⁴ See, e.g., *Bus. Roundtable v. SEC*, 647 F.3d 1144, 1149–50 (D.C. Cir. 2011); *Michigan v. EPA*.

⁸⁵ See, e.g., *Corrosion-Proof Fittings v. EPA*, 947 F.2d 1201, 1222–23 (5th Cir. 1991) (striking down the EPA's proposed asbestos regulation because it would create costs in excess of benefits); *Public Citizen, Inc. v. Mineta*, 340 F.3d 39 (2d Cir. 2003). See generally Cecot & Viscusi, *supra* note 82, at 580–82 (describing cases in which the agency action has been rejected due to its CBA).

the level of detail that would be necessary to overturn this regulation, but they are relatively uncommon.⁸⁶

2. California's Clean Air Act Waiver

As it turned out, eliminating the Obama-era CAFE standards and replacing them with much weaker fuel economy rules did not, by itself, succeed in lowering national fuel-economy standards. The State of California has authority under the Clean Air Act to promulgate air quality standards that are more stringent than federal air quality standards.⁸⁷ In order to do so, California must obtain a waiver from the EPA that exempts it from being preempted by federal rules. California has received dozens of such waivers in the past, including waivers from the Obama administration that remained in effect after the Trump EPA announced its intention to roll back Obama-era CAFE standards. Pursuant to that waiver, California announced an agreement with several major automakers that it would promulgate Obama's CAFE standards as its own, and that these automakers would abide by them.⁸⁸ Because of the size and importance of the California market, and the difficulty of manufacturing different automobiles with different levels of fuel economy for different states, the California rules would likely regulate fuel economy for all cars manufactured and sold throughout the country.

In September 2019, the Trump administration announced that it was withdrawing California's preemption waiver.⁸⁹ It made two arguments. First, it argued that California did not need stricter fuel economy standards to meet "compelling and extraordinary conditions," as required by the Clean Air Act.⁹⁰ According to the Trump administration, California's standards were primarily intended to reduce emissions of carbon dioxide and help curb climate change. But, the Trump agencies argued, because climate change is a global problem, and California's carbon emissions do not remain in

⁸⁶ *Owner-Operator Indep. Drivers Ass'n, Inc. v. Fed. Motor Carrier Safety Admin.*, 494 F.3d 188, 205 (D.C. Cir. 2007) (scrutinizing the agency's modeling choices and rejecting the regulation on the basis that it does not articulate a reasonable explanation for dubious modeling decisions); *Pub. Citizen v. Fed. Motor Carrier Safety Admin.*, 374 F.3d 1209, 1218 (D.C. Cir. 2004) (same).

⁸⁷ 42 U.S.C. § 7543(b)(1).

⁸⁸ Office of Gov. Gavin Newsom, California and Major Automakers Reach Groundbreaking Framework Agreement on Clean Emission Standards, (July 25, 2019), <https://www.gov.ca.gov/2019/07/25/california-and-major-automakers-reach-groundbreaking-framework-agreement-on-clean-emission-standards/>.

⁸⁹ *Env'tl. Prot. Agency & National Highway Traffic Safety Administration, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program*, 84 Fed. Reg. 51,310 (Sept. 27, 2019) [hereinafter SAFE One National Program Rule].

⁹⁰ 42 U.S.C. § 7543(b)(1)(B).

California or affect only Californians, California cannot claim to have an “extraordinary condition” that warrants particular standards.⁹¹

Second, the Trump administration argued that state fuel economy standards were preempted by the Energy Policy and Conservation Act, which does not allow for state waivers.⁹² That law states:

When an average fuel economy standard prescribed under this chapter is in effect, a State or a political subdivision of a State may not adopt or enforce a law or regulation related to fuel economy standards or average fuel economy standards for automobiles covered by an average fuel economy standard under this chapter.⁹³

This creates an obvious conflict with the Clean Air Act, which—in the context of fuel economy standards—would seem to explicitly permit precisely the sort of state action that the Energy Policy and Conservation Act prohibits. The only two courts to have confronted this issue both resolved it in favor of the Clean Air Act (and thus in favor of the state seeking a preemption waiver).⁹⁴ Nonetheless, the Trump administration asserted that those courts were wrong, and that states should be categorically preempted from issuing their own fuel economy standards under the Energy Policy and Conservation Act.⁹⁵

Notably, the Trump administration claimed that it should be entitled to *Chevron* deference with respect to both of these arguments. Like the federal CAFE standards themselves, the rule withdrawing California’s waiver was jointly promulgated by the EPA and NHTSA, the agencies charged with administering the relevant sections of the Clean Air Act⁹⁶ and Energy Policy and Conservation Act,⁹⁷ respectively. Relatedly, the EPA and

⁹¹ SAFE One National Program Rule, *supra* at 89, at 51,339 (“The GHG emissions from California cars are no more relevant to the pollution problem at issue (*i.e.*, climate change) as it impacts California than are the GHG emissions from cars being driven in New York, London, Johannesburg, or Tokyo”).

⁹² *Id.* at 51,311.

⁹³ 49 U.S.C. § 32919(a).

⁹⁴ *Green Mountain Chrysler v. Crombie*, 508 F. Supp. 2d 295 (D. Vt. 2007); *Cent. Valley Chrysler-Jeep, Inc. v. Goldstene*, 529 F. Supp. 2d 1151 (E.D. Cal. 2007), as corrected (Mar. 26, 2008).

⁹⁵ SAFE One National Program Rule, *supra* note 89, at 51,314.

⁹⁶ *Id.* at 51,351 (“Where states are now adopting standards for intents and purposes far removed from NAAQS attainment planning or more specifically directed at global air pollution, EPA as the agency charged with implementing the Clean Air Act is acting well within that role in setting out an interpretation that aligns with Congressional intent.”) (citing *Chevron*).

⁹⁷ *Id.* at 51,320 (“However, to the extent there is any ambiguity, NHTSA is the expert agency and its regulation adopted in this document is entitled to deference.”) (citing *Chevron*).

NHTSA took the position that the withdrawal of California's waiver was not a "rule" under Executive Order 12,866.⁹⁸ It thus declined to perform a cost-benefit analysis.

The withdrawal of California's Clean Air Act waiver is consistent with our theme of Chevronizing around CBA. Here, too, the Trump administration has deployed a series of legal arguments, coupled with a claim for *Chevron* deference, to evade consideration of the policy consequences of its actions. We evaluate the merits of these legal arguments in greater depth in the next Part.

D. *General Service Lamps*

In the waning days of the Obama administration, the Department of Energy issued a regulation that would have banned the sale of traditional incandescent light bulbs in 2020.⁹⁹ The regulation, along with the 2007 law that authorized it, led to the rapid growth of a market in energy-efficient light bulbs, including fluorescent, halogen, and LED.¹⁰⁰ However, demand for the cheaper, less efficient incandescent light bulb remained strong, and the industry opposed the Obama regulation.¹⁰¹ In September 2019, the Department of Energy issued a final rule that withdrew the Obama regulation.¹⁰²

The 2019 regulation was accompanied by a quite mysterious cost-benefit analysis that purported to show that the regulation would reduce costs. Based on the industry's "confidential estimates of total domestic shipments for the years 2015 to 2018" (the commitment to data transparency having been temporarily forgotten),¹⁰³ DOE argued that its regulation would reduce costs in the form of "reduction in uncertainty" equal to roughly \$50 million to \$200 million per year.¹⁰⁴ As far as we can understand, the "reduction in uncertainty" referred to uncertainty about whether DOE itself would

⁹⁸ *Id.* at 51,352 ("EPA's action here, however, is not a rule as defined by Executive Order 12866, consistent with its previous actions on waiver requests, and is therefore exempt from review by the Office of Management and Budget as required for rules and regulations by Executive Order 12866.").

⁹⁹ U.S. Dept. of Energy, Energy Conservation Program: Energy Conservation Standards for General Service Lamps, 82 Fed. Reg. 7276 (Jan. 19, 2017); U.S. Dept. of Energy, Energy Conservation Program: Energy Conservation Standards for General Service Lamps, 82 Fed. Reg. 7322 (Jan. 19, 2017).

¹⁰⁰ Nadja Popovich, *America's Light Bulb Revolution*, N.Y. TIMES (Mar. 8, 2019), <https://www.nytimes.com/interactive/2019/03/08/climate/light-bulb-efficiency.html>.

¹⁰¹ *Id.*

¹⁰² U.S. Dept. of Energy, Energy Conservation Program: Definition for General Service Lamps, 84 Fed. Reg. 46,661 (Sept. 5, 2019).

¹⁰³ *Id.* at 46,674.

¹⁰⁴ *Id.* at 46,674.

ultimately decide on a new efficiency rule that allowed the sale of incandescent light bulbs or instead trigger the statute's backstop (which would have barred traditional incandescent bulbs). Because the industry cannot predict what DOE will do, it must be prepared to deliver a large volume of light bulbs that will satisfy demand regardless of what happens, and this of course would be larger than if industry knew that incandescent light bulbs would be barred or not. DOE further rejected commenters' concerns that its regulation would cause environmental harm on the ground that it has not yet determined what the energy conservation standard will be.¹⁰⁵

It is hard to make sense of this analysis. The practical effect of the regulation is to allow incandescent light bulbs to be sold in 2020. A cost-benefit analysis would estimate the effects on the environment and compare them to the consumer surplus from sales of incandescent bulbs. Since this analysis has not been performed, we do not know whether withdrawal would be cost-justified.¹⁰⁶ But the effect on inventory is second-order concern, and the argument that the regulation has no environmental effect because DOE has not yet decided what some future conservations standard will be is disingenuous.

II. CHEVRONIZING AROUND CBA

The preceding examples demonstrate that CBA is not as malleable as some of its critics have contended.¹⁰⁷ For its repeals of the Obama-era mercury regulation and the Clean Power Plan, the Trump EPA was able to massage some of the numbers at the margin, but could not bring itself to argue that the new mercury and CPP regulations were cost-justified. With respect to the repeal of Obama's fuel economy and general service lamp standards, the Trump EPA did gin up phony CBAs, but their phoniness is plain to anyone who cares to examine them. We suspect that agency officials worried in these two cases that a phony CBA would invite a hostile judicial or public response. While these concerns did not stop the EPA and DOT from issuing the CAFE regulation, or the DOE from issuing the general lamps regulation, the transparently erroneous CBAs make the regulations vulnerable to such challenges.

¹⁰⁵ *Id.* at 46,671.

¹⁰⁶ The Obama regulation did not include a cost-benefit analysis on the ground that the regulation was not a "major regulation."

¹⁰⁷ *But see, e.g.,* Farber, *supra* note 31, at 432 ("On the contrary, the experience of the Trump Administration may strengthen the argument that cost-benefit analysis is too malleable to be considered reliable.").

By way of contrast, it is notable that the Trump administration has made most of its significant deregulatory inroads in areas where CBA has not traditionally been required, or in ways that are not normally subject to CBA. Thus, for example, the reduction of resources for enforcement is not subject to a cost-benefit requirement;¹⁰⁸ nor is the reduction in reliance on scientific advisory boards.¹⁰⁹ The withdrawal of regulations under the Congressional Review Act does not require a CBA.¹¹⁰ The FCC was able to withdraw Obama's net neutrality regulation without offering a CBA.¹¹¹ The Trump administration's recent revision of regulations for implementing the Endangered Species Act also involved a regulatory area in which agencies have not used cost-benefit analysis and are prohibited by statute from taking economic considerations into account.¹¹² And the administration's immigration-related actions, including the withdrawal of the Deferred Action for Childhood Arrivals program, have generally not required CBAs for various reasons—in the case of DACA, for example, because the administration merely abandoned the Obama administration's decision not to enforce certain laws.¹¹³ Where CBA is required, the administration that has

¹⁰⁸ Alex Leary, *Trump Administration Pushes to Deregulate With Less Enforcement*, WALL ST. J. (June 23, 2019), <https://www.wsj.com/articles/trump-administration-pushes-to-deregulate-with-less-enforcement-11561291201> (noting that President Trump has attempted to deregulate “by not hiring people to do the work of enforcing rules that are on the books”).

¹⁰⁹ Jill Colvin, *Trump Aims to Slash Number of Federal Advisory Committees*, ASSOCIATED PRESS (June 14, 2019), <https://apnews.com/4e36550332c74894b8b87f4ed51aaff>.

¹¹⁰ 5 U.S.C. §§ 801–808. Under the Congressional Review Act (CRA), Congress can overturn a proposed agency rule by a joint resolution of disapproval. Congress does not need to justify its decision with cost-benefit analysis. The 115th Congress (2017–2018) overturned 16 rules under the CRA, whereas only one rule had previously been overturned since the law's passage in 1996. MAEVE P. CAREY & CHRISTOPHER M. DAVIS, CONG. RESEARCH SERV., IF10023, THE CONGRESSIONAL REVIEW ACT (CRA) (2018), <https://fas.org/sgp/crs/misc/IF10023.pdf>.

¹¹¹ Historically, independent agencies such as the FCC have not been subject to the same CBA requirements as traditional executive branch agencies. According to one analysis, “Section 1(b)(6) of E.O. 12866. E.O. 12866, like its predecessor orders that were issued by President Ronald Reagan (E.O. 12291 and E.O. 12498), does not apply the cost-benefit analysis or OIRA review to independent regulatory agencies such as the Federal Reserve Board and Securities and Exchange Commission.” CONG. RESEARCH SERV., R43056, COUNTING REGULATIONS: AN OVERVIEW OF RULEMAKING, TYPES OF FEDERAL REGULATIONS 4 n. 23 (2019), <https://fas.org/sgp/crs/misc/R43056.pdf>.

¹¹² Dept. of the Interior, Fish and Wildlife Service & Dept. of Commerce, Nat'l Oceanic and Atmospheric Admin., Endangered and Threatened Wildlife and Plants; Revision of the Regulations for Listing Species and Designating Critical Habitat, 84 Fed. Reg. 45,020, 45,024–25 (Aug. 27, 2019).

¹¹³ The cost-benefit test of E.O. 12866 applies to “regulatory actions,” § 6(a)(3)(C), defined as an actions leading up to a final rule or regulation designed to have the effect of law, § 3(d), (e). Thus, it does not apply to enforcement decisions.

had to work around CBA rather than disregard it completely. CBA has offered friction against the Trump administration's deregulatory goals.

The Trump administration has responded to these frictions with a variety of tactics designed to evade or frustrate cost-benefit analysis. Some of these tactics are straightforward and relatively well understood. Others are innovations. In the sections that follow, we categorize these tactics and evaluate their legality. Our conclusion is that most of them are illegal, or should be held to be illegal. But cracking down on these actions would, in some cases, require courts to subject the Trump administration's actions to a level of scrutiny that they have not traditionally been willing to apply to administrative action.

In the case of mercury and the Clean Power Plan, the administration tried to evade CBA rather than falsify it. Its strategies in both cases involved what we call "Chevronizing around CBA"—using the executive branch's authority over legal interpretation to evade or nullify the results of a cost-benefit analysis. In the mercury case, the administration argued that while the Obama-era mercury regulation generates benefits greater than the costs, some of those benefits—the "co-benefits"—did not count because the agency was legally prohibited from issuing a mercury regulation unless the mercury-related health benefits of the regulation alone exceeded the costs. Here, the agency's argument was based on Chevron Step 2: the EPA argued that the statute was ambiguous, and thus the agency was entitled to deference in its interpretation excluding co-benefits. In its repeal of the Clean Power Plan, by contrast, the EPA operated at Chevron Step 1: it argued that the statute unambiguously prohibited the agency from regulating in the manner dictated by the Clean Power Plan, cost-benefit consequences notwithstanding. These two approaches are species of the same genus. In both cases, the agency used an interpretation of the Clean Air Act to escape the consequences of its cost-benefit analysis. Below, we analyze these two efforts in depth.

A. Chevronizing around CBA at Step 2: The Cases of Mercury and Fuel Economy

1. Mercury

As we explained above, the section of the Clean Air Act under which the Obama EPA regulated mercury requires that regulation be "appropriate and necessary." The Trump EPA argued that this language was ambiguous; that the EPA now interpreted the language to exclude consideration of co-benefits; and that the EPA's interpretation was entitled to deference under Chevron Step 2.

This flavor of the Chevronizing strategy is potentially powerful because regulatory statutes are frequently ambiguous. This ambiguity creates interpretive space for the agency under Chevron, space that the agency can use to craft a legal interpretation that excludes benefits or costs. “Appropriate and necessary” is a paradigmatic example.¹¹⁴ Still, an agency’s authority under Chevron is not limitless. Even if a statute is ambiguous, Step 2 of the Chevron framework nonetheless requires that the executive branch’s interpretation of ambiguous language be “reasonable.”¹¹⁵

The meaning of this term has given rise to much scholarly debate. Some scholars have taken the position that *Chevron*’s two steps both call for statutory construction: Step One asks “whether the text of the agency’s governing statute nullifies the agency’s position,” while Step Two asks “whether other conventional tools of construction cast doubt on the agency’s position.”¹¹⁶ Others have suggested that Chevron Step 2 calls for a more substantive type of review, possibly “arbitrary and capricious” review under the APA.¹¹⁷ This version of Chevron Step 2 would direct a court to scrutinize the policy choices underlying the agency’s action, rather than merely engaging in a legalistic analysis of the agency’s statutory interpretation.¹¹⁸ Empirical studies of *Chevron* have shown that appellate courts subscribe to each of these interpretations at various times.¹¹⁹

Here, if Chevron Step 2 were given any sort of substantive content, we suspect that it would be fatal to the Trump EPA’s repeal of mercury regulations.¹²⁰ That deregulation would create billions of dollars in net costs,

¹¹⁴ Though the Supreme Court has held that it requires the agency to take costs into account. See *Michigan v. EPA*, 135 S. Ct. 2699, 2707–08 (2015).

¹¹⁵ *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 843 (1984).

¹¹⁶ See Ronald M. Levin, *The Anatomy of Chevron: Step Two Reconsidered*, 72 CHI.-KENT L. REV. 1253, 1278–80 (1997); see also Kenneth A. Bamberger & Peter L. Strauss, *Chevron’s Two Steps*, 95 VA. L. REV. 611, 614 (2009); Peter L. Strauss, *Deference is Too Confusing—Let’s Call Them Chevron Space and Skidmore Weight*, 112 COLUM. L. REV. 1143, 1165 (2012).

¹¹⁷ Catherine M. Sharkey, *Cutting in on the Chevron Two-Step*, 86 FORDHAM L. REV. 2359, 2383 (2018); Mark Seidenfeld, *A Syncopated Chevron: Emphasizing Reasoned Decision-Making in Reviewing Agency Interpretations of Statutes*, 73 TEX. L. REV. 83, 127, 131 (1994). Still other scholars have argued that *Chevron* has only one step. Matthew C. Stephenson & Adrian Verneule, *Chevron Has Only One Step*, 95 VA. L. REV. 597 (2009).

¹¹⁸ Sharkey, *supra* note 117, at 2383.

¹¹⁹ Richard M. Re, *Should Chevron Have Two Steps*, 89 IND. L.J. 605, 638–40 (2014); Kent Barnett & Christopher J. Walker, *Chevron in the Circuit Courts*, 116 MICH. L. REV. 1, 34–35 (2017).

¹²⁰ It is worth noting that, across a wide variety of legal contexts, courts will sometimes treat the word “reasonable” as if it requires a comparison between costs and benefits. For examples from federal regulatory law, see Tracy Bateman Farrell, et. al, 45A *Am. Jur. 2d Job Discrimination* § 200 (2019) (when determining whether an accommodation is

and no identified non-monetary benefit that might justify such a loss. That hardly seems reasonable, or for that matter “appropriate and necessary.”¹²¹

There is a related problem with the EPA’s interpretation that renders it unreasonable. On its view, the Trump EPA is allowed to limit pollution that generates mercury-related harms and pollution that generates particulate matter-related harms but cannot count both harms when evaluating a regulation that does both. It is hard to think of a justification for such an approach and the Trump administration does not supply one.

The problem with the EPA’s stance is that it could compel the agency to engage in unnecessarily wasteful regulation. Imagine that EPA is considering a rule that limits emissions from factories. The anticipated rule imposes costs of \$1 billion on businesses, and results in lower emissions of two substances, X and Y. Suppose further that the X reduction produces benefits of \$0.9 billion and the Y reduction produces benefits of \$0.8 billion. The rule passes a cost-benefit analysis because the joint benefits of \$1.7 billion exceed the \$1 billion cost.

reasonable under the ADA, “courts are permitted to take into account the reasonableness of the cost of any necessary workplace accommodation, the availability of alternatives therefor, or other appropriate relief in order to achieve an equitable and appropriate remedy,” and an employer does not need to provide an accommodation if doing so would be “unduly costly, extensive, substantial, or disruptive”); *Am. Textile Mfrs. Inst., Inc. v. Donovan*, 452 U.S. 490, 512 n.30 (1981) (requirement that the Consumer Product Safety Commission promulgate rules that are “reasonably necessary” to eliminate an “unreasonable risk” of injury require “a generalized balancing of costs and benefits”); Barbara J. Van Arsdale, et. al, 15 *Am. Jur. 2d Civil Rights* § 403 (2019) (“An accommodation is reasonable under the Fair Housing Act if it is both efficacious and proportional to the costs to implement it.”). For examples from tort law, see *McCarty v. Pheasant Run, Inc.*, 826 F.2d 1554, 1558 (7th Cir. 1987) (“Ordinarily the innkeeper knows much more about the hazards of his trade than the guest, and can take reasonable (=cost-justified) steps to reduce them, while ordinarily the guest can do little to protect himself against them.”); see also *United States v. Carroll Towing Co.*, 159 F.2d 169, 173 (2d Cir.1947) (L. Hand, J.); *Maryland Cas. Co. v. City of Jackson*, 493 So.2d 955, 960 n. 3 (Miss.1986); *People Express Airlines, Inc. v. Consolidated Rail Corp.*, 100 N.J. 246, 266–67 (1985); *Micallef v. Miehle Co.*, 39 N.Y.2d 376, 386 (1976); 3 Harper, James & Gray, *The Law of Torts* § 16.9, at pp. 467–68 (2d ed. 1986); *Prosser and Keeton on the Law of Torts* § 31, at p. 173 (5th ed. 1984); *East River S.S. Corp. v. Transamerica Delaval, Inc.*, 476 U.S. 858, 865 (1986). For examples from property law, see *Restatement (Second) of Torts* § 826 (land use is unreasonable if “the gravity of the harm outweighs the utility of the actor’s conduct” or if “the harm caused by the conduct is serious and the financial burden of compensating for this and similar harm to others would not make the continuation of the conduct not feasible”); *Kopeccky v. National Farms, Inc.*, 510 N.W.2d 41 (Neb. 1994); Michael Allen Wolf, 12 *Powell on Real Property* § 79C.06 (2019) (in the context of evaluating zoning changes, “courts have generally tried to balance the public gain from the particular provision against the private loss sustained by the property owner”).

¹²¹ *Michigan v. EPA*, 135 S. Ct. at 2712.

Now further suppose that two different laws authorize EPA to regulate X and Y. Call these laws law-X and law-Y. Each law imposes different substantive standards: EPA may regulate X only if “appropriate and necessary,” while EPA may regulate Y only if regulation “serves the public interest.” Instead of issuing one regulation to reduce emissions of both X and Y, the EPA could issue separate regulations of X (under law-X) and Y (under law-Y). However, regulation X alone would impose costs of \$0.7 billion, and regulation Y alone would impose costs of \$0.6 billion, for a total of \$1.3 billion. It would thus be optimal for the EPA to regulate both chemicals with a single rule.

Suppose that a court held that the statutory language is ambiguous and the EPA deserved *Chevron* deference. The EPA then decided to interpret the statute to exclude co-benefits and bar the single regulation. Would a court hold that the EPA’s regulation was reasonable at *Chevron* Step 2?

We are pretty sure the answer is “no.” The standards “appropriate and necessary” and “the public interest” do not exclude considerations of co-benefits but on the contrary invite the agency to take into account all relevant effects of the regulation. Excluding co-benefits from the analysis would push the agency toward inefficient alternatives and block regulations that would benefit public welfare. We do not think one can reasonably interpret these standards to require EPA to exclude co-benefits. Put more generally, it would seem unreasonable for an agency to select—as a matter of that agency’s discretion—a legal interpretation that compels the agency to act wastefully or inefficiently. Deliberately exercising agency discretion in order to achieve unnecessarily wasteful ends seems the antithesis of reasonableness.

To test this intuition, let us consider some more extreme cases. Imagine that EPA regulates under law-X and the co-benefit is now something over which the EPA has no authority. Let’s imagine that EPA could prove that the co-benefit is reducing violent crime. Industry argues that EPA cannot take this co-benefit into account and therefore that the regulation should be struck down because the costs exceed the authorized benefits.

Industry is wrong. EPA should take into account reductions in violent crime—or, more precisely, reductions in deaths, injuries, and property loss—as long as a causal relationship between the emissions and violent crime can be established. The goal of regulation should be to increase overall social welfare. This requires analyzing all of the effects of a regulation, not merely the intended effects or those specifically named by the statute.

We can make this point in another way by imagining the regulation produces costs rather than benefits, for example, by increasing violent crime. (We might call this effect a “co-cost.”) EPA would be on firm ground if it put the relevant outcomes into a cost-benefit analysis and regulated (or chose not to regulate) on its own. The issue is not whether the regulation produces

benefits or costs by affecting behavior that the underlying statute did not seek to influence; the issue is whether the benefits and costs are actually borne by the relevant group of people, in a way that is clear and measurable.

This last point is worth emphasizing. Virtually all regulations affect behaviors across many dimensions. A pollution-control regulation will typically reduce many types of emissions, not just one, and it would be strange for the agency to ignore the effects of the other types of emissions—good or bad—just because it acts based on a statute that regulates only the one. The same regulation could, by increasing the cost of goods produced by the factor, have a range of other effects—on the safety of produces that are built with the factory’s inputs, on employment, on working conditions in the factory. Similarly, regulation of fuel economy standards will affect the amount of fuel consumed and the price of automobiles, but as we have seen it will also affect pollution, traffic fatalities, and more. These effects are unavoidable, so if the agency is not allowed to take them into account, its regulations will often cause great harm. Indeed, the vast majority of costs and benefits that figure into the Trump administration’s CBA of its fuel economy standards are actually co-costs and co-benefits: increased or reduced traffic fatalities, environmental harms, and so forth.¹²² Yet the Trump administration has continued to consider co-costs and co-benefits in this context without any recognition that it is acting inconsistently with its approach to mercury.

The Trump EPA hedges a bit in its defense of repealing the mercury regulation by suggesting a more restricted version of its rule against taking account of co-benefits. It argues that the problem with the mercury regulation is that the “primary” benefit is the reduction of non-mercury emissions. We can see the force of this argument by considering a semi-hypothetical example. Imagine that EPA wants to reduce cigarette smoking because of its public health effects and so issues an environmental regulation that puts a limit on how much cigarette smoke a person may produce. (We will assume that the EPA can find a statute somewhere that gives it authority to do this.) Then the EPA conducts a cost-benefit analysis and virtually all the benefits come from the avoidance of deaths of smokers themselves rather than from second-hand smoke “pollution” caused by their “emissions.” It is evident that the agency is trying to regulate in a way outside its authority—which here belongs to the FDA. A fair interpretation of the authorizing statutes suggests that EPA may not regulate cigarette smoking, and it cannot avoid this restriction by purporting to regulate smoke emissions.

One can imagine a similar argument even when an agency issues rules that affect outcomes within its jurisdiction. Imagine that Congress tells EPA to strictly regulate mercury emissions but to regulate particulate matter

¹²² See *supra* Part II.A.

emissions with a light touch. EPA then issues a regulation that strictly regulates both types of emissions and justifies the regulation with a cost-benefit analysis in which the effects on particulate matter play the dominant role. Here, an argument could be made that EPA acted improperly. But our case is, if anything, the opposite. The standard for regulating particulate matter emissions is “requisite to protect the public health,”¹²³ and the Supreme Court has held that this requires the EPA to regulate particulate matter emissions without regard to cost¹²⁴—which is to say, even more stringently than it regulates mercury.¹²⁵

It is important to emphasize that if this provision of the Clean Air Act *unambiguously* barred consideration of co-benefits, then the EPA would be obligated (at Chevron Step 1) not to consider them in its regulatory decisions. This is the position the Trump EPA has taken with respect to the Clean Power Plan, which we discuss below. But this is *not* the Trump EPA’s view of the statute authorizing it to regulate mercury, and we suspect it is highly unlikely that a court would ever hold that “appropriate and necessary” unambiguously bars consideration of co-benefits.¹²⁶ Here, the Trump EPA’s refusal to take co-benefits into account is the agency’s own choice—an exercise of the agency’s policy discretion. The agency is deliberately selecting an interpretation that will force it to create more costs than benefits. Such an attempt to Chevronize around cost-benefit analysis should not be deemed “reasonable.”

2. Fuel economy

The EPA and NHTSA’s claims to *Chevron* deference in the withdrawal of California’s Clean Air Act waiver raise different issues. Consider first the EPA’s argument that California does not face “compelling

¹²³ 42 U.S.C. § 7409(b)(1).

¹²⁴ *Whitman v. American Trucking*, 531 U.S. 457, 466-67 (2001).

¹²⁵ *Michigan v. EPA*, 135 S. Ct. at 2709 (“*American Trucking* thus establishes the modest principle that where the Clean Air Act expressly directs EPA to regulate on the basis of a factor that on its face does not include cost, the Act normally should not be read as implicitly allowing the Agency to consider cost anyway. That principle has no application here. “Appropriate and necessary” is a far more comprehensive criterion than “requisite to protect the public health”; read fairly and in context, as we have explained, the term plainly subsumes consideration of cost.”).

¹²⁶ In another case, the D.C. Circuit approved the EPA’s reliance on co-benefits. See *United States Sugar Corp. v. Envtl. Prot. Agency*, 830 F.3d 579, 625 (D.C. Cir. 2016), on reh’g en banc, 671 F. App’x 822 (D.C. Cir. 2016), and on reh’g en banc in part, 671 F. App’x 824 (D.C. Cir. 2016). If the Obama EPA exercised its discretion properly to consider co-benefits, then the Trump EPA’s reversal, without any explanation based on policy considerations, seems arbitrary.

and extraordinary conditions” that necessitate a waiver.¹²⁷ The EPA argued that “the term ‘extraordinary’ should refer to circumstances that are specific to California.”¹²⁸ “Extraordinary” means “going beyond what is usual, regular, or customary,” or “exceptional,”¹²⁹ and the statute is specifically meant to allow waivers for particular states but not others.¹³⁰ Accordingly, EPA’s interpretation of the statute appears at minimum reasonable, and it is perhaps even the best interpretation of the statute.

What is more dubious is EPA’s claim that “while effects related to climate change in California could be substantial, they are not sufficiently different from the conditions in the nation as a whole to justify separate State standards.”¹³¹ California is certainly not the only state to have been affected by climate change. But it has been affected in a manner—among other things, the outbreak of vast wildfires, accompanied by power blackouts meant to reduce the incidence of such fires—that is different and arguably more severe than most other states.¹³² Even though the EPA is entitled to *Chevron* deference as to its interpretation of the Clean Air Act, its conclusion that California does not meet the terms of the statute is subject to arbitrary and capricious review under the APA.¹³³ As we have noted, arbitrary and capricious review is often—though not always—quite limited.¹³⁴ But if a court conducts a more searching inquiry, we suspect that the EPA’s determination is unlikely to survive.

With respect to the conflict between the Clean Air Act and the Energy Policy and Conservation Act, the outcome is equally uncertain. The EPCA explicitly requires NHTSA to take into account “the effect of other motor vehicle standards of the Government on fuel economy” when setting fuel economy standards.¹³⁵ Courts have held that when the EPA grants California a preemption waiver, this waiver effectively transforms California’s fuel economy standards into federal standards and requires that NHTSA take them

¹²⁷ 42 U.S.C. § 7543(b)(1)(B).

¹²⁸ SAFE One National Program Rule, *supra* note 89, at 51,341.

¹²⁹ *Extraordinary*, MERRIAM-WEBSTER DICTIONARY ONLINE, <https://www.merriam-webster.com/dictionary/extraordinary> (last visited Dec. 29, 2019).

¹³⁰ 42 U.S.C. § 7543(b).

¹³¹ SAFE One National Program Rule, *supra* note 89, at 51,342.

¹³² Tim Arango, Jose A. Del Real & Ivan Penn, *Five Lessons We Learned from the California Wildfires*, N.Y. TIMES (Nov. 4, 2019), <https://www.nytimes.com/2019/11/04/us/fires-california.html>.

¹³³ 5 U.S.C. § 706.

¹³⁴ *Compare* Gersen & Vermeule, *supra* note 83, at 1358, 1362 (finding that the overwhelming majority of agency decisions survive “arbitrary and capricious” challenges at the Supreme Court), *with* *Cecot & Viscusi*, *supra* note 82, at 382-84 (finding higher rates of reversal in the lower courts).

¹³⁵ 49 U.S.C. § 32902(f).

into account.¹³⁶ It was on this basis that two federal courts held that the EPCA does not preempt states from promulgating fuel economy regulations pursuant to EPA waiver.¹³⁷ Once California has obtained an EPA waiver, its standards have the status of federal regulations, and the EPCA does not block them.

Of course, these cases were decided in the presence of federal agencies that were favorably inclined toward the state regulations at issue. The federal government was not a party to either lawsuit, and the courts do not make reference to *Chevron* deference or the agencies' position. But it is nonetheless entirely possible that those cases could have come out differently had the courts been required to defer to reasonable agency constructions of the statutes. That, in turn, again raises the question of whether an agency interpretation of a statute can be reasonable under *Chevron* Step 2 if it compels the agency to take an action that is not cost-benefit justified. An honest cost-benefit analysis, had EPA and NHTSA been required to produce one, would likely show that denying California a Clean Air Act waiver creates costs in excess of benefits. Yet here, because no cost-benefit analysis was produced, it will be challenging for a court to puncture EPA and NHTSA's result. It is thus possible that the withdrawal of California's waiver will survive a court challenge.

B. Chevronizing around CBA at Step 1: The Clean Power Plan

As with its approach to repealing the mercury regulation, the Trump administration's strategy with regard to repealing the Clean Power Plan represents a type of Chevronizing around CBA. Here, too, the administration was faced with an unfavorable CBA: however much it attempted to massage the numbers, its analysis revealed that repealing the CPP would create huge net costs (and lead to many unnecessary deaths).¹³⁸ In response, the Trump EPA took the position that its hands were tied—the Clean Air Act allowed only regulations that could be applied to a single power plant, not regulation of the overall mixture of fuel sources used in a state.¹³⁹ In advancing this argument, the EPA did not claim that it was entitled to deference under

¹³⁶ *Goldstene*, 529 F. Supp. 2d at 1168–69, 1172.

¹³⁷ *Id.* at 1172; *Crombie*, 520 F. Supp. 2d at 348–50. The courts held, in the alternative, that the EPCA's preemption provision should be read very narrowly, and that it did not preempt the state fuel economy standards. *Goldstene*, 529 F. Supp. 2d at 1174–75; *Crombie*, 520 F. Supp. 2d at 330–35.

¹³⁸ See *supra* notes 45–51 and accompanying text.

¹³⁹ Repeal of Clean Power Plan, *supra* note 51, at 32,556. See also *supra* notes 47–52 and accompanying text.

Chevron. Instead, it argued that the statute unambiguously prohibited regulation of the type employed in the Clean Power Plan.¹⁴⁰

On its own terms, this is a dubious conclusion. Recall that the Clean Air Act requires the EPA to implement the “best system of emission reduction.”¹⁴¹ The word “system” is amenable to a wide variety of interpretations.¹⁴² The standard definition of the word would include large-scale plans that would favor some types of energy production over others.¹⁴³ In addition, the Clean Air Act never states explicitly that the only permissible standards are those that can be applied within boundaries of each regulated source. The Trump EPA infers this from the words “existing source” and “application,” but that is not the only reasonable interpretation of those words, particularly when they are read in context with the phrase “system of emission reduction.”

Nonetheless, one can see why the Trump EPA adopted this legal strategy. This version of Chevronizing around CBA at Step 1—if it were upheld by the courts—would serve three overlapping purposes for the Trump administration. First, it would justify the agency’s decision to repeal the CPP despite the fact that the CPP creates benefits well in excess of costs. It would also insulate the repeal decision from “arbitrary and capricious” review under the APA: if the CPP is unlawful, it cannot be arbitrary and capricious to repeal it. Second, it would bind the hands of any future EPA, operating under a different president, that might attempt to reinstate the CPP. If the Clean Air Act is unambiguous, the views of any given EPA as to the statute’s meaning are irrelevant.¹⁴⁴ Third, this approach does not require the EPA to argue that the statute is ambiguous and that its interpretation—which would generate greater costs than benefits—is reasonable. As we suggested in the prior section, courts may be reluctant to accept as reasonable a discretionary interpretation that produces costs in excess of benefits and forecloses the

¹⁴⁰ *Id.* at 32,527 (“After reconsidering the relevant statutory text, structure, and purpose, the Agency now recognizes that Congress “spoke to the precise question” of the scope of CAA section 111(a)(1) and clearly precluded the unsupportable reading of that provision asserted in the CPP. Accordingly, this action repeals the CPP.”). See also *supra* notes 54–55 and accompanying text.

¹⁴¹ 42 U.S.C. § 7411(a)(1).

¹⁴² Repeal of Clean Power Plan, *supra* note 51, at 32,528.

¹⁴³ See Merriam-Webster Dictionary, <https://www.merriam-webster.com/dictionary/system> (defining “system” as “a regularly interacting or interdependent group of items forming a unified whole”).

¹⁴⁴ *Chevron*, 467 U.S. at 842-43 (“If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.”).

most efficient options.¹⁴⁵ Here, the EPA has attempted to escape that bind by arguing that it possesses no interpretive discretion.¹⁴⁶

Arguing that an interpretation is permitted under *Chevron* (as in the case of mercury) creates different types of legal risks than arguing that an interpretation is mandated by an unambiguous statute (as with the CPP).¹⁴⁷ But in both cases, an agency that does not have a strong argument on policy grounds for repealing existing regulations has resorted to a legal interpretation as a mechanism for evading CBA.

CONCLUSION

The Trump administrations' deregulatory project exposes some serious tensions in the structure of the administrative state. On the one hand, a tradition of judicial deference to the executive, exemplified by the *Chevron* doctrine, suggests that when the governing statute is ambiguous, courts will (or should) give Trump a free hand to roll back regulation. Congress gave the president discretion over policy, and the question whether to regulate or deregulate falls within that policy discretion. Courts should therefore defer to the president's policy judgments. On the other hand, the rise of cost-benefit analysis suggests that courts should push back against the executive branch when its regulatory decisions violate a cost-benefit test, even if the relevant statutory language is broad and ambiguous. The president's choice whether to regulate or deregulate any particular industry is therefore constrained by facts about the world—people's preferences and the costs of regulatory compliance—which the president is required to respect.

We see three ways to resolve this tension. First, one could grab the *Chevron* horn of the dilemma, and argue that in the presence of an ambiguous statute, the executive branch can do what it wants, cost-benefit analysis notwithstanding. Indeed, the cost-benefit requirement itself began as an initiative by the executive branch, and only later was enforced by courts, and

¹⁴⁵ See *supra* Part III.A.1.

¹⁴⁶ Repeal of Clean Power Plan, *supra* note 51, at 32,523 (“The text of the CAA is inconsistent with that interpretation, and the context, structure, and legislative history confirm that the statutory interpretation underlying the CPP was not a permissible construction of the Act.”).

¹⁴⁷ It is possible that in the course of litigation, the Trump EPA will argue in the alternative that it is entitled to *Chevron* deference in the event that a court views the language of the Clean Air Act as ambiguous. However, this line of argument will likely be foreclosed by the *Chenery* doctrine, which does not permit agencies to rely upon arguments or justifications that were not offered at the time a regulation was promulgated.

still only sporadically.¹⁴⁸ The Trump administration could argue that what the president giveth, the president mayeth take away. But at minimum, this window of discretion appears to be narrowing. Courts have increasingly found an unambiguous cost-benefit requirement in the statutory language that agencies are required to enforce.¹⁴⁹ If this trend continues, executive discretion will further erode. We suspect that the sloppy cost-benefit analyses used by the Trump administration will be rejected by the courts as arbitrary and capricious, further strengthening this emerging cost-benefit norm.

Second, one could go the other direction, and argue that executive branch administrative discretion is a myth, or is becoming one. Even where statutory language is ambiguous, the executive must comply with cost-benefit analysis, or perhaps even maximize social welfare, and courts will push back if it does not. But this view raises numerous difficult (as well as familiar) questions. Do the courts have the capacity to second-guess the judgments of experts in the regulatory agencies?¹⁵⁰ Many such judgments involve technical questions, including, for example, which of a number of conflicting studies is most credible, and how valuations should be extrapolated from limited data. Courts are notoriously skittish, probably for good reason, about overruling the executive's judgment with regard to technical issues over which the courts have substantially less expertise, even though technical analyses can be misused to determine outcomes preferred for political reasons.

Third, one might find a middle way. One possibility is that the executive's discretion is at a maximum when it chooses whether to regulate and how much, and at a minimum when it seeks to eliminate or curtail existing regulations. Consider, for example, the choice whether to issue a strict regulation and a moderate regulation. Imagine that both regulations pass a cost-benefit analysis in the sense of being preferable to the status quo, but they generate different wealth levels and perhaps distributional consequences, and involve different levels of uncertainty about consequences. Under existing law, a court is likely to defer to the choice of the executive, and this may well be the proper approach as well. By contrast, if an executive seeks to replace an earlier modest regulation with a strict regulation, or a strict regulation with a modest regulation (or none at all), a

¹⁴⁸ *Business Roundtable v. SEC*, 647 F.3d 1144 (D.C. Cir 2011); *Corrosion-Proof Fittings v. EPA*, 947 F.2d 1201 (5th Cir 1991). See generally Jonathan S. Masur & Eric A. Posner, *Cost-Benefit Analysis and the Judicial Role*, 85 U. Chi. L. Rev. 935 (2018).

¹⁴⁹ *Michigan v. EPA*, 135 S Ct 2699, 2705 (2015); *Business Roundtable v. SEC*, 647 F.3d 1144 (D.C. Cir. 2011); Cass R. Sunstein, *Cost-Benefit Analysis and Arbitrariness Review*, 41 Harv. Envir. L. Rev. 1, 11–13 (2017).

¹⁵⁰ See Masur & Posner, *Cost-Benefit Analysis and the Judicial Role*, *supra* note 148 and sources cited therein.

court should be more likely to insist that the revision be cost-justified.¹⁵¹ Experience with the status quo regulation, and the economic analysis and related materials that the government had used to justify the regulation, may give a court the information it needs to review the regulatory reform.

Whatever the preferred solution, our main point is to argue that when a statute neither unambiguously permits or prohibits cost-benefit analysis, the tradition of *Chevron* deference and the emerging cost-benefit norm are in tension, and one will have to give. The Trump administration has laid bare the contradiction by so obviously trying to use *Chevron* to evade cost-benefit analysis, and now courts will have to decide what to do. The tension reflects an underlying theoretical uncertainty about how much discretion the executive should have over public policy—whether courts should curtail that discretion, and, if so, to what degree. This tension is also reflected in the efforts by commentators and some judges to revive the nondelegation doctrine, which would require Congress to curtail the discretion of the executive by engaging in regulation itself rather than delegating regulatory authority to agencies.¹⁵² The problem with the nondelegation doctrine is that it imposes on Congress a burden for which it lacks institutional capacity because of the highly complex and ever-changing challenges of regulation.¹⁵³ A cost-benefit norm that constrained the executive without imposing new burdens on Congress may be the solution to this problem.

¹⁵¹ This would involve a change to existing law, under which the Supreme Court has typically required the same degree of explanation from an agency for a regulatory change (or deregulation) as it has for an agency's original regulation. *FCC v. Fox*, 556 U.S. ___ (2009).

¹⁵² See *Gundy v. United States*, 588 U.S. ___ (2019) (describing the limits of Congress's power to delegate to agencies).

¹⁵³ CASS R. SUNSTEIN, *THE COST-BENEFIT REVOLUTION* 36 (2018) (explaining the rationale from expertise for delegating substantial authority to agencies).