

Nos. 20-1530, 20-1531, 20-1778, 20-1780

IN THE
Supreme Court of the United States

STATE OF WEST VIRGINIA, ET AL.,
Petitioners,

v.

UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY, ET AL.,
Respondents.

On Writs of Certiorari
to the United States Court of Appeals
for the District of Columbia Circuit

**BRIEF OF *AMICI CURIAE* FORMER POWER
INDUSTRY EXECUTIVES IN SUPPORT OF
RESPONDENTS**

SOPHIA L. CAI
JENNER & BLOCK LLP
455 Market St. Suite 2100
San Francisco, CA 94105

ALLISON TORRENCE
JENNER & BLOCK LLP
353 N. Clark St.
Chicago, IL 60654

MATTHEW E. PRICE
Counsel of Record
JENNER & BLOCK LLP
1099 New York Ave., NW
Suite 900
Washington, DC 20001
(202) 639-6000
Mprice@jenner.com

Caption Continued on Inside Cover

THE NORTH AMERICAN COAL CORPORATION,
Petitioner,

v.

ENVIRONMENTAL PROTECTION AGENCY, ET AL.,
Respondents.

WESTMORELAND MINING HOLDINGS LLC,
Petitioner,

v.

ENVIRONMENTAL PROTECTION AGENCY, ET AL.,
Respondents.

STATE OF NORTH DAKOTA,
Petitioner,

v.

ENVIRONMENTAL PROTECTION AGENCY, ET AL.,
Respondents.

TABLE OF CONTENTS

TABLE OF AUTHORITIES iii

INTERESTS OF *AMICI CURIAE* 1

INTRODUCTION 2

ARGUMENT..... 6

I. The Major Questions Doctrine Does Not Limit EPA’s Identification of the Best System of Emissions Reduction for Power Sector 6

 A. Congress Intended the Clean Air Act and Clean Water Act to Be Technology-Forcing. 6

 B. EPA’s Consideration of Costs Is Controlled by the Standards of Reasoned Decision-Making, Not the Separation of Powers. 9

 C. EPA Cannot Shirk Its Duty to Impose Appropriately Stringent Performance Standards for Carbon Emissions Simply Because Those Regulations May Carry High Costs. 13

II. The Court Should Not Disturb Regulated Parties’ Compliance Flexibility, or Use That Flexibility as a Reason to Invalidate an Emissions Standard. 15

A.	Compliance Flexibility Allows Parties to Find the Most Cost-Effective Means of Compliance.....	19
B.	Actual Compliance Costs Are Often Far Lower Than Projections, as a Result of Compliance Flexibility.	23
	CONCLUSION	26
	APPENDIX - LIST OF <i>AMICI CURIAE</i>	1a

TABLE OF AUTHORITIES

CASES

<i>American Electric Power Co. v. Connecticut</i> , 564 U.S. 410 (2011).....	9
<i>EPA v. EME Homer City Generation, L.P.</i> , 572 U.S. 489 (2014).....	20, 21
<i>Entergy Corp. v. Riverkeeper, Inc.</i> , 556 U.S. 208 (2009).....	11
<i>Massachusetts v. EPA</i> , 549 U.S. 497 (2007)	14
<i>Michigan v. EPA</i> , 576 U.S. 743 (2015)	10
<i>National Federation of Independent Business v. Department of Labor, Occupational Safety and Health Administration</i> , No. 21A244, 2022 WL 120952 (U.S. Jan. 13, 2022) (per curiam)	8, 9
<i>Natural Resources Defense Council, Inc. v. United States EPA</i> , 822 F.2d 104 (D.C. Cir. 1987).....	7
<i>Southwestern Electric Power Co. v. United States EPA</i> , 920 F.3d 999 (5th Cir. 2019).....	22
<i>Union Electric Co. v. EPA</i> , 427 U.S. 246 (1976).....	5, 7, 8
<i>Utility Air Regulatory Group v. EPA</i> , 573 U.S. 302 (2014).....	14
<i>Whitman v. American Trucking Ass’n</i> , 531 U.S. 457 (2001).....	5-6, 8, 10, 12, 17

STATUTES

33 U.S.C. § 1311(b)(2)(A)	11
33 U.S.C. § 1314(b)(1)(A)	21
42 U.S.C. § 7409(b).....	19
42 U.S.C. § 7410(a)(2)(D)(i).....	19
42 U.S.C. § 7411	9
42 U.S.C. § 7411(a)(1)	7, 8, 14, 18
42 U.S.C. § 7411(b).....	7
42 U.S.C. § 7411(d).....	18
42 U.S.C. § 7411(d)(1).....	7
42 U.S.C. § 7412(n)(1)(A)	10

OTHER AUTHORITIES

<i>2021 in Review: Planning Efforts Focus on Future Grid</i> , PJM Inside Line (Dec. 20, 2021), https://bit.ly/3Ks8c7z	16
Brief of Respondents Calpine Corp. and Exelon Corp. in Support of Petitioners, <i>U.S. EPA v. American Lung Ass’n</i> , No. 12-1182 (U.S. Sept. 4, 2013), 2013 WL 4769416.....	21
Comments of Edison Electric Institute, <i>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</i> , Docket ID No. EPA-HQ-OAR-2018-0794 (Apr. 17, 2019)	25

Declaration of J. Staudt, Exhibit A to Motion of Industry Respondent Intervenors to Govern Future Proceedings, <i>White Stallion Energy Center, LLC v. EPA</i> , No. 12-1100 (D.C. Cir. Sept. 24, 2015).....	24, 25
Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496 (Dec. 15, 2009)	14
Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals, 76 Fed. Reg. 48,208 (Aug. 8, 2011).....	20
<i>Learn about Effluent Guidelines: Level of Controls</i> , EPA, https://bit.ly/3FQxqsK (last visited Jan. 18, 2022).....	21, 22
National Emission Standards for Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units, 77 Fed. Reg. 9304 (Feb. 16, 2012)	23
<i>PJM Emission Data Sparks Innovative Approach to Reduce Carbon Footprint</i> , PJM Inside Lines (Oct. 12, 2021), https://bit.ly/3GI88hP	16

Reconsideration of Interpretation of Regulations That Determine Pollutants Covered by Clean Air Act Permitting Programs, 75 Fed. Reg. 17,004 (Apr. 2, 2010).....	14
<i>Regulatory Impact Analysis for the Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone in 27 States; Correction of SIP Approvals for 22 States</i> , Docket ID No. EPA-HQ-OAR-2009-0491 (June 2011), https://bit.ly/3FGqrmg	20
<i>Regulatory Impact Analysis for the Final Mercury and Air Toxics Standards</i> , US EPA (Dec. 2011), https://bit.ly/3ruzj9i	23-24
Southern Co. et al., Quarterly Report (Form 10-Q) (Nov. 3, 2021), https://bit.ly/3qJAkLM	22
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. 24,419 (Apr. 25, 2016)	25
Table 2.6. Revenue from Sales of Electricity to Ultimate Customers: Total by End-Use Sector, 2010 - December 2020 (Million Dollars), https://bit.ly/32jcey3 (last visited Jan. 18, 2022).....	13

U.S. Energy Information Administration, *68%
of U.S. Coal Fleet Retirements Since 2011
Were Plants Fueled by Bituminous Coal*
(Aug. 27, 2021), <https://bit.ly/3IsgkDt>..... 16

INTERESTS OF *AMICI CURIAE*¹

Amici curiae are former executives from a range of companies that own and operate power plants or from independent system operators responsible for operating the electric grid.² Companies in the power sector have, for decades, provided reliable and affordable energy across the United States. For these companies, environmental compliance is a routine planning and operational consideration. They structure their short- and long-term strategic plans to anticipate, account for, and adapt to technology-forcing emissions standards promulgated by the U.S. Environmental Protection Agency (“EPA”). Operationally, many power generation companies own multiple power plants. *Amici*, for example, worked at companies that owned large and diverse fleets, including coal, gas, nuclear, hydro, and renewables. These companies make strategic decisions regarding how to comply with environmental standards in light of their fleet as a whole and the business enterprise as a whole. For example, they may

¹ No counsel for a party authored this *amicus curiae* brief in whole or in part and no such counsel or a party made a monetary contribution intended to fund the preparation or submission of the brief. No person other than *amici curiae* or its counsel made such a monetary contribution. Pursuant to Supreme Court Rule 37.2(a), *amici* have obtained the consent of all parties. On January 23, 2022, the Power Company Respondents gave consent via email sent by counsel of record. On January 24, 2022, the Commonwealth of Virginia gave consent via email sent by counsel of record. All other parties have filed blanket consents to the filing of *amicus* briefs in these consolidated cases, as shown on the docket of the lead case, No. 20-1530.

² A list of *amici curiae* is set forth in an Appendix to this brief.

shift output from one plant to another depending on market conditions that change minute to minute over the course of a day. Moreover, environmental compliance is just one variable relevant to these operational decisions, along with considerations such as fuel costs, weather, transmission availability, and many other considerations. They also make long-range planning decisions, deciding whether to retire certain plants or invest in others, based on long-range expectations concerning market conditions, fuel costs, and other factors, including the anticipated arc of environmental regulations.

Amici submit this brief to provide the Court with the benefit of their experience making these types of planning and operational decisions for parties subject to EPA regulation.

INTRODUCTION

The major questions doctrine is intended to prevent agencies from finding elephants in mouseholes—from converting what Congress intended to be interstitial gap-filling authority into the basis for sweeping, transformational regulation. That doctrine, however, does not fit this case, because Congress designed both the Clean Air Act and the Clean Water Act to be transformative laws. Rather than allowing industry to emit into the air and discharge into the Nation’s waters unlimited amounts of pollution, Congress intended for EPA to strictly regulate such emissions and discharges to safeguard public health and welfare, knowing that such regulations could impose

significant costs and affect the makeup of power companies' generation fleets.

In so regulating, Congress directed EPA—using various statutory formulations—to set emissions limits based on *forward-looking assessments* of control technology (not only what was in widespread use at the time of the rule being developed), and then left states and regulated parties free to achieve those limits using whatever methods they chose. Thus, in general, neither the Clean Air Act nor the Clean Water Act mandated that regulated facilities or industry use a specific, existing technology to limit air or water pollution to a certain amount. Instead, Congress required EPA to determine what “available,” “achievable,” or “demonstrated” technology might be “best,” and to base more demanding emission or effluent limitations on EPA’s assessments of technological potential. In some contexts, Congress directed EPA to consider costs in setting emission or effluent limitations; in other contexts, Congress directed EPA not to consider costs.

The genius of these statutes is that Congress then left regulated parties to decide for themselves how to achieve the level of emission or effluent control that EPA determined its identified technology could achieve. Congress designed these laws with the assumption that industry would innovate and could find ways to achieve the required level of emission or effluent limitations set by EPA more efficiently than if the government had mandated a particular technological approach, based on an inside-the-fence assessment of options. That is just as much the case for the regulation of greenhouse gas

emissions—which this Court has held EPA *must* regulate under the Clean Air Act—as for any of the other pollutants EPA has regulated over the past five decades.

Congress’s vision has been borne out through EPA’s implementation of the Clean Air Act and Clean Water Act. Both have driven air and water pollution to far lower levels than in the 1970s, while the economy has grown exponentially. Congress has not needed to intervene with new prescriptive rules each time new information or products have emerged. Instead, EPA has been able to adapt its emissions and effluent limitations, and industry has been able to adapt its practices to meet those limitations. Because of regulated parties’ incentive to comply with those limitations through the most efficient means they can identify, combined with the costs of control technology declining as deployment increases, the power sector has consistently discovered ever less expensive methods for meeting national pollution control requirements.

For example, power companies have complied by shifting generation to other plants in their fleet, retiring certain assets, installing different control technologies than the ones EPA used to set the performance standard, repowering with a different fuel source, and entering into emissions trading programs with other regulated parties that allow the industry to meet aggregate limits rather than limits imposed on individual facilities. That flexibility, harnessing the power of the market, has facilitated compliance at far lower costs than were initially projected.

All of this is why Petitioners' invocation of the major questions doctrine is so misconceived. The Clean Air Act and Clean Water Act were both intended to address major questions, and to sharply reduce national air and water pollution by granting EPA the authority to impose pollution controls that would spur industry—in seeking the least costly way to comply—to make transformative changes to its pollution practices. As this Court has described it, the Clean Air Act was a “a drastic remedy to what was perceived as a serious and otherwise uncheckable problem of air pollution.” *Union Elec. Co. v. EPA*, 427 U.S. 246, 256 (1976). Congress's intent in this regard was in no way ambiguous; it is the *raison d'être* of the statutes. Section 111 of the Clean Air Act plays its part to fulfill that overarching purpose: it authorizes EPA to set air pollutant emissions standards for fossil fuel-fired power plants. Yet in invoking the major questions doctrine, Petitioners seek to shove this elephant into a mousehole.

The guidance Congress gave EPA in exercising its authority to promulgate technology-based pollution control standards under either law does not remotely raise a nondelegation doctrine issue, notwithstanding the sweep of the Acts. These Acts set forth the factors EPA is allowed to consider in setting standards and therefore easily meet the Court's longstanding requirement of an “intelligible principle” to satisfy nondelegation concerns. That is why this Court, in a 2001 unanimous opinion in *Whitman v. American Trucking*, easily rejected a similar claim that the Clean Air Act raised serious nondelegation doctrine concerns. *Whitman v. Am. Trucking Ass'n*, 531 U.S. 457, 462

(2001) (rejecting nondelegation arguments for particulate matter and ozone National Ambient Air Quality Standards (“NAAQS”)).

To be sure, complying with technology-forcing standards can sometimes lead companies to adopt compliance strategies that significantly change the makeup of their generation fleets. Companies may choose to retire aging power plants or reduce reliance on particular sources of fuel, like coal. Indeed, many companies have already taken significant steps in that direction. But these implications, which arise from companies’ business decisions about how best to comply with a technology-forcing performance standard, do not somehow transform EPA’s statutory authority to set emissions standards into a “major question” outside the agency’s authority. EPA has set technology-forcing standards time and time again, and the power sector has successfully adapted to meet new requirements to reduce pollution while still providing affordable and reliable power.

ARGUMENT

- I. **The Major Questions Doctrine Does Not Limit EPA’s Identification of the Best System of Emissions Reduction for the Power Sector.**
 - A. **Congress Intended the Clean Air Act and Clean Water Act to Be Technology-Forcing.**

Courts have repeatedly recognized that Congress intended for the Clean Air Act and Clean Water Act to

authorize EPA to implement technology-forcing standards—that is, performance standards that exceed the industry’s status quo. See *Union Elec. Co.*, 427 U.S. at 256-57; *id.* at 257 (recognizing the “technology-forcing character” of Clean Air Act pollution control requirements that are “designed to force regulated sources to develop pollution control devices that might at the time appear to be economically or technologically infeasible.” (quoting *Train v. Nat. Res. Def. Council, Inc.*, 421 U.S. 60, 90 (1975))); *Nat. Res. Def. Council, Inc. v. EPA*, 822 F.2d 104, 122 (D.C. Cir. 1987) (noting the “technology-forcing framework of the [Clean Water] Act”). Congress wanted EPA to reach beyond technology already in wide use, and set emissions standards based on a forward-looking view of what was technologically possible—thereby spurring the creation for new markets to satisfy demand for new, improved technologies, all while driving down costs.

Section 111 of the Clean Air Act exemplifies this technology-forcing and market-building policy. For new sources, the statute directs EPA to set a standard for emissions of air pollutants that “reflects the degree of emission limitation achievable through the application of the best system of emission reduction.” 42 U.S.C. § 7411(a)(1), (b). For existing sources, states submit plans establishing standards of performance that reflect the emissions limitations that can be achieved by applying the “best system” identified by EPA. However, states are not required to adopt that system; instead, they remain free to choose their own approach, so long as it achieves the required emissions limitations. *Id.* § 7411(d)(1).

Of course, Section 111 does not direct EPA to determine the “best system of emissions reduction” at all costs, or without regard to the indirect consequences of regulation. Instead, Section 111 instructs that, in determining the best system of emission reduction, EPA must “tak[e] into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements.” *Id.* § 7411(a)(1).

Congress thus identified an intelligible principle to guide EPA’s regulation and delegated to EPA the authority to adopt ambitious but achievable emissions limitations—knowing that in doing so, EPA would potentially foster transformative changes in industry practices. Indeed, that was the point. *See, e.g., Union Elec. Co.* 427 U.S. at 256 (describing Clean Air Act Amendments as “a drastic remedy”); *Am. Trucking*, 531 U.S. at 466 (“In particular, the economic cost of implementing a very stringent standard might produce health losses sufficient to offset the health gains achieved in cleaning the air—for example, by closing down whole industries and thereby impoverishing the workers and consumers dependent upon those industries. That is unquestionably true, and Congress was unquestionably aware of it.”). To say, as Petitioners do, that the very regulation Congress tasked EPA to undertake is a “major question” that it should be presumed not to have authorized would frustrate Congress’ intent, rather than protect its prerogatives.³

³ This case thus could not be more different than the recent case concerning a vaccine mandate. *See Nat’l Fed’n of Indep. Bus. v.*

B. EPA’s Consideration of Costs Is Controlled by the Standards of Reasoned Decision-Making, Not the Separation of Powers.

Congress understood that environmental regulations implemented to protect human health and the environment will sometimes impose high costs of compliance on the regulated industries. Thus, as noted above, Section 111 specifically directs EPA to consider costs when determining the best system of emissions reduction. In other Clean Air Act and Clean Water Act provisions, Congress authorized EPA to consider costs in different ways.

For example, EPA may not consider costs at all when setting ambient air quality standards, *see*

Dep’t Of Labor, Occupational Safety and Health Admin., No. 21A244, 2022 WL 120952 (U.S. Jan. 13, 2022) (per curiam) (“*OSHA*”). There, the Court held that OSHA is limited to regulating “*workplace* safety standards,” and “no provision of the Act addresses public health more generally, which falls outside of OSHA’s sphere of expertise.” *Id.* at *3. Here, by contrast, setting 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,” 42 U.S.C. § 7411, falls squarely within EPA’s sphere of expertise and the scope of its delegated power. *See Am. Elec. Power Co. v. Connecticut*, 564 U.S. 410, 428 (2011) (“It is altogether fitting that Congress designated an expert agency, here, EPA, as best suited to serve as primary regulator of greenhouse gas emissions.”). In the five decades since the Clean Air Act amendments were enacted, EPA has issued countless emissions regulations to address a threat—air pollution—that is directly tied to the agency’s legislatively delegated authority. *Cf. OSHA*, 2022 WL 120952, at *4.

Whitman v. Am. Trucking Associations, 531 U.S. 457, 465 (2001). And when deciding whether to regulate power plants under Section 112 of the Clean Air Act, governing hazardous air pollutants, EPA must consider cost in determining whether such regulation is “appropriate and necessary,” 42 U.S.C. § 7412(n)(1)(A). Thus, for example, in *Michigan v. EPA*, which dealt with the 2012 Mercury and Air Toxics Standards, this Court held that it was error for EPA to regard cost as “irrelevant” when determining whether regulation was “appropriate and necessary.” *See* 576 U.S. 743, 759 (2015). But the Court made clear that EPA enjoyed discretion to determine *how* to consider cost, including how to balance cost against other considerations. Thus, this Court did not require EPA to “conduct a formal cost-benefit analysis,” *id.*, but rather noted that “[i]t will be up to the Agency to decide (as always, within the limits of reasonable interpretation) how to account for cost.” *Id.*⁴

In still other cases, cost informs whether a regulation is sufficiently stringent. For example, the Fifth Circuit rejected EPA’s “best technology available”-based 2015 Effluent Limitation Guidelines as inconsistent with the Clean Water Act requirement that EPA identify “the best available technology

⁴ On remand, the D.C. Circuit sent MATS back to EPA to determine whether the standards were “appropriate and necessary” when taking costs into account. In 2016, EPA published its Supplemental Finding that the public health benefits of MATS justified the costs to the regulated industry. EPA then issued a Revised Supplemental Finding reversing the 2016 decision, which is currently undergoing reconsideration by the agency.

economically achievable for such category or class, which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants.” 33 U.S.C. § 1311(b)(2)(A) (emphasis added). And in other cases, EPA can compare costs to benefits in deciding how to regulate. *See, e.g., Entergy Corp. v. Riverkeeper, Inc.*, 556 U.S. 208, 226 (2009) (concluding that “EPA permissibly relied on cost-benefit analysis in setting the national performance standards and in providing for cost-benefit variances from those standards” as part of its regulation of power plants under the Clean Water Act).

These different approaches demonstrate that Congress knows how to specify when it wants EPA to consider costs and how to guide EPA’s consideration of costs. In Section 111, Congress left to the agency’s expertise—subject to the constraints of reasoned decisionmaking—to decide how costs, among other variables, should factor into the setting of technology-based performance standards. If EPA’s regulation is challenged, a court can review the agency’s work to ensure that the agency’s choices are reasoned and supported by evidence, using the familiar reasoned-decisionmaking standards of administrative review.

Petitioners, however, seek to convert what should be a garden variety administrative law question—did EPA engage in reasoned decisionmaking when it adopted a performance standard, including by considering costs?—into a nondelegation question that is inherently subjective and unpredictable. They argue that EPA can promulgate greenhouse gas emission

standards—but only ones that do not impose high costs or lead parties to make too many changes to their fleets. They insist that standards with expected compliance costs that are in their view *too high* must implicate a major question that triggers separation of powers concerns. *E.g.*, W.V. Pet. Br. at 20 (“*First*, take the money involved.”). But, under this theory, how high is too high? And too high for whom—for regulated parties, or for others (like coal producers) who may be indirectly affected? Is a question “major” based just on the number of zeroes in the estimated costs? Or are costs to be compared to the benefits of the regulation?

The Court need not and should not invoke a “major questions” doctrine that invites these uncertainties because Congress delegated broad authority to EPA. Congress did not place a cost threshold in the statute. Instead, it instructed EPA to consider costs when promulgating regulations. This instruction provides EPA with an intelligible principle with which to regulate, while also vesting it with authority broad enough to address the significant environmental issues that Congress sought to confront. *Cf. Am. Trucking*, 531 U.S. at 467 (citing to Section 111(b)(1)(B) as an example of where Congress “explicitly permitted or required economic costs to be taken into account in implementing the air quality standards”).

Transforming an ordinary reasoned-decisionmaking question into a separation-of-powers question would, ironically, hamstring EPA from exercising the authority that Congress explicitly sought to vest in the agency. Because there is no cost threshold

in the statute, EPA could not know whether a proposed regulation, the benefits of which outweigh the costs, nevertheless costs “too much.” This would either chill regulation in a way that Congress did not intend, or would create significant regulatory uncertainty in an industry that, above all, needs regulatory certainty to guide large capital investment decisions and to inform resource planning that unfolds on a time horizon of decades, not months.

C. EPA Cannot Shirk Its Duty to Impose Appropriately Stringent Performance Standards for Carbon Emissions Simply Because Those Regulations May Carry High Costs.

Petitioners’ focus on the absolute dollars that may be involved in compliance is misplaced for another reason as well. Power generation is a massive industry—with total annual revenues of approximately \$400 billion⁵—that supplies the U.S. electric grid with affordable, reliable energy every minute of every day. Regulations that impose performance standards on such a large industry will naturally be costly in absolute terms—often in the billions of dollars. But to hold that imposing such performance standards is a “major question” that Congress has not authorized would turn the Clean Air Act on its head.

⁵ Table 2.6, Revenue from Sales of Electricity to Ultimate Customers: Total by End-Use Sector, 2010 - December 2020 (Million Dollars), <https://bit.ly/32jcey3> (last visited Jan. 18, 2022).

After all, as this Court has already explained, EPA *must* address greenhouse gas emissions, including carbon dioxide. *See Massachusetts v. EPA*, 549 U.S. 497 (2007); *see also Util. Air Regul. Grp. v. EPA*, 573 U.S. 302 (2014); Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496 (Dec. 15, 2009); Reconsideration of Interpretation of Regulations That Determine Pollutants Covered by Clean Air Act Permitting Programs (“Timing Rule”), 75 Fed. Reg. 17,004 (Apr. 2, 2010). Congress intended it do so, and to identify the best system of emission reduction while taking into account “the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements.” 42 U.S.C. § 7411(a)(1).

Petitioners in effect tell this Court that although Congress directed EPA to regulate greenhouse gas emissions, it did not give EPA the tools to do so effectively because any effective regulation will, by its very nature and the size of the industry, be costly. Their position would eviscerate EPA’s ability to regulate effectively the very pollutants that Congress wanted EPA to regulate, from the very sources EPA has historically regulated under Congress’s express direction. Petitioners’ argument would undermine, rather than protect, Congress’s power.

II. The Court Should Not Disturb Regulated Parties' Compliance Flexibility, or Use That Flexibility as a Reason to Invalidate an Emissions Standard.

The power sector thinks about environmental regulations much in the same way as any other business obligation—*i.e.*, by seeking the most cost-effective way to comply. Power companies differ with respect to the fuel mix and size of their fleets, but in general, a power company's environmental compliance department will work with its generation-operation and resource-planning departments to determine how to maximize economic return on prior and anticipated future investments across its power plant fleet, taking into consideration factors including the competition in the markets its plants serve; fluctuating variables such as fuel costs, weather, and customer demand; available technology; and transmission constraints—as well as emissions requirements and the costs of emission control technologies.

Planning decisions in this capital-intensive industry reflect not only the regulations of the moment, but also expectations about what the future will hold. Companies try to anticipate changes—including tightening environmental standards and the development of new technologies, as well as anticipated fuel prices—when they decide where and how to invest. Even though EPA's greenhouse gas regulations have yet to come into force, the industry has anticipated such regulation for years, and it has engaged in planning and investment decisions with that expectation. For

example, in the country's largest regional grid, PJM Interconnection, L.L.C., which stretches from Illinois to the Atlantic coast, and from New Jersey to parts of North Carolina, "95% of the more than 225,000 MW in [the] new services queue come from proposed solar, wind, storage or hybrid renewable/battery resources."⁶ Meanwhile, the industry has retired about one-third of its coal-fired capacity since 2010,⁷ and the last time a new coal plant came online was in 2013.

So when EPA promulgates or amends emissions standards, generation owners are not caught off guard. The possibility that EPA might enact far-reaching new greenhouse gas emission regulations will surprise no one. Rather, the industry has planned for this contingency and is prepared to make business decisions about how best to comply on a fleet-wide basis.⁸ That is so even when EPA regulations reflect the emissions-reduction capabilities of a plant-specific technology—for example, a particular type of smokestack scrubber. A company might compare the costs and benefits of installing that scrubber at its high-emitting plants to the costs and benefits of other potential approaches to compliance. These may include, for example, installing other control technologies that might be as effective or

⁶ *2021 in Review: Planning Efforts Focus on Future Grid*, PJM Inside Line (Dec. 20, 2021), <https://bit.ly/3Ks8c7z>.

⁷ U.S. Energy Information Administration, *68% of U.S. Coal Fleet Retirements Since 2011 Were Plants Fueled by Bituminous Coal* (Aug. 27, 2021), <https://bit.ly/3IsgkDt>.

⁸ See, e.g., *PJM Emission Data Sparks Innovative Approach to Reduce Carbon Footprint*, PJM Inside Lines (Oct. 12, 2021), <https://bit.ly/3GI88hP>.

even more effective; repowering a coal plant so that it can run on gas, which may provide the company with greater flexibility; retiring a plant and shifting output to other lower-emitting plants; or participating in an emissions trading system.

Each company has the incentive to comply in the most efficient way, and companies that implement the most cost-effective solutions gain a competitive advantage. Moreover, companies rely on the technology-forcing aspects of the rules to drive supplier innovation, which can sometimes lead to greater efficiencies and reduced cost (for example, more efficient gas turbines) as well as reduced pollution. The methods that industry chooses to adopt can result in significant changes to the makeup of the generation fleet. But if that occurs, it is because the industry found that to be the most efficient means of compliance.

Petitioners appear to seek to frustrate this scheme by arguing that, if parties' compliance will have wide-ranging impact on the makeup of the generation fleet, then the performance standard must be a "major question" that Congress did not intend to empower EPA to set. This position confuses the standard with the means of compliance. Indeed, even where Congress has not allowed EPA to consider costs, it has done so precisely because it understands that parties will be able to consider costs when deciding how to best comply with EPA's regulations. *See Am. Trucking*, 531 U.S. at 470-71 (distinguishing between EPA's role in setting NAAQS without considering costs from a state's role in developing implementation plans by considering which

technologies are most efficient and economically feasible). The validity of EPA's identification of the best system of emissions reduction should be adjudicated based on its compliance with the factors identified in Section 111(a): Is it the best system for reducing emissions, taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements? *See* 42 U.S.C. § 7411(a)(1). If so, then it is within EPA's authority to set emissions limitations based on that system, and states must adopt performance standards for existing sources based on the emissions limitations that system could achieve, *id.* § 7411(d)—even as regulated parties might employ entirely different strategies in meeting the performance standards.

Indeed, that is the genius of the Clean Air Act. It is not a traditional command-and-control statute. Instead, it provides criteria for EPA to use to set emissions limits and then relies on competitive forces to encourage regulated parties to implement the most efficient ways to achieve those emissions limits. And frequently, parties will be able to achieve targets at far lower cost than EPA initially projected, precisely because it is in their business interests to find efficiencies EPA could not have anticipated. Accepting Petitioners' argument—that EPA's best system of emissions reduction can trigger the major questions doctrine because, in complying, companies may change the fuel mix in their generation fleets—takes a key design attribute of the Clean Air Act and turns it into a poison pill. For example, the fact that the power sector may decide that replacing an old power plant is a more

efficient approach than retrofitting it with the particular control technology used to set an emissions standard does not somehow invalidate the standard. Congress intended to allow compliance flexibility in order to achieve the Nation's environmental goals in the most efficient way possible, and to harness competitive forces by allowing plant owners to drive innovation, improve performance, and lower costs.

This intention has been borne out in practice. As several examples below illustrate, the ability of regulated parties to identify the best compliance strategy for their fleets has stimulated innovation and achieved pollution reduction at far less cost than was initially projected.

A. Compliance Flexibility Allows Parties to Find the Most Cost-Effective Means of Compliance.

EPA's implementation of the programs related to NAAQS provides an example of how the power sector innovates to achieve cost-effective compliance. The Clean Air Act obligates EPA to establish NAAQS for air quality across the Nation. 42 U.S.C. § 7409(b). The "Good Neighbor Provision" requires states to limit the contribution of air pollution from in-state sources to downwind states. *See* 42 U.S.C. § 7410(a)(2)(D)(i).

In response to certain states struggling to meet or maintain their air quality requirements because of pollution from upwind sources, EPA promulgated several programs including the Cross-State Air Pollution Rule ("CSAPR"), which allocates emissions

budgets for sulfur dioxide (“SO₂”) and nitrogen oxides (“NO_x”) to each of 27 upwind states, and then allows EPA to craft federal implementation plans to achieve those emission reductions. Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals, 76 Fed. Reg. 48,208 (Aug. 8, 2011); *see EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489 (2014) (upholding CSAPR and overturning D.C. Circuit’s rejection of the use of federal implementation plans).

EPA’s federal implementation plans set emissions budgets for each upwind state, but grant companies and states significant flexibility in how to comply with these emissions budgets by allowing for “interstate emissions trading” of SO₂ and NO_x.⁹ Upwind sources can comply by reducing their SO₂ and NO_x emissions to permissible levels; they can “over comply” and sell the resulting emission credits; they can purchase emission credits if economically attractive to do so; or they can do some combination of these things. Companies can determine which compliance strategy or suite of compliance strategies is most cost-effective for any given plant at any given time—including choosing among installing plant-specific controls, operating less,

⁹ *Regulatory Impact Analysis for the Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone in 27 States; Correction of SIP Approvals for 22 States*, at 1, Docket ID No. EPA-HQ-OAR-2009-0491 (June 2011), <https://bit.ly/3FGqrmg>; *see also id.* at 25 (outlining “how reductions will be achieved, and different options to do so” (capitalization altered)).

retiring aging plants, or purchasing credits from other regulated entities.

In upholding CSAPR, this Court concluded that the “EPA’s cost-effective allocation of emission reductions among upwind States ... is a permissible, workable, and equitable interpretation of the Good Neighbor Provision.” *EME Homer City Generation, L.P.*, 572 U.S. at 524. As part of that case, power plant owners Calpine Corporation and Exelon Corporation filed a brief explaining that although pollution control requirements can impose significant costs, EPA’s market-based compliance plan provided a cost-effective solution. Br. of Resp’ts Calpine Corp. and Exelon Corp. in Support of Pet’rs at 8-9, *U.S. EPA v. American Lung Ass’n*, No. 12-1182 (U.S. Sept. 4, 2013), 2013 WL 4769416; *see also EME Homer*, 572 U.S. at 522 n.22 (citing an example from that brief).

The Clean Water Act presents another example of how compliance flexibility can drive efficiencies. Section 304(b) of the Clean Water Act requires EPA to set limitations on effluents—wastewater discharges—that are “attainable through the application of the best practicable control technology.” 33 U.S.C. § 1314(b)(1)(A). EPA sets Effluent Limitation Guidelines (“ELGs”) based on the best available technology (“BAT”) it has identified for particular types of discharges that is economically achievable on an industry-by-industry basis. *See Learn about Effluent Guidelines: Level of Controls*, EPA, <https://bit.ly/3FQxqsK> (last visited Jan. 18, 2022). Depending on the pollutant, type of discharge, and

operation being regulated, EPA will set standards based on the best practicable control technology currently available (“BPT”), BAT, or the best conventional pollutant control technology (“BCT”), among others. *Id.* These standards are meant to be strict—the Fifth Circuit rejected an earlier version of the ELGs for being arbitrary and capricious because the standards were not tough enough, noting that “BAT is supposed to be ‘the [Clean Water Act]’s most stringent standard’ for setting discharge limits.” *Sw. Elec. Power Co. v. U.S. EPA*, 920 F.3d 999, 1016 (5th Cir. 2019).

Crucially, neither the statute nor EPA regulations require regulated entities to comply with these ELGs by installing the “best” technology used to set the standard; the government does not “control” this aspect of a company’s compliance. *See Learn about Effluent Guidelines: Level of Controls*, EPA, <https://bit.ly/3FQxqsK> (last visited Jan. 18, 2022) (“Effluent limitations are based on performance of specific technologies, but the regulations do not require use of a specific control technology.”). Instead of installing the standard-setting technology, companies can opt to develop new technologies, change sources of fuel, or even retire aging plants to achieve the same pollution-control requirements. In fact, the 2020 Stream Reconsideration Rule created a subcategory in which power plants that cease use of coal as a fuel source by 2028 will be found to comply with BAT. In response, Southern Company announced that it plans to retire several units by 2028 to comply with BAT. The Southern Co. et al., Quarterly Report (Form 10-Q) 145 (Nov. 3, 2021), <https://bit.ly/3qJAKLM>. That business

decision in response to an environmental standard is an example of how companies may decide to comply with a technology-based standard by changing the mix of their generation fleet. Such a decision—even if widespread among regulated parties—does not somehow convert the standard-setting process into a “major question.”

B. Actual Compliance Costs Are Often Far Lower Than Projections, as a Result of Compliance Flexibility.

One consequence of the compliance flexibility just described is that regulated industry is often able to achieve compliance with emissions standards at a far lower cost than EPA initially estimated. This makes projected cost a particularly inappropriate basis for measuring whether a regulation implicates a “major question” outside the agency’s delegated authority.

EPA’s 2012 Mercury Air Toxics Standards (“MATS”) offers a prime example. MATS set out ambitious mercury emissions standards that coal- and oil-fired power plants were to achieve by Spring 2016. *See* National Emission Standards for Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units, 77 Fed. Reg. 9304 (Feb. 16, 2012). EPA projected that MATS compliance would impose costs on coal generation amounting to \$9.6 billion in the first year alone. *Regulatory Impact Analysis for the Final Mercury and*

Air Toxics Standards at ES-1, ES-2, EPA (Dec. 2011), <https://bit.ly/3ruzj9i>. In assessing costs, EPA anticipated that power plants would meet the MATS requirements primarily by installing pollution controls on site, such as filters and scrubbers, and, to a lesser extent, by changing fuel sources. *Id.* at 3-14.

Industry managed to comply at a fraction of the projected cost. According to one accounting, “the true cost of complying with the Rule is approximately \$7 billion per year *less* than estimated by EPA . . . or less than one-quarter of what EPA originally estimated.” Decl. of J. Staudt ¶ 5, Exhibit A to Mot. of Industry Resp’t Intervenors to Govern Future Proceedings, *White Stallion Energy Center, LLC v. EPA*, No. 12-1100 (D.C. Cir. Sept. 24, 2015) (“Staudt Decl.”) (emphasis added). The lower-than-expected costs to comply with MATS were due in part to decisions by companies to shift generation from coal plants to gas plants, as well as to use different control technologies to comply (such as dry scrubbers and baghouses) than the technology EPA had anticipated (wet scrubbers). The alternative control technologies selected by industry turned out to be “less expensive and more effective than originally assumed in EPA’s analysis.” *Id.* Some plants also found it was possible to meet the mercury standard by making small changes to existing NO_x and SO₂ control systems, which EPA had not anticipated.

Still, the rule had sweeping implications for generation fleets. As noted, many companies chose to comply by retiring aging coal plants that were uneconomic and polluted heavily, and invested instead in

new, more efficient, and cleaner generation technology. As a result, Edison Electric Institute (“EEI”) noted that “the retirement of older coal generation—whether because of MATS requirements, gas and renewable generation prices, ongoing maintenance costs, power prices, state policies, or some combination of them—significantly lowered annual compliance costs for MATS.” Comments of EEI at 11 n.12, *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*, Docket ID No. EPA-HQ-OAR-2018-0794 (Apr. 17, 2019) (EEI comment to Final Rule withdrawing appropriate and necessary finding, 85 Fed. Reg. 31,286 (May 22, 2020)).

Industry often finds a way to lower compliance costs, if given the flexibility to do so. Indeed, in almost all cases involving environmental regulations, “the actual costs are significantly lower than the costs originally estimated both by EPA and by industry, sometimes by an order of magnitude.” Staudt Decl. ¶ 14.¹⁰

So long as the emissions standard is set in a manner that is consistent with the statute, regulated parties should remain free to comply in whatever

¹⁰ In 2016, on remand from this Court, EPA published its Supplemental Finding, determining that the public health benefits of MATS justified the costs to the regulated industry. 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. 24,419 (Apr. 25, 2016).

manner they wish. A challenger's expectation that parties may seek to comply by retiring certain types of plants in favor of others, rather than by installing the control technology used by EPA to set the standard, is no reason to invalidate the standard. Instead, that is how Congress intended the Clean Air Act to work.

CONCLUSION

The decision below should be affirmed.

Respectfully submitted,

SOPHIA L. CAI
JENNER & BLOCK LLP
455 Market St. Suite 2100
San Francisco, CA 94105

ALLISON TORRENCE
JENNER & BLOCK LLP
353 N. Clark St.
Chicago, IL 60654

MATTHEW E. PRICE
Counsel of Record
JENNER & BLOCK LLP
1099 New York Ave., NW
Suite 900
Washington, DC 20001
(202) 639-6000
MPrice@jenner.com

APPENDIX

APPENDIX

LIST OF *AMICI CURIAE**

Paul J. Allen, former Senior Vice President Corporate Affairs and Chief Environmental Officer, Constellation Energy

Paul J. Feldman, former Chairman of the Midcontinent Independent System Operator.

J. Derek Furstenwerth, former Senior Director, Environmental Services, Calpine Corporation.

Joseph T. Kelliher, former Executive Vice President-Federal Regulatory Affairs for NextEra Energy, and former Chairman and Commissioner of the U.S. Federal Energy Regulatory Commission.

Kevin Leahy, former Managing Director, Energy and Environmental Policy, Duke Energy.

Randolph Price, former Vice President, Environment, Health & Safety, ConEdison.

Daniel D. Richard, Jr., former Senior Vice President for Public Policy, PG&E Corporation.

John Rowe, former Chief Executive Officer, Exelon Corporation.

* Past affiliations listed for identification purposes only.

Jeff Sterba, former President, Chairman, and Chief Executive Officer, PNM Resources, Inc.

Eric B. Svenson, Jr., former Vice President, Environmental, Health and Safety, Public Service Enterprise Group.

Roy Thilly, former CEO, WPPI Energy.

William Tyndall, former Vice President of Corporate Development and Strategy, Cinergy Corp.

Stephen Whitley, former President/CEO, New York Independent System Operator.

Jeffrey L. Williams, former Director-Climate Consulting, Entergy Corporation.