No. 24A_____

IN THE
SUPREME COURT OF THE UNITED STATES

ELECTRIC GENERATORS FOR A SENSIBLE TRANSITION,

Applicant,

v.

ENVIRONMENTAL PROTECTION AGENCY and MICHAEL S. REGAN, Administrator, United States Environmental Protection Agency,

Respondents.

EMERGENCY APPLICATION FOR IMMEDIATE STAY OF FINAL AGENCY ACTION PENDING DISPOSITION OF PETITION FOR REVIEW

DIRECTED TO THE HONORABLE JOHN G. ROBERTS, JR., CHIEF JUSTICE OF THE SUPREME COURT OF THE UNITED STATES AND CIRCUIT JUSTICE FOR THE DISTRICT OF COLUMBIA CIRCUIT

ALLISON D. WOOD
MAKRAM B. JABER
AARON M. FLYNN
MCGUIREWOODS LLP
888 16th Street NW, Suite 500
Black Lives Matter Plaza
Washington, DC 20006
(202) 857-2420

PAUL D. CLEMENT
Counsel of Record
C. HARKER RHODES IV
CLEMENT & MURPHY, PLLC
706 Duke Street
Alexandria, VA 22314
(202) 742-8900
paul.clement@clementmurphy.com

Counsel for Applicant Electric Generators for a Sensible Transition

July 26, 2024

PARTIES TO THE PROCEEDINGS

Applicant in this Court and Petitioner below is Electric Generators for a Sensible Transition.

Respondents in this Court and Respondents below are the United States Environmental Protection Agency and Michael S. Regan, Administrator, United States Environmental Protection Agency.

Respondents in this Court and Petitioners below are, by court of appeals case number, as follows:

24-1120: The States of West Virginia, Indiana, Alabama, Alaska, Arkansas, Florida, Georgia, Idaho, Iowa, Kentucky, Louisiana, Mississippi, Missouri, Montana, Nebraska, New Hampshire, North Dakota, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, and Wyoming.

24-1121: The States of Ohio and Kansas

24-1122: National Rural Electric Cooperative Association

24-1124: National Mining Association and America's Power

24-1126: Oklahoma Gas and Electric Company

24-1142: United Mine Workers of America, AFL-CIO

24-1143: International Brotherhood of Electrical Workers, AFL-CIO

24-1144: International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers, AFL-CIO

24-1146: Midwest Ozone Group

24-1152: Edison Electric Institute

24-1153: NACCO Natural Resources Corporation

24-1155: Idaho Power Company

24-1222: Appalachian Region Independent Power Producers Association

24-1226: Rainbow Energy Center, LLC

24-1227: Montana-Dakota Utilities Co.

24-1233: Westmoreland Mining Holdings LLC, Westmoreland Mining LLC, and Westmoreland Rosebud Mining LLC

Respondents in this Court and Intervenors for Petitioners below are the Louisiana Public Service Commission and Tennessee Valley Public Power Association, Inc. Respondents in this Court and Intervenors for Respondents below are the American Lung Association, American Public Health Association, California Air Resources Board, City and County of Denver, City of Boulder, City of Chicago, City of New York, Clean Air Council, Clean Wisconsin, Commonwealth of Massachusetts, Commonwealth of Pennsylvania, District of Columbia, Edison Electric Institute, Natural Resources Defense Council, State of Arizona, State of Colorado, State of Connecticut, State of Delaware, State of Hawaii, State of Illinois, State of Maine, State of Maryland, State of Michigan, State of Minnesota, State of New Mexico, State of New York, State of North Carolina, State of Oregon, State of Rhode Island, State of Vermont, State of Washington, State of Wisconsin, State of New Jersey, Consolidated Edison, Inc., New York Power Authority, Pacific Gas and Electric Company, Power Companies Climate Coalition, and Sacramento Municipal Utility District.

RELATED PROCEEDINGS

This application arises from a July 19 order denying eight motions to stay filed in 17 consolidated cases:

West Virginia v. EPA, No. 24-1120 (D.C. Cir.) (main docket)

Ohio v. EPA, No. 24-1121 (D.C. Cir.)

National Rural Electric Cooperative Association v. EPA, No. 24-1122 (D.C. Cir.)

National Mining Association v. EPA, No. 24-1124 (D.C. Cir.)

Oklahoma Gas and Electric Company v. EPA, No. 24-1126 (D.C. Cir.)

Electric Generators for a Sensible Transition v. EPA, No. 24-1128 (D.C. Cir.)

United Mine Workers of America v. EPA, No. 24-1142 (D.C. Cir.)

International Brotherhood of Electrical Workers v. EPA, No. 24-1143 (D.C. Cir.)

International Brotherhood of Boilermakers v. EPA, No. 24-1144 (D.C. Cir.)

Midwest Ozone Group v. EPA, No. 24-1146 (D.C. Cir.)

Edison Electric Institute v. EPA, No. 24-1152 (D.C. Cir.)

NACCO Natural Resources Corporation v. EPA, No. 24-1153 (D.C. Cir.)

Idaho Power Company v. EPA, No. 24-1155 (D.C. Cir.)

Appalachian Region Independent Power Producers Association v. EPA, No. 24-1222 (D.C. Cir.)

Rainbow Energy Center, LLC v. EPA, No. 24-1226 (D.C. Cir.)

Montana-Dakota Utilities Co. v. EPA, No. 24-1227 ((D.C. Cir.)

Westmoreland Mining Holdings LLC v. EPA, No. 24-1233 (D.C. Cir.)

CORPORATE DISCLOSURE STATEMENT

Pursuant to Rule 29.6, Applicant Electric Generators for a Sensible Transition states as follows:

Electric Generators for a Sensible Transition is an *ad hoc* coalition of electric generating companies and a national trade association that have joined together for the purpose of challenging the final rule of the United States Environmental Protection Agency ("EPA") at issue here, which represents EPA's latest effort to repurpose limited statutory tools to address a major question—namely, the degree to which electricity generation should be transitioned away from fossil-fuel-based generation in the name of attacking climate change. The members of the *ad hoc* coalition own and operate (directly or via subsidiaries) electric generating units that are subject to the final rule or have members that own and operate such units. The members of the *ad hoc* coalition are: Ameren Missouri; American Electric Power Company, Inc.; American Public Power Association; Appalachian Power Company; Arizona Public Service Company; Duke Energy Corporation; Evergy, Inc.; Kentucky Power Company; Kentucky Utilities Company; Louisville Gas and Electric Company; MidAmerican Energy Company; Monongahela Power Company; Nevada Power Company d/b/a NV Energy; NorthWestern Energy Group, Inc.; NRG Energy, Inc.; NRG Texas Power LLC; Ohio Valley Electric Corporation; PacifiCorp; Public Service Company of Oklahoma; Sierra Pacific Power Company d/b/a/ NV Energy; The Southern Company; Southwestern Electric Power Company; Talen Generation, LLC; Talen Montana Holdings, LLC; Vistra Corp.; and Wheeling Power Company.

Electric Generators for a Sensible Transition has no parent corporation, and no publicly held corporation has a 10% or greater ownership in it.

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Cases

Statutes

Regulations

Other Authorities

TO THE HONORABLE JOHN G. ROBERTS, JR., CHIEF JUSTICE OF THE SUPREME COURT OF THE UNITED STATES AND CIRCUIT JUSTICE FOR THE DISTRICT OF COLUMBIA CIRCUIT:

Applicant Electric Generators for a Sensible Transition respectfully requests an immediate stay of the final rule of the United States Environmental Protection Agency ("EPA") entitled "New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule," 89 Fed. Reg. 39,798 (May 9, 2024) (the "Rule"). Applicant has a petition for review of the Rule pending in the United States Court of Appeals for the District of Columbia Circuit and, due to the immediate harm its members face from the Rule, moved that court for a stay pending its review. That court denied Applicant's motion for a stay, forcing Applicant to seek relief from this Court.

Applicant agrees with and incorporates by reference the application for a stay of the Rule filed in this Court by West Virginia and 24 other States on July 23, 2024. Applicant files its own stay application to underscore the irreparable harm the Rule inflicts on the major private-industry parties it regulates and to elaborate on the Rule's illegality.

INTRODUCTION

The Rule represents EPA's third attempt to regulate greenhouse gas emissions from new and existing electric generating units under Section 111 of the Clean Air Act, 42 U.S.C. §7411. The third time is decidedly not the charm. As this Court made clear just two years ago in reviewing the Rule's precursors, the Clean Power Plan and

the Affordable Clean Energy Rule, Congress simply has not granted EPA the authority to "restructur[e] the Nation's overall mix of electricity generation" by "dictating the optimal mix of energy sources nationwide." *West Virginia v. EPA*, 597 U.S. 697, 720, 730 (2022). And yet EPA is at it again, setting impossible standards that will effectively require electric generators to retire their coal-fired units and severely curtail their use of gas-fired units, in an effort to accomplish the precise same climate-change-motivated, generation-shifting result that this Court has already recognized is beyond EPA's authority.

To be sure, EPA has learned something from its previous experience: Rather than openly mandating that electric generators shift their generation mix or subsidize their competitors, as the Clean Power Plan did, the Rule instead purports to set technology-based emissions standards derived from EPA's assessment of the "best system of emission reduction" for new and existing units. That was enough to satisfy the D.C. Circuit, which denied a stay here just as it did in *West Virginia*. But the thin veneer of technology-based analysis that EPA applied only compounds the problems with the Rule, as EPA's analysis defies the statutory text, which requires the chosen system of emission reduction to be both "adequately demonstrated" and "achievable"—not an untested and unattainable system designed to force premature retirement rather than sensible regulation of existing generation facilities. The primary system of emissions reduction on which EPA relied—carbon capture and storage with a 90% carbon dioxide capture rate ("90% CCS")—has never been "adequately demonstrated" at anything like the scale needed for industry-wide use,

and the standards that EPA has set based on that system are not remotely "achievable," making a mockery of the statute's textual requirements. 42 U.S.C. §7411(a)(1). The other system of emission reduction that EPA proposed for certain plants—"co-firing" existing coal-fired units with natural gas, by replacing coal with natural gas for 40% of their annual heat input—is not even a variation on what this Court previously condemned. It is a generation-shifting mandate plain and simple, and is not achievable for almost all of the relevant plants. The Rule thus not only exceeds the limited scope of EPA's statutory authority but also defies this Court's decision in *West Virginia*.

The serious flaws in the Rule cannot be deferred to a later day. Absent a stay, the Rule will impose immediate and devastating impacts on the electric generation system in the United States—promptly forcing electric generators to make irreversible decisions about plant closures, replacement generation, and the like that involve enormous irretrievable costs and risk electric reliability. As an *ad hoc* coalition of 25 electric generating companies and a national trade association, Applicant has a first-hand understanding of the immediate and irreparable harms that the Rule will inflict on electric power generators if it remains in place pending judicial review. Those extraordinary harms, and the Rule's multiple fatal flaws, require a stay pending review.

OPINION BELOW

The D.C. Circuit's order denying Applicant's motion for a stay is unpublished, but reproduced at App.1-3. The Rule is published at 89 Fed. Reg. 39,798 (May 9, 2024).

JURISDICTION

This Court has jurisdiction over this stay application under 28 U.S.C. §1254(1), and has authority to grant Applicant relief under the Clean Air Act, 42 U.S.C. §7607; the Administrative Procedure Act, 5 U.S.C. §705; and the All Writs Act, 28 U.S.C. §1651(a).

STATUTORY PROVISIONS INVOLVED

Relevant provisions of the Clean Air Act are reproduced at App.4-9.

STATEMENT

I. Legal Background

Section 111 of the Clean Air Act authorizes EPA to set nationally applicable "standards of performance" to control emissions from "new" stationary sources of certain air pollutants. 42 U.S.C. §7411(b). It also authorizes EPA to set guidelines for states to use in establishing their own source-specific "standards of performance" for "existing" stationary sources. *Id.* §7411(d). For both new and existing sources, Congress required that standards of performance must "reflect[] the degree of emission limitation achievable through the application of the best system of emission reduction which … the Administrator determines has been adequately demonstrated," taking into account "the cost of achieving such reduction" and "any nonair quality health and environmental impact and energy requirements." *Id.* §7411(a)(1).

In *West Virginia*, this Court held that these statutory provisions do not empower EPA to "substantially restructure the American energy market." 597 U.S. at 724. That case addressed the original precursor of the Rule: the Clean Power

Plan, which was EPA's first attempt to regulate greenhouse gas emissions from electric generating units. *See id.* at 711-12. In particular, the Clean Power Plan set guidelines for state emission-reduction standards by determining that the best system of emission reduction for existing coal-fired power plants was "a shift in generation to cleaner sources," by either reducing those plants' production of electricity or subsidizing cleaner energy sources such as natural gas plants, wind farms, or solar installations. *Id.* at 713. That approach, EPA explained, "would implement a sector-wide shift in electricity production from coal to natural gas and renewables." *Id.* And applying that approach, EPA set standards that it projected would shift the share of national electricity generation produced by coal-fired plants from 38% in 2014 down to 27% in 2030. *Id.* at 714.

On the same day that EPA promulgated the Clean Power Plan, dozens of challengers sought review and a stay pending review from the D.C. Circuit. The D.C. Circuit denied a stay, but this Court granted one, preventing the Clean Power Plan from taking effect. *Id.* at 715. Six years later—after a change in Presidential administrations, a new rule that sought to replace the Clean Power Plan (the Affordable Clean Energy Rule, representing EPA's second attempt to regulate greenhouse gas emissions from power plants), vacatur of that new rule by the D.C. Circuit, and a second change in Presidential administrations—the controversy reached this Court on the merits. *See id.* at 715-18 (detailing the protracted course of judicial and regulatory review).

With the merits at last squarely before it, this Court flatly rejected EPA's claim of statutory authority to "restructur[e] the Nation's overall mix of electricity generation." *Id.* at 720. EPA's interpretation, the Court explained, would "'discover in a long-extant statute an unheralded power' representing a 'transformative expansion in [EPA's] regulatory authority,'" based on an ancillary provision of the Act that "was designed to function as a gap filler and had rarely been used in preceding decades." *Id.* at 724 (quoting *Util. Air Regul. Grp. v. EPA*, 573 U.S. 302, 324 (2014)). That newly discovered authority, the Court recognized, would allow EPA to decide "that it would be 'best' if coal made up a much smaller share of national electricity generation," or even "forc[e] coal plants to 'shift' away virtually all of their generation—*i.e.*, to cease making power altogether." *Id.* at 728.

As the Court explained, nothing in the Clean Air Act clearly affords EPA that "unprecedented power over American industry." *Id.* (quoting *Indus. Union Dep't, AFL-CIO v. Am. Petroleum Inst.*, 448 U.S. 607, 645 (1980) (plurality op.)). On the contrary, there was "little reason to think" that Congress "tasked [EPA], and [EPA] alone, with balancing the many vital considerations of national policy implicated in deciding how Americans will get their energy"—particularly when the agency has "'no comparative expertise'" in making those policy judgments. *Id.* at 729 (quoting *Kisor v. Wilkie*, 588 U.S. 558, 578 (2019)). The Court was particularly skeptical of the notion that the EPA possessed the authority to "forc[e] coal plants to 'shift' away virtually all their generation," *id.* at 728, or "requir[e] coal plants to become natural-gas plants," *id.* at 728 n.3. In short, the authority that Congress has granted EPA to

"reduce air pollution from power plants" does not also empower EPA to "dictat[e] the optimal mix of energy sources nationwide." *Id.* at 730.

II. Factual and Procedural Background

EPA issued the Rule on May 9, 2024—its third try (after the Clean Power Plan and the Affordable Clean Energy Rule) at regulating greenhouse gas emissions from power plants under Section 111. The Rule applies to two different types of fossil fuel-fired electric generating units: combustion turbines and steam generating units. The vast majority of combustion turbines are fired with natural gas, although they can also combust distillate oil and other fossil fuels.[1] 89 Fed. Reg. at 39,818. Steam generating units can be fired with coal, natural gas, or oil, but the majority of these units combust coal. *See id.* at 39,840. At issue here are the performance standards set by EPA under Section 111(b) for new gas-fired combustion turbines, *see id.* at 39,902, and EPA's guidelines for state standards under Section 111(d) for existing coal-fired units, *see id.* at 39,840.

Any new gas-fired combustion turbine that begins construction on or after May 23, 2023 (the date of the proposed Rule, *see* 42 U.S.C. §7411(b)(6)), must meet the requirements of the Rule. For all "base load" units—those that generate electricity at a level more than 40% of their potential electric output—EPA determined that the best system of emission reduction starting with Phase 2 in 2032 is 90% CCS, and

[1] For simplicity, Applicant refers to combustion turbines as gas-fired, but its arguments apply equally to the small handful of combustion turbines that combust other fossil fuels.

imposed an emission standard of 100 pounds of carbon dioxide per megawatt hour with a compliance date of January 1, 2032, based on that determination.[2] *See* 89 Fed. Reg. at 39,903. That system of emission reduction requires the installation of specially designed carbon-dioxide capture technology, as well as transportation (normally by pipeline) of the captured carbon dioxide to a site where it can be permanently stored (normally by depositing it deep underground). *See id.* at 39,846. For "intermediate load" units, which generate only 20% to 40% of their potential electric output, EPA set a standard based on "high-efficiency simple cycle turbine technology," *id.* at 39,918, while for "low load" units, which generate less than 20% of their potential electric output, the standard is based on "lower-emitting fuels," *id.* at 39,917. EPA then determined that the best systems of emission reduction for intermediate and low load units are adequately demonstrated and the standards based on them are achievable. There are no Phase 2 standards for either of these types of units.

As to existing coal-fired steam generating units, EPA again relied on 90% CCS as the best system of emission reduction, this time for any "long-term" plants that "intend to operate past January 1, 2039," requiring that these units begin compliance with standards based on this system on January 1, 2032. *Id.* at 39,801, 39,838. For

---

[2] Phase 1, which is in effect now, requires that any new base load gas-fired combustion turbine meet an emission standard of between 800-900 pounds of carbon dioxide per megawatt hour (depending on the unit's base load rating). This standard is based on a best system of emission reduction of highly efficient combined cycle generation. 89 Fed. Reg. at 39,947-48. The Phase 1 standard is based on adequately demonstrated technology and is achievable.

"medium-term" plants that intend to operate past January 1, 2032, but permanently cease operation before 2039, EPA determined that the best system of emission reduction is "natural gas co-firing" at 40%, which requires turning a coal-fired unit into one that uses natural gas for 40% of its annual heat input (i.e., directly shifting 40% of its generation from coal to natural gas). *Id.* at 39,841. These medium-term plants must meet the standards based on this fuel-switching beginning on January 1, 2030. *Id.* at 39,801. Finally, the Rule all but invites coal-fired plants to be shuttered by exempting from these costly requirements existing coal-fired units that will "permanently cease operation" before 2032, *id.* at 39,843, which they must commit to doing in federally enforceable state plans that are due by May 11, 2026, *see* 40 C.F.R. §§60.5785b, 60.5740b(a)(9)(ii); *see also id.* §60.5876b(b) (requiring units seeking an exemption to start reporting information to EPA by November 12, 2024).

On the day after the Rule was issued, Applicant filed a petition for review in the D.C. Circuit, one of what eventually became seventeen consolidated petitions challenging the Rule. Like multiple other petitioners, Applicant moved for a stay of the Rule, explaining that the Rule exceeded EPA's statutory authority and would cause Applicant's members serious and irreparable harm. On July 19, the court denied all of the pending motions to stay the Rule. App.1-3. In a brief order, it took the view that the case did not implicate any major question, despite the dramatic effects that the Rule will have on electric generation across the nation, because EPA had "claimed only the power to 'set emissions limits under Section 111 based on the application of measures that would reduce pollution by causing the regulated source

to operate more cleanly.'" App.2 (quoting *West Virginia*, 597 U.S. at 725). The court also stated that petitioners could not show irreparable harm because "actual compliance deadlines do not commence until 2030 or 2032," and that to the extent leaving those deadlines in place would require electric generators to irrevocably commit now to long-term plans premised on compliance with the Rule, "a stay will not help because the risk remains that the distant deadlines in EPA's rule will come back into force." App.2.

REASONS FOR GRANTING THE APPLICATION

"Stay applications are nothing new," and indeed "seek a form of interim relief perhaps 'as old as the judicial system of the nation.'" *Ohio v. EPA*, 144 S.Ct. 2040, 2052 (2024) (quoting *Scripps-Howard Radio, Inc. v. FCC*, 316 U.S. 4, 17 (1942)). In deciding whether to grant a stay, this Court "appl[ies] the same 'sound principles' as other federal courts," examining "(1) whether the applicant is likely to succeed on the merits, (2) whether it will suffer irreparable injury without a stay, (3) whether the stay will substantially injure the other parties interested in the proceedings, and (4) where the public interest lies." *Id.* (ellipsis omitted) (quoting *Nken v. Holder*, 556 U.S. 418, 434 (2009)). All four of those factors weigh heavily in favor of a stay here. The Rule goes beyond EPA's statutory authority, conflicts with the requirements of the Clean Air Act, and threatens to devastate the Nation's electric generation, just like its modestly more transparent precursor. This Court should grant a stay.

I. The Rule Exceeds EPA's Statutory Authority And Contravenes The Clean Air Act.

Applicant—and the many others challenging the Rule—are overwhelmingly likely to succeed on the merits. This Court has already squarely held that EPA lacks the statutory authority to restructure the Nation's energy markets, and EPA cannot achieve that impermissible end just by setting emissions standards that effectively compel coal-fired plants to either close or "become natural gas plants." *West Virginia*, 597 U.S. at 728 n.3. On the contrary, EPA's attempt to frame its generation-shifting mandate as a garden-variety technology-based emission reduction program only multiplies the problems with the Rule, as the agency's analysis defies the text of the Clean Air Act by pretending that experimental technology "has been adequately demonstrated" and by setting limits that are nowhere near "achievable" for industry participants, as evidenced by the agency's invitation for plants to shutter rather than comply. 42 U.S.C. §7411(a)(1). And all of this is in service of broad policy goals this Court has already held lie beyond EPA's current authority. Those glaring flaws plainly demonstrate that the challenges to the Rule are likely to prevail on the merits.

A. Congress Has Not Granted EPA the Authority to Restructure the Nation's Overall Mix of Electricity Generation or to Simply Order Coal Plants to Become Natural Gas Plants.

This Court has already made crystal clear that Congress did not authorize EPA to artificially "restructur[e] the Nation's overall mix of electricity generation" by forcing generators to switch from one fuel to another. *West Virginia*, 597 U.S. at 720. That was a holding, not a challenge to the agency to fashion an alternative means to the same forbidden end. And that holding should resolve this case. What EPA cannot

do directly and transparently, it cannot do via indirection—and the Rule is nothing more than a thinly disguised attempt to achieve the same ends this Court rejected in *West Virginia*, this time by using unattainable standards to shut down disfavored plants, or explicitly mandating a shift from coal to natural gas, rather than simply ordering them to close. That modest change in tactics should not change the outcome. Congress did not empower EPA to "forc[e] coal plants to 'shift' away virtually all of their generation—i.e., to cease making power altogether," whether EPA reaches that result directly through an express command or indirectly through unattainable standards. *Id.* at 728.

Just like *West Virginia*, this case "is a major questions case." *Id.* at 724. Like its precursor, the Rule regulates an industry that "is among the largest in the U.S. economy, with links to every other sector." *Id.* at 745 (Gorsuch, J., concurring). Its burdens will likewise affect "a significant portion of the American economy," *id.* at 722 (majority op.) (quoting *Util. Air*, 573 U.S. at 324), and "require 'billions of dollars in spending' by private persons or entities," *id.* (quoting *King v. Burwell*, 576 U.S. 473, 485 (2015)). More important, allowing the Rule to stand would represent "a 'transformative expansion in [EPA's] regulatory authority,'" allowing it to dictate the Nation's overall mix of electricity generation by merely setting standards that disfavored sources cannot meet. *Id.* at 724 (quoting *Util. Air*, 573 U.S. at 324). As *West Virginia* explained, Congress simply did not task EPA with "balancing the many vital considerations of national policy implicated in deciding how Americans will get their energy," let alone deciding "how much coal-based generation there should be

over the coming decades"; instead, the "basic and consequential tradeoffs involved in such a choice are ones that Congress would likely have intended for itself." *Id.* at 729-30. That analysis does not change just because EPA now asserts the power to decide those fundamental questions indirectly rather than directly.

The D.C. Circuit took the opposite view, claiming that the Rule does not "implicate a major question under *West Virginia*" because EPA "has claimed only the power to 'set emissions limits under Section 111 based on the application of measures that would reduce pollution by causing the regulated source to operate more cleanly.'" App.2 (quoting *West Virginia*, 597 U.S. at 725). That misses the point. EPA surely has the authority to set emissions limits that will cause regulated sources to operate more cleanly, even if that "impose[s] some costs on regulated plants, and therefore (all else equal) cause[s] those plants to lose some share of the electricity market." *West Virginia*, 597 U.S. at 731 n.4. But there is an "obvious difference" between issuing emission standards that "may end up causing an incidental loss of coal's market share," and issuing unattainable standards that will restructure energy generation nationwide by forcing coal plants to shut down or convert to natural gas plants (and by limiting the amount of generation from new natural gas plants to boot). What EPA has done here is plainly the latter—and under the major questions doctrine and *West Virginia*, it has no statutory authority "to direct existing sources to effectively cease to exist." *Id.* at 728 n.3. And it does not get points for dressing up rules with generation-shifting purposes and effects in more modest clothing, especially when the rule relies on technology that has never been adequately

demonstrated, expressly requires a degree of generation-shifting, and provides a "retirement out" that underscores what is really going on. Indeed, in *West Virginia* itself, this Court already considered and rejected the possibility that EPA could simply force coal plants to shutter or become natural gas plants. *Id.* at 728 & n.3.

In short, the Rule goes far beyond the authority that Congress provided EPA under Section 111. It flouts this Court's explicit direction that EPA does not have the authority to "force a nationwide transition away from the use of coal to generate electricity," even if that "may be a sensible 'solution to the crisis of the day.'" *Id.* at 735 (quoting *New York v. United* States, 505 U.S. 144, 187 (1992)). It is expansive, sweeping, and consequential, and mandates a dramatic transformation of the American energy system. Because the standards that the Rule sets cannot be met, electric generators will have no choice but to retire their existing coal-fired units and severely curtail use of new gas-fired units, achieving precisely the generation-shifting result that this Court has already concluded EPA has no authority to require. Having been prevented by this Court in *West Virginia* from imposing that mandate through the front door, EPA cannot now bring it in through the back door by subjecting disfavored sources to unrealistic and prohibitive standards.

B. The Rule Cannot Be Reconciled With Section 111's Requirements.

Even apart from its forbidden effort to tackle major societal questions through limited statutory authorization, the Rule violates the Clean Air Act. Under Section 111, standards must be based on a system of emission reduction that "has been adequately demonstrated," and must be "achievable." 42 U.S.C. §7411(a)(1); *see West Virginia*, 597 U.S. at 709. The Rule fails on both counts. Carbon capture and storage

at a 90% capture rate may be a promising experimental technology, but it comes nowhere near being adequately demonstrated, particularly at the scale that the Rule requires. And the Rule's reliance on both 90% CCS and co-firing coal-fired plants with 40% natural gas makes its limits plainly unachievable, as neither of those technologies can be implemented on an industry-wide basis without massive infrastructure development and exorbitant cost. Those conflicts between the Rule and the statute further confirm that the challenges to the Rule are likely to succeed.

1. The Rule's reliance on 90% CCS conflicts with the statutory requirement that systems of emission reduction be "adequately demonstrated."

Under Section 111, EPA can base its standards only on a system of emission reduction that "has been adequately demonstrated." 42 U.S.C. §7411(a)(1). By its plain text—and in particular, its use of the present perfect "has been"—that provision requires a system of emission reduction that *already* "has been adequately demonstrated," not one that EPA believes could be or will be adequately demonstrated in the future. *Id.*; *see* present perfect, *Oxford English Dictionary* (Dec. 2023) (noting that the present perfect tense "denot[es] action that is completed at the present time"). That statutory language forecloses a mandate-it-and-it-will-materialize approach under which EPA attempts to set standards based on technology that is merely experimental, theoretical, or aspirational. Instead, for EPA to impose a technology on industry as the best system of emission reduction under Section 111, that technology must be one that already "has been shown" to be "reasonably reliable" and "reasonably efficient." *Essex Chem. Corp. v. Ruckelshaus*, 486 F.2d 427, 433 (D.C. Cir. 1973).

The Rule's selection of 90% CCS as a best system of emission reduction fails that statutory standard. While that approach to emission reduction may be promising at some point in the future, CCS has never achieved a 90% capture rate at *any* full-scale facility—not one. The limited experimental results that the Rule cites, none of which consistently achieved 90% CCS at industrial scale, only underscore that adequate demonstration is lacking. As to coal-fired units, for instance, the Rule asserts that 90% CCS is adequately demonstrated based on the Boundary Dam project in Saskatchewan, Canada. 89 Fed. Reg. at 39,847. But that facility does not capture even close to 90% of its carbon dioxide emissions, and has been plagued with problems—to such an extent that its owner felt the need to send EPA a "correction" regarding EPA's characterization of the project, explaining that the unit "is not capturing 90 per cent of emissions." Email from J. Jickling, SaskPower, to EPA Docket (Aug. 4, 2023), EPA-HQ-OAR-2023-0072-0687; *see also* Carlos Anchondo, *CCS 'Red Flag?' World's Sole Coal Project Hits Snag*, E&E News (Jan. 10, 2022), https://tinyurl.com/5ch749hd. The Petra Nova project in Texas, which the Rule also cites, *see* 89 Fed. Reg. at 39,847, likewise missed its capture targets by about 17% in its first three years of operation, and sat idle for over three years because it was uneconomic. *See* Comments of the Power Generators Air Coalition, Attachment D, at 6 (Aug. 8, 2023), EPA-HQ-OAR-2023-0072-0710 ("Power Generators Comments").[3]

[3] In addition, as the Rule recognizes, the Petra Nova project was funded by the Energy Policy Act of 2005, and so by statute it cannot be relied on as evidence of adequate demonstration. *See* Pub. L. No. 109-58, 119 Stat. 594 (2005); 89 Fed. Reg. at 39,847.

Beyond that, the Rule cites only projects that are not yet operational and other industrial applications that fundamentally differ from applying CCS to coal-fired units and do not achieve 90% removal in any event, confirming the absence of anything remotely approaching adequate demonstration. *See generally* 89 Fed. Reg. at 39,846-51.

The record is even worse for gas-fired units. Because there are no gas-fired plants *at all* operating with carbon capture and storage at the scale that would be required under the Rule, the Rule simply extrapolates based on (the demonstrably inadequate) data from coal-fired plants to conclude that 90% CCS is possible at new gas-fired plants. 89 Fed. Reg. at 39,924-25. That is plainly a bridge too far. EPA cannot rely on experimental uses in coal-fired plants even to set standards for coal-fired plants; using that unproven technology to set standards for plants using completely different fuel is two standard deviations removed from adequate demonstration.[4]

While EPA points to three limited gas-fired projects, none is operating at the scale that would be required under the Rule. That only underscores how far EPA has

---

[4] Putting aside that 90% CCS is not adequately demonstrated even for coal-fired units, EPA's blithe "extrapolation" suffers from another flaw as well. As commenters explained to EPA, there is a large difference between the carbon dioxide content (i.e., the carbon dioxide concentration) of the exhaust from gas-fired units and the carbon dioxide content of the exhaust from coal-fired units. *See, e.g.,* Power Generators Comments, Attachment C, at 2 (explaining concentration is "3-4% [carbon dioxide] for [gas-fired] application and 11-13% [carbon dioxide] content for coal-fired application). Accordingly, EPA cannot simply assume that the performance of CCS for coal-fired units is indicative of CCS performance for gas-fired units.

strayed from what the statute requires. *See* 89 Fed. Reg. at 39,926-27. The Bellingham Cogeneration Facility in Massachusetts uses CCS only on a tiny 40-megawatt slipstream, which is far below the level of capture required at even a modestly sized gas-fired plant. Power Generators Comments, Attachment C, at 4. The Technology Centre Mongstad in Norway is an even tinier 12-megawatt *pilot plant testing site* in Norway, which likewise is not representative of the much larger units to which the Rule applies. 89 Fed. Reg. at 39,927 & n.768. And as the Rule acknowledges, the Peterhead Power Station in Scotland is not demonstrated at all; it is only "in the planning stages of development." *Id.* at 39,927. If EPA is invoking pilot projects in Norway and planned projects in Scotland, it is literally miles away from adequate demonstration.

The Rule invokes other CCS projects that remain in development as well, *see* 89 Fed. Reg. at 39,850-51, but projects *in development* are by definition not yet "adequately demonstrated," 42 U.S.C. §7411(a)(1). That applies *a fortiori* to the "vendor statements" that the Rule cites, no matter how "supportive" those statements may be. 89 Fed. Reg. at 39,851. Having a product to sell for future delivery is no substitute for actual demonstration. And EPA's apparent desire to stimulate future technology development cannot save the Rule, as Section 111 requires a system of emission reduction that already "has been adequately demonstrated," 42 U.S.C. §7411(a)(1), not "an uncertain and unproven technology," *Sierra Club v. Costle*, 657 F.2d 298, 347 (D.C. Cir. 1981). In short, EPA's reliance on experimental technology

and pilot projects rather than a system of emission reduction that "has been adequately demonstrated" cannot be reconciled with Section 111's demands.

2. The Rule's reliance on 90% CCS conflicts with the statutory requirement that standards be "achievable."

The Rule's reliance on 90% CCS also violates Section 111 by producing standards that are not "achievable." 42 U.S.C. §7411(a)(1). By its plain language, that statutory requirement mandates that a Section 111 standard must be achievable at the time of its promulgation—not theoretically attainable at some point in the future once the necessary technology develops or the required infrastructure is completed and certainly not so unattainable that shuttering is the only realistic alternative for many facilities. As explained above, the technology required for 90% CCS is still at the experimental stage, making the standards that the Rule sets in reliance on that technology anything but achievable. *See supra* pp.16-18.

But even if the basic technology were available, the 90% CCS-based standards in the Rule would *still* be unachievable, because the infrastructure needed to implement 90% CCS does not exist. As EPA concedes, 90% CCS would require constructing *at least 5,000 miles of pipelines* for carbon transport by 2032. 89 Fed. Reg. at 39,856. That is a massive undertaking—one that (if it is even possible) will cost billions of dollars, require countless permits and easements, take years to complete, and involve additional burdens that EPA wildly underestimates. *See* Power Generators Comments at 35-37. A standard that requires massive nationwide infrastructure development to materialize is not "achievable" now, as Section 111 requires. 42 U.S.C. §7411(a)(1).

The Clean Air Act requires EPA to take cost into account in setting performance standards. *Id.* The costs that would be required to implement 90% CCS (again, assuming that technology eventually materializes) are exorbitant. Recognizing those costs, the Rule claims that they will be offset by tax credits under the Inflation Reduction Act. 89 Fed. Reg. at 39,879-82. As an initial matter, those tax credits come with significant risk, because they are available *only* if the facility is able to capture a minimum amount of carbon dioxide. *See* Pub. L. No. 117-169, §13104(a), 136 Stat. 1818, 1924 (2022) (electric generating facility must capture at least 18,750 tons per year of carbon dioxide). Given the current nascent state of the technology, there is a substantial risk that it may not achieve the required efficacy, in which case units implementing it will not receive any tax credits. More important, Congress' enactment of incentives to stimulate CCS development underscores that the technology needed for 90% CCS does not currently exist, and that Congress chose a system of incentives, rather than mandates, when it comes to CCS technology. Congress could have transformed the sector through direct mandates; the fact that it chose a more modest approach is just one more mark against EPA's effort to demand convulsive change.

Finally, the Rule's assertion that installing CCS will result in a "significant economic benefit" to existing coal plant owners, 89 Fed. Reg. at 39,879, is paternalism on steroids. If electric generators could make a profit by installing and operating CCS, they would be racing each other to do so voluntarily. With all due respect to the agency, EPA does not know the economics of energy production better than the

industry, which is here explaining that these standards cannot be met, will force early coal plant retirements, and will seriously hamper the generation of electricity from new gas plants, all of which will severely threaten electric reliability and affordability. As between market forces and agency speculation, Applicant respectfully submits that the former is far more reliable. EPA's attempts to justify its reliance on 90% CCS thus only confirm that its standards are not achievable and so contravene Section 111.

3. The Rule's reliance on co-firing coal-fired plants with natural gas is unadorned forbidden generation-shifting and results in standards that are not achievable.

EPA's reliance on co-firing a coal plant with 40% natural gas as the best system of emission reduction for coal-fired units that commit to cease operations before 2039 is if anything more obviously unlawful. That system of emission reduction explicitly requires shifting energy generation from coal to natural gas, which is precisely what this Court has held EPA cannot do. *West Virginia*, 597 U.S. at 728 & n.3. EPA has no authority to require a plant to change its fuel type by switching 40% of its annual heat input from coal-fired to gas-fired. *See id.* at 728 n.3 ("doubt[ing]" that EPA could "requir[e] coal plants to become natural gas plants" because EPA lacks the authority "to direct existing sources to effectively cease to exist"). In short, EPA 40% co-firing mandate is not even thinly-disguised generation-shifting, it is generation-shifting plain and simple, and cannot be reconciled with *West Virginia.*

Even apart from that fatal flaw, natural gas co-firing does not represent a standard that can reasonably be achieved by "the industry as a whole." *Nat'l Lime Ass'n v. EPA*, 627 F.2d 416, 431 (D.C. Cir. 1980). The Rule confirms as much, stating

only that "[*m*]*any* existing coal-fired steam generating units already use *some* amount of natural gas, and *several* have co-fired at relatively high levels at or above 40 percent of heat input in recent years." 89 Fed. Reg. at 39,892 (emphases added). That is a far cry from showing that 40% co-firing is generally achievable throughout the industry. And the Rule's glib statement that "plants may find it necessary to construct natural gas supply pipelines," *id.* at 39,893, only underscores that the necessary infrastructure to achieve the standards is *not* readily available now, as Section 111 requires.

In fact, only about one-third of coal-fired steam generating units co-fire natural gas at all, and of those units only 4% actually co-fire significant amounts for generating electricity (as opposed to co-firing small amounts of gas for starting up the boiler or holding it in "warm standby"). Power Generators Comments at 59. Most coal-fired steam generating units in the United States would need extensive modifications to be able to co-fire that amount of gas, and most do not have access to natural gas, meaning that pipelines would need to be constructed—projects that would cost $4 million to $10 million per mile, require countless permits, and could not be completed in time to comply with the Rule in any event. *Id.* at 59-60.[5] In

[5] If there is any doubt about the sheer impossibility of completing a gas pipeline within the deadline of the Rule, the Court need look no further than the Mountain Valley Pipeline saga. That project started in 2014, when the Federal Energy Regulatory Commission commenced a "pre-filing review" of the project, and it was completed a decade later after multiple challenges in the Fourth Circuit, this Court's vacatur of the Fourth Circuit's stays, and intervention by Congress. *See Overview*, Mountain Valley Pipeline, https://www.mountainvalleypipeline.info/overview/ (last

short, a standard based on converting coal-fired plants to co-firing with natural gas at 40% is not achievable "for the industry as a whole," but only for a small subset of sources at most. *Nat'l Lime Ass'n*, 627 F.2d at 431. The Rule's imposition of that standard accordingly cannot be squared with Section 111.

II. The Rule Will Cause Substantial Irreparable Harm.

The Rule is not only unlawful, but also threatens to cause substantial irreparable harm absent a stay. While its compliance deadlines are set years in the future, that lead time reflects two realities—both of which underscore the need for a stay. First, the stretched out deadlines reflect the reality that the relied-upon technology is not currently available—let alone adequately demonstrated—at this juncture, which underscores Applicant's likelihood of success on the merits. Simply put, EPA could not demand immediate adoption of non-existent technology. Second, the extended deadlines are necessary because electric generation requires major investments and irrevocable decisions years in advance, which underscores the immediate and irreparable harms to industry. Leaving the Rule in place will not only impose significant costs on electric generators that cannot be unspent, but will likely force the premature retirement of coal-fired units unable to comply with the Rule's demands and obstruct the development of critically needed new gas-fired units. This

---

visited July 26, 2024); *Appalachian Voices v. U.S. Dep't of the Interior*, 78 F.4th 71, 75-76 (4th Cir. 2023) (recounting the "legal history" of that case). Other pipelines have been abandoned altogether in light of permitting obstacles, even after taking the case all the way to this Court and prevailing on one of the multiple legal objections raised by pipeline opponents. *See PennEast Pipeline Co. v. New Jersey*, 594 U.S. 482 (2021); *U.S. Forest Serv. v. Cowpasture River Pres. Ass'n*, 590 U.S. 604 (2020).

Court should not allow the Rule to impose those harms, and impose a potentially irrevocable shift in the Nation's overall mix of electricity generation, while judicial review remains pending.

A. The Rule Requires Applicant's Members to Incur Substantial and Irretrievable Costs and Make Irrevocable Decisions Now to Prepare for Future Compliance.

The harm that Applicant's members face from the Rule begins now, as they must decide on and commit to their compliance pathways years in advance. As the declarations in the record describe, the type of planning that the Rule requires takes years of advance work, as "[t]he nature of the utility planning process requires [electric generators] to take actions well in advance of a forecasted event or need in order to ensure that we maintain our ability to provide the most cost-effective and reliable electric service possible to our customers." App.63 (Bridson ¶20); *see* App.13-14 (Ballew ¶3); App.35-36 (Beam ¶¶56-57, 62); App.53-54 (Bridson ¶2); App.89 (Brown ¶11); App.135 (Crockett ¶18); App.148 (Gaden ¶8); App.156-59 (Glenn ¶¶8, 11); App.172-73 (Janson ¶13); App.184-85 (Johnson ¶27); App.201 (Komaromy ¶34); App.208-09 (Lafser ¶4); App.405 (Lebsack ¶10); App.416, 420-21 (Williams ¶¶5, 19). In order to meet the compliance schedule in the Rule, Applicant's members have already been forced to rapidly accelerate their efforts and unexpectedly devise entirely new plans, in conflict with their usual orderly and integrated planning process. *See, e.g.*, App.175 (Janson ¶18); App.209-10 (Lafser ¶6). And that disruption is only the beginning of the irreparable harm that Applicant's members face, as each day that the Rule remains in place imposes additional irretrievable costs that they

must incur and additional irrevocable decisions that they must make in order to remain on track for compliance.

The Rule's requirements for existing coal-fired units exemplify the problem. Once the owner and operator of each unit decide which compliance method to follow—whether by shutting the unit down before 2032, converting to co-firing with natural gas at 40% and then shutting down before 2039, or somehow attaining 90% CCS—they must work with state regulators to develop their plans to implement the rule, which must be submitted by May 11, 2026. App.89 (Brown ¶12); *see* 40 C.F.R. §60.5785b. As a result, electric generators must fully commit to their compliance pathway well before this litigation will be fully resolved—and indeed, the Rule itself contemplates that they must make these decisions within the next few months. *See* 40 C.F.R. §60.5876b(b) (requiring owners and operators of units that have "committed to permanently cease operations by January 1, 2032" to submit required information "[b]eginning November 12, 2024"). And the same problems extend equally to the Rule's requirements for new gas-fired units, as companies that must replace retiring units before the Rule's shutdown deadlines for existing coal-fired plants and expand their generation to meet growing demand will have to spend significant additional sums to plan for and acquire additional gas generation—which the Rule makes highly inefficient and substantially more expensive, *see infra* pp.32-33.

The evidence of those harms to Applicant's members is voluminous. If the Rule is not stayed, Ameren Missouri expects to face an "immediately-required commitment" to comply with the Rule of $5 million to $10 million, including for

"soliciting and securing bids from contractors, procuring equipment, mobilizing resources and employees, securing approvals for major capital expenditures, applying for and securing the necessary local, state, and federal permits and approvals, and communicating and working with numerous stakeholders, including state environmental agencies and local communities." App.209 (Lafser ¶5). The Kansas City Board of Public Utilities likewise expects costs of about $1 million to $2 million per year while the litigation is pending, App.185 (Johnson ¶28), while Vistra estimates that its "costs of undertaking such near-term activities would likely exceed $10 million per plant," App.14 (Ballew ¶4). And Duke Energy Florida and Midwest utilities expect costs in the "hundreds of millions of dollars that would have to be expended in the next 2-3 years," reflecting the need for immediate "engineering, design, and contracting" for additional gas-fired generation. App.156-57 (Glenn ¶8).

Those expenditures cannot be unspent if the Rule is eventually vacated after judicial review, and those investment decisions cannot be reversed once generators obligated to provide reliable electric service to the public have devoted time and contractual commitments to pursing a particular compliance pathway. *See, e.g.*, App.184-85 (Johnson ¶27) ("Once KCBPU begins its efforts to comply with the GHG Rule, the path chosen will be effectively irreversible."); App.135-36 (Crockett ¶20); App.160 (Glenn ¶15); App.204 (Komaromy ¶41); App.421 (Williams ¶20). The costs of complying with the Rule are accordingly irreparable. *See, e.g.*, *Ohio*, 144 S.Ct. at 2053; *Thunder Basin Coal Co. v. Reich*, 510 U.S. 200, 220-21 (1994) (Scalia, J., concurring in part and concurring in the judgment) (because sovereign immunity bars

recovering compliance costs from the government, "complying with a regulation later held invalid almost *always* produces the irreparable harm of nonrecoverable compliance costs"); *Mexichem Specialty Resins, Inc. v. EPA*, 787 F.3d 544, 555 (D.C. Cir. 2015) (economic injuries are irreparable where no "adequate compensatory or other corrective relief will be available at a later date, in the ordinary course of litigation").

The D.C. Circuit panel below nevertheless disregarded the irreparable harm that Applicant's members face from being forced to incur those substantial and immediate long-term planning costs, claiming that "a stay will not help because the risk remains that the distant deadlines in EPA's rule will come back into force at the end of the case." App.2. That is not how stays work. A stay "suspend[s] the source of authority to act—the order or judgment in question," preventing "'alteration of the status quo'" while judicial review proceeds. *Nken*, 556 U.S. at 428-29 (quoting *Ohio Citizens for Responsible Energy, Inc. v. NRC*, 479 U.S. 1312, 1313 (1986) (Scalia, J., in chambers)). Where, as here, a regulation sets future deadlines that require immediate action to come into future compliance, a stay of that regulation necessarily requires tolling those deadlines during judicial review; otherwise, regulated parties would be forced to proceed with compliance regardless, and the stay would do nothing to preserve "the state of affairs before the … order was entered." *Id.* at 429. The D.C. Circuit panel's contrary view would make it effectively impossible for courts to stay agency rules that require long-term planning, contradicting settled practice (including this Court's stay of the Clean Power Plan, *see West Virginia v. EPA*, 577

U.S. 1126 (2016)). An agency cannot insulate its actions from judicial scrutiny just by setting long-term deadlines that require immediate compliance costs, and then claiming that any stay pending judicial review would be ineffective because regulated parties will have to comply anyway to avoid violating those deadlines if the agency eventually prevails. *Contra* App.2.

B. The Rule Causes Irreparable Harm by Forcing the Premature Retirement of Coal-Fired Units.

Leaving the Rule in place pending judicial review would not only subject Applicant's members to immediate compliance costs that cannot be unspent, but also force them to commit to compliance pathways that will inevitably lead to longer-term irreparable harm as well. For the vast majority of coal-fired units, the only feasible compliance option will be shutting down operations before January 1, 2032, to avoid the impossible standards of performance that the Rule requires for existing coal-fired plants that will continue operation beyond that date. *See, e.g.*, App.128 (Crockett ¶5) ("[T]he only compliance strategy available … consists primarily of premature and accelerated retirement of the Company's coal-fired generating units[.]"). As already described, *see supra* pp.16-22, the other compliance pathways that the Rule envisions are effectively impossible, leaving electric generators no plausible alternative other than premature retirement for their existing coal-fired units. For an agency intent on mandating generation-shifting, this is a feature, not a bug. But from any other perspective, this is classic irreparable harm.

That looming irreparable harm is supported by copious evidence in the record. The system of emission reduction on which EPA relied for existing coal-fired plants

that will continue to operate into 2039—90% CCS—has not been consistently demonstrated at any electric generating unit in the world, *see* App.17-18 (Ballew ¶11); App.214 (Lafser ¶18), making it infeasible for electric generators to rely on that system to ensure compliance, *see* App34 (Beam ¶49); App.90 (Brown ¶13); App.161 (Glenn ¶17); App.203 (Komaromy ¶38); App.419 (Williams ¶15). And companies with a history of testing carbon capture and storage pilot projects at their facilities have confirmed that it cannot possibly be installed and operational by 2032, when the Rule's heightened standards begin to take effect. *See, e.g.*, App.34 (Beam ¶48) ("Over the course of nearly a decade working on the CCS project, we learned that the practical considerations of trying to deploy CCS alone are sufficient to support our claims that CCS … cannot be deployed by 2032[.]"); App.161 (Glenn ¶17) (even with a "headstart" in trying to design CCS at one facility since 2023, "Duke Energy Indiana would be challenged to have all the permit approvals and be operational by 2032"); *see also* App.129-30 (Crockett ¶7) (describing experience with CCS research and pilot projects).

In short, even if 90% CCS had been adequately demonstrated, *but see supra* pp.16-18, that technology could not be implemented and operational by the deadlines imposed in the Rule. The planning alone that would be required to implement that technology could take 3 to 4 years, permitting could take 7 to 12 years, contracting could take 1 to 2 years, and construction could take 5 to 10 years, plainly incompatible with the timeline that the Rule requires. App.66-68 (Bridson ¶22). Most facilities also lack the infrastructure necessary to deploy that technology (such as pipelines for

carbon dioxide transportation and storage facilities), and electric generators cannot control construction of that infrastructure. App.34 (Beam ¶48); App.129-30 (Crockett ¶7).

Even if 90% CCS were feasible and could be installed in time to meet the Rule's demands, implementing that technology would be exorbitantly expensive (and likely subject to its own legal challenges). App.408 (Lebsack ¶19). Illinois Municipal Electric Agency, for instance, studied adding CCS to one of its facilities and concluded that it would cost $2.04 billion per unit. App.146-47 (Gaden ¶6). Vistra projects that costs for CCS could exceed $5 billion, App.18 (Ballew ¶12), and Arizona Public Service Company ("APS") estimates that installing CCS on new gas-fired units would effectively double their cost, App.196 (Komaromy ¶23). Those extravagant costs effectively foreclose any realistic possibility of implementing carbon capture and storage systems to comply with the Rule.

The Rule's other purported best system of emission reduction for existing coal-fired plants—co-firing with natural gas at 40%—only gives plants a limited lease on life, as the Rule envisions plants adopting this option to commit to ceasing operations before 2039. It is infeasible in all events. That compliance mechanism is practicable only for coal plants that can be converted to co-firing at a reasonable cost, and that have an adequate supply of natural gas available to switch 40% of their annual heat input from coal to natural gas—and for the vast majority of the units affected, neither condition is met. *See, e.g.*, App.409 (Lebsack ¶25) (estimating that conversion to co-firing "would cost in excess of $150 million"); App.148 (Gaden ¶8) (discussing

unavailability of natural gas and resulting infeasibility of co-firing). LG&E-KU, for instance, has the natural gas infrastructure needed for this compliance pathway "at only one of the company's four coal-fired power plant sites," and cannot build similar infrastructure at the company's other plants and negotiate natural gas supply contracts by the Rule's compliance deadline. App.128-29, 137-38 (Crockett ¶¶6, 22).

Because the other compliance pathways are infeasible, permanently closing coal-fired units is the only option that most electric generators have under the Rule. Talen Energy, for instance, operates Units 3 and 4 at the Colstrip Steam Electric Station in Rosebud County, Montana; its only "compliance strategy available for Colstrip consists of shutting down the plant by January 1, 2032." App.404-05 (Lebsack ¶¶6, 8). And Talen must make that decision even earlier, because Colstrip is subject to another EPA rule requiring installation of costly pollution controls by July 2027—controls that make little economic sense if the plant must shut down before 2032. As a result, absent a stay of the Rule, there is a high likelihood Talen will be forced to close Colstrip by July 2027, well before this litigation is likely to be finally resolved. App.406-07 (Lebsack ¶¶13-16).

Other electric generators face similar quandaries. American Electric Power must decide by December 2025 whether to install additional pollution controls at its coal-fired facilities to satisfy another EPA rule, a decision whose economics will be substantially affected by whether the Rule remains in effect. App.33 (Beam ¶43). Absent a stay, LG&E-KU will be forced to undertake the "premature and accelerated retirement of the Company's entire coal-fired generation fleet[,] which comprises

nearly 55% of its current generating capacity with a current net book value of approximately $5.2 billion." App.130 (Crockett ¶8). And Evergy would likewise have to close 67% of its coal-fired fleet, at untold cost. App.62 (Bridson ¶18); *see* App.144-46 (Gaden ¶4) (explaining that forced shutdowns will convert coal-fired units into stranded assets, destroying the value of hundreds of millions of dollars of investment). Those substantial and irreparable harms readily satisfy the second stay factor.

C. The Rule Causes Irreparable Harm by Arbitrarily Limiting Generation from New Gas-Fired Units.

The irreparable harm that Applicant's members face from being forced to close existing coal-fired units is only exacerbated by the obstacles that the Rule imposes for new gas-fired units. To ensure continued delivery of electricity, most electric generators will have to replace prematurely retired coal-fired units with new gas-fired units, in addition to the new gas-fired units that most of Applicant's members were already planning to build to meet increasing demand. But by imposing an infeasible 90% CCS-based standard on all new gas-fired plants that generate more than 40% of their potential electric output, the Rule effectively requires electric generators to massively overbuild the capacity of new gas-fired units, forcing generators to construct more than twice the capacity that they actually need just so they can artificially limit the amount the units generate to less than 40% of their capacity. *See, e.g.*, App.221-22 (Lafser ¶33) (explaining that the Rule will require Ameren Missouri to "start planning and spending money now to construct and operate two 40% [capacity-factor] combined cycle plants as opposed to one 80%

[capacity-factor] combined cycle plant with 90% CCS, which would mean construction of two (instead of one) large plants each with substantial (60%) unused capacity"); App.419 (Williams ¶15). This is the equivalent of telling consumers they need to buy two or three cars instead of one because they can use only 40% of each car's capacity.

The Rule will accordingly require enormous costs and time commitments—starting now—to design and build new gas-fired plants. APS, for instance, estimates that its efforts to comply with the Rule with respect to new gas-fired units will "involve the commitment of substantial resources—in the tens of millions of dollars, if not in the range of $100 million—for design, engineering, and permitting, in order to meet the Final Rule's deadline of 2032." App.203-04 (Komaromy ¶42); *see* App.201-03 (Komaromy ¶¶34-38). LG&E-KU, which has never before attempted to build more than one baseload generation unit at the same time, would be forced to "complete seven to eight [natural gas combined cycle] plants and major renewable generation over the span of less than five years," costing "a minimum of $7 billion for construction of replacement generation alone." App.132-33 (Crockett ¶¶13-14). And those are not distant future costs; absent a stay, the company will have to spend "hundreds of millions of dollars on these projects by the time the court decides the legality of the Rule," App.133 (Crockett ¶14), at which point its expenditures would be irretrievable. Those massive undertakings confirm the irreparable harm that the Rule will cause if it is allowed to remain in effect pending judicial review.

III. The Balance of Equities and the Public Interest Likewise Favor a Stay.

The final two factors also weigh in favor of granting a stay. As to the balance of equities, there is no risk that a stay will "substantially injure" EPA or any other

parties interested in the proceedings, *see Ohio*, 144 S.Ct. at 2052; at most, it will just prevent the agency from effectively escaping judicial review by forcing industry participants to make irrevocable plans based on the Rule before a court can determine its legality.[6]

The public interest, on the other hand, heavily favors a stay, as allowing the Rule to remain in effect threatens substantial harm not only to electric generators but to the public that they serve and the communities in which they operate. The massive costs imposed by the Rule will cause electric rates to rise substantially, including in some of the poorest areas in the country, which will be disproportionately affected. *See* App.148-49 (Gaden ¶9) (describing disproportionate impacts on low-income communities, including forcing customers to choose between power and other necessities); *see also* App.43 (Beam ¶93); App.139 (Crockett ¶25); App.186 (Johnson ¶31); App.417 (Williams ¶8).

The Rule will also threaten the reliability of the electric grid, a concern that several regional transmission organizations—the nonprofit entities mandated by the Federal Energy Regulatory Commission to, among other things, ensure electric reliability—expressed following EPA's release of the Rule. *See, e.g.*, App.29-30 (Beam

---

[6] In *Ohio*, which involved an ambient air quality rule, this Court accepted that "each side has strong arguments about the harms." *Ohio*, 144 S.Ct. at 2053. Here, any possible harm to Respondents (or members of the public, for that matter) that would result from a stay is infinitesimally small and attenuated. Applicant does not dispute that action to address climate change is necessarily incremental. But the fact such action is so incremental also means that postponing the applicability of this Rule by 2 to 3 years while the courts decide its legality cannot practically cause any damage, much less substantial injury.

¶29) (noting PJM Interconnection—the reliability coordinator in 13 states and the District of Columbia—has "concerns with the Rule and its impacts on reliability"); App.223-24 (Lafser ¶38) (noting the Midcontinent Independent System Operator—the reliability coordinator in 15 states—has expressed that the Rule will cause "immediate and serious challenges to the reliability of our region's electric grid"); App.77-78 (Bridson ¶34) (noting the Southwest Power Pool—the reliability coordinator in 14 states—has concerns "about the impact the Final Rule may have on the region's" reliability); *see also* App.192 (Komaromy ¶7) (noting "serious challenges in ensuring the reliability of our electrical energy system" as "a result of the Final Rule"); App.21-22 (Ballew ¶17). Those risks are especially pronounced in areas with considerable growth in electric demand, where the Rule will "severely impact [generators'] ability to meet burgeoning load growth and customer demand." App.194 (Komaromy ¶15).

The costs that the Rule imposes, and the premature retirement of coal-fired plants that it requires, also threaten communities around the country with devastating job losses. If the Rule remains in effect, LG&E-KU projects potential staff reductions at its facilities ranging from 70% to 95% or more, due to the smaller number of employees needed for non-coal generation. App.139-40 (Crockett ¶26). In Kansas City, Kansas, compliance with the Rule is likely to lead to the loss of 50 to 75 full-time employees and reduce local wages by $5 million to $10 million annually. App.185-86 (Johnson ¶29). "The premature retirement of OVEC's two coal-fired generating stations would result in the loss of approximately 500 direct jobs, with a

payroll in excess of 50 million dollars, as well as the loss of myriad ancillary jobs in our local communities and from our suppliers (including coal suppliers)." App.89 (Brown ¶9); *see* App.68 (Bridson ¶23) (projecting that Evergy will lose over 650 full-time jobs by 2032 as a result of the Rule). And AEP expects to lose all of its plants in West Virginia, which "represent more than a half a billion dollars in economic activity for the State of West Virginia, over 2000 jobs, and almost $200 million in labor income." App.42 (Beam ¶89). Without a stay, those losses are likely permanent, as it is not realistic to expect that workforces can be reassembled and plants reopened if the Rule is eventually vacated on appeal. App.139-40 (Crockett ¶26).

Finally, the public interest favors a stay for one other important reason. The whole point of the major questions doctrine and this Court's decision in *West Virginia* is that the solution to major societal problems like climate change lies in Congress, not in agencies divining elephantine new powers in minor provisions of statutes enacted long ago. Failing to stay EPA's latest salvo in its ongoing effort to address a major contemporary question implicating a wide range of interests through an ancillary provision of the Clean Air Act enacted more than 50 years ago just guarantees that the branch of government that should be addressing these issues will remain on the sidelines. Put simply, the public interest favors making clear sooner rather than later that EPA's latest effort to tackle climate change by mandating generation-shifting indirectly is no more lawful than its earlier efforts to achieve the same end by more transparent and direct means.

CONCLUSION

This Court should stay the Rule pending judicial review.

Respectfully submitted,

s/Paul D. Clement

ALLISON D. WOOD
MAKRAM B. JABER
AARON M. FLYNN
MCGUIREWOODS LLP
888 16th Street NW, Suite 500
Black Lives Matter Plaza
Washington, DC 20006
(202) 857-2420

PAUL D. CLEMENT
Counsel of Record
C. HARKER RHODES, IV
CLEMENT & MURPHY, PLLC
706 Duke Street
Alexandria, VA 22314
(202) 742-8900
paul.clement@clementmurphy.com

Counsel for Applicant Electric Generators for a Sensible Transition
July 26, 2024