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## IN THE SUPREME COURT OF THE UNITED STATES

STATE OF WEST VIRGINIA, ET AL. (No. 24A95);

NATIONAL RURAL ELECTRIC COOPERATIVE (No. 24A96);

NATIONAL MINING ASS'N, ET AL. (No. 24A97);

NACCO NATURAL RESOURCES CORP. (No. 24A98);

MIDWEST OZONE GROUP (No. 24A105);

ELECTRIC GENERATORS FOR A SENSIBLE TRANSITION (No. 24A106);

EDISON ELECTRIC INSTITUTE, ET AL. (No. 24A116);

STATE OF OHIO ET AL. (No. 24A117),

APPLICANTS

V.

ENVIRONMENTAL PROTECTION AGENCY, ET AL.

RESPONSE OF FEDERAL RESPONDENTS
IN OPPOSITION TO APPLICATIONS FOR STAY

ELIZABETH B. PRELOGAR

Solicitor General

Counsel of Record

Department of Justice

Washington, D.C. 20530-0001

SupremeCtBriefs@usdoj.gov
(202) 514-2217

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IN OFFOSITION TO AFFLICATIONS

Section 111 of the Clean Air Act (Act), 42 U.S.C. 7411, directs the Environmental Protection Agency (EPA or Agency) to limit emissions of air pollutants by "stationary sources," including power plants. To do so, EPA first identifies the "best system of emission reduction" that "the Administrator determines has been adequately demonstrated." 42 U.S.C. 7411(a)(1). EPA then quantifies the degree of emission reduction that is "achievable" through application of that system. Ibid.

In the Rule at issue here, EPA set limits for some coal and gas power plants' emissions of carbon dioxide  $(CO_2)$ , a greenhouse

gas that drives climate change. EPA determined that the "best system of emission reduction" for many such plants is 90% carbon capture. That technology involves using chemical solvents to remove 90% of the carbon dioxide from the plant's exhaust stream, transporting the captured carbon dioxide via pipeline, and permanently storing the captured carbon dioxide underground.

Applicants challenged the Rule in the D.C. Circuit. That court unanimously denied a stay, finding that applicants are unlikely to succeed on their challenges to the Rule and that they have not shown that they will suffer irreparable harm during the pendency of the litigation. In the same order, the court directed that the case be expedited, and it has since established a schedule under which briefing will conclude by November 1, 2024.

This Court should deny the stay applications. Although applicants invoke the major-questions doctrine and claim that EPA exceeded its statutory authority, they do not meaningfully dispute EPA's interpretation of the Act. They instead criticize EPA's application of the Act to the specific technology at issue here, objecting to EPA's technical and scientific judgments regarding the dependability, feasibility, and cost of carbon capture. And in raising those objections, they largely ignore the hundreds of pages of analysis that EPA provided in the Rule itself and elsewhere in the administrative record. This case, in short, does not involve the type of fundamental statutory-interpretation issue that might warrant this Court's intervention, whether on the merits

docket or the emergency docket. The case instead primarily involves routine, record-intensive arbitrary-and-capricious claims -- and meritless ones at that.

As the court of appeals found, applicants are unlikely to succeed on their claims that EPA exceeded its statutory authority. The term "best system of emission reduction" includes, at its core, technologies or methods that enable individual power plants to operate more cleanly. See <a href="West Virginia">West Virginia</a> v. <a href="EPA">EPA</a>, 597 U.S. 697, 725-727 (2022). The Rule falls within that core: Carbon capture is a technology that enables individual plants to reduce their emissions.

Applicants are also unlikely to succeed on their claims that 90% carbon capture is not "adequately demonstrated" and that EPA's standards are not "achievable." The Act assigns the task of judging adequate demonstration and achievability to EPA: The best system must be one that "the Administrator determines has been adequately demonstrated." 42 U.S.C. 7411(a)(1) (emphasis added). And determining whether a particular degree of emission reduction is "achievable" requires the type of practical scientific judgment for which the Agency has primary expertise. A court reviewing EPA's determinations regarding adequate demonstration and achievability should apply the deferential arbitrary-and-capricious standard, asking whether EPA's judgments on those points were reasonable and reasonably explained.

EPA acted reasonably in concluding, based on hundreds of pages

of scientific and technical analysis, that the carbon-capture system has been adequately demonstrated and that standards of performance based on that system are achievable. Applicants portray carbon capture as an untested, futuristic technology. As the Agency explained, however, "CO2 capture was patented nearly 100 years ago in the 1930s," "has been used in a variety of industrial applications," and has been shown to work at both coal and gas plants. 89 Fed. Reg. 39,798, 39,813 (May 9, 2024). "Thousands of miles of CO2 pipelines have been constructed and securely operated in the U.S. for decades." Ibid. "And tens of millions of tons of CO2 have been permanently stored deep underground." Ibid. Nearly a decade ago, EPA first found carbon capture to be adequately demonstrated for reducing greenhouse-gas emissions from certain power plants, and developments since then have only reinforced that finding.

The primary disputes in this case do not concern carbon capture in general, but instead focus on (a) the specific rate of capture that the Rule requires (90% of the carbon dioxide in a plant's exhaust stream), and (b) the feasibility of developing adequate facilities for capturing, transporting, and storing the captured carbon dioxide before January 1, 2032 -- the deadline that EPA established. But whether the capture rate should be 90% or some other percentage, and how long it takes to install carbon-capture facilities, are the types of technical and scientific issues that Congress entrusted to the expert agency. A court should

not second-guess EPA's record-based judgment on those points -- and certainly not in an emergency posture.

Other federal statutes confirm the Rule's lawfulness. In 2005, Congress enacted legislation to fund research into the use of carbon capture at coal plants. And in 2022, aware that EPA was considering carbon capture as a candidate for the best system of emission reduction, Congress substantially increased a tax credit for power plants that capture and store carbon dioxide. Congress thus has affirmatively facilitated the possible designation of carbon capture as the best system, while still leaving the technical task of evaluating that technology to EPA.

Applicants have also failed to show irreparable harm. Plants do not need to comply with the relevant limits until 2030 or 2032; the state applicants' need to devise their implementing plans while judicial review of the Rule proceeds is an ordinary feature of the Act's cooperative-federalism framework; and the D.C. Circuit has expedited the merits briefing in this case in order to protect applicants' interests. Applicants have not shown that they will suffer irreparable harm during the pendency of the expedited review proceedings in the court of appeals. By contrast, tolling the Rule's deadlines and postponing eventual compliance would cause irreparable harm to the government and the public by permitting irretrievable emissions of carbon dioxide in the meantime. This Court should deny the stay applications.

#### **STATEMENT**

## A. Statutory Background

Congress enacted the Act in order to protect the public from air pollution. Section 111 of the Act directs EPA to identify categories of stationary sources that cause or contribute significantly to air pollution that EPA determines "may reasonably be anticipated to endanger public health or welfare." See 42 U.S.C. 7411(b)(1)(A). EPA must then establish "standards of performance" for sources in that category. 42 U.S.C. 7411(b)(1)(B).

The Act defines the term "standard of performance" as

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

42 U.S.C. 7411(a)(1). A standard of performance thus is a limit on "emissions of air pollutants." <u>Ibid.</u> To set the limit, EPA must first identify the "best system of emission reduction" that "has been adequately demonstrated." <u>Ibid.</u> EPA must then quantify "the degree of emission limitation achievable through the application" of that system. Ibid.

Section 111 establishes somewhat different standard-setting processes for new sources (<u>i.e.</u>, those built or modified after a proposed standard has been issued) and existing sources. See 42 U.S.C. 7411(a)(2) and (6), (b) and (d). For <u>new</u> sources, EPA simply sets the limit on permissible emissions by identifying the

best system and quantifying the degree of emission limitation achievable through that system. See 42 U.S.C. 7411(b)(1)(B). A new source generally may achieve that limit in any way it chooses; it need not actually use the particular system that EPA has identified as the best. See 42 U.S.C. 7411(b)(5).

The Act's provisions concerning existing sources, in contrast, establish a cooperative-federalism framework. U.S.C. 7411(d). EPA may regulate existing sources' emissions of a particular air pollutant under Section 111 only if those emissions are not already regulated under certain other parts of the Act. See 42 U.S.C. 7411(d)(1). When regulating existing sources under Section 111, EPA first sets the amount of pollution reduction to be achieved, again by identifying the best system and quantifying the degree of emission limitation achievable through the application of that system. See 42 U.S.C. 7411(a)(1). Each State then submits a plan containing the restrictions that it will impose and enforce to achieve that amount of reduction. U.S.C. 7411(d)(1). In applying a standard to a "particular source," a State may "take into consideration, among other factors, the remaining useful life of the existing source." Ibid. reviews state plans to determine whether they are "satisfactory." 42 U.S.C. 7411(d)(2)(A). If a State fails to submit a satisfactory plan, the Agency must directly regulate existing sources in the State's stead. 42 U.S.C. 7411(d)(2).

The Act vests the D.C. Circuit with exclusive jurisdiction to

review EPA rules that implement Section 111. See 42 U.S.C. 7607(b)(1). That court "may reverse any such action found to be \* \* \* arbitrary, capricious \* \* \* or otherwise not in accordance with law," or "in excess of statutory jurisdiction, authority, or limitations." 42 U.S.C. 7607(d)(9)(A) and (C).

# B. Regulatory Background

The air pollutants covered by the Act include greenhouse gases such as carbon dioxide. See Massachusetts v. EPA, 549 U.S. 497, 528-529 (2007). Greenhouse gases released into the atmosphere act "like the ceiling of a greenhouse, trapping solar energy and retarding the escape of reflected heat." Id. at 505. The release of such gases drives climate change. See ibid.

EPA has long listed coal and gas plants as categories of stationary sources regulated under Section 111. See 36 Fed. Reg. 5931 (Mar. 31, 1971); 42 Fed. Reg. 53,657 (Oct. 3, 1977). Such plants are by far the largest stationary-source emitters of greenhouse gases. They account for a quarter of all domestic emissions, and emissions from the power sector exceed emissions from all other industrial sectors combined. See 89 Fed. Reg. at 39,812.

In 2015, EPA issued two rules addressing coal and gas plants' carbon-dioxide emissions: the New Source Rule (for new plants) and the Clean Power Plan (for existing plants). See 80 Fed. Reg.

<sup>&</sup>lt;sup>1</sup> This response uses the terms "coal plants" and "gas plants" as shorthand for the applicable regulatory terms, "coal-fired steam generating units" and "fossil fuel-fired stationary combustion turbine electricity generating units."

64,510 (Oct. 23, 2015); 80 Fed. Reg. 64,662 (Oct. 23, 2015). The New Source Rule is currently in effect and is not directly at issue here. The Clean Power Plan was stayed, see <u>West Virginia</u> v. <u>EPA</u>, 577 U.S. 1126 (2016), and the Agency subsequently repealed the Plan before it could take effect, see 84 Fed. Reg. 32,520 (July 8, 2019).

During litigation over the repeal, this Court held that the Clean Power Plan reflected an unlawful regulatory approach. See West Virginia v. EPA, 597 U.S. 697 (2022). The Court noted that EPA had traditionally set Section 111 standards based on measures that would enable individual sources to operate more cleanly. See id. at 706. The Court observed that EPA had departed from that approach in the Plan by instead concluding that the "best system of emission reduction" for coal plants was to shift generation so that coal plants would make up a smaller share of the power grid. Ibid. Rejecting that approach, the Court concluded that Section 111 did not authorize EPA to regulate based on a judgment "that it would be 'best' if coal made up a much smaller share of national electricity generation." Id. at 728.

# C. The Rule

In May 2024, EPA adopted the Rule that is at issue in this litigation. See 89 Fed. Reg. at 39,798. The Rule reflects EPA's return to its traditional regulatory approach of identifying technologies that will enable individual sources to operate more cleanly. The Rule focuses on two such technologies: carbon cap-

ture and gas co-firing.

Carbon capture involves using chemical solvents to remove carbon dioxide from a plant's exhaust stream. See 89 Fed. Reg. at 39,846. The captured carbon dioxide is then compressed, transported via pipeline, and permanently stored underground. See <a href="mailto:ibid.">ibid.</a>
Carbon capture has been used since the 1930s, and its cost has declined in recent years because of technological advances and other developments. See <a href="mailto:id.">id.</a> at 39,800.

Gas co-firing involves firing a combination of coal and natural gas instead of coal alone. See 89 Fed. Reg. at 39,815. Many coal plants already co-fire natural gas. See <u>ibid.</u> Enabling gas co-firing generally involves making relatively minor modifications to a plant's boilers. See ibid.

In fashioning the Rule, EPA relied on carbon capture and gas co-firing to set the amount of emission reduction to be achieved by existing coal plants. EPA exempted coal plants that plan to shut down by the end of 2031, explaining that installation of new emissions-control technology would not be cost-effective for those plants. See 89 Fed. Reg. at 39,841. For coal plants that intend to operate in the medium term (through 2038), EPA found that the best system of emission reduction is 40% gas co-firing (i.e., substituting natural gas for coal at a level of 40% of the plant's annual heat input). See ibid. And for coal plants that plan to operate in the long term (beyond 2038), the Agency found that the best system is 90% carbon capture (i.e., capturing 90% of the

carbon dioxide emitted by the plant). See ibid.

EPA separately revised the standards for new gas plants that the Agency had established in 2015. See 89 Fed. Reg. at 39,917. Based on their rates of use, EPA grouped such plants into three subcategories: base-load, intermediate-load, and low-load plants. See <a href="mailto:ibid.">ibid.</a> For base-load gas plants (<a href="mailto:i.e.">i.e.</a>, those that generate at least 40% of their maximum capacity), EPA again found that the best system is 90% carbon capture. See <a href="mailto:id.">id.</a> at 39,923. The best systems for the other types of gas plants are not at issue here.

State plans to regulate existing coal plants are due by May 2026. See 89 Fed. Reg. at 39,997. The limits for existing mediumterm coal plants (based on gas co-firing) take effect in January 2030. See <u>id.</u> at 39,841. The limits for existing long-term coal plants and new base-load gas plants (based on carbon capture) take effect in January 2032. See id. at 39,841, 39,923, 39,997.

## D. Proceedings Below

Applicants -- States, energy companies, and other groups -- filed petitions for review in the D.C. Circuit. See App., <a href="infra">infra</a>, la. They argued that the Rule exceeded the Agency's statutory authority and was arbitrary and capricious. See <a href="ibid.">ibid.</a>

The court of appeals unanimously denied applicants' motions to stay the Rule. See App., <u>infra</u>, 1a-3a. The court first determined that applicants had not shown that they were likely to succeed on the merits. See <u>id</u> at 2a. It explained that applicants' statutory claims were likely to fail because EPA had "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." <u>Ibid.</u> (quoting <u>West Virginia</u>, 597 U.S. at 725). And it stated that applicants' arbitrary-and-capricious claims were likely to fail "given the record in this case." <u>Ibid.</u>

The court of appeals also explained that, because "actual compliance deadlines do not commence until 2030 or 2032," "years after this case will be resolved," applicants did not face irreparable harm. See App., infra, 2a. The court recognized that the "deadline for States to submit state implementation plans is May 2026." Ibid. It observed, however, that "the only consequence of failing to submit a state plan is the promulgation of a federal plan -- which the States can replace with their own plans later." Ibid. The court also stated that, to the extent applicants "claim[ed] harm due to the need for long-term planning, 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."

"[A]s an alternative means of protecting all parties' interests" and in accordance with EPA's suggestion that the case be expedited, the court of appeals directed the parties to propose expedited briefing schedules to "ensure this case can be argued and considered as early as possible in the court's 2024 term." App., infra, 2a. In line with the parties' proposals, the court

has since issued a schedule under which briefing will be completed by November 1, 2024. See id. at 4a-6a.

#### ARGUMENT

A stay is "'not a matter of right'" but a matter of "'judicial discretion,'" and an applicant "bears the burden of showing that the circumstances justify an exercise of that discretion." Nken v. Holder, 556 U.S. 418, 433-434 (2009) (citations omitted). The applicant must show that (1) it would likely succeed on the merits, (2) it will suffer irreparable harm without a stay, and (3) the equities and the public interest support a stay. See Ohio v. EPA, 144 S. Ct. 2040, 2052 (2024). An applicant seeking emergency relief from this Court must also show a reasonable probability that the Court would grant certiorari. See Hollingsworth v. Perry, 558 U.S. 183, 190 (2010) (per curiam). Applicants have not made the necessary showings here.

## I. APPLICANTS ARE UNLIKELY TO SUCCEED ON THE MERITS

As the D.C. Circuit unanimously held, applicants are unlikely to show that the Agency exceeded its authority or exercised that authority unreasonably. See App., <u>infra</u>, 2a.

A. Consistent With EPA's Traditional Approach To Stationary-Source Regulation Under Section 111, The Rule Is Based On Technologies That Will Enable Individual Sources To Operate More Cleanly

In <u>West Virginia</u> v. <u>EPA</u>, 597 U.S. 697 (2022), this Court held that EPA had exceeded its authority under Section 111 in promulgating the Clean Power Plan. The Court explained that the Plan's

emphasis on generation-shifting departed from the Agency's traditional mode of regulation under Section 111, which had focused on improving the performance of individual emissions sources. Contrary to applicants' contentions (e.g., EGST Appl. 11-14), the Rule does not utilize the generation-shifting approach that the Court disapproved in West Virginia. Rather, in fashioning the Rule, EPA returned to the traditional source-based approach that the West Virginia Court had used as its benchmark.

# 1. The Rule comports with West Virginia

The <u>West Virginia</u> Court read the term "system of emission reduction" to include, at its core, "measures that would reduce pollution by causing plants to operate more cleanly." 597 U.S. at 706. That reading, the Court concluded, reflects "the seemingly universal view, as stated by EPA in its inaugural Section 111(d) rulemaking, that 'Congress intended a technology-based approach.'" <u>Id.</u> at 726 (citation omitted). It also accords with EPA's longstanding practice of "focus[ing] on improving the emissions performance of individual sources." <u>Id.</u> at 727. The <u>West Virginia</u> Court had "no occasion to decide whether the statutory phrase 'system of emission reduction' refers <u>exclusively</u> to measures that improve the pollution performance of individual sources." <u>Id.</u> at 734. It made clear, however, that such measures form the statute's heartland. Ibid.

The Clean Power Plan departed significantly from that individual-source-focused framework. Instead of focusing on "equip-

ment and practices at the level of an individual facility," the Plan emphasized "the energy generation mix at the grid level."

West Virginia, 597 U.S. at 715 (citation omitted). The Court concluded that EPA had decided that "it would be 'best' if coal made up a much smaller share of national electricity generation,"

id. at 728, and that the best "system" for coal plants was to "reduce their own production of electricity, or subsidize increased generation by natural gas, wind, or solar sources," id. at 706. The Court rejected that approach, holding that Section 111 does not empower the Agency to "forc[e] a shift throughout the power grid from one type of energy source to another." Id. at 727-728.

In contrast to the Clean Power Plan, the Rule falls within Section 111's heartland. As the court of appeals in this case noted in denying applicants' stay requests, the Rule sets emission limits "based on the application of measures" -- namely, carbon capture and gas co-firing -- "that would reduce pollution by causing the regulated source to operate more cleanly." App., infra, 2a (quoting West Virginia, 597 U.S. at 725). The Rule focuses on "improving the emissions performance of individual sources," not on changing "the energy generation mix at the grid level.'" West Virginia, 715, 727 (citation omitted). Section 111 permits such "technology-based" standards. Id. at 726.

# 2. Applicants' contrary arguments lack merit

a. Applicants concede that the Rule, on its face, regulates

based on technologies that would "'improve the emissions performance of individual sources' rather than transform the grid as a whole." NACCO Appl. 2 (brackets and citation omitted). But they argue that the Rule's invocation of those technologies is a subterfuge. On their telling (e.g., EGST Appl. 13-14), EPA set "unattainable" standards in order to "force coal plants to shutter," "dressing up rules with generation-shifting purposes and effects in more modest clothing."

Applicants' attacks on the Rule's ostensible "purposes" (EGST Appl. 13) contravene foundational principles of administrative law. Courts generally must accept "an agency's stated reasons for acting." <a href="Dep't of Commerce">Dep't of Commerce</a> v. <a href="New York">New York</a>, 588 U.S. 752, 781 (2019). That reluctance to infer agency dissembling or untoward ulterior motives is simply one aspect of the more general principle that courts owe a "presumption of regularity" to actions taken by a coordinate Branch of the federal government. <a href="Citizens to Preserve">Citizens to Preserve</a> Overton Park, Inc. v. Volpe, 401 U.S. 402, 415 (1971).

In promulgating the Rule at issue here, EPA stated that the Rule "is not directed at improvement of the overall power system." 89 Fed. Reg. at 39,899. Instead, "each affected source is able to apply [the best system] to its own facility to reduce its own emissions." Ibid. Yet the various applications are replete with casual assertions that the Agency acted in bad faith and that its stated rationale is a sham. See, e.g., W. Va. Appl. 9 (asserting that the Rule's requirements are "really a backdoor avenue to

forcing coal plants out of existence"); NACCO Appl. 31 (asserting that EPA sought "to obscure the Rule's true objective -- use the exorbitant costs of carbon-capture equipment to force the closure of all affected coal-fired power plants") (citation and internal quotation marks omitted); NRECA Appl. 11 ("[T]his Rule is a thinly-veiled attempt at forcing the electricity-generation industry to produce power from EPA's preferred sources."); EGST Appl. 2 ("EPA is at it again, setting impossible standards \* \* \* 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."). Applicants are entitled to argue that EPA acted unreasonably in concluding that the Rule's requirements are achievable, but the Court should disregard their assertions that EPA set out to compel generation shifting, which has no basis in the Rule or the record.

Applicants' arguments about the Rule's "effects" (EGST Appl. 13) are also misguided. All Section 111 standards of performance governing power plants "impose some costs on regulated plants," and the incremental effect of any such standard may prompt some plants to close or to reduce their operations. West Virginia, 597 U.S. at 731 n.4. All such standards therefore can be expected to have a practical effect on "'the mix of energy sources'" in "the electricity market." Ibid. (citation omitted).

Nothing in <u>West Virginia</u> suggests that the prospect of such effects is a sufficient basis for finding particular standards of

performance unlawful. To the contrary, the <u>West Virginia</u> Court emphasized the "obvious difference between (1) issuing a rule that may end up causing an incidental loss of coal's market share, and (2) simply announcing what the market share of coal, natural gas, wind, and solar must be, and then requiring plants to reduce operations or subsidize their competitors to get there." 597 U.S. at 731 n.4. In promulgating the Rule at issue here, the Agency heeded this Court's directive in <u>West Virginia</u> and returned to its traditional regulatory approach, identifying technologies that will improve the performance of individual sources. The Rule's potential to "caus[e] an incidental loss of coal's market share," ibid., does not cast doubt on its validity.

Applicants describe the Rule as "using unattainable standards to shut down disfavored plants." EGST Appl. 12. The Act's requirement that standards of performance be "achievable," 42 U.S.C. 7411(a)(1), precludes EPA from setting unattainable standards, for coal plants or for any other emission sources. But the prospect that the Rule may cause some incremental reduction in the number of coal plants that choose to remain in operation does not mean that the Rule's standards are "unattainable." And the responsibility for determining whether a standard is achievable belongs primarily to EPA. See pp. 24-25, infra. Judicial review of EPA's determination that the Rule's standards are "achievable" should focus on whether the Agency's stated scientific and technical judgments are arbitrary and capricious, not on speculation that

EPA sought to achieve "via indirection \* \* \* the same [generation-shifting] ends this Court rejected in <u>West Virginia</u>." EGST Appl. 12; see pp. 24-25, infra.

Applicants also contend that 40% natural gas co-firing, which the Agency identified as the best system of emission reduction for medium-term coal plants, "is generation-shifting plain and simple, and cannot be reconciled with West Virginia." EGST Appl. 21. But the pertinent question under West Virginia is whether the system operates "at the level of an individual facility" rather than "at the grid level" -- not whether EPA's chosen method of improving an individual source's performance relies on some switching of fuels. 597 U.S. at 715 (citation omitted). Indeed, the West Virginia Court quoted with apparent approval EPA's description of "fuelswitching" as an example of the "more traditional air pollution control measures" that the Agency had historically employed. Id. at 727 (citation omitted).

To be sure, EPA could not carry fuel-switching to the point of "direct[ing] existing sources to effectively cease to exist," West Virginia, 597 U.S. at 728 n.3, by requiring that an existing power plant effectively become a different kind of plant. But 40% gas co-firing does not do that. It requires only "minor changes" to a coal plant's boilers. 89 Fed. Reg. at 39,902. Many coal plants "are already capable of co-firing some amount of gas without any changes at all, and several have fired at 40 percent and above in recent years." Ibid.

Finally, applicants infer that, by exempting coal plants that do not plan to operate past 2031 from the Rule's strictures, EPA manifested a forbidden intent to induce early coal-plant closures. See EGST Appl. 14 (stating that the Rule "provides a 'retirement out' that underscores what is really going on"). But Section 111 directs the Agency to consider "cost" in identifying the "best system of emission reduction." 42 U.S.C. 7411(a)(1). EPA reasonably found that, because capital costs must be amortized over time, the costs of installing carbon-capture or gas-co-firing technologies are reasonable for long- and medium-term plants, but not for plants that will close by the end of 2031. See 89 Fed. Reg. at 39,841. Indeed, industry members submitted comments urging EPA to provide that option. See id. at 39,891 n.677. Applicants contend that the availability of that option may induce some coal plants, for their own economic reasons, to retire earlier than they otherwise would have. But no plant is required to do so and the possibility of some such incremental effect provides no basis for viewing the Rule as a covert effort to coerce retirements or to shift generation among different sources.

b. Some applicants invoke (e.g., W. Va. Appl. 21-26) the major-questions doctrine. That doctrine is inapposite here. The major-questions doctrine instructs courts, in certain "extraordinary" cases, to "hesitate" before accepting an agency's assertion of an "extravagant statutory power" based on a "novel" reading of "modest words" or "vague terms." West Virginia, 597 U.S. at 716,

723-724 (citations and quotation marks omitted); see Alabama Ass'n of Realtors v. Dep't of Health & Human Servs., 594 U.S. 758, 765 (2021) (per curiam) (applying the doctrine to an "unprecedented" "claim of expansive authority").

This case does not involve a "novel" claim of "extravagant" power. "Since passage of the Act 50 years ago, EPA has exercised [its] authority [under Section 111] by setting performance standards based on measures that would reduce pollution by causing plants to operate more cleanly." West Virginia, 597 U.S. at 706. The Agency followed that path here in identifying carbon capture and gas co-firing as the best systems of emission reduction.

Applicants emphasize (e.g., EGST Appl. 12) the costs of complying with the Rule, but cost alone does not trigger major-questions analysis. This Court often resolves multibillion-dollar cases without invoking the major-questions doctrine. See, e.g., Becerra v. Empire Health Found., 597 U.S. 424 (2022). Nor are the Rule's projected costs unusually large within the specific context of power-plant regulation. "EPA has required controls with comparable costs in prior rules for the electric power industry and the industry has successfully complied with those rules." 89 Fed. Reg. at 39,882. In directing EPA to establish emission-reduction requirements for new and existing sources of "air pollution which may reasonably be anticipated to endanger public health or welfare," 42 U.S.C. 7411(b)(1)(A), Congress surely contemplated that particular exercises of that authority might impose substantial

aggregate costs on regulated entities.

The Act protects regulated entities against unreasonable costs by (a) requiring EPA to "tak[e] into account the cost of achieving emission reduction" when the Agency identifies the "best system of emission reduction, 42 U.S.C. 7411(a)(1); and (b) authorizing judicial review of EPA's consideration of cost (along with the Agency's other technical and scientific judgments) under Act's arbitrary-and-capricious standard, 42 the U.S.C. 7607(b)(9)(A). Applicants argue (NRECA Appl. 24) that "EPA's cost estimates are off" and that compliance with the Rule's requirements would be far more expensive than EPA projected. That challenge is properly before the D.C. Circuit, but it does not suggest any uncertainty as to the scope of EPA's statutory authority, and it therefore does not trigger the major-questions doctrine.

c. One group of applicants argues (Ohio Appl. 13-14) that EPA may not regulate power plants' carbon-dioxide emissions under Section 111(d) because the Agency regulates those plants' mercury emissions under Section 112's separate hazardous-air-pollutants (HAP) program. Some parties raised that issue in West Virginia, but the Court denied certiorari on that question. See West Virginia v. EPA, 142 S. Ct. 420, 420 (2021) (limiting certiorari grant). In any event, that claim lacks merit.

Section 111(d)(1) establishes a framework under which each State "establishes standards of performance for any existing source for any air pollutant" that satisfies specified criteria.

42 U.S.C. 7411(d)(1)(A). Each of the "standards of performance" to which Section 111(d)(1) refers governs emissions of a specific pollutant from a specific source category. Consistent with that statutory language, EPA applies Section 111 "on a pollutant-bypollutant basis." West Virginia, 597 U.S. at 709. Since "[c]arbon dioxide \* \* \* has not been listed as a hazardous pollutant," id. at 711, power plants' emissions of carbon dioxide are not regulated under the HAP program. EPA therefore remains free to regulate power plants' carbon-dioxide emissions under Section 111(d). Am. Lung Ass'n v. EPA, 985 F.3d 914, 977-988 (D.C. Cir. 2021) (per curiam), rev'd on other grounds sub nom. West Virginia v. EPA, 597 U.S. 697 (2022). On applicants' contrary reading, "the Clean Air Act would allow the EPA to regulate sources under both Section [111(d)] and Section 112 if, and only if, EPA adopted its Section [111(d)] regulation before the Section [112] regulation. No rational explanation is offered as to why Congress would want the mere sequencing of regulations to render them either lawful or invalid." Id. at 983.

# B. EPA Identified "Adequately Demonstrated" Systems Of Emission Reduction And Set "Achievable" Standards Of Performance

Section 111 directs EPA to identify the best system of emission reduction that "the Administrator determines has been adequately demonstrated," and to quantify the degree of emission reduction that is "achievable" through that "system." 42 U.S.C. 7411(a)(1). Contrary to applicants' arguments, (e.g., Edison

Appl. 7-20), EPA complied with those requirements.

# 1. Section 111 delegates to EPA the task of judging adequate demonstration and achievability

A court must independently interpret the terms "adequately demonstrated" and "achievable." See Loper Bright Enters. v. Raimondo, 144 S. Ct. 2244, 2266 (2024). A system is "adequately demonstrated" if it "has been shown to be reasonably reliable" and "reasonably efficient." Essex Chem. Corp. v. Ruckelshaus, 486 F.2d 427, 433 (D.C. Cir. 1973), cert. denied, 416 U.S. 969 (1974); see Webster's Third New International Dictionary of the English Language (Webster's) 600 (1971) (defining "demonstrate" to mean "show or prove" "the special value or merits" of an "article or product"). A standard is "achievable" if affected sources "can adopt a specific system of emission reduction to achieve the specified degree of emission limitation." 89 Fed. Reg. at 39,830; see Webster's 16 (defining "achievable" to mean "capable of being achieved" or "attainable").

Section 111 delegates to EPA the technical task of assessing whether a particular system or standard meets those requirements. Section 111 directs EPA to base standards on the best system that "the Administrator determines has been adequately demonstrated." 42 U.S.C. 7411(a)(1) (emphasis added). That text "expressly delegate[s]" to EPA the responsibility to judge adequate demonstration. Loper Bright, 144 S. Ct. at 2263 (citation omitted). Similarly, the word "achievable" "leaves [EPA] with flexibility."

<u>Ibid.</u> (citation omitted); see <u>Kisor</u> v. <u>Wilkie</u>, 588 U.S. 558, 632 (2019) (Kavanaugh, J., concurring in the judgment) ("[0]pen-ended terms" such as "feasible" and "practicable" "afford agencies broad policy discretion."). That allocation of authority is "altogether fitting," for courts lack the "scientific" and "technological" expertise needed for "coping with issues of this order." <u>Am. Elec. Power Co. v. Connecticut</u>, 564 U.S. 410, 428 (2011).

Because Section 111 "delegates authority to an agency," "courts must respect the delegation, while ensuring that the agency acts within it." Loper Bright, 144 S. Ct. at 2273. A court may not decide for itself what has been adequately demonstrated or what is achievable. Responsibility for those decisions instead is entrusted to EPA, "subject to judicial review only to ensure against action 'arbitrary, capricious, or otherwise not in accordance with law.'" Am. Elec., 564 U.S. at 429 (quoting 42 U.S.C. 7607(d)(9)(A)) (citation and ellipsis omitted).

The arbitrary-and-capricious standard requires agency action to be "reasonable and reasonably explained." FCC v. Prometheus Radio Project, 592 U.S. 414, 423 (2021). "That is not a high bar." Judulang v. Holder, 565 U.S. 42, 45 (2011). Judicial review under that standard is "deferential," especially when a court reviews a "scientific determination." Baltimore Gas & Elec. Co. v. NRDC, Inc., 462 U.S. 87, 103 (1983).

- 2. EPA reasonably exercised its statutory authority to identify technologies that will improve the emission performance of individual power plants
- a. EPA found that 90% carbon capture has been "adequately demonstrated" and that standards based on that system are "achievable." See 89 Fed. Reg. at 39,846-39,883, 39,925-39,932. Those decisions -- which rested on dozens of pages of analysis in the Rule itself and hundreds of pages of analysis elsewhere in the administrative record -- were reasonable and reasonably explained.

EPA first explained that carbon capture writ large has been adequately demonstrated. See 89 Fed. Reg. at 39,846. Carbon capture "was patented nearly 100 years ago in the 1930s" and "has been used in a variety of industrial applications." <u>Ibid.</u> "Furthermore, thousands of miles of CO<sub>2</sub> pipelines have been constructed and securely operated in the U.S. for decades." <u>Id.</u> at 39,847. "And tens of millions of tons of CO<sub>2</sub> have been permanently stored deep underground." <u>Ibid.</u> "There are currently at least 15 operating [carbon-capture] projects in the U.S., and another 121 that are under construction or in advanced stages of development." <u>Ibid.</u> That evidence shows that "the components of [carbon capture] have been successfully operated" as an integrated system. <u>Ibid.</u>

EPA further explained that carbon capture has been adequately demonstrated, not just in industrial applications generally, but for coal and gas plants in particular. See 89 Fed. Reg. at 39,846-39,847, 39,924-39,925. "For example, since 1978, [a carbon-capture] system has been used to capture approximately 270,000 metric

tons of CO<sub>2</sub> per year" from the Argus Cogeneration Plant, a coal plant in California. <u>Id.</u> at 39,846-39,847. Similarly, the Bellingham Cogeneration Facility, a gas plant in Massachusetts, operated a carbon-capture system from 1991 to 2005. See <u>id.</u> at 39,926. EPA's determinations were nothing new. EPA first found carbon capture to be adequately demonstrated — and first designated it as part of the best system for certain new fossil-fuel plants — in the New Source Rule, which was issued nearly a decade ago and which remains in effect. See 80 Fed. Reg. at 64,513.

Turning to the individual components (i.e., the capture, transport, and storage of carbon), EPA found that carbon capture has been adequately demonstrated for coal plants at the 90% rate required by the Rule. EPA identified multiple coal plants that had already achieved that level: Petra Nova, a facility in Texas, had achieved "92.4 percent"; Plant Barry, a facility in Alabama, had achieved "90 percent"; and Boundary Dam Unit 3, a facility in Saskatchewan, Canada, had achieved "approximately 89.7 percent." 89 Fed. Reg. at 39,848-39,850. EPA further observed that additional coal projects designed to exceed 90% capture are in advanced stages of development: Project Tundra in North Dakota and Project Diamond Vault in Louisiana are both designed to achieve "95 percent" capture rates, and "[o]ther projects" that "target capture rates of 90 percent or above" have completed "feasibility work." Id. at 39,850-39,851. EPA noted, finally, that technology vendors had "demonstrated capture rates" above 90%, "offer[ed] guarantees"

of 90% capture rates, and "attest[ed]" that "90 percent capture rates are achievable." Id. at 39,851-39,852.

EPA similarly found the 90% capture rate to be adequately demonstrated for new gas plants. See 89 Fed. Reg. at 39,925-39,932. The Agency explained that the evidence relating to 90% capture at coal plants applied to gas plants as well because "CO2 capture at [coal plants] is identical to CO2 capture at [gas plants]" in all its "essential[s]." Id. at 39,926. EPA also noted that the Bellingham Cogeneration Facility had achieved up to "95 percent" capture, and that Technology Centre Mongstad in Norway had achieved "capture rates of over 98 percent." Id. at 39,926-39,927.

EPA further found that the transport of captured carbon dioxide from plants to storage sites had been adequately demonstrated. See 89 Fed. Reg. at 39,855-39,862. Carbon dioxide can
be moved by "pipeline," "vessel," "highway," or "rail," but pipelines are "generally more economical" than other methods. <u>Id.</u> at
39,856, 39,889. Carbon-dioxide pipelines "have been in use across
the country for nearly 60 years." <u>Id.</u> at 39,855. "In the past 20
years, 500 million metric tons of CO<sub>2</sub> have moved through over 5,000
miles of CO<sub>2</sub> pipelines." Id. at 39,860.

EPA likewise found that carbon-dioxide storage has been adequately demonstrated. See 89 Fed. Reg. at 39,862-39,874. Storage in "subsurface geologic formations" is "well proven and broadly available throughout the U.S." <u>Id.</u> at 39,862. The Department of

Energy has "demonstrated geologic sequestration through a series of field research projects," "injecting more than 12 million tons of  $CO_2$ ." Id. at 39,864.

EPA finally found that standards based on 90% carbon capture are "achievable." 42 U.S.C. 7411(a)(1). The Agency explained that power plants can adopt carbon-capture systems by installing "capture facilities," constructing "pipelines," and developing "sequestration sites." 89 Fed. Reg. at 39,878 & n.612. EPA found that such systems could be "deployed at the necessary scale in the compliance timeframe." Id. at 39,878.

b. EPA made similar determinations with respect to 40% gas co-firing. In finding that system of emission reduction to be adequately demonstrated, EPA noted that "[m]any existing [coal plants] already use some amount of natural gas," and that "several" of those plants have co-fired "at or above 40 percent." 89 Fed. Reg. at 39,892. EPA also found emission reductions through gas co-firing to be achievable. See <a href="mailto:ibid.">ibid.</a> Enabling gas co-firing generally requires minor "modifications" to "existing boilers," as well as the construction of "natural gas supply pipelines," most of which would be "less than 15 miles in length." <a href="mailto:Id.">Id.</a> at 39,892-39,893.

# 3. Applicants' contrary arguments lack merit

a. Applicants argue that EPA unlawfully relied on "future predictions" rather than on "what 'has been' demonstrated." NACCO Appl. 17, 20 (emphasis omitted). But EPA did no such thing.

Rather, the Agency explained that Section 111's "plain text" -"'has been adequately demonstrated'" -- "indicates a requirement
that the technology <u>currently</u> be demonstrated." 89 Fed. Reg. at
39,830. EPA then found that the systems involved here satisfy
that requirement. See, <u>e.g.</u>, <u>id.</u> at 39,846 ("The technology is
adequately demonstrated, given that it has been operated at
scale."); <u>id.</u> at 39,847 ("[T]he technology is commercially proven
and available today."); <u>id.</u> at 39,852 ("[The system] is currently
a viable technology").

Applicants argue that EPA relied on "D.C. Circuit cases largely dating from the 1970s" that allowed the Agency to "'project the development' of a technology 'at a future time.'" NACCO Appl. 2 (citation omitted). But while EPA discussed cases permitting "some amount of projection," the Agency made clear that it was "not relying on this point for purposes of these rules." 89 Fed. Reg. at 39,832 n.223; see <a href="id.">id.</a> at 39,832 n.223; see <a href="id.">id.</a> at 39,832. EPA stated, for instance, that its ability to "make a projection" was "not relevant here" "because [the technology] is already in existence." <a href="Id.">Id.</a> at 39,830 n.202.

Applicants are also wrong in arguing that, because the necessary "CO2 infrastructure" "does not exist" today, NACCO Appl. 14, 17, EPA must have relied on predictions that third parties "will build out pipelines and sequestration facilities in time," W. Va. Appl. 15. In fact, "EPA did not base its analysis \* \* \* on the projected existence of a large-scale interstate pipeline

network" built by third parties. 89 Fed. Reg. at 39,855 (emphasis added); see <u>id.</u> at 39,861 ("[T]he [best system] is <u>not</u> premised on the buildout of a national, trunkline  $CO_2$  pipeline network.") (emphasis added).

Instead, pipelines and sequestration sites form part of the "best system" that regulated plants would be expected to install (or hire contractors to install). See 89 Fed. Reg. at 39,878 ("Installing [carbon capture] requires the building of capture facilities and pipelines \* \* \* and the development of sequestration sites."). There is nothing unusual about that. The "best system of emission reduction" often involves the construction of new facilities or the transportation of materials from the source to a storage site. For example, in the 1970s, EPA identified a technology known as "flue gas desulfurization" as the best system for reducing sulfur-dioxide emissions from new coal plants. See 37 Fed. Reg. 5767, 5768 (Mar. 21, 1972); 44 Fed. Reg. 33,580, 33,592 (June 11, 1979). Using that technology entails installing scrubbers that remove sulfur dioxide from the plant's exhaust stream, as well as building treatment facilities, pipelines, and reservoirs to treat, transport, and store the scrubber waste. See Office of Air Quality Planning and Standards, EPA, Electric Utility Steam Generating Units -- Flue Gas Desulfurization Capabilities as of October 1978, at 2-10 (Jan. 1979), https://nepis.epa.gov/Exe/ ZyPDF.cqi?Dockey=91010NIP.PDF. Nor is it remarkable that plants have not yet installed the necessary facilities. The need for

plants to install new technology or otherwise modify their operations is an inherent logical consequence of EPA's exercise of its statutory authority to establish new standards of performance.

Finally, applicants are wrong in arguing (EGST Appl. 23) that EPA's "compliance deadlines" show that "the relied-upon technology is not currently available." Because "pollution control systems" can be "complex," regulated parties often need time to "acquire," "install," and "begin to operate" those systems. 89 Fed. Reg. at 39,832. In setting Section 111 standards, EPA therefore "has typically allowed for some amount of time before sources must demonstrate compliance." Ibid. EPA did just that here, finding that "January 1, 2032, is an achievable compliance date" given "the technical and bureaucratic steps necessary to install and implement" the technology. Id. at 39,875. EPA found that 90% carbon capture is adequately demonstrated now; plants just need time to install it, and the Rule reasonably accounts for that.

b. Applicants also argue that it is not enough for EPA to determine that carbon capture has been shown to work in coal and gas plants. In applicants' view, a system can be adequately demonstrated only if it is "in actual, routine use" among the regulated sources. NACCO Appl. 20 (citation omitted).

The statute imposes no such requirement. The Act asks whether the best system of emission reduction "has been adequately demonstrated," 42 U.S.C. 7411(a)(1) -- not whether it has been in "routine use" by the specific category of regulated sources subject to

a new EPA rule. "Demonstrate" means "to make evident or reveal as true by reasoning processes, concrete facts and evidence, experimentation, or repeated examples." Webster's 600. Under the Act's plain terms, EPA thus may rely on a broad range of evidence in identifying the best system of emission reduction for a given category of sources. In particular, a system may be adequately demonstrated even though it is not yet routinely used by the specific existing sources to which a new EPA rule applies.

In contrast to Section 111, other Clean Air Act provisions define the level of emission reductions that EPA must require by reference to the current performance of existing sources within the same category. See 42 U.S.C. 7412(d)(3)(B) (referring to "the average emission limitation achieved by the best performing 5 sources \* \* in the category"); 42 U.S.C. 7412(d)(3)(A) (referring to "the best performing 12 percent of the existing sources"); 42 U.S.C. 7429(a)(2) (referring to "the best performing 12 percent of units in the category"). But Section 111 contains no such language. And when "Congress includes particular language in one section of a statute but omits it in another section of the

<sup>&</sup>lt;sup>2</sup> The Clean Air Act provisions cited in the text use the best-performing existing sources within a category to define the minimum level of stringency that EPA may require. See 42 U.S.C. 7412(d)(3) ("shall not be less stringent, and may be more stringent than"); 42 U.S.C. 7429(a)(2) ("shall not be less stringent than"). Thus, while those provisions use emission reductions already achieved by the best-performing sources in a category as a benchmark for category-wide regulation, they leave EPA free to require greater emission reductions if the Agency concludes that such reductions are "achievable." 42 U.S.C. 7412(d)(3), 7429(a)(2).

same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion." Russello v. United States, 464 U.S. 16, 23 (1983) (citation omitted).

Applicants' reading ignores settled practice too. The D.C. Circuit has long recognized that a standard "need not necessarily be routinely achieved within the industry prior to its adoption."

Essex, 486 F.2d at 434. And EPA has repeatedly set such standards:

- In a 1971 sulfur-dioxide rule, EPA found a "dual-absorption system" to be the best system for sulfuric-acid plants even though only one U.S. sulfuric-acid plant was then using that system. Essex, 486 F.2d at 435.
- In the same rule, EPA found sulfur scrubbers to be the best system for coal plants even though only three U.S. plants had used such scrubbers. See 37 Fed. Reg. at 5768.
- In 1979, in finding more advanced scrubbers to be the best system for coal plants, EPA relied on data from pilot projects and prototype facilities, rather than on data from currently operating plants. See 44 Fed. Reg. 33,580, 33,588-33,592 (June 11, 1979).
- In a 1998 nitrogen-oxide rule, EPA found a technology known as "selective catalytic reduction" to be the best system for coal-fired industrial boilers even though no existing industrial boilers used that technology. See 63 Fed. Reg. 49,442, 49,444 (Sept. 16, 1998).

In those cases, once EPA set a standard based on what had been adequately demonstrated though not yet in routine use, regulated entities were able to install the technologies at scale to achieve emission reductions -- just as Congress intended. See C.A. Prof. Rothschild Amicus Br. 12-21. That longstanding, consistent practice provides strong evidence of Section 111's meaning. See <a href="Loper Bright">Loper</a>
Bright, 144 S. Ct. at 2258.

Finally, applicants' reading defies common sense. Section 111 requires EPA to set standards based on the "best" system of emission reduction. 42 U.S.C. 7411(a)(1). But absent some form of legal or practical compulsion, polluters ordinarily do not spend money on pollution-control systems, let alone on the "best" systems. The whole point of Section 111 is to get them to do so. Limiting Section 111 to systems that are already in widespread use by particular types of sources would drain the provision of meaningful practical effect.

c. Applicants contest EPA's assessment of the record, which spanned hundreds of pages of scientific and technical analysis. Because this Court would be unlikely to grant certiorari to review such record-intensive claims, those challenges do not justify emergency relief. See <a href="Does 1-3">Does 1-3</a> v. <a href="Mills">Mills</a>, 142 S. Ct. 17, 18 (2021) (Barrett, J., concurring). In any event, those record-based challenges lack merit because applicants have not shown that EPA's judgments "fell outside the zone of reasonableness." <a href="Prometheus">Prometheus</a>, 592 U.S. at 428.

Applicants acknowledge (W. Va. Appl. 10) that it is feasible to "capture carbon, move it through pipelines, and put it in the ground." They also concede (Edison Appl. 12-13) that power plants, in particular, can capture and store carbon. Applicants focus, however, on the 90% rate of capture contemplated by the Rule. See, e.g., id. at 13 (emphasizing "the actual capture percentage" and objecting to the "90%-capture requirement"); EGST Appl. 14-15

("Carbon capture and storage at a 90% capture rate \* \* \* comes nowhere near being adequately demonstrated.") (emphasis added).

Applicants object (e.g., W. Va. Appl. 11-12) to EPA's reliance on two projects, Boundary Dam Unit 3 and Petra Nova, in setting a 90% rate for coal plants. But EPA reasonably explained why those objections lack merit. For instance, applicants assert (ibid.) that those projects captured carbon dioxide from only a slipstream -- i.e., only a portion of the plant's full exhaust stream. But after studying the "properties of the flue gas" -- "composition, temperature, pressure, density, flowrate, etc." -- EPA determined that capture from a slipstream is representative of capture from the full exhaust stream. 89 Fed. Reg. at 39,850.

Applicants note that Boundary Dam Unit 3 faced "technical challenges," NACCO Appl. 15 (citation omitted), but EPA explained at length how those "challenges have been sufficiently overcome" and how "the improvements already employed and identified at Boundary Dam can be readily applied during the initial construction of a new CO<sub>2</sub> capture plant today," 89 Fed. Reg. at 39,848. Applicants also observe that, during the notice-and-comment process that culminated in the Rule, Boundary Dam's owner filed a comment stating that the unit had not consistently maintained a 90% capture rate. See NACCO Appl. 15. EPA explained, however, that Boundary Dam "has consistently achieved 90 percent capture rates of the CO<sub>2</sub> in the processed slipstream" and that the source's failure to consistently achieve that level of performance for the full exhaust

stream reflected a lack of "economic incentives and regulatory requirements" rather than a lack of technological capability. 89 Fed. Reg. at 39,848. And while applicants point out that Petra Nova suffered "outages," NACCO Appl. 16 (brackets and citation omitted), EPA explained in detail that "outages are normal" for power plants; that many of Petra Nova's outages "were unrelated to the CO<sub>2</sub> capture facility"; that outages related to the capture facility had "decreased year-on-year"; and that challenges faced by the plant could be overcome and did not affect the plant's ability to reach its maximum capture rate, 89 Fed. Reg. at 39,850.

Applicants also complain (EGST Appl. 17) that EPA cited some "projects that are not yet operational" in explaining its decision to utilize a 90% capture rate. But the fact that plants are "actively pursuing the installation" of 90%-capture systems confirms that "the basic technology already exists," and it "support[s]" "the determination that [the system] is adequately demonstrated." 89 Fed. Reg. at 39,851.

In a related vein, applicants argue (EGST Appl. 17) that, because coal is a "completely different fuel" from natural gas, EPA could not reasonably rely on data from coal plants in setting a 90% capture rate for gas plants. But EPA explained that "CO2 capture at [coal] plants" is "identical to CO2 capture" at gas plants in all its "essential[s]." 89 Fed. Reg. at 39,926. "The same technology (i.e., the same solvents and processes) that is employed on [coal plants] \* \* \* can be applied to [gas plants]."

<u>Ibid.</u> If anything, the differences between coal plants and gas plants make certain aspects of carbon capture even "easier" at gas plants. <u>Ibid.</u> And in any event, EPA found that a 90% rate had been shown at gas plants as well. See id. at 39,926-39,927.

Applicants further argue (EGST Appl. 17) that EPA's evidence does not show that a 90% carbon-capture system would work "at the scale that would be required by the Rule." But EPA evaluated the evidence and found that "all components" of the system have "been demonstrated, including [on] a commercial scale." 89 Fed. Reg. at 39,846. The Agency explained that many plants "are at the same scale as Boundary Dam Unit 3"; that the system "has further been demonstrated at [even] larger scales in industrial applications"; and that other projects have proven the feasibility of "scal[ing] up." EPA, Response to Comments, EPA-HQ-OAR-2023-0072-8914, ch. 4, at 40 (Apr. 2024). "Considering this information," EPA found that the system "has been demonstrated at scale for [power plants] and is achievable regardless of the size of the unit." Ibid.

Turning from capture rate to transportation, applicants complain (NACCO Appl. 17) about the distance over which plants would need to build pipelines. But EPA carefully studied the proximity of existing coal plants to potential storage sites. See 89 Fed. Reg. at 39,855-39,856. It found that most affected plants are located less than 20 miles from a potential storage site; that the vast majority of plants would need to build "relatively short lateral pipelines"; and that plants "are capable of constructing

 $CO_2$  pipelines as needed." Id. at 39,855.

Applicants contend (NACCO Appl. 16) that EPA's standard of performance is not achievable because "the massive amount of CO2 to be captured" will "have no place to go." But EPA explained that captured carbon dioxide can be stored in "deep saline formations," which are "common in the U.S." 89 Fed. Reg. at 39,862. The Department of Energy has estimated that the available storage capacity in such formations is at least 2.4 trillion metric tons, while EPA has estimated that between 1.3 and 1.4 billion metric tons of carbon dioxide will need to be stored for covered sources to comply with the Rule. See id. at 39,863. The carbon dioxide that will need to be sequestered under the Rule would therefore take up "less than a tenth of a percent of the storage capacity." Ibid.

Applicants argue (W. Va. Appl. 14-17) that the deadline imposed by the Rule does not give plants enough time to install pipelines and other components of the carbon-capture system. But EPA reasonably explained its conclusion that the deadline is achievable. After reviewing the evidence from engineering experts and from past carbon-capture projects, the Agency developed a comprehensive timeline describing the steps that plants would need to take and when they would need to do so. See 89 Fed. Reg. at 39,874-39,875. "Based on this detailed analysis," EPA found that "January 1, 2032, is an achievable compliance date." Id. at 39,875.

Applicants complain that individual plants may find EPA's standards unachievable because of obstacles such as "distance" to storage sites, "permitting hurdles," and other "difficulties." NACCO Appl. 17 (citation omitted). But Section 111 does not require that a standard of performance be "achievable" for every single source within a covered category. Rather, Section 111 directs EPA to set a general standard for the relevant category and then allows States to account for case-specific "factors" when "applying a standard to any particular source." 42 U.S.C. 7411(d)(1). Consistent with that structure, EPA acknowledged that, to the extent a particular coal plant faces special circumstances that make compliance on EPA's timeline "unreasonable," the relevant State can account for those circumstances in its state plan by adjusting the compliance timeline for that plant. 89 Fed. Reg. at 39,860.

Applicants raise a host of additional technical objections to EPA's analysis. They argue, for example, that EPA elided distinctions between "pre-combustion" capture and "post-combustion" capture, NRECA Appl. 19; between "exhaust from gas-fired units" and "exhaust from coal-fired units," EGST Appl. 17 n.4; and between a plant that "run[s] its capture system on its own power" and a plant that "relies on a separate natural gas combustion turbine to power the capture system," NMA Appl. 12. EPA addressed such objections at length in the Rule, in its responses to comments, and in its D.C. Circuit stay opposition. There is no sound basis to second-

quess EPA's analysis of those technical issues.

EPA "was required to consider the evidence and give reasons for [its] chosen course of action. [It] did so." Dep't of Commerce, 588 U.S. at 777. The Agency's action was not arbitrary and capricious.

#### C. EPA Properly Considered The Relevant Factors

1. Section 111 requires EPA, in identifying the best system of emission reduction for sources within a particular category, to consider the "cost of achieving [the] reduction." 42 U.S.C. 7411(a)(1). Consistent with D.C. Circuit precedent, EPA understood the statutory reference to cost to mean that the Agency "may not adopt a standard the cost of which would be 'excessive' or 'unreasonable.'" 89 Fed. Reg. at 39,832 (citation omitted); see Essex, 486 F.2d at 433 ("reasonably be expected to serve the interests of pollution control without becoming exorbitantly costly"). EPA determined that carbon capture and gas co-firing met those requirements, and applicants have not shown that the Agency's analysis was arbitrary and capricious.

In 2019, EPA had found that the "high cost[s]" of carbon capture prevented that technology from qualifying as the best system of emission reduction for existing power plants. 84 Fed. Reg. at 32,548. In promulgating the Rule five years later, however, EPA explained that "the factual underpinnings" of its prior cost analysis had "changed in several ways." 89 Fed. Reg. at 39,838. The Agency observed that "[p]rocess improvements learned from ear-

lier deployments," "the availability of better solvents," and other "technological advances" had "decreased the costs" of carbon-capture systems "in recent years." Id. at 39,813-39,814. It also noted that, in 2022, Congress had substantially increased a pre-existing tax credit for power plants that capture and store carbon dioxide. See id. at 39,880-39,881 (citing 26 U.S.C. 45Q). EPA found that the expanded credit "offsets a significant portion of the capture, transport, and sequestration costs." Id. at 39,881. Given those developments, EPA found that the costs of carbon capture "are reasonable" for sources covered by the Rule. Id. at 39,880.

EPA further accounted for cost by declining to identify carbon capture as the best system of emission reduction for <u>all</u> existing coal plants or for <u>all</u> new gas plants. EPA instead classified existing coal plants into three groups -- long-term plants, mediumterm plants, and plants that will not operate past 2031 -- based on how long particular plants intend to remain in operation. See 89 Fed. Reg. at 39,841. EPA similarly classified new gas plants into three groups -- base-load, intermediate-load, and low-load plants -- based on the percentage of a plant's generating capacity that it uses. See <u>id.</u> at 39,923. EPA identified carbon capture as the best system only for the longest-running coal plants (long-term plants) and the most-used gas plants (base-load plants). See <u>id.</u> at 39,841, 39,923. EPA concluded that its subcategorization approach will ensure that the 90% carbon-capture standard will

apply only to those plants that will run enough to render the achievement of that standard cost-effective. See ibid.

EPA likewise analyzed the costs of 40% gas co-firing. See 89 Fed. Reg. at 39,894-39,895. It estimated the "capital costs" of "boiler modifications," the "[p]ipeline costs," and the difference between "coal and gas prices." <u>Id.</u> at 39,894. Based on those estimates, EPA found that "co-firing is cost-reasonable." Ibid.

Applicants disagree with EPA's analysis of the costs of carbon capture and gas co-firing, declaring that the Agency's "cost estimates are off," NRECA Appl. 24, and that "neither of those technologies can be implemented on an industry-wide basis without \* \* \* exorbitant cost," EGST Appl. 15. But applicants rely largely on their own comments, see, e.g., NRECA Appl. 24, and ignore the contrary evidence supporting EPA's estimates. Section 111, in any event, "entrusts" the "complex" task of weighing "environmental benefit" against "the possibility of economic disruption" "to EPA," subject to judicial review under the deferential arbitrary-and-capricious standard. Am. Elec., 564 U.S. at 427. An agency violates that standard by "entirely fail[ing] to consider an important aspect of the problem," Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983), but EPA has not "entirely failed" to consider cost. A court that "secondguess[ed]" EPA's "value-laden decisionmaking" and "weighing of incommensurables" would improperly "substitute[] [its] judgment for that of the agency." Dep't of Commerce, 588 U.S. at 777.

2. For similar reasons, applicants are wrong in arguing that EPA violated its duty to consider "energy requirements," 42 U.S.C. 7411(a)(1), by failing to address the Rule's effects on "grid reliability," NRECA Appl. 28. In fact, EPA devoted multiple pages of analysis to "Grid Reliability Considerations." 89 Fed. Reg. 40,011; see id. at 40,011-40,020. The Agency agreed that "reliability of the \* \* \* power system is of paramount importance." Id. at 40,013. To that end, EPA consulted extensively with the Department of Energy, the Federal Energy Regulatory Commission, state regulators, power companies, and other entities. See id. at 40,011. After evaluating facts such as "the downtime necessary to install the CO2 capture equipment," the Agency found that the system it had identified "can be implemented while maintaining a reliable electric grid." Id. at 39,886; see id. at 40,013 ("EPA has concluded these final rules will not interfere with grid operators' ability to continue delivering reliable power.").

The Rule also incorporates multiple provisions that are designed to ensure that implementation does not interfere with the reliability of the power grid. See 89 Fed. Reg. at 40,013-40,020. For example, EPA recognized that States could "address circumstances in which reliability \* \* \* is a concern" by incorporating "reliability-specific adjustments" into state plans. <u>Ibid.</u> EPA also afforded sources with "additional flexibility" during "emergency situations." <u>Id.</u> at 40,014. And EPA permitted extensions

of the Rule's deadlines where "unforeseen reasons" force plants to "temporarily remain online to support reliability." Id. at 40,017.

# D. Other Statutes Reinforce The Conclusion That The Rule Is Lawful

1. In the Energy Policy Act of 2005 (Energy Policy Act), Pub. L. No. 109-58, Title IX, 119 Stat. 856, Congress funded a "carbon capture research and development program," with the object of developing "carbon dioxide capture technologies" for "coal" plants. § 963(a), 119 Stat. 891. The Energy Policy Act specifies that "[n]o technology" "shall be considered to be \* \* \* adequately demonstrated for purposes of [Section 111]" "solely by reason of the use of the technology" by "facilities receiving assistance under this Act." 42 U.S.C. 15962(i)(1) (emphasis added). Congress thus sought to promote carbon-capture research and recognized carbon capture's potential application to coal And by its plain terms, Section 15962(i) allows EPA to rely on evidence concerning funded projects' performance, in conjunction with other evidence, in identifying the best system of emission reduction and judging adequate demonstration under Section 111.

In the Inflation Reduction Act of 2022 (Inflation Reduction Act), Pub. L. No. 117-169, 136 Stat. 1818, Congress extended and substantially increased a tax credit for power plants that capture and store carbon dioxide. See 26 U.S.C. 45Q(a). The Chairman of the House Committee on Energy and Commerce, which drafted the

statute's environmental provisions, explained:

Congress intends for all of the technologies funded under this Act (such as the tax credits for [carbon capture] and clean hydrogen production) to be available to EPA to tackle the climate crisis[.] \* \* \* [W]e urge EPA, where feasible, to base its emissions requirement on \* \* \* technologies that are available \* \* \* because of incentives contained within this Act. \* \*

Congress anticipates that EPA may consider [carbon capture] or clean hydrogen as candidates for [best systems of emission reduction] for [coal and gas plants]. Further, Congress anticipates that EPA may consider the impact of the [carbon capture] and hydrogen production tax credits in lowering the costs of those measures.

168 Cong. Rec. E879 (Aug. 26, 2022) (statement of Rep. Pallone).

The Energy Policy Act and Inflation Reduction Act confirm that carbon capture is the type of technology that EPA may lawfully designate as the "best system" of emission reduction under Section 111. Those statutes also show that, while Congress left the technical task of evaluating carbon capture to the expert agency, it facilitated the possible designation of that technology as the best system by funding research into it in 2005 and then by reducing its cost in 2022.

2. Applicants argue (EGST Appl. 16 n.3) that EPA may not rely on projects funded by the Energy Policy Act even as "evidence" that carbon capture has been adequately demonstrated. But the Energy Policy Act states that EPA may not base an adequate-demonstration finding "solely" on projects funded by the statute. 42 U.S.C. 15962(i). EPA did not rely "solely" on Energy Policy Act projects, ibid.; instead, it explained that, while Energy Policy

Act projects provided "additional support" for its findings, the other evidence -- which it catalogued in detail -- was "by itself \* \* \* sufficient." 89 Fed. Reg. at 39,855.

3. Applicants also argue (NACCO Appl. 27-32) that, when EPA considered cost, it should have considered the cost to the Treasury of providing tax credits to power plants that capture carbon in order to comply with the Rule. But applicants did not raise that issue in the court of appeals, the court did not consider it, and the argument therefore provides no basis for emergency relief in this Court. See <u>Cutter</u> v. <u>Wilkinson</u>, 544 U.S. 709, 718 n.7 (2005).

Applicants' contention lacks merit in any event. Section 111 directs EPA to consider, not "cost" in general, but "the cost of achieving such reduction." 42 U.S.C. 7411(a)(1). The term "such reduction," in turn, refers to the reduction "achiev[ed] through the application of the best system." <a href="Ibid.">Ibid.</a> The statutory text therefore focuses on the cost to the regulated source of "achie[ving]" the reduction "through the application" of the best system, not on the loss of revenue to the Treasury that the Inflation Reduction Act tax credits may entail. Ibid.

EPA has never suggested, moreover, that the total costs of carbon capture exceed the total benefits to the public. Rather, EPA found in 2019, before Congress enacted the Inflation Reduction Act, that the cost was too high for "coal-fired power plants" to bear without being "forc[ed] [to] clos[e]." 84 Fed. Reg. at 32,548. Congress's decision to increase the tax credit in 2022

helped solve that problem. Indeed, the evident purpose of the expanded tax credit is to render economically feasible, and thereby facilitate, power plants' use of a technology that benefits the public by reducing greenhouse-gas emissions and their attendant harmful climate-related effects. By increasing the amount of the credit, Congress evidently concluded that those potential public benefits outweighed the burdens on the public fisc. EPA did not act arbitrarily in declining to second-guess that legislative judgment.

## E. The Rule Respects The Act's Cooperative-Federalism Framework

Applicants argue (W. Va. Appl. 18-21) that the Rule is inconsistent with the Act's cooperative-federalism provisions. That is incorrect.

West Virginia, 597 U.S. at 710. "The Agency, not the States, decides the amount of pollution reduction that must ultimately be achieved." <u>Ibid.</u> "The States then submit plans containing the emissions restrictions that they intend to adopt and enforce in order not to exceed the permissible level of pollution established by EPA." <u>Ibid.</u> But EPA may reject a state plan that is not "satisfactory." 42 U.S.C. 7411(d)(2)(A). The Agency has separately promulgated regulations setting out the criteria that it will apply in determining whether particular state plans are "satisfactory." See 40 C.F.R. 60.20-60.29a.

Applicants object that, although the Rule allows States broad leeway to adopt standards "more stringent" than those the Rule specifies, it does not give States similar leeway to set <a href="less">less</a> stringent standards. W. Va. Appl. 19 (emphasis added). But that is precisely what the Act requires. States are always free to adopt and enforce standards that are more stringent than the federal standards. See 42 U.S.C. 7416. But Section 111(a)(1) assigns to EPA the task of determining the <a href="minimum">minimum</a> amount of emission reductions that States' standards must achieve, with variances from that amount permitted under Section 111(d)(1). See 42 U.S.C. 7411(a)(1), (d)(1).

Applicants also argue that the Rule deprives States of their power to grant "source-specific variances." W. Va. Appl. 19; see Ohio Appl. 12-13. That is incorrect. Under Section 111, "the State in applying a standard of performance to any particular source under a plan" may consider, "among other factors, the remaining useful life of the existing source." 42 U.S.C. 7411(d)(1). Consistent with that provision, the Rule recognizes that States "have the discretion" to adopt plans "accounting for \* \* \* RULOF [i.e., remaining useful life and other factors]." 89 Fed. Reg. at 39,991.

Finally, applicants criticize (W. Va. Appl. 20-21) other EPA regulations that set out the criteria EPA will apply in determining whether particular state plans are satisfactory. But applicants are already contesting the lawfulness of those rules in separate

litigation, in which no party has sought a stay. See <u>West Virginia</u> v. <u>EPA</u>, No. 24-1009 (D.C. Cir. filed Jan. 16, 2024). The Rule did not readopt those regulations and it did not amend them, although it superseded the regulations' default timeline for States to submit their plans with a more generous timeline. See 89 Fed. Reg. at 39,997. Applicants' objections to those regulations therefore are not properly presented here.

### II. APPLICANTS WILL NOT SUFFER IRREPARABLE HARM WHILE THIS CASE IS PENDING BEFORE THE D.C. CIRCUIT

The "basic requisites" of equitable relief include "substantial and immediate irreparable injury." O'Shea v. Littleton, 414 U.S. 488, 502 (1974). In assessing irreparable harm, a court must focus on the period of time needed to complete judicial review. The "historic office" of a stay, after all, is to resolve the "dilemma" of "what to do when there is insufficient time to resolve the merits and irreparable harm may result from delay." Nken, 556 U.S. at 432. If an applicant fails to show that it will suffer irreparable harm during the pendency of judicial review, this Court can deny relief on that basis alone and "avoid delving into the merits." Labrador v. Poe, 144 S. Ct. 921, 929 (2024) (Kavanaugh, J., concurring in the grant of stay).

In this case, the court of appeals found that applicants are unlikely to suffer irreparable harm while this case is being litigated. App., <u>infra</u>, 2a. "[A]ctual compliance deadlines do not commence until 2030 or 2032 -- years after this case will be

resolved." <u>Ibid.</u> The court of appeals also accepted EPA's suggestion that "this case be expedited as an alternative means of protecting all parties' interests." <u>Ibid.</u> The court sought "to ensure [that] this case can be argued and considered as early as possible in the court's 2024 term," <u>ibid.</u>, and it subsequently issued a schedule under which briefing will be completed by November 1, 2024, see id. at 4a-6a.

Applicants therefore bear the burden of showing that they will suffer irreparable harm "in advance of the expeditious determination of the merits toward which the [D.C.] Circuit is swiftly proceeding." Doe v. Gonzales, 546 U.S. 1301, 1309 (2005) (Ginsburg, J., in chambers); see Dep't of Educ. v. Louisiana, No. 24A78, slip op. 3 (Aug. 16, 2024) (per curiam) (denying a stay in part because the court of appeals had "expedited its consideration of the case"). They have not made that showing.

1. Applicants assert three primary near-term harms. None of those asserted injuries justifies a stay.

First, applicants argue (EGST Appl. 24-28) that power plants must incur significant costs now in order to achieve compliance by 2032. But EPA found otherwise in the Rule. Relying on evidence from engineering firms and past carbon-capture projects, EPA developed a representative timeline for compliance. See 89 Fed. Reg. at 39,874. EPA anticipated that plants will need to engage only in "feasibility work" before the June 2026 deadline for submitting state plans. See <u>ibid</u>. The Agency estimated that such

work would take "less than 1 year," <u>ibid.</u>, meaning that plants could wait until June 2025 to start.

The initial "feasibility work" consists of "preliminary" and "conceptual" tasks, such as "using software" to find an "optimized pipeline route." 89 Fed. Reg. at 39,874. "[T]he costs of the feasibility work in general are substantially less than other components of the project schedule." Ibid. Many plants have already completed feasibility work facilitated by the tax-credit incentives. See EPA, Greenhouse Gas Mitigation Measures for Steam Generating Units Technical Support Document 43-44 & n.100, EPA-HQ-OAR-2023-0072-9095 (Apr. 2024). And for other plants, the limited cost of performing such work is not the type of "substantial and immediate irreparable injury" that justifies a stay. O'Shea, 414 U.S. at 502.

Applicants invoke (e.g., EGST Appl. 26-27) the principle that the costs of complying with a rule that is later held invalid ordinarily constitute irreparable harm. But the limited costs that applicants will incur during the D.C. Circuit litigation will not necessarily be wasted if applicants eventually prevail. Applicants do not seriously dispute that carbon capture in general has been adequately demonstrated; they primarily object to the 90% capture rate and to EPA's compliance timeline. See pp. 35-36, 39-40, supra. Even if the D.C. Circuit accepts those arguments, applicants would be entitled, at most, to a remand so that EPA can consider setting a different capture rate or a different compliance

timetable. In that scenario, any expenditures made during the pendency of the litigation would facilitate plants' ultimate achievement of whatever requirements EPA imposed at the end of that process. And the possibility of a judicial determination that EPA's timetable is unreasonably short provides no basis for deferring commencement of the steps needed for plants to achieve compliance.

Second, applicants assert (EGST Appl. 28-32) that the Rule will force some plants to shut down. But the Rule does not direct any plant to close. And while applicants claim that some plants will choose to close rather than comply with the Rule, nothing in the Rule would force those plants to close before 2032. Fears that some plants may feel economic pressure to close eight years from now do not justify granting a stay today.

Applicants respond that "uncertainty" interferes with their "ability to make future plans." NACCO Appl. 33 (citation omitted). But a stay would not eliminate uncertainty; "the risk remains" that the court of appeals or this Court would eventually find the Rule lawful. App., <u>infra</u>, 2a. More broadly, businesses routinely make investment decisions and other plans in the face of uncertainty about the future. The need to do so does not justify a stay.

Finally, applicants argue (W. Va. Appl. 35) that, because state plans are due in 2026, States will suffer irreparable harm "by having to immediately start drafting state plans." But the

state planning process is part of the Clean Air Act's design, not a source of harm to be avoided. Given the Act's timeline for judicial review, see 42 U.S.C. 7607(b)(1), judicial review and state plan development usually occur in parallel. To treat the need to develop a state plan as a sufficient ground for finding irreparable harm would subvert the principle that a stay "is an extraordinary remedy that should not be granted in the ordinary case." Nken, 556 U.S. at 437 (Kennedy, J., concurring).

In any event, a State that does not wish to incur the expense of drafting a plan can simply refrain from doing so. EPA would then assume responsibility for developing a plan for that State. See 42 U.S.C. 7411(d)(2). And even then, "States can replace [EPA's plans] with their own plans later." App., infra, 2a.

2. In asserting irreparable harm, applicants dispute EPA's assessment of the record. Rejecting EPA's projected compliance timeline, they claim that plants "must begin design, permitting, siting, procurement, and construction immediately" in order to achieve compliance by 2030 or 2032. NRECA Appl. 35-36 (citation omitted). And rejecting EPA's cost estimates, they assert (NMA Appl. 19) that the "immediate" costs will be "exorbitant."

Section 111, however, entrusts to EPA the task of making technical judgments about "achievab[ility]" and "cost." 42 U.S.C. 7411(a)(1); see pp. 24-25, <u>supra</u>. And EPA's assessments are controlling so long as they are reasonable and reasonably explained — as they are here. See p. 25, supra. Courts must respect that

principle not only when assessing likelihood of success on the merits, but also when evaluating the equities. "Courts of equity can no more disregard statutory \* \* \* provisions than can courts of law." Hedges v. Dixon County, 150 U.S. 182, 192 (1893).

Even apart from Section 111's delegation of authority, the "expert agency is surely better equipped" than courts to answer questions such as how much time it takes, or how much it costs, to install carbon-capture technology. Am. Elec., 564 U.S. at 428. An agency's judgment on such matters "should not be subject to second-guessing" by a court that "lacks the background, competence, and expertise" to assess the issue. S. Bay United Pentecostal Church v. Newsom, 140 S. Ct. 1613, 1614 (2020) (Roberts, C.J. concurring in denial of application for injunctive relief). "That is especially true when, as here, a party seeks emergency relief." Ibid.

3. Applicants argue (W. Va. Appl. 37) that, even if they do not suffer irreparable harm during the review proceedings in the court of appeals, they will do so during eventual "review in this Court." But those arguments are premature. The only issue that the Court needs to decide now is whether to grant a stay pending review in the D.C. Circuit. The Court could deny the stay applications without prejudice to renewal after the D.C. Circuit issues its decision.

This Court will be in a substantially better position to assess the relevant stay factors after the D.C. Circuit has ruled

on the merits. Congress has channeled judicial review of nationally applicable Clean Air Act regulations to the D.C. Circuit, see 42 U.S.C. 7607(b)(1), and that court has become "familiar with interpreting the Clean Air Act," Ohio v. EPA, 98 F.4th 288, 295 (D.C. Cir. 2024). The stay applications here raise a jumble of statutory and administrative-law issues, but the D.C. Circuit's decision could make this Court's task more manageable by narrowing the set of issues that the Court would need to consider in deciding whether to grant a stay. The D.C. Circuit's opinion could also help the Court to evaluate the merits and certworthiness of applicants' claims. And by expediting the case so that it can be "argued and considered as early as possible in the court's 2024 term," the D.C. Circuit has sought to minimize any harms to applicants while the case is pending before that court. App., infra, 2a.

#### III. A STAY WOULD HARM THE GOVERNMENT AND THE PUBLIC

Applicants seek (e.g., EGST Appl. 27) relief that would entail "tolling [the Rule's] deadlines" during judicial review in the court of appeals and then in this Court. But such a postponement would cause significant harm to the government and the public — harm that outweighs any injuries that applicants may suffer during the pendency of the litigation.

Climate change is the Nation's most pressing environmental challenge. It "touches nearly every aspect of public welfare." 89 Fed. Reg. at 39,807. Its effects include "rising sea levels,"

"extreme weather events," "more frequent and more intense heat waves," "increased risk of storm surge and flooding," "changes in water supply and quality due to changes in drought and extreme rainfall events," and "the potential for significant agricultural disruptions and crop failures." Id. at 39,800, 39,807.

The primary cause of those harms is "human-induced buildup of [greenhouse gases] in the atmosphere." 89 Fed. Reg. at 39,808. Atmospheric concentrations of greenhouse gases "have risen to a level that has no precedent in human history," and those concentrations "continue to climb." <u>Ibid.</u> Fossil-fuel power plants are "by far the largest" stationary-source emitters of such gases in the Nation. <u>Id.</u> at 39,812. The top five industrial emitters of carbon dioxide, and 81 of the top 100, are fossil-fuel power plants. See <u>ibid.</u> The Rule makes a meaningful contribution toward addressing that problem: 90% capture would cut a plant's carbon-dioxide emissions by about 90%. See <u>id.</u> at 39,801. Applicants state (NACCO Appl. 16) that they would need to capture a "massive amount of CO<sub>2</sub>" to comply with the Rule, but that is another way of saying that applicants will emit a "massive amount of CO<sub>2</sub>" if the Rule's requirements do not take effect.

Tolling the Rule's deadlines and postponing eventual compliance would "delay the substantial reductions required by the Rule," allowing "significant and irretrievable additional carbon dioxide emissions" in the meantime. Gov't C.A. Opp. to Mot for Stay Ex. 1,  $\P$  119. "[E]mitted CO<sub>2</sub> is never destroyed," and "every ton of

CO<sub>2</sub> emissions adds CO<sub>2</sub> to the atmosphere effectively permanently." Gov't C.A. Opp. to Mot. for Stay Ex. 3, ¶ 17. The problem thus "is cumulative"; "every additional ton of CO<sub>2</sub> emitted adds permanent warming to the climate system." Id. ¶ 6. And "CO<sub>2</sub> emissions resulting from any delay [in implementing the Rule] will also lead to permanent warming." Id. ¶ 23.

There is consequently no basis for applicants' suggestion (EGST Appl. 34 n.6) that "postponing the applicability of this Rule by 2 to 3 years while the courts decide its legality cannot practically cause any damage." To the contrary, such delay would cause serious harm -- harm that outweighs the plants' burden of undertaking "initial conceptual design and other preliminary tasks," 89 Fed. Reg. at 39,874, or the States' burden of beginning to draft state plans, W. Va. Appl. 35.

### IV. THIS COURT SHOULD TAILOR THE SCOPE OF ANY RELIEF AND SHOULD NOT GRANT CERTIORARI BEFORE JUDGMENT

At a minimum, this Court should limit any stay relief to the specific portions of the Rule that applicants have contested and for which the Court finds that they have made the required showings. First, a separate portion of the Rule repeals an earlier EPA rule issued in 2019. See 89 Fed. Reg. at 39,836-39,840. No applicant has challenged the repeal, and EPA stated that the repeal is "independent" of and "severable from" the Rule's other provisions. Id. at 39,802. Second, the Rule sets emission limits for multiple subcategories of plants (long-term and medium-term coal

plants, as well as base-load, intermediate-load, and low-load gas plants). See pp. 10-11, <u>supra</u>. Applicants have not challenged the standards for intermediate-load and low-load gas plants, and EPA explained that the standard for each subcategory is "independent from" the standards for the other subcategories. 89 Fed. Reg. at 39,802. A court would have no sound basis for staying the portions of the Rule that no applicant challenges. See <u>Califano</u> v. <u>Yamasaki</u>, 442 U.S. 682, 702 (1979) ("[I]njunctive relief should be no more burdensome to the defendant than necessary to provide complete relief to the plaintiffs.").

One applicant asks (NACCO Appl. 34) this Court to treat its application as a petition for a writ of certiorari before judgment, grant the petition, and resolve the petitions for review of the Rule in the first instance. But there is a serious question whether this Court would have jurisdiction to proceed in that manner. Except for a few narrow categories of cases specified in Article III, the Court may exercise only appellate jurisdiction. See U.S. Const. Art. III, § 2, Cl. 2. Here, no court has yet ruled on the merits of the petitions for review of the Rule; instead, the D.C. Circuit will exercise original jurisdiction to address those petitions in the first instance, and thus far that court has decided only whether a stay of the Rule should be granted, see 42 U.S.C. 7607(b)(1).

This Court has never granted certiorari before judgment in a case in this posture. Although this Court has held oral argument

on emergency applications in cases originally filed in courts of appeals, the Court did not rule on the merits of the petitions for review in those cases, but only on the question whether the challenged agency rules should be stayed during the pendency of the judicial-review proceedings — a question that the courts of appeals had previously decided. See Ohio v. EPA, 144 S. Ct. 2040, 2052, 2058 (2024); NFIB v. OSHA, 595 U.S. 109, 113, 117, 120-121 (2022) (per curiam). NACCO's request for certiorari before judgment ignores this jurisdictional issue and lacks merit.

#### CONCLUSION

The applications for stays should be denied.

Respectfully submitted.

ELIZABETH B. PRELOGAR Solicitor General

AUGUST 2024

### APPENDIX

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FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 24-1120

September Term, 2023

EPA-89FR39798

Filed On: July 19, 2024

State of West Virginia, et al.,

**Petitioners** 

٧.

Environmental Protection Agency and Michael S. Regan, Administrator, United States Environmental Protection Agency,

Respondents

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Louisiana Public Service Commission, et al., Intervenors

\_\_\_\_\_

Consolidated with 24-1121, 24-1122, 24-1124, 24-1126, 24-1128, 24-1142, 24-1143, 24-1144, 24-1146, 24-1152, 24-1153, 24-1155, 24-1222, 24-1226, 24-1227, 24-1233

**BEFORE:** Millett, Pillard, and Rao, Circuit Judges

#### ORDER

Upon consideration of the motions for stay, the oppositions thereto, the replies, the Rule 28(j) letter, and the responses thereto; and the motions to participate as amici curiae and the lodged amicus briefs, it is

**ORDERED** that the motions of the Chamber of Commerce, the Sierra Club, the Environmental Defense Fund, and Professor Rachel Rothschild to participate as amici curiae be granted. The Clerk is directed to file the lodged amicus briefs. It is

FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 24-1120

September Term, 2023

FURTHER ORDERED that the motions for stay be denied. Petitioners have not satisfied the stringent requirements for a stay pending this court's review. See Nken v. Holder, 556 U.S. 418, 434 (2009); D.C. CIRCUIT HANDBOOK OF PRAC. AND INTERNAL PROCS. 33 (2021).

On the merits, petitioners dispute whether the Environmental Protection Agency ("EPA") acted arbitrarily or capriciously in determining that carbon capture and other emission control technologies are adequately demonstrated, or that specific degrees of emission mitigation are achievable with those technologies. But petitioners have not shown they are likely to succeed on those claims given the record in this case. Nor does this case implicate a major question under West Virginia v. EPA, 142 S. Ct. 2587 (2022), 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[,]" a type of conduct that falls well within EPA's bailiwick, id. at 2610.

On irreparable harm, actual compliance deadlines do not commence until 2030 or 2032—years after this case will be resolved. Though the first deadline for States to submit state implementation plans is May 2026, the only consequence of failing to submit a state plan is the promulgation of a federal plan—which the States can replace with their own plans later. EPA Opp., Ex. 1, Goffman Decl. ¶ 100. To the extent petitioners claim harm due to the need for long-term planning, 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.

EPA has suggested that this case be expedited as an alternative means of protecting all parties' interests. Accordingly, to ensure this case can be argued and considered as early as possible in the court's 2024 term, it is

**FURTHER ORDERED** that the parties submit, within 14 days from the date of this order, proposed formats and schedules for the briefing of these cases. The parties are strongly urged to submit a joint proposal and are reminded that the court looks with extreme disfavor on repetitious submissions and will, where appropriate, require a joint brief of aligned parties with total words not to exceed the standard allotment for a single brief. Whether the parties are aligned or have disparate interests, they must provide detailed justifications for any request to file separate briefs or to exceed in the

FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 24-1120

September Term, 2023

aggregate the standard word allotment. Requests to exceed the standard word allotment must specify the word allotment necessary for each issue.

### **Per Curiam**

FOR THE COURT:

Mark J. Langer, Clerk

BY: /s/

Selena R. Gancasz

**Deputy Clerk** 

FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 24-1120

September Term, 2023

EPA-89FR39798

Filed On: August 9, 2024

State of West Virginia, et al.,

**Petitioners** 

٧.

**Environmental Protection Agency and** Michael S. Regan, Administrator, United States Environmental Protection Agency,

Respondents

Louisiana Public Service Commission, et al., Intervenors

Consolidated with 24-1121, 24-1122, 24-1124, 24-1126, 24-1128, 24-1142, 24-1143, 24-1144, 24-1146, 24-1152, 24-1153, 24-1155, 24-1222, 24-1226, 24-1227, 24-1233

> BEFORE: Pan and Garcia, Circuit Judges

#### ORDER

Upon consideration of the proposed briefing formats and schedules, it is

**ORDERED** that the following briefing format and schedule will apply in these consolidated cases:

Petitioners' Opening Briefs (up to three briefs, not to exceed 32,000 words in the aggregate)

September 6, 2024

FOR THE DISTRICT OF COLUMBIA CIRCUIT

### No. 24-1120

### September Term, 2023

Briefs of Intervenors Supporting Petitioners (up to two briefs, not to exceed 9,100 words in the aggregate)	September 6, 2024
Respondents' Brief (not to exceed 32,000 words)	October 11, 2024
Briefs of Intervenors Supporting Respondents (up to four briefs, not to exceed 16,000 words in the aggregate)	October 18, 2024
Petitioners' Reply Briefs (up to three briefs, not to exceed 16,000 words in the aggregate)	October 25, 2024
Reply Briefs of Intervenors Supporting Petitioners (up to two briefs, not to exceed 4,550 words in the aggregate)	October 25, 2024
Deferred Appendix	October 29, 2024
Final Briefs	November 1, 2024

The parties will be informed later of the date of oral argument and the composition of the merits panel.

The parties are advised that the court "looks with extreme disfavor on the filing of duplicative briefs in consolidated cases," see D.C. Circuit Handbook of Practice and Internal Procedures 38 (2021), and the parties are encouraged to collaborate to avoid duplication of arguments in their briefs.

The court reminds the parties that

In cases involving direct review in this court of administrative actions, the brief of the appellant or petitioner must set forth the basis for the claim of standing. . . . When the appellant's or petitioner's standing is not apparent from the administrative record, the brief must include arguments and evidence establishing the claim of standing.

See D.C. Cir. Rule 28(a)(7).

### United States Court of Appeals FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 24-1120

September Term, 2023

Petitioners should raise all issues and arguments in the opening brief. The court ordinarily will not consider issues and arguments raised for the first time in the reply brief.

To enhance the clarity of their briefs, the parties are urged to limit the use of abbreviations, including acronyms. While acronyms may be used for entities and statutes with widely recognized initials, briefs should not contain acronyms that are not widely known. See D.C. Circuit Handbook of Practice and Internal Procedures 43 (2021); Notice Regarding Use of Acronyms (D.C. Cir. Jan. 26, 2010).

Parties are strongly encouraged to hand deliver the paper copies of their briefs to the Clerk's office on the date due. Filing by mail may delay the processing of the brief. Additionally, counsel are reminded that if filing by mail, they must use a class of mail that is at least as expeditious as first-class mail. See Fed. R. App. P. 25(a). All briefs and appendices must contain the date that the case is scheduled for oral argument at the top of the cover. See D.C. Cir. Rule 28(a)(8).

### **Per Curiam**

FOR THE COURT: Mark J. Langer, Clerk

BY: ls/

> Selena R. Gancasz Deputy Clerk