In the Supreme Court of the United States

NACCO NATURAL RESOURCES CORP. (NO. 24A178);
WESTMORELAND MINING HOLDINGS LLC, ET AL. (NO. 24A179);
STATE OF NORTH DAKOTA, ET AL. (NO. 24A180);
MIDWEST OZONE GROUP (NO. 24A186);
TALEN MONTANA, LLC, ET AL. (NO. 24A197);
AMERICA'S POWER, ET AL. (NO. 24A199); AND
NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION, ET AL. (NO. 24A203),
APPLICANTS

v.

ENVIRONMENTAL PROTECTION AGENCY, ET AL.

RESPONSE OF THE FEDERAL RESPONDENTS IN OPPOSITION TO THE APPLICATIONS FOR A STAY

ELIZABETH B. PRELOGAR
Solicitor General
Counsel of Record
Department of Justice
Washington, D.C. 20530-0001
SupremeCtBriefs@usdoj.gov
(202) 514-2217

TABLE OF CONTENTS

In the Supreme Court of the United States

Nos. 24A178, 24A179, 24A180, 24A186, 24A197, 24A199, 24A203

NACCO NATURAL RESOURCES CORP. (NO. 24A178);
WESTMORELAND MINING HOLDINGS LLC, ET AL. (NO. 24A179);
STATE OF NORTH DAKOTA, ET AL. (NO. 24A180);
MIDWEST OZONE GROUP (NO. 24A186);
TALEN MONTANA, LLC, ET AL. (NO. 24A197);
AMERICA'S POWER, ET AL. (NO. 24A199); AND
NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION, ET AL. (NO. 24A203),
APPLICANTS

v.

ENVIRONMENTAL PROTECTION AGENCY, ET AL.

RESPONSE OF THE FEDERAL RESPONDENTS IN OPPOSITION TO THE APPLICATIONS FOR A STAY

The Solicitor General, on behalf of the federal respondents, respectfully files this response in opposition to the applications for a stay of agency action. Applicants challenge a 2024 Environmental Protection Agency (EPA) rule that addresses emissions of hazardous air pollutants from coal-fired power plants. Only two aspects of the rule are at issue here.

First, the rule tightens emission standards for non-mercury metals (such as arsenic and chromium) released from coal-fired power plants. The applications suggest that the new, more stringent standards will cause upheaval throughout the industry. EPA determined, however, that approximately 90% of coal-fired power plants can *already* meet the new limits, and that only two units in the country (both of which are part of the Colstrip facility in Montana) would require substantial upgrades to achieve compliance. Second, the rule requires that power plants firing lignite (a type

of coal) must meet the same mercury emission limits as plants firing other types of coal. EPA has determined that those limits can be achieved using systems that are already installed at the lignite-firing plants. Affected power plants have up to three years—the default maximum under the Clean Air Act (CAA or Act), ch. 360, 69 Stat. 322, as amended, 42 U.S.C. 7401 *et seq.*—to comply with those limits, with a fourth year available where warranted.

The D.C. Circuit has expedited its consideration of the petitions for review. Applicants nevertheless ask this Court to issue an emergency nationwide stay of the entire rule, even the portions of it that they do not challenge. The D.C. Circuit denied that extraordinary relief, and this Court should do the same.

The applicable statutory subsection covers especially hazardous pollutants including neurotoxins and carcinogens. It directs EPA to "require the maximum degree of reduction in emissions" in those pollutants—up to and including "prohibition"—that the agency "determines is achievable," taking into account costs and certain other factors, 42 U.S.C. 7412(d)(2), and to periodically "revise as necessary" those emission standards based on intervening "developments in practices, processes, and control technologies," 42 U.S.C. 7412(d)(6). EPA determined that during the years since 2012, when the agency had last promulgated hazardous-air-pollutant emission standards for power plants, various developments—such as improved materials for fabric filter bags (used to control non-mercury metal emissions) and sulfur-resistant sorbents (used to control mercury emissions)—confirmed that tighter emission standards are achievable. Applicants neither dispute that achievability determination nor contend that EPA failed to consider costs or the other statutory factors.

Instead, applicants' principal contentions are that EPA failed to weigh the benefits of the rule against its costs; that no such benefits in fact exist; and that revising

the standards is therefore not "necessary" within the meaning of the statute. Those contentions lack merit. In applicants' view, the only cognizable benefit of reducing hazardous air pollution is to provide an "ample margin of safety" to protect public health, so that further reduction is superfluous if emissions already are low enough to provide that margin. But that contradicts the judgment Congress made in amending the statute in 1990. As originally enacted in 1970, the Act required EPA to regulate to ensure an "ample margin of safety"—a separate obligation that continues to apply in modified form in Section 7412(f). But Congress determined that the "ample margin of safety" requirement alone was insufficient to regulate emissions of those pollutants. In the 1990 amendments, Congress thus directed that, regardless of the margin of safety, EPA must "require the maximum degree of reduction in emissions" of those pollutants (including "prohibition") that EPA "determines is achievable" based on "developments" in technology and costs. 42 U.S.C. 7412(d)(2) and (6). In adopting the rule at issue here, EPA correctly determined that it had discretion (if not an obligation) to revise the applicable standards even if emissions from coal-fired power plants did not currently pose a public-health risk sufficient to trigger EPA's separate duty to act under Section 7412(f). Applicants' contrary position would effectively nullify Congress's considered policy choice in enacting Section 7412(d).

Applicants err in suggesting that this rule represents a redux of *Michigan* v. *EPA*, 576 U.S. 743 (2015), which held that EPA had improperly failed to consider the costs of regulating power plants' emissions of hazardous air pollutants. *Michigan* involved a separate CAA provision requiring EPA to make a threshold determination that regulating power plants is "appropriate and necessary," a capacious phrase that the Court held included consideration of costs. After *Michigan* was decided, however, the agency indisputably *did* consider costs before determining, in a 2023 final rule

that no one has challenged, that subjecting coal-fired power plants to regulation under Section 7412 is "appropriate and necessary." *Michigan* has no bearing on the propriety of EPA's separate determination in the 2024 rule here that intervening "developments" have confirmed that tightened emission standards are "achievable," rendering it "necessary" to "revise" existing standards. 42 U.S.C. 7412(d)(2) and (6).

Nor have applicants satisfied the equitable requirements for the extraordinary relief they seek. To minimize the costs that applicants will incur during the pendency of the litigation, the D.C. Circuit has expedited its consideration of applicants' petitions for review. EPA found that every coal-fired power plant except for the Colstrip facility can meet the revised standards in the 2024 rule without substantial capital investments. Plants therefore are unlikely to incur large expenditures during the pendency of expedited judicial review, especially given that compliance is not required until 2027 or 2028. And Colstrip's outlier compliance costs result from its own refusal over the last decade to invest in the same modern pollution-control technologies that its peers already use. That sort of self-inflicted harm cannot justify a stay.

Applicants also speculate that the rule might force some coal-fired power plants into retirement, thereby threatening coal mines, jobs, local economies, electricity prices, and the reliability of the power grid. But EPA relied on peer-reviewed, industry-standard methodologies to project that *no* coal-fired plant would retire as a result of the rule. In any event, applicants have not explained how those downstream economic harms would be likely to materialize during the pendency of expedited judicial review, as needed to justify a stay.

On the other side of the balance, the government and the public (whose interests merge here) would be harmed by a stay. Applicants contend that the rule only marginally reduces the risk to public health, so that a stay would not harm the public.

But Congress made a different policy determination in the Act, directing EPA to "require the maximum degree of reduction in emissions" that the agency "determines is achievable" following a periodic review for "developments." 42 U.S.C. 7412(d)(2) and (6). And with limited exceptions listed in the statute itself, Congress directed EPA to require compliance "in no event later than 3 years after the effective date." 42 U.S.C. 7412(i)(3)(A). A stay would subvert Congress's intent to ensure "expeditious[]" (*ibid.*) compliance. This Court should deny the applications and allow the rule to remain in effect during the pendency of already-expedited judicial proceedings.

STATEMENT

A. Statutory Background

1. The Act "establishes three main regulatory programs to control air pollution from stationary sources such as power plants." *West Virginia* v. *EPA*, 597 U.S. 697, 707 (2022). One program addresses "[s]tandards of performance" for "stationary sources" of air pollution, 42 U.S.C. 7411; another addresses "ambient air quality standards," 42 U.S.C. 7409; see 42 U.S.C. 7408-7410. This case involves the third program, set forth in Section 112 of the Act (42 U.S.C. 7412), which addresses emissions of hazardous air pollutants. Hazardous air pollutants include neurotoxins like mercury, human carcinogens like arsenic and chromium, and a host of other toxic chemicals. See 42 U.S.C. 7412(b)(1) (initial list of more than 180 pollutants specified by Congress); 42 U.S.C. 7412(b)(2) (directing EPA to "periodically review the list" and "add[] pollutants which present, or may present, * * * a threat of adverse human health effects").

As initially enacted in the Clean Air Amendments of 1970, Pub. L. No. 91-604, 84 Stat. 1685, Section 7412 adopted a "*risk-based*" approach, under which EPA "considered levels of [hazardous air pollutants] at which health effects are observed, fac-

tored in an 'ample margin of safety to protect the public health,' and set emission restrictions accordingly." *Sierra Club* v. *EPA*, 353 F.3d 976, 979 (D.C. Cir. 2004) (citation omitted). "This approach proved to be disappointing," in part "because of uncertainty over appropriate levels of protection." *Ibid.* EPA later observed that "Congress[came to] understand[] that fully characterizing the risks posed by [hazardous air pollutant] emissions was exceedingly difficult." 88 Fed. Reg. 13,956, 13,963 (Mar. 6, 2023); see 89 Fed. Reg. 38,508, 38,515-38,516 (May 7, 2024) (observing that "conducting an epidemiologic study" for hazardous air pollutants is "challenging," in part because exposure "is typically more uneven and more highly concentrated among a smaller number of individuals than exposure" to other pollutants). From 1970 to 1990, EPA set standards for only seven hazardous pollutants, *Sierra Club*, 353 F.3d at 979. "The ineffectiveness of the risk-based approach created a 'broad consensus that the program to regulate [hazardous air pollutants] under section 112 of the Clean Air Act should be restructured to provide EPA with authority to regulate with *technology-based* standards.'" *Ibid.* (citation and ellipsis omitted).

The Clean Air Act Amendments of 1990, Pub. L. No. 101-549, § 301, 104 Stat. 2531, added new technology-based requirements to Section 7412. Under that approach, EPA "first divide[s] sources covered by the program into categories and subcategories in accordance with statutory criteria." *Michigan* v. *EPA*, 576 U.S. 743, 748 (2015); see 42 U.S.C. 7412(c)(1). Then "EPA must promulgate technology-based emission standards for categories of sources that emit" hazardous air pollutants. *Sierra Club*, 353 F.3d at 980. Those emission standards "shall require the maximum degree of reduction in emissions"—up to and including "prohibition"—that the agency "determines is achievable," "taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy re-

quirements." 42 U.S.C. 7412(d)(2). But regardless of costs or those other criteria, the emission standards "shall not be less stringent" than "the average emission limitation achieved by the best performing 12 percent of the existing sources" (or "the best performing 5 sources * * * for categories or subcategories with fewer than 30 sources")—and "may be more stringent" than that floor. 42 U.S.C. 7412(d)(3)(A) and (B). "The idea is to set limits that, as an initial matter, require all sources in a category to at least clean up their emissions to the level that their best performing peers have shown can be achieved." *Sierra Club*, 353 F.3d at 980; see *West Virginia*, 597 U.S. at 708.

After promulgating those initial emission standards, EPA must thereafter conduct "a recurring 'technology review.'" *National Association for Surface Finishing* v. *EPA*, 795 F.3d 1, 5 (D.C. Cir. 2015). Specifically, subsection (d)(6) provides that EPA "shall review, and revise as necessary (taking into account developments in practices, processes, and control technologies), emission standards promulgated under this section no less often than every 8 years." 42 U.S.C. 7412(d)(6). Because any "revis[ion]" (*ibid.*) of an emission standard necessarily would go beyond the floor identified during the initial rulemaking, EPA also considers the factors set forth in subsection (d)(2)—namely, "the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements"—that the agency would consider as an initial matter in determining whether to set a beyond-the-floor standard to attain "the maximum degree of reduction in emissions." 42 U.S.C. 7412(d)(2).

2. Notwithstanding Congress's 1990 "restructur[ing]" of the hazardous-air-pollutant program "to provide EPA with authority to regulate with *technology-based* standards," *Sierra Club*, 353 F.3d at 979 (citation and ellipsis omitted), Congress retained some aspects of the legacy risk-based approach. Two are relevant here.

First, Congress required EPA to "investigate and report" to Congress whether,

after the agency's initial promulgation of standards under subsection (d), there remains any residual "risk to public health" from the emission of hazardous air pollutants. 42 U.S.C. 7412(f)(1). If Congress itself "does not act on any recommendation" contained in that report, EPA "shall, within 8 years after promulgation of standards * * * pursuant to subsection (d)," promulgate new standards where "required in order to provide an ample margin of safety to protect public health" or "to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect." 42 U.S.C. 7412(f)(2)(A).

Second, in the case of electric utility steam generating units—that is, power plants—Congress imposed a threshold requirement for EPA regulation under Section 7412. Congress directed that, before adding power plants to the "list" of sources to be regulated, 42 U.S.C. 7412(c)(1), EPA was to "perform a study of the hazards to public health reasonably anticipated to occur as a result of emissions by" power plants "after imposition of the requirements" of other CAA provisions, and to report the results to Congress. 42 U.S.C. 7412(n)(1)(A). Congress further directed that EPA "shall regulate" power plants "under this section, if the Administrator finds such regulation is *appropriate and necessary* after considering the results of the study." *Ibid.* (emphasis added). EPA completed the required study in 1998, and in 2000 the agency determined that it was appropriate and necessary to regulate emissions of hazardous air pollutants from fossil-fuel-fired power plants, which accordingly were "listed" under Section 7412(c). See 65 Fed. Reg. 79,825 (Dec. 20, 2000).[1] EPA did not, however, promulgate any emission standards at that time.

---

[1] Because the Act requires power plants, if listed, to be regulated "under this section," 42 U.S.C. 7412(n)(1)(A), "EPA has interpreted the Act to mean that power plants become subject to regulation on the same terms as" other sources of hazardous air pollutants once the appropriate-and-necessary determination has been made, *Michigan*, 576 U.S. at 748.

B. Regulatory History

1. In 2012, EPA reaffirmed its appropriate-and-necessary determination and also set emission standards for fossil-fuel-fired power plants. See 77 Fed. Reg. 9363 (Feb. 16, 2012).[2] In *Michigan*, *supra*, this Court held that EPA had improperly failed to consider costs in making the 2012 appropriate-and-necessary determination. 576 U.S. at 751-754. The Court did not, however, opine on the emission standards themselves, which were left in place on remand to the agency. See *White Stallion Energy Center, LLC* v. *EPA*, No. 12-1100, 2015 WL 11051103, at *1 (D.C. Cir. 2015) (per curiam) (remanding without vacatur), stay denied, No. 15A886 (Mar. 3, 2016) (Roberts, C.J.), and cert. denied, 579 U.S. 903 (2016). In 2023, EPA again determined, after considering costs, that regulation of fossil-fuel-fired power plants is appropriate and necessary. See 88 Fed. Reg. 13,956 (Mar. 6, 2023).[3] That determination was not challenged and is not at issue here.

Meanwhile, because the emission standards had been promulgated in 2012, EPA was obligated to (and did) conduct both the one-time risk review and the recurring technology review by 2020. 42 U.S.C. 7412(d)(6) and (f)(2); see 85 Fed. Reg.

---

[2] In the interim, EPA had promulgated a rule removing fossil-fuel-fired power plants from the list of source categories to be regulated under Section 7412, on the ground that such regulation was not appropriate and necessary. 70 Fed. Reg. 15,994 (Mar. 29, 2005). The D.C. Circuit vacated that rule, holding that EPA had not complied with the statutory requirements for delisting power plants as a source category subject to hazardous-air-pollutant regulation. *New Jersey* v. *EPA*, 517 F.3d 574, 581-584 (2008), cert. denied, 555 U.S. 1169 (2009); see 42 U.S.C. 7412(c)(9).

[3] In 2016, on remand after this Court's decision in *Michigan*, EPA made supplemental findings that regulating fossil-fuel-fired power plants was appropriate and necessary. See 81 Fed. Reg. 24,420 (2016). EPA reversed those findings in 2020, yet continued to enforce the 2012 emission standards. See 85 Fed. Reg. 31,286 (May 22, 2020). Each of those agency actions was challenged, but the D.C. Circuit did not finally resolve either challenge. See *Murray Energy Corp.* v. *EPA*, No. 16-1127 (D.C. Cir.); *American Academy of Pediatrics* v. *Regan*, No. 20-1221 (D.C. Cir.); *Massachusetts* v. *EPA*, No. 20-1265 (D.C. Cir.). Both of those agency actions have been superseded by the 2023 and 2024 final rules.

31,286 (May 22, 2020). In the risk review, EPA concluded that the 2012 standards provided "an ample margin of safety" and thus did not need to be revised on public-health-risk grounds. 85 Fed. Reg. at 31,314. In the technology review, EPA found no developments in practices, processes, or control technologies that would "achieve further cost-effective reductions beyond the current standards," and the agency therefore did not revise the standards on that basis either. *Id.* at 31,298; see *id.* at 31,314.

2. In 2024, EPA issued a final rule that is the subject of these stay applications. 89 Fed. Reg. 38,508 (May 7, 2024); see Exec. Order No. 13,990, § 2(a)(iv), 86 Fed. Reg. 7037, 7038 (Jan. 25, 2021) (directing a review of the 2020 rule). EPA did not reopen the one-time risk review that it had conducted in 2020. 89 Fed. Reg. at 38,518. EPA revisited the technology review, however, and the agency concluded—contrary to its conclusions in the 2020 technology review—that certain developments in practices, processes, and control technologies warranted revisions to the 2012 standards. *Id.* at 38,518. Specifically, EPA concluded that, although the fundamental nature of emission-control technologies had not changed since 2012, certain improvements—including more durable fabric-filter-bag materials, better practices for monitoring electrostatic precipitators, and the development of sulfur-resistant sorbents designed to capture mercury—had made those controls more efficient and cheaper to use. *Id.* at 38,521, 38,530, 38,537, 38,541; see *id.* at 38,541 (noting that the 2020 technology review did not address those developments). Based on those determinations, EPA revised the emission standards for coal-fired power plants in two ways that are challenged here.

First, the 2024 rule tightens the emission standards for non-mercury metals (such as arsenic and chromium) that are released from coal-fired power plants. 89 Fed. Reg. at 38,520. Nearly all power plants have elected to gauge such emissions by

using a surrogate measurement of filterable particulate matter, the control of which also reduces non-mercury metals. See *id.* at 38,510. The 2024 rule reduces the surrogate standard for filterable particulate matter from 0.030 to 0.010 pounds per million British thermal units (lb/MMBtu), with corresponding proportional changes to the individual and total non-mercury-metals emission limits. *Id.* at 38,520, 38,529-38,535.

Although the various applications suggest that the rule imposes substantial industry-wide burdens, EPA's assessment demonstrates otherwise. EPA observed that more than 90% of coal-fired power plants *already* "are demonstrating the ability to meet 0.010 lb/MMBtu with existing controls," *id.* at 38,530; that "only two" coal-fired units in the country—both of which are part of the Colstrip facility in Montana—"would need to install [new technologies] to achieve the" revised standard, *id.* at 38,533; and that retrofitting Colstrip by itself accounted for 42 percent of the rule's total estimated compliance costs, *ibid.* EPA also noted that Colstrip had "struggled to meet the original 0.030 lb/MMBtu" limit and had previously "agreed to pay $450,000 to settle these air quality violations." *Id.* at 38,531. EPA observed that the Northern Cheyenne Tribe, whose reservation is 20 miles from the facility, had noted that its tribal members "have been disproportionately impacted by exposure to [hazardous air pollutant] emissions from the Colstrip facility." *Ibid.*

Second, the 2024 rule requires power plants firing lignite (a type of coal) to meet the same mercury emission limits as power plants firing other types of coal, such as bituminous coal, subbituminous coal, or coal refuse. 89 Fed. Reg. at 38,510, 38,537-38,549. Specifically, the rule requires lignite-fired power plants to reduce mercury emissions from 4.0 to 1.2 pounds per trillion British thermal units (lb/TBtu), which has been the limit for other coal-fired power plants (including Colstrip, which

fires subbituminous coal) since 2012. *Id.* at 38,537. EPA observed that, although lignite produces only 7 percent of all coal-fired power, lignite-fired power plants "were responsible for almost 30 percent of all [mercury] emitted from coal-fired" power plants and constituted "16 of the top 20" mercury-emitting power plants in 2021. *Ibid.* EPA acknowledged "characteristics of lignite that make the control of [mercury] more challenging," but observed that those characteristics "are also found in non-lignite fuels" and that power plants firing those non-lignite fuels have long been able to meet the 1.2-lb/TBtu standard. *Id.* at 38,541. EPA also acknowledged that most lignite-fired power plants do not currently meet the revised standard, but the agency concluded that, because "[m]ost [mercury] control technologies are 'dial up' technologies—for example, sorbents or chemical additives have injection rates that can be 'dialed' up or down to achieve a desired [mercury] emission rate"—the revised standard was achievable. *Id.* at 38,540.

The 2024 rule makes other changes that applicants have not challenged here. For example, the rule requires most coal- and oil-fired power plants to measure and report compliance with the applicable surrogate filterable particulate matter standard using a continuous emission monitoring system, rather than through quarterly performance testing. 89 Fed. Reg. at 38,510, 38,518, 38,535-38,537. The 2024 rule also modifies the definition of when a power plant is in "startup," 40 C.F.R. 63.10042, to match the definition that is "already being used by the majority of" power plants, 89 Fed. Reg. at 38,519; see *id.* at 38,550-38,552. EPA explained that the agency had "independently considered and adopted each portion of this final rule * * * and each is severable should there be judicial review." *Id.* at 38,519; see *id.* at 38,518-38,519, 38,529 n.42.

The 2024 rule took effect on July 8, 2024. 89 Fed. Reg. at 38,508. Power plants

have up to three years (the default statutory maximum) to comply with the revised emission standards described above. *Id.* at 38,519; see 42 U.S.C. 7412(i)(3)(A). Permitting authorities may "allow, if warranted, a fourth year for compliance." 89 Fed. Reg. at 38,519; see 42 U.S.C. 7412(i)(3)(B).

C. Proceedings Below

Applicants—several States, power plants, mining companies, and industry groups—and others filed petitions for review of the 2024 rule in the D.C. Circuit. See 42 U.S.C. 7607(b)(1). Applicants also filed emergency motions to stay the rule pending judicial review of their petitions. Citing *Nken* v. *Holder*, 556 U.S. 418 (2009), the court of appeals denied the stay motions in a per curiam order, explaining that applicants "have not satisfied the stringent requirements for a stay pending court review." 2024 WL 3730667, at *1. The court has ordered an expedited schedule, with briefing to be complete on December 10, 2024. See C.A. Doc. 2072376 (Aug. 29, 2024).

ARGUMENT

The applications should be denied. 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 is likely to succeed on the merits; (2) it will suffer irreparable injury without a stay; and (3) the equities and the public interest support a stay. *Ohio* v. *EPA*, 144 S. Ct. 2040, 2052 (2024). An applicant seeking emergency relief from this Court also must show a reasonable probability that the Court would grant certiorari. *Hollingsworth* v. *Perry*, 558 U.S. 183, 190 (2010) (per curiam); see *Does 1-3* v. *Mills*, 142 S. Ct. 17, 18 (2021) (Barrett, J., concurring). Applicants have not made the necessary showings here.

I. APPLICANTS ARE UNLIKELY TO SUCCEED ON THE MERITS

EPA correctly determined that whether a revision of emission standards is "necessary" within the meaning of Section 7412(d)(6) depends on the technology review called for in that provision, not on the separate risk review addressed in Section 7412(f)(2), and that "developments in practices, processes, and control technologies" include *all* such developments, not just major or substantial ones. 42 U.S.C. 7412(d)(6). And the rule is not arbitrary and capricious because EPA adequately considered costs, benefits, power-grid reliability, and all other important aspects of the problem.

A. The 2024 Rule Comports With The Text Of Section 7412

1. A revision of emission standards under subsection (d)(6) may be "necessary" based on EPA's technology review, regardless of any residual risk to public health

Section 7412(d)(6) states that at least once every eight years, EPA "shall review, and revise as necessary (taking into account developments in practices, processes, and control technologies), emission standards." 42 U.S.C. 7412(d)(6). Applicants' principal statutory contention (*e.g.*, NACCO Appl. 15-22; Westmoreland Appl. 12-22; States Appl. 22-24; Rural Appl. 12-17) is that a revision of emission standards cannot be "necessary" within the meaning of subsection (d)(6) unless revised standards are required to provide an ample margin of safety to protect public health. Applicants argue that no such necessity exists here because the emissions of hazardous air pollutants from every coal-fired power plant already are low enough to provide such a margin of safety (based on cancer and non-cancer health risks). Those contentions reflect a misunderstanding of the nature and contours of a subsection (d)(6) periodic review.

a. "[T]he word 'necessary' * * * has always been recognized as a word to

be harmonized with its context." *Armour & Co.* v. *Wantock*, 323 U.S. 126, 129-130 (1944); see *McCulloch* v. *Maryland*, 17 U.S. 316, 413-414 (1819) ("The word 'necessary' * * * has not a fixed character peculiar to itself. It admits of all degrees of comparison."). In some legal contexts the word "may import absolute physical necessity" or "that which is indispensable"; in others, "it may import that which is only convenient, useful, appropriate, suitable, proper, or conducive to the end sought." *Black's Law Dictionary* 1029 (6th ed. 1990). When a law-firm partner hands her associate a draft brief, a directive to "revise as necessary (taking into account the court's word limits)" conveys something quite different from a directive to "revise as necessary (taking into account your fellow associates' comments)." The nature of the parenthetical constraint sheds light both on what goal the revision must be necessary to attain and on how tightly coupled to that goal the revision must be.

The CAA provision here directs that, in "revis[ing] as necessary" the pre-existing hazardous-air-pollutant emission standards, EPA must "tak[e] into account developments in practices, processes, and control technologies." 42 U.S.C. 7412(d)(6). That language ties the "necess[ity]" of revised emission standards to the consideration of relevant developments that would make tighter standards achievable. 42 U.S.C. 7412(d)(6). Because an evaluation of such developments is an inherently discretionary task that requires the exercise of judgment—more akin to considering comments on a brief than to considering word limits—EPA has discretion to conclude that a revision of emission standards is "necessary" within the meaning of Section 7412(d)(6) even if the revision is not "an absolute physical necessity," *McCulloch*, 17 U.S. at 413; cf. *Loper Bright Enterprises* v. *Raimondo*, 144 S. Ct. 2244, 2263 (2024) ("the statute's meaning may well be that the agency is authorized to exercise a degree of discretion").

Other provisions within subsection (d) confirm that EPA's subsection (d)(6) inquiry should focus not on public-health concerns, but on intervening changes that may make stricter emission standards achievable. Paragraph (2) directs that, in establishing initial emission standards for a source category, EPA "shall require the maximum degree of reduction in emissions" (up to and including "prohibition") that the agency "determines is achievable," taking into account "cost," "non-air quality"-related concerns, and "energy requirements." 42 U.S.C. 7412(d)(2). The factors that EPA must consider at that stage do *not* include the residual risks to public health or the environment from the emission of hazardous air pollutants. Those initial standards "shall not be less stringent" than a floor set by the "best"—not the worst, or even the average—sources within the category. 42 U.S.C. 7412(d)(3). Congress thus focused on maximizing reductions of emissions and forcing stragglers to catch up, even where an ample margin of safety already exists. Indeed, that is the entire point of the "*technology-based*" approach that Congress adopted in 1990 and implemented in subsection (d). *Sierra Club* v. *EPA*, 353 F.3d 976, 979 (D.C. Cir. 2004). And Congress made clear that the considerations informing those initial standards apply to all "[e]missions standards promulgated under this subsection," 42 U.S.C. 7412(d)(2)—that is, subsection (d).

The directive in paragraph (6) of subsection (d) that EPA must "tak[e] into account developments in practices, processes, and control technologies," 42 U.S.C. 7412(d)(6), is thus best read to require the agency to determine what further reductions in emissions have become "achievable" as a result of relevant developments during the intervening years, 42 U.S.C. 7412(d)(2). That is the only sensible reason to require a *recurring* technology review. And if EPA determines based on intervening developments that its existing standards do not "require the maximum degree of re-

duction in emissions" that the agency "determines is achievable," taking into consideration costs and the other statutory factors, *ibid.*, then a revision of those standards is "necessary" under paragraph (6). Nothing in the text or structure of subsection (d) in general, or of paragraph (6) in particular, "suggests that EPA must consider * * * public health objectives or risk reduction achieved by additional controls" in promulgating or revising emission standards. *Association of Battery Recyclers, Inc.* v. *EPA*, 716 F.3d 667, 672 (D.C. Cir. 2013) (per curiam).[4]

b. Applicants' contrary position effectively conflates the technology-based approach in subsection (d) with the separate legacy risk-based approach in subsection (f). Under the latter, EPA "shall, within 8 years," promulgate revised emission standards "if promulgation of such standards is required in order to provide an ample margin of safety to protect public health * * * or to prevent * * * an adverse environmental effect." 42 U.S.C. 7412(f)(2)(A). Subsection (f) thus specifically addresses circumstances in which revised emission standards are needed to provide an ample margin of safety to protect public health and the environment. But nothing in subsection (f)'s text suggests that this grant of authority should limit or establish an exception to EPA's separate authority (and duty) under subsection (d) to consider technological developments in determining what emission limits are "achievable."

Applicants observe that the "aim" of Section 7412 is "preventing harm to public health or the environment." Westmoreland Appl. 12; see NACCO Appl. 16; States Appl. 22; Rural Appl. 13. But Congress amended Section 7412 in 1990 to "require the maximum degree of reduction in emissions" (up to and including "prohibition") that EPA "determines is achievable." 42 U.S.C. 7412(d)(2). Congress further specified

---

[4] Applicants do not contend that EPA failed to take into consideration costs and the other statutory factors enumerated in subsection (d)(2).

that the best performing sources within a category or subcategory would be used as the benchmark for determining what emissions reductions other sources should be required to achieve. See 42 U.S.C. 7412(d)(3); pp. 6-7, *supra*. Congress thus viewed those technology-based requirements as essential components of its overall strategy for protecting public health and the environment from the ill effects of hazardous air pollution. Cf. *West Virginia*, 597 U.S. at 708. And Congress structured Section 7412 in a way that clearly separates that technology-based approach in subsection (d) from the legacy risk-based approach in subsection (f), with no indication that either should limit the other.

To be sure, under subsection (n), EPA may regulate power plants' emissions of hazardous air pollutants only if the agency makes a threshold determination that regulation is "appropriate and necessary." 42 U.S.C. 7412(n)(1)(A). That broad language requires EPA to consider costs, benefits (including to public health and the environment), and other criteria in making the threshold determination. See *Michigan* v. *EPA*, 576 U.S. 743, 751-754 (2015). But EPA has already done that here, and no party challenged the appropriate-and-necessary determination that the agency made in 2023. See 88 Fed. Reg. 13,956 (Mar. 6, 2023); p. 9, *supra*. As these applications come to this Court, it therefore must be taken as given that regulation of hazardous air pollutants released by coal-fired power plants is appropriate and necessary.[5]

---

[5] Some applicants suggest (*e.g.*, America's Power Appl. 8) that, because power plants had already achieved compliance with the 2012 standards by the time of EPA's 2023 appropriate-and-necessary determination, those plants had no incentive to challenge that determination. That is incorrect. Precisely because Section 7412 contemplates periodic revision of hazardous-emission standards, power plants had ample incentive to challenge the 2023 appropriate-and-necessary determination even if those plants were in compliance with the standards in effect at that time. Indeed, EPA had proposed the revised standards that were ultimately promulgated in the 2024 rule—*i.e.*, the standards that applicants challenge here—before the 60-day win-

It also bears mention that subsections (d)(2) and (d)(6) apply generally to all stationary sources of hazardous air pollutants, not just to power plants. EPA often tightens emission standards for those other sources even where ample margins of safety already exist. See 89 Fed. Reg. at 38,525 n.29 (listing examples); cf. *United States* v. *Santos*, 553 U.S. 507, 522 (2008) (plurality opinion) ("[T]he meaning of words in a statute cannot change with the statute's application.") (citing *Clark* v. *Martinez*, 543 U.S. 371, 378 (2005)). Section 7412(n) requires a threshold appropriate-and-necessary determination for power plants that EPA need not make before regulating other source categories. But nothing in Section 7412(n) addresses the nature and contours of EPA's periodic reviews under Section 7412(d)(6), which by their nature can occur only after EPA has made that threshold determination and has promulgated initial emission standards.

Applicants' passing reliance (NACCO Appl. 11, 18; Westmoreland Appl. 21; Talen Appl. 21-22; America's Power Appl. 14; Rural Appl. 16) on the "delisting" criteria in subsection (c)(9) is misplaced. There, Congress provided that EPA "may" remove a source category from regulation under Section 7412 if the agency determines that no source in the category emits pollutants at levels above those that provide an ample margin of safety to protect public health and the environment, including (in the case of carcinogenic pollutants) a lifetime cancer risk of no greater than one in one million. See 42 U.S.C. 7412(c)(9)(B); cf. 42 U.S.C. 7412(f)(2) (listing similar criteria under the risk-based approach). But that grant of discretionary authority ("may") does not curtail the Act's separate grants of authority for EPA to determine whether further reductions in emissions are technologically achievable and neces-

---

dow to seek judicial review of the 2023 necessary-and-appropriate determination expired. See 42 U.S.C. 7607(b)(1); 88 Fed. Reg. 24,854 (Apr. 24, 2023) (proposed rule).

sary. See 42 U.S.C. 7412(d)(2) and (6). Indeed, the parallel grants of authority in subsections (c)(9), (d), and (f)(2) simply underscore EPA's statutory obligation to apply *both* risk-based *and* technology-based criteria in fashioning appropriate emissions standards. Cf. *Biden* v. *Texas*, 597 U.S. 785, 802-803 (2022).

Finally, applicants' reading of "necessary" in subsection (d)(6) gives rise to an oddity. As noted, in promulgating its initial standards, EPA must maximize reduction in emissions wherever achievable, after considering costs and other factors that do not include the margin of safety for protecting public health or the environment. 42 U.S.C. 7412(d)(2). So if EPA were promulgating subsection (d)(2) standards for the first time today, the Act would not only permit the two emission standards in the 2024 rule, but would arguably *require* them. On applicants' reading of subsection (d)(6), however, those standards are now *prohibited* simply because EPA initially promulgated more forgiving standards in 2012. Applicants provide no sound basis to read the statute to create that kind of internal contradiction, given Congress's twin directives to EPA to maximize emission reductions where achievable and to periodically reevaluate what reductions can be achieved. Cf. *Shapiro* v. *McManus*, 577 U.S. 39, 43 (2015) (rejecting an interpretation that "needlessly produces a contradiction in the statutory text").

2. "Developments" in practices, processes, and control technologies include incremental improvements in those areas

Section 7412(d)(6) requires EPA to revise existing emission standards as necessary, "taking into account developments in practices, processes, and control technologies." In the 2024 rule, EPA identified a "clear trend in control efficiency, costs, and technological improvements" since 2012. 89 Fed. Reg. at 38,521. Those improvements include better practices for monitoring the operation of electrostatic precipita-

tors (a type of control to limit filterable particulate matter as a surrogate for non-mercury metals); more durable filter-bag materials for fabric filters (another type of control for filterable particulate matter), such as Teflon or P84 felt, rather than fiberglass; the development of "sulfur tolerant" injected sorbents to capture mercury emissions, such as Fluepac ST (a brominated powdered activated carbon); and the development of sodium- and halogen-salt-based solutions, like SBS Injection and HBS Injection, that can be co-injected to control mercury emissions. *Id.* at 38,521, 38,530, 38,541, 38,546-38,547. The agency also noted the reduced costs and improved efficiency of existing technologies. See *ibid.* Those developments improve how effectively coal-fired units can reduce emissions of hazardous air pollutants, and they are partly responsible for coal-fired plants' current ability to meet the 2012 standards at a lower cost than EPA had anticipated. *Id.* at 38,530.

Applicants principally contend (Westmoreland Appl. 27-29; States Appl. 24-30; America's Power Appl. 16; Rural Appl. 17-20) that none of those improvements can support EPA's adoption of more stringent emission standards because electrostatic precipitators, fabric filters, and injected sorbents already were in existence when the 2012 standards were promulgated, and a "development" under subsection (d)(6) must be "new" and "significant." Westmoreland Appl. 27; see States Appl. 25. That contention lacks merit. When Congress enacted subsection (d)(6), the ordinary meaning of "development" included "a gradual unfolding," an "evolution," a "growth and unfolding," and a "gradual advancement." 4 *The Oxford English Dictionary* 563-564 (2d ed. 1989) (capitalization omitted) (definitions 1 through 4). Contrary to applicants' suggestion that "development" requires a brand-new technology or a significant advancement in an existing one, those definitions confirm that the term encompasses incremental changes over time. And applicants offer no persuasive policy rationale

for limiting EPA's authority under subsection (d)(6) to circumstances involving dramatic rather than incremental changes in emissions-control technologies or practices. When incremental improvements during the relevant eight-year period have made further emissions reductions achievable, recognizing EPA's authority to update the standards is consistent with both the text and the purpose of subsection (d)(6).

Applicants otherwise attempt to nitpick the developments that EPA identified. For example, some applicants suggest (States Appl. 29; Rural Appl. 19-20) that more durable and reliable filter bags are irrelevant to emission reductions because the emission standards already presuppose that filter bags will operate perfectly. But "most facility operators normally target an emission level below the emission limit by incorporating a compliance margin or margin of error in case of equipment malfunctions or failures." 89 Fed. Reg. at 38,521. As a result, more durable filter bags make a lowering of emission limits more achievable as a practical matter because they lower both the risk that a control might fail and the wear and tear that impairs efficacy. *Id.* at 38,530. Some applicants argue (Westmoreland Appl. 28; States Appl. 26-27; Rural Appl. 18-19) that other identified developments that make controls more cost-effective (such as better practices in monitoring electrostatic precipitators) do not qualify because they are not "new *technological* developments," States Appl. 27. But the statute encompasses "developments in *practices* [and] *processes*," not just "developments in * * * control technologies." 42 U.S.C. 7412(d)(6) (emphasis added); cf. *West Virginia*, 597 U.S. at 708 (explaining, in the context of subsection (d)(2), that "'changes in the design and operation' of the facility, or 'in the way that employees perform their tasks,' are also available options") (brackets and citation omitted). And while the 2020 technology review found no relevant new developments since 2012 (see Westmoreland Appl. 27; Rural Appl. 18), the 2024 rule identifies intervening

developments that the 2020 review overlooked. 89 Fed. Reg. at 38,521, 38,534, 38,541; see *FCC* v. *Fox Television Stations, Inc.*, 556 U.S. 502, 515-516 (2009).

B. The 2024 Rule Is Not Arbitrary And Capricious

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 & Electric Co.* v. *NRDC, Inc.*, 462 U.S. 87, 103 (1983).

EPA's explanation for promulgating the two standards here easily clears that bar. EPA explained that developments in best practices for monitoring electrostatic precipitators and in materials for fabric filter bags meant that a 0.010-lb/MMBtu limit for surrogate filterable particulate matter emissions was achievable after considering costs and other statutory factors. 89 Fed. Reg. at 38,520-38,527, 38,529-38,535. Indeed, approximately 90% of coal-fired plants had already shown an ability to meet that standard. *Id.* at 38,530. EPA further explained that developments in sulfur-resistant injected sorbents and other salt-based solutions meant that the same 1.2-lb/TBtu limit for mercury emissions that all other coal-fired plants have long had to meet also was achievable for lignite-fired plants. *Id.* at 38,537-38,549. Applicants do not take particular issue with anything in those explanations, but instead contend that EPA arbitrarily and capriciously failed to address certain other aspects of the problem. Those contentions lack merit.

1. EPA adequately considered the anticipated benefits of the rule as well as its likely costs

The principal theme running throughout the applications is that the 2024 rule

arbitrarily and capriciously imposes massive costs for no meaningful benefit. *E.g.*, Westmoreland Appl. 20-24; States Appl. 31-34; Talen Appl. 19-23; America's Power Appl. 12-16; Rural Appl. 23-24. That is incorrect. Applicants' contention that the rule will produce no meaningful benefit rests on their view that, because EPA has determined that emissions of hazardous air pollutants from coal-fired power plants are already low enough to provide an ample margin of safety for public health (for example, because the cancer risk is less than one in one million), any further reduction in the plants' hazardous-air-pollutant emissions is superfluous. See *ibid.* That view simply restates the argument that the revised standards are not "necessary," cf. NACCO Appl. 18 (recognizing as much), and lacks merit for the same reasons, see Part I.A.1, *supra*. Congress perceived a benefit in emission standards that "require the maximum degree of reduction in emissions" (up to and including "prohibition") of hazardous air pollutants that EPA "determines is achievable" (after considering costs and other factors in subsection (d)(2)), regardless of the residual cancer risk. 42 U.S.C. 7412(d)(2). Applicants may disagree with that policy choice, but that is no justification for declining to give effect to the statute Congress wrote.

In any event, EPA *did* weigh costs and public-health benefits independent of its consideration of costs under subsection (d)(6). Cf. *Michigan*, 576 U.S. at 759 (explaining that, even for the appropriate-and-necessary finding in subsection (n), EPA need not "conduct a formal cost-benefit analysis in which each advantage and disadvantage is assigned a monetary value"). EPA determined that, "when all of the costs and benefits are considered (including nonmonetized benefits), this final rule is a worthwhile exercise of" the agency's authority. 89 Fed. Reg. at 38,553. Applicants' disagreement with that balancing does not warrant a stay. Cf. *Department of Commerce* v. *New York*, 588 U.S. 752, 777 (2019) (explaining that "second-guessing the

[agency's] weighing of risks and benefits" is improper).

As for the surrogate filterable particulate matter emission standard, EPA explained that the overwhelming majority of coal-fired power plants already could meet the revised 0.010-lb/MMBtu standard, and that only 33 plants would need any sort of "control improvements" to meet it. 89 Fed. Reg. at 38,533; see *id.* at 38,530-38,534. EPA estimated annualized compliance costs of $87.2 million, 42% of which (*i.e.*, $36.6 million) were for fabric-filter retrofits at a single facility (Colstrip). See *id.* at 38,531-38,533. Even including that outlier facility's costs within the total, EPA observed that the increased compliance costs triggered by the rule are the equivalent of a rounding error compared to "the typical capital and total expenditures for the power sector"—just "0.03 percent of the lowest year over the 2000 to 2019 period." *Id.* at 38,533. EPA further observed that Colstrip alone "significantly drives up the cost of this final rule." *Id.* at 38,534. The agency explained that "higher costs for one facility * * * should not prevent the EPA from establishing achievable standards for the sector" by "consider[ing] the performance of the industry at large." *Ibid.*

Applicants focus (*e.g.*, Westmoreland Appl. 2, 8, 22-24; States Appl. 12-13, 32-33) on cost effectiveness—the cost per pound of reduction in pollutant emissions—and observe that EPA has previously rejected emission standards that were more cost effective than this one. EPA acknowledged that the cost effectiveness value of the revised standard here ($10.5 million per ton of non-mercury metals, or $34,520 per ton of filterable particulate matter) was "higher than cost-effectiveness values that the EPA concluded were not cost-effective and weighed against implementing more stringent standards for some prior rules." 89 Fed. Reg. at 38,523. EPA observed, however, that comparisons to those prior rulemakings were inapt because the earlier rules had involved different industries like petroleum refining, iron-ore processing,

iron and steel manufacturing, and Portland cement manufacturing. *Id.* at 38,522-38,524; cf. *Sierra Club*, 353 F.3d at 986 (explaining that EPA's justification for CAA standards must be evaluated on an industry-by-industry basis). EPA explained that it "routinely views cost effectiveness in light of other factors, such as other relevant costs metrics (*e.g.,* total costs, annual costs, and costs compared to revenues), impacts to the regulated industry, and industry-specific dynamics." 89 Fed. Reg. at 38,524; see *id.* at 38,522-38,524, 38,532-38,533. EPA further explained that "unique attributes of the power sector"—such as the size and revenues of the industry, the scale of the emission reductions, and the existing capability of the regulated parties to meet the revised standards—made power plants different from those other industries. *Id.* at 38,524 (observing that the 2024 rule will reduce particulate matter emissions by 2537 tons per year, compared to 120 and 138 tons per year in the rejected iron-and-steel manufacturing and Portland cement rules, respectively). EPA's explanations are more than sufficient to satisfy the requirements for reasoned decisionmaking. See *Fox Television*, 556 U.S. at 513-514.

As for the mercury emission standard, EPA similarly concluded "that the total costs of controls (which consist[] of small annual incremental operating costs) to comply with the revised [mercury] emission standard will be a small fraction of the total revenues for the impacted lignite-fired units." 89 Fed. Reg. at 38,549. EPA explained that, since lignite-fired plants can meet the revised 1.2 lb/TBtu standard "using existing sorbent injection equipment," "significant additional capital investment is unlikely." *Ibid.* And EPA calculated a cost-effectiveness of between $10,895 and $28,176 per incremental pound of mercury removed at 1.2 lb/TBtu, depending on the sorbent injection rate. *Id.* at 38,548. That compared favorably to the cost-effectiveness value ($27,000 per pound) in the 2012 standard. *Id.* at 38,549 n.82.

Against those costs, EPA evaluated the benefits of reducing emissions of mercury and non-mercury metals. EPA explained that mercury "is a persistent and bioaccumulative toxic metal that, once released from power plants into the ambient air, can be readily transported and deposited to soil and aquatic environments where it is transformed by microbial action into methylmercury," which then "bioaccumulates in the aquatic food web" and finds its way to humans. 89 Fed. Reg. at 38,515. EPA explained that exposure to methylmercury "has been associated with developmental neurotoxicity and manifests as poor performance on neurobehavioral tests, particularly on tests of attention, fine motor function, language, verbal memory, and visual-spatial ability." *Ibid.* "Evidence also suggests potential for adverse effects on the cardiovascular system, adult nervous system, and immune system, as well as potential for causing cancer." *Ibid.* EPA likewise explained that exposure to non-mercury metals "is associated with a variety of adverse health effects," including "chronic health disorders (*e.g.,* pneumonitis, decreased pulmonary function, pneumonia, or lung damage; detrimental effects on the central nervous system; damage to the kidneys) and alimentary effects (such as nausea and vomiting)." *Ibid.* Several pollutants also are human carcinogens or probable human carcinogens. *Ibid.*

EPA explained that "quantifying the economic value of these impacts remains challenging" for a variety of reasons, including the lack of relevant and useful epidemiologic studies. 89 Fed. Reg. at 38,515; see *id.* at 38,515-38,516. EPA further explained that it was difficult to place a monetary value on reducing a given individual's potential cancer risk over a lifetime of exposure to hazardous air pollutants. *Id.* at 38,516. As part of its regulatory analysis required by executive order, EPA did monetize other health and climate benefits that it anticipated would result from the 2024 rule. The agency concluded that the rule would yield $420 million in monetized ben-

efits ($47 million annualized), assuming a 2% discount rate, compared to $860 million in compliance costs ($96 million annualized). *Id.* at 38,558, 38,561.

EPA explained, however, that the resulting cost-benefit deficit of $440 million ($49 million annualized) did not take into account the rule's non-monetized benefits: namely, annual reductions of about 900 to 1000 pounds of mercury; annual reductions of at least 4 to 7 tons of non-mercury metals; and improved water quality and availability, among other benefits of the rule. 89 Fed. Reg. at 38,561; see *id.* at 38,555 (concluding that, "when all of the costs and benefits are considered (including non-monetized benefits), this final rule is a worthwhile exercise" of EPA's authority). Applicants may disagree with EPA about whether those benefits are worth $49 million per year (or even $96 million per year), but that sort of policy disagreement about the weighing of incommensurables provides no basis for staying the rule under the arbitrary-and-capricious standard of review. Cf. *Department of Commerce*, 588 U.S. at 777. That is especially so given that Colstrip's costs alone account for over $36 million per year. See 89 Fed. Reg. at 38,533.

2. EPA adequately considered power-grid reliability

The States contend (Appl. 34-37) that EPA did not consider the 2024 rule's effect on the reliability of the power grid. Other applicants raise similar contentions in claiming irreparable harm from the rule (*e.g.* Westmoreland Appl. 29; Midwest Ozone Appl. 8-9; Talen Appl. 27-28; America's Power Appl. 18-20; Rural Appl. 28). Those contentions lack merit.

EPA directly addressed concerns that the rule could affect power-grid reliability and concluded that such effects were not anticipated. 89 Fed. Reg. at 38,526. Applicants deride that conclusion as "perfunctory" (States Appl. 35), but it was based on modeling that EPA had conducted in its April 2024 Regulatory Impact Analysis,

see States Appl. App. 685a-715a (reproducing the relevant portion of that analysis). EPA used a well-accepted, peer-reviewed model that is routinely used by industry and was based on information about the electricity market obtained from utilities, industry experts, gas- and coal-market experts, financial institutions, and governments. See *id.* at 685a-688a.

The model projected that the 2024 rule would not cause any coal-fired capacity to retire. States Appl. App. 702a. EPA also observed that "[t]he units requiring additional" controls to meet the revised filterable particulate matter standard "are projected to generate less than 1.5 percent of total generation in 2028." 89 Fed. Reg. at 38,526. EPA thus found no credible evidence that the rule "would result in a significant number of retirements or a larger amount of capacity needing controls," and the agency therefore did "not anticipate this rule will have any implications for resource adequacy." *Ibid.* That conclusion and explanation easily satisfy the requirements for reasoned decisionmaking. See *Fox Television*, 556 U.S. at 513-514. And EPA's conclusion that grid reliability would not be threatened was especially unsurprising given the agency's view that the vast majority of coal-fired power plants can already achieve the new emission standards. See pp. 11-12, 24-26, *supra*.

Applicants argue (*e.g.*, Talen Appl. 27-28) that "there is no nationwide grid, only a patchwork of regional grids," and that EPA therefore should have analyzed "whether any regional grid would be threatened by the" 2024 rule. But EPA projected that *no* coal-fired power plant was likely to retire as a result of the rule. 89 Fed. Reg. at 38,526. EPA also observed that even if (contrary to its studies) some owners chose to retire plants early (whether because of the 2024 rule or for other reasons), power plants cannot retire unilaterally; before shutdown, they generally must undergo extensive processes imposed by state regulators and regional transmission organiza-

tions "to protect electric system reliability." *Ibid.* "These processes typically include analysis of the potential impacts of the proposed [plant] retirement on electrical system reliability, identification of options for mitigating any identified adverse impacts, and, in some cases, temporary provision of additional revenues to support the [plant's] continued operation until longer-term mitigation measures can be put in place." *Ibid.* EPA additionally observed that power plants may obtain an order under 16 U.S.C. 824a(c) "to temporarily operate notwithstanding environmental limits when the Secretary of Energy determines doing so is necessary to address a shortage of electric energy or other electric reliability emergency." 89 Fed. Reg. at 38,526. Those backstops further undermine any claim that the rule will threaten grid reliability, whether nationwide or in any particular region.

The States suggest that EPA's predictions cannot be trusted because the agency underestimated the impact of the 2012 standards on power plant operations: EPA predicted that "about 5,000" megawatts of coal-fired power generation would "go offline," but in fact it was "closer to 60,000" megawatts. States Appl. 13; see *id.* at 17, 36. Although more coal-fired units eventually retired than EPA had predicted in 2012, independent studies concluded that those closures were "primarily" driven by "the decrease in natural gas prices," along with "smaller factors such as advances in the cost and performance of renewable generating sources, lower-than-anticipated growth in electricity demand, and environmental regulations." 87 Fed. Reg. 7624, 7653 (Feb. 9, 2022) (notice of proposed rulemaking for 2023 appropriate-and-necessary determination). And in adopting the rule at issue here, EPA observed that "no commenter [including applicants] cited a single instance where implementation of an EPA program caused an adverse reliability impact." 89 Fed. Reg. at 38,526. EPA noted that litigants challenging other rules affecting power plants had raised similar

concerns about reliability, all of which had "proved to be groundless." *Ibid.* Indeed, the same concerns were raised about the 2012 standards, but EPA "ha[s] seen no evidence in the last decade to suggest that the implementation of [those standards] caused power sector adequacy and reliability problems." *Id.* at 38,526-38,527.

The States question (Appl. 35) EPA's expertise in this area, asserting that the agency did not indicate that it had consulted with "FERC, NERC, or any similar entity that could have apprised it of the Rule's likely impact on grid reliability." But Congress entrusted EPA to set standards for sources like power plants without requiring interagency consultation. See 42 U.S.C. 7412(d)(2), (f)(2), and (n)(1). And although EPA has been regulating the power sector for years, applicants point to no evidence of blackouts or soaring electricity prices as a result of such regulation. See 89 Fed. Reg. at 38,519, 38,526 (listing examples of past rules). In any event, EPA has indicated that it did consult "other Federal agencies, reliability experts, and grid operators" in connection with this and other rules affecting fossil-fuel-fired power plants. States Appl. App. 676a.

3. EPA adequately considered the challenged rule's interaction with other rules

Some applicants contend that EPA did not "meaningfully assess how the confluence of these (and many other) rules targeting coal-fired power plants will affect the power grid." States Appl. 37; see Westmoreland Appl. 24-25. That contention is mistaken. EPA analyzed the cumulative impacts of its recent power-plant rules, including this rule, and concluded that together they are unlikely to impair the power sector's ability to meet demand. See EPA, *Resource Adequacy Analysis: Vehicle Rules, Final 111 EGU Rules, ELG and MATS RTR* (Apr. 2024).[6]

[6] Available at Gov't C.A. Opp. to Stay, Lassiter Decl., Ex. J (July 22, 2024); and also at www.regulations.gov/document/EPA-HQ-OAR-2023-0072-8915.

Some applicants contend (Talen Appl. 23-32; Westmoreland Appl. 25-26) that EPA did not consider the combined impact on Colstrip of the 2024 rule and a roughly contemporaneous EPA rule that requires carbon capture and sequestration by coal-fired power plants, see 89 Fed. Reg. 39,798 (May 9, 2024).[7] Applicants claim that the carbon-capture rule will cause Colstrip to retire earlier than anticipated, thereby effectively increasing Colstrip's annualized cost to comply with the hazardous-emissions rule at issue here and potentially threatening power-grid reliability. The specter of possible retirement has long haunted Colstrip; the issue has been the subject of years-long litigation between Colstrip's owners and has even triggered action by the Montana legislature. Talen Appl. App. 741a-742a (Lesback Decl. ¶¶ 25-26). But Colstrip has not announced any specific plan to retire. In the face of that longstanding uncertainty, EPA reasonably declined to exempt Colstrip based on speculation about an early retirement that might (or might not) occur regardless of this (or any other) rule.

EPA likewise reasonably declined a request to create a subcategory for facilities facing near-term retirements. Cf. Talen Appl. 29-31. Fewer than a quarter of coal-fired units had preexisting plans to retire between 2029 and 2032, and only three of those units would require improvements to comply with the revised emission standard. 89 Fed. Reg. at 38,527. Creating the subcategory therefore would have had "little utility." *Ibid.*

Colstrip is the only coal-fired facility in the country that has refused to employ modern electrostatic precipitators or fabric filters, instead insisting on using venturi wet scrubbers—and as a result has "struggled to meet the original 0.030 lb/MMBtu"

---

[7] The carbon-capture rule is the subject of several pending stay applications in this Court. See, *e.g.*, *West Virginia* v. *EPA*, No. 24A95.

standard. 89 Fed. Reg. at 38,531. That the costs of compliance with the 2024 rule will be higher for Colstrip simply reflects that facility's failure to invest in modern particulate matter controls over the last decade, when all of its peers have done so. EPA reasonably determined that it would be counterproductive to reward that kind of intransigence.

4. EPA adequately considered other aspects of the problem

Applicants' remaining quibbles with EPA's analysis lack merit. The Westmoreland applicants contend (Appl. 18) that Colstrip is not actually a straggler, and that unique properties of the coal (from Westmoreland's Rosebud mine) that is fired in the Colstrip facility cause the surrogate filterable particulate matter measurement to overestimate the emission of non-mercury metals. But if that is true, Colstrip remains free to attempt to demonstrate compliance by directly reporting emissions of non-mercury metals (the limits for which were proportionally reduced in the rule), rather than the surrogate emissions. See 89 Fed. Reg. at 38,520, 38,535. Colstrip thus far has instead chosen to utilize the "more easily measurable surrogate"—as have all but one coal-fired plant—and even paid a large fine for violating the surrogate threshold. *Id.* at 38,535; see *id.* at 38,531.

The Rural Electric Cooperative applicants challenge (Appl. 21-23) the underlying data on which EPA relied. They claim that the filterable particulate matter data do not reflect "all seasonal and load conditions" and do not "exclude periods where units were co-firing natural gas." *Id.* at 21. They also assert that the mercury data lack "verified testing results" and underestimate compliance costs. *Id.* at 22-23. Those fact-intensive challenges cannot justify an emergency stay from this Court, especially when the court of appeals has not yet had an opportunity to address them based on the full administrative record.

In any event, those claims lack merit. EPA considered emissions in both peak (winter and summer) and non-peak periods of electricity usage, as well as average emissions of 296 coal-fired plants. See 89 Fed. Reg. at 38,530; EPA, *2023 Technology Review for the Coal- and Oil-Fired EGU Source Category* (Jan. 2023).[8] EPA also observed that natural-gas co-firing is itself a control strategy used by many power plants, see 89 Fed. Reg. at 38,538, so that periods in which that strategy was employed should not be excluded. As for mercury emissions, EPA explained the basis for its projections (namely, that the sorbent injection rate can easily be dialed up or down, see *id*. at 38,540); and applicants' cost estimates are inflated because they assumed a stringent 0.006-lb/MMBtu limit, not the actual 0.010-lb/MMBtu limit, see Cichanowicz, et al., *Technical Comments* 21 (June 19, 2023).[9]

5. The 2024 rule is not pretextual

The States contend that the 2024 rule is a pretext "to force a nationwide transition away from coal for putative climate change reasons." States Appl. 38; see *id.* at 37-40. That contention lacks merit. "The presumption of regularity supports the official acts of public officers, and, in the absence of clear evidence to the contrary, courts presume that they have properly discharged their official duties." *United States* v. *Chemical Foundation*, 272 U.S. 1, 14-15 (1926).

As discussed above, EPA reasonably explained why it was promulgating the two revised standards following its technology review under Section 7412(d)(6). See pp. 23-33, *supra*. That explanation is entitled to respect and is not subject to "judicial inquiry into 'executive motivation,'" which "represents 'a substantial intrusion' into the workings of another branch of Government and should normally be avoided." *De-*

[8] Available at www.regulations.gov/comment/EPA-HQ-OAR-2018-0794-5789.

[9] Available at www.regulations.gov/comment/EPA-HQ-OAR-2018-0794-5956.

partment of Commerce, 588 U.S. at 781 (citation omitted). A supposed hidden motive to "force a nationwide transition away from coal" (States Appl. 38) is inconsistent with EPA's promulgation of a rule that would not result in the closing of *any* coal-fired plants and with the agency's rejection of calls for an even stricter 0.006-lb/MMBtu limit for surrogate filterable particulate matter emissions. See 89 Fed. Reg. at 38,526-38,527, 38,534, 38,555. The States rely (Appl. 37-40) on extra-record evidence such as news interviews and internal documents, but "a court is ordinarily limited to evaluating the agency's contemporaneous explanation in light of the existing administrative record," *Department of Commerce*, 588 U.S. at 780, and Congress made that "ordinar[y]" (*ibid.*) rule mandatory here, see 42 U.S.C. 7607(d)(7)(A) (providing that the "record for judicial review shall consist exclusively of the material" in the administrative record).

In any event, the extra-record material that the States proffer does not demonstrate pretext. For example, the Administrator's statement in a PBS interview about "coupl[ing] the regulation of climate pollution with the regulation of health-based pollution" was a response to a question about "the kind of tools that you believe you still can use to regulate [the power] industry," not some revelation of a hidden motive. States Appl. 38 (citation and emphasis omitted). And even if EPA had both hazardous-air-pollution and climate-change goals in mind when promulgating the 2024 rule, "a court may not reject an agency's stated reasons for acting simply because the agency might also have had other unstated reasons" or "because it might have been influenced by political considerations or prompted by an Administration's priorities." *Department of Commerce*, 588 U.S. at 781. While this Court in *Department of Commerce* affirmed a lower court's remand to the agency on the ground that the proffered "explanation for agency action" was "incongruent with what the record reveals about

the agency's priorities and decisionmaking process," *id.* at 785, here the explanation for the agency's action is straightforward: EPA conducted a technology review under Section 7412(d)(6), as Congress authorized it to do, and the agency "revise[d] * * * emission standards" in light of that review following notice-and-comment rulemaking, 42 U.S.C. 7412(d)(6), as Congress directed it to do. Nothing in the States' extra-record evidence is "incongruent" with that explanation.

II. APPLICANTS HAVE NOT SATISFIED THE EQUITABLE REQUIREMENTS FOR A STAY

A. Applicants Will Not Suffer Irreparable Harm During The Pendency Of Judicial Review

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 does not 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).

Applicants have not made the necessary showing of irreparable harm here, especially given the compliance deadline of 2027 (at the earliest) and "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 *Department of Education* v. *Louisiana*, No. 24A78 (Aug. 16, 2024), slip op. 3 (per curiam) (denying a stay in part because the court of appeals had "expedited its consideration of the case"). Applicants argue (*e.g.*, NACCO Appl. 22-23; Midwest Ozone Appl. 5-8;

Talen Appl. 32-33; Rural Appl. 25-27) that a stay is warranted to avoid repeating the situation that arose after this Court's 2015 ruling in *Michigan*, *supra*, in which most power plants had already complied with the 2012 emission standards by the time the Court issued its decision. But the court of appeals here has ordered an expedited schedule, with briefing to be complete on December 10, 2024. Applicants' fears of prolonged judicial review are thus unfounded.

Moreover, the bulk of the costs for nearly all power plants will be post-compliance annual costs, not up-front capital investments that would have to be made during the pendency of judicial review. EPA observed that only Colstrip would require significant control upgrades to meet the revised 0.010-lb/MMBtu surrogate filterable particulate matter emission standard, and that no lignite-fired plant would require substantial capital improvements to meet the revised 1.2-lb/TBtu mercury emission standard that all other coal-fired plants have been meeting for years. See 89 Fed. Reg. at 38,531, 38,533, 38,549. And despite applicants' repeated claims of "excessive" (Westmoreland Appl. 6; States Appl. 32) or "staggering" (America's Power Appl. 10, 19; Rural Appl. 27) compliance costs, EPA explained that the anticipated costs amount to just 0.03% of the industry's typical expenditures—indeed, that the *total* estimated costs are the equivalent of a rounding error even when compared to the industry's *annual* revenues. See 89 Fed. Reg. at 38,533, 38,555 (2022 annual revenues of $427.8 billion, total compliance costs of $0.86 billion).

In that respect, the 2024 rule is not remotely comparable to the situation in *Michigan*, where the annual compliance costs ($9.6 billion) were one hundred times larger than those here ($96 million). See 576 U.S. at 749; 89 Fed. Reg. at 38,561. That disparity reflects the fact that, whereas the 2012 rule set forth EPA's initial hazardous-air-pollutant emission standards for a source category (fossil-fuel-fired

power plants) that had not previously been regulated under Section 7412, the 2024 rule simply effects incremental adjustments to the pre-existing emission standards to bring stragglers into line with their better-performing peers. Accordingly, there is no sound basis to conclude that any expenditures the applicants may incur during the pendency of the D.C. Circuit proceedings will constitute an irreparable injury sufficient to warrant this Court's intervention.[10]

One of Colstrip's owners alleges that, to meet the 2027 or 2028 compliance deadline, it may need to make "irreversible business and regulatory decisions" about Colstrip during the pendency of judicial review. Talen Appl. 34 (citing Talen Appl. App. 751a-754a). But that will typically be true when EPA issues a new emission standard requiring capital improvements, especially given Congress's preference for a three-year compliance period. And many of the immediate difficulties with bringing Colstrip into compliance stem from infighting among its various owners. See Talen Appl. App. 752a. In any event, Colstrip's need to make immediate capital investments, and its atypical compliance costs, simply reflect that facility's refusal over the past decade to invest in the same modern control technologies used by every one of its peers. That sort of self-inflicted harm cannot support an emergency stay.

Some applicants raise (States Appl. 15-18; Midwest Ozone Appl. 8-9; Talen Appl. 35-36; Rural Appl. 28-29) grid-reliability concerns. But applicants have not shown any likelihood that the rule will threaten the reliability of the grid, see Part

---

[10] The Rural Electric Cooperative applicants have attached declarations claiming compliance costs several orders of magnitude larger than EPA's estimates. See, *e.g.*, Rural Appl. App. 342a-345a (claiming $260 million in costs for a single facility). Those declarations were not presented to the agency during rulemaking. Cf. 42 U.S.C. 7607(d)(7)(A). In any event, this Court should not grant a nationwide stay based on a challenger's factual dispute with the agency's findings, especially when the court of appeals has not had an opportunity to address that highly technical dispute with the benefit of the full administrative record in the first instance.

I.B.2, *supra*, let alone that any such threat will materialize during the pendency of expedited judicial review. Applicants' claims (Westmoreland Appl. 29-32; States Appl. 15-21; Midwest Ozone Appl. 8-12; Talen Appl. 34-37; America's Power Appl. 16-20; Rural Appl. 29-34) that power plants will shut down—resulting in shuttered coal mines, lost jobs, higher electricity prices, and depressed local economies—likewise cannot support emergency relief. There is no sound basis to think that those harms will arise at all given EPA's determination that no coal plants will retire as a result of the rule, much less that they will be felt during the pendency of the current litigation. And in any event, those sorts of indirect downstream economic effects should carry less weight in the equitable stay analysis.

B. A Stay Would Harm The Government And The Public

On the other side of the balance, a stay would impose harm on governmental and public interests, which "merge" here. *Nken*, 556 U.S. at 435. In Section 7412(d), Congress adopted a technology-based approach to the regulation of hazardous air pollutants, directing EPA to promulgate emission standards that "require the maximum degree of reduction in emissions" that EPA "determines is achievable" (taking into account costs and other statutory factors), and to periodically "revise as necessary" those standards based on intervening "developments in practices, processes, and control technologies." 42 U.S.C. 7412(d)(2) and (6). Because the 2024 rule faithfully implements those statutory directives, staying the rule would deny the public the benefits that Congress sought to confer. See *United States* v. *Oakland Cannabis Buyers' Cooperative*, 532 U.S. 483, 497 (2001) (explaining that "a court sitting in equity cannot 'ignore the judgment of Congress, deliberately expressed in legislation'") (citation omitted). As the state respondents here explain, staying the rule also would harm downwind States and tribal communities living near power plants. See Mass.

Resp. Part II. Applicants are thus wrong to say (*e.g.*, Westmoreland Appl. 30-32; Midwest Ozone Appl. 10-12; America's Power 18-20; Rural Appl. 31-34) that a stay will not harm any third parties or the public.

Congress also specified, subject only to carefully crafted exceptions and extensions set forth in the Act, see 42 U.S.C. 7412(i)(3)(B) and (4)-(8), that compliance deadlines should "in no event" be later than three years from the effective date of any emission standard, 42 U.S.C. 7412(i)(3)(A). Congress thus expressed a policy preference for "expeditious[]" compliance with emission standards, 42 U.S.C. 7412(i)(3)(A), and a stay would frustrate that legislatively expressed goal as well.

III. AT A MINIMUM, 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 2024 rule that applicants have contested and for which the Court finds that they have made the required showings. For example, the 2024 rule requires that power plants use continuous emissions monitoring to report compliance with the applicable surrogate filterable particulate matter standards, at whatever level those standards might be set. See 89 Fed. Reg. at 38,535-38,537. In addition, to better reflect industry practice, the rule modifies the definition of when a power plant is in "startup." See *id.* at 38,550-38,552. EPA noted that the agency had "independently considered and adopted each portion of this final rule * * * and each is severable should there be judicial review." *Id.* at 38,519; see *id.* at 38,518-38,519, 38,529 n.42.

Applicants have not meaningfully challenged those aspects of the rule, and no applicant has argued that it will be irreparably harmed if those provisions take effect during the pendency of this litigation. There is consequently no sound basis for staying those portions of the 2024 rule. See *Califano* v. *Yamasaki*, 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."). Likewise, even if this Court determines that some applicants will suffer immediate and irreparable injury unless the rule's filterable particulate matter limits are stayed with respect to the Colstrip facility, that determination will provide no basis for staying application of those limits to any other coal-fired plant or facility, much less for staying application of the rule's limits on mercury emissions from lignite-fired plants.

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 2024 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. Thus far, the D.C. Circuit, which will exercise original jurisdiction to address those petitions, see 42 U.S.C. 7607(b)(1), has decided only whether a stay of the rule should be granted.

This Court has never granted certiorari before judgment 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. 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 that jurisdictional issue and lacks merit. At a minimum, the need to address that threshold jurisdictional question would complicate this Court's review. And par-

ticularly given the expedited briefing schedule in the D.C. Circuit, there is no practical need for this Court's immediate intervention.

CONCLUSION

The applications should be denied.

Respectfully submitted.

ELIZABETH B. PRELOGAR
Solicitor General

SEPTEMBER 2024