

Nos. 24A95, 24A96, 24A97, 24A98, 24A106, and 24A116

IN THE
Supreme Court of the United States

STATE OF WEST VIRGINIA, *et al.*,
Applicants,
v.
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, *et al.*,
Respondents.

To the Honorable John G. Roberts, Jr.,
Chief Justice of the United States and
Circuit Justice for the District of Columbia Circuit

**BRIEF OF THE CHAMBER OF COMMERCE OF THE UNITED STATES OF
AMERICA AS *AMICUS CURIAE* IN SUPPORT OF APPLICANTS' MOTIONS
FOR STAY PENDING REVIEW**

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INTEREST OF *AMICUS CURIAE*

The Chamber of Commerce of the United States of America (“Chamber”) is the world’s largest business federation.¹ It represents approximately 300,000 direct members and indirectly represents the interests of more than 3 million companies and professional organizations of every size, in every sector, and from every region of the country. An important function of the Chamber is to represent the interests of its members in matters before Congress, the Executive Branch, and the courts. To that end, the Chamber regularly files *amicus curiae* briefs in cases, like this one, that raise issues of concern to the business community.

The Chamber supports policies that reduce greenhouse-gas emissions as much and as quickly as reasonably possible, consistent with the pace of innovation and the feasibility of implementing large-scale technical change. The Chamber also has a strong interest in ensuring that agency regulations comply with the law, and that judicial review of regulations is timely and effective.

INTRODUCTION AND SUMMARY OF ARGUMENT

Yet again, EPA is coloring well outside its statutory lines. In 2015, with the Clean Power Plan, EPA claimed to find “in the previously little-used backwater of Section 111(d)” of the Clean Air Act (“CAA”), *West Virginia v. EPA*, 597 U.S. 697, 730 (2022), the unprecedented power to force a transformation of the nation’s power

¹ Pursuant to Supreme Court Rule 37.6, *amicus curiae* states that no counsel for any party authored this brief in whole or in part and no entity or person, aside from *amicus curiae*, its members, or its counsel, made any monetary contribution intended to fund the preparation or submission of this brief.

sector. This Court stayed that rule, *West Virginia v. EPA*, 577 U.S. 1126 (2016), and then, in *West Virginia*, 597 U.S. 697, confirmed that EPA had exceeded its authority in choosing generation-shifting measures as a “best system of emission reduction” under section 111(d). Now, just two years later, EPA is back with a different “best system of emission reduction” that stretches another part of section 111(d) past its breaking point. Among its other “meaningful constraints,” section 111 requires that EPA “make sure the best system has a proven track record.” *Id.* at 759 (Kagan, J., dissenting). EPA has not done so. The primary “best system of emission reduction” in the Rule²— 90% carbon-capture-and-sequestration (“CCS”)—does not even exist for electric generating units (“EGUs”), much less have a proven track record for EGUs.

This Court should grant the motions for a stay. As this Court recently observed, “[w]hen States and other parties seek to stay the enforcement of a federal regulation against them,” the resolution often “turns on the merits and the question who is likely to prevail at the end of th[e] litigation.” *Ohio v. EPA*, 144 S. Ct. 2040, 2052–53 (2024). Here, the merits strongly favor the Applicants. The Rule is premised on a system of technologies that has not “been adequately demonstrated” as required by section 111. 42 U.S.C. § 7411(a)(1). Indeed, EPA concedes that “no commercial power plant is consistently achieving 90% capture,” Resp’ts’ Opp’n to Mots. to Stay Final Rule at 44, *West Virginia v. EPA*, No. 24-1120 (D.C. Cir. June 11, 2024), and

² “New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule,” 89 Fed. Reg. 39,798 (May 9, 2024).

instead argues that section 111 gives it authority to “project the development of a control system at a future time.” 89 Fed. Reg. at 39,801. But that reading is contrary to the plain text of the Act.

The other stay factors are also satisfied. If the Rule takes effect, it will cause serious irreparable harm. Regulated parties, and the U.S. economy more generally, will suffer major costs that cannot be recovered if the Rule is later invalidated. In addition, the Rule will jeopardize the reliability and affordability of the nation’s power, which is critical to the functioning of our national economy and the activities of daily life. EPA itself projects that its Rule will result in widespread retirement of dispatchable generation while severely restricting pathways for reliable electricity supplies necessary to replace it, even as demand for electricity is increasing and projected to soar in the coming decade. For similar reasons, the balance of the equities and the public interest favor staying the Rule pending review.

ARGUMENT

I. If The D.C. Circuit Upholds The Rule, This Court Would Likely Grant Review And Reverse.

Applicants are likely to succeed on the merits because, among other reasons, the Rule exceeds EPA’s authority under section 111 of the Clean Air Act by selecting a system of emission reduction that has not “been adequately demonstrated.” First, the Rule misinterprets that statutory requirement. And second, even under EPA’s own mistaken standard, EPA has far exceeded its statutory limits by selecting a system that is not currently operational for EGUs anywhere in the country, based on speculation about capabilities that may emerge in the future.

A. EPA Misinterpreted its Authority Under Clean Air Act Section 111.

Section 111 authorizes EPA to regulate power plants by setting a “standard of performance” for their emission of pollutants. 42 U.S.C. § 7411(a)(1). That standard must be “achievable” and reflect the “best system of emission reduction” (“BSER”) that EPA determines “*has been* adequately demonstrated” for the particular source category. *Ibid* (emphasis added). This means, at the very least, that EPA must “make sure the best system has a proven track record.” *West Virginia*, 597 U.S. at 759 (Kagan, J., dissenting). A system “has been adequately demonstrated” if it “has been shown to be reasonably reliable, reasonably efficient,” *Essex Chem. Corp. v. Ruckelshaus*, 486 F.2d 427, 433 (D.C. Cir. 1973), and not “unreasonably costly,” *Sierra Club v. Costle*, 657 F.2d 298, 384 (D.C. Cir. 1981). EPA cannot select a system that is “purely theoretical or experimental,” *Essex Chem.*, 486 F.2d at 433–34, or based on only “prototype” or “pilot scale” demonstration facilities. *Sierra Club*, 657 F.2d at 341 n.157.

The Rule, however, features a primary “best system of emission reduction” that lacks any meaningful track record and is not realistically available to the electric power industry. The Rule seeks to reduce GHGs from new natural gas-fired, and existing coal-fired, EGUs, mainly by identifying carbon capture and sequestration (“CCS”) technology with 90% CO₂ capture as BSER for these units. CCS technology is highly promising, and Chamber members are investing in developing and commercializing the technology for a range of applications. But as explained below, EPA’s hypothesized CCS system for EGUs (including 90% capture) does not exist at

this time, and there is no evidence that it will be available in the near future. See *infra* I.B.

EPA acknowledges as much, but asserts that section 111 authorizes it to project a BSER that *might be* demonstrated in the future. 89 Fed. Reg. at 39,831. EPA asserts that “the BSER can be forward-looking in nature and take into account anticipated improvements in control technologies” and, accordingly, that the Agency “may reasonably project the development of a control system at a future time.” *Id.* at 39,801. EPA supports its reading by saying that the word “demonstrated” in section 111 should be interpreted to mean “to ‘explain or make clear by using examples, experiments, *etc.*,’” suggesting all that is needed is a pilot “demonstration project” or “demonstration plant” as “examples of technological feasibility.” *Id.* at 39,830–31.

As this Court recently made clear, the judiciary “must exercise independent judgment in determining the meaning of statutory provisions.” *Loper Bright Enters. v. Raimondo*, 144 S. Ct. 2244, 2262 (2024). That inquiry begins, of course, with the text. *Ross v. Blake*, 578 U.S. 632, 638 (2016). And in reviewing that text, the Court looks to the ordinary meaning of statutory terms where a definition is not provided, *HollyFrontier Cheyenne Refining, LLC v. Renewable Fuels Association*, 594 U.S. 382, 388 (2021), as well as the “conventional rules of grammar,” *Facebook Inc. v. Duguid*, 592 U.S. 395, 402 (2021).

EPA’s reading, which suggests that the base technology underlying the chosen system need merely be in existence, should be rejected for at least three reasons. First, EPA misunderstands the verb tense of the phrase “*has been* adequately

demonstrated.” The Agency rewrites the phrase to require only that “the technology is in existence.” 89 Fed. Reg. at 39,830. But that changes the meaning of the phrase, which applies to the *system* and uses the present perfect tense “has been demonstrated.” That mandates not merely that some aspect of the underlying technology “exist” today; the chosen *system* must have “a proven track record.” *West Virginia*, 597 U.S. at 759 (Kagan, J., dissenting).

Second, EPA uses a secondary definition of “demonstrate”—namely, to “explain or make clear by using examples, experiments, etc.”—to support its view that a proven track record is unnecessary. That interpretive move is not plausible. The most common definitions at the time of the Clean Air Act’s enactment required far more than what EPA suggests. “Demonstrate” meant “to show clearly,” “to prove or make clear by reasoning or evidence,” or “to illustrate or explain esp. with many examples.” Webster’s Seventh New Collegiate Dictionary 220 (1970); see also Webster’s New World Dictionary of the American Language 376 (1970) (defining “demonstrate” as “to show by reasoning; prove”).

Third, EPA ignores that the system must not only be “demonstrated” but “*adequately* demonstrated.” “Adequately” means “in an adequate manner” with “adequate” defined as “fully sufficient for a specified or implied requirement.” Webster’s Third New International Dictionary at 25 (1986). That forecloses EPA’s position that it need only establish “technological feasibility” by way of a single “test or study—as in, for example, a ‘demonstration project’ or ‘demonstration plant.’” 89 Fed. Reg. at 39,831–32. It is not enough that the technology can work in some form

(say, CCS with 30% CO₂ capture) and might therefore evolve eventually into the BSER. The word “adequately” requires that the chosen *system* (CCS with 90% CO₂ capture) is “reasonably reliable, reasonably efficient, and . . . can reasonably be expected to serve the interests of pollution control without becoming exorbitantly costly.” *Essex Chem.*, 486 F.2d at 433. That is one of the “meaningful constraints” imposed by section 111 on EPA’s authority to “find the best system of emission reduction,” and it must be honored. *West Virginia*, 597 U.S. at 758–59 (Kagan, J., dissenting).

To support its strained reading of the text, EPA relies on *Portland Cement Association v. Ruckelshaus*, 486 F.2d 375 (D.C. Cir. 1973), and *Lignite Energy Council v. EPA*, 198 F.3d 930 (D.C. Cir. 1999). 89 Fed. Reg. at 39,835. Those cases do not provide EPA the shelter it seeks.

First, *Portland Cement* and *Lignite Energy* were not about whether a BSER “has been adequately demonstrated,” which is the relevant question here. Instead, these cases were about the “degree of emission limitation” for certain new sources. In *Portland Cement*, the petitioners challenged stationary source standards for new or modified Portland cement plants. 486 F.2d at 378. And thus, it was “the ‘achievability’ of the proposed standard that [wa]s in issue” when the court said it could consider “what may fairly be projected for the regulated future.” *Id.* at 391. Likewise, *Lignite Energy* was also about “extrapolat[ing] from ... studies ... in setting . . . [a] new source performance standard.” 198 F.3d at 934.

Second, whatever these cases have to say, they are arguably both founded on the mistaken understanding that section 111 concerns *new* emission sources only. In *Portland Cement*, the court rejected any focus on “the state of the art at present” because, in its view, section 111 “is addressed to standards for new plants” only. 486 F.2d at 391. And in *Lignite Energy*, the court similarly based its conclusion on the premise that section 111 “applies only to new sources.” 198 F.3d at 934. In the D.C. Circuit’s view at the time, because section 111 “applies only to new sources . . . [it] looks toward what may fairly be projected for the regulated future, rather than the state of the art at present.” *Ibid.* (cleaned up). But as this Court has since recognized, section 111 applies to *both* new and existing sources. *West Virginia*, 597 U.S. at 706.

The D.C. Circuit’s stay denial order did not consider any of this. It concluded that the Applicants were not likely to succeed, “given the record in this case,” on the claim that EPA “acted arbitrarily or capriciously in determining that carbon capture and other emission control technologies are adequately demonstrated.” States’ Emergency Application for Immediate Stay at App. 2a, No. 24A95 (U.S. July 23, 2024). But it did not even acknowledge, much less address, the Applicants’ contention that EPA incorrectly interpreted the statute in the first place—a legal question over which the court was required to “exercise independent judgment.” *Loper Bright Enters.*, 144 S. Ct. at 2273.

B. EPA’s Chosen System of Carbon Capture and Sequestration Has Not Been Adequately Demonstrated.

In any event, the Rule fails even EPA’s preferred standard under *Portland Cement* and *Lignite Energy*. Under *Portland Cement*, any “projection based on

existing technology” is “subject to the restraints of reasonableness and cannot be based on ‘crystal ball’ inquiry.” 486 F.2d at 391. Nor may EPA rely on “mere speculation or conjecture.” *Lignite Energy*, 198 F.3d at 934. But that is all the Agency has presented, as explained below.

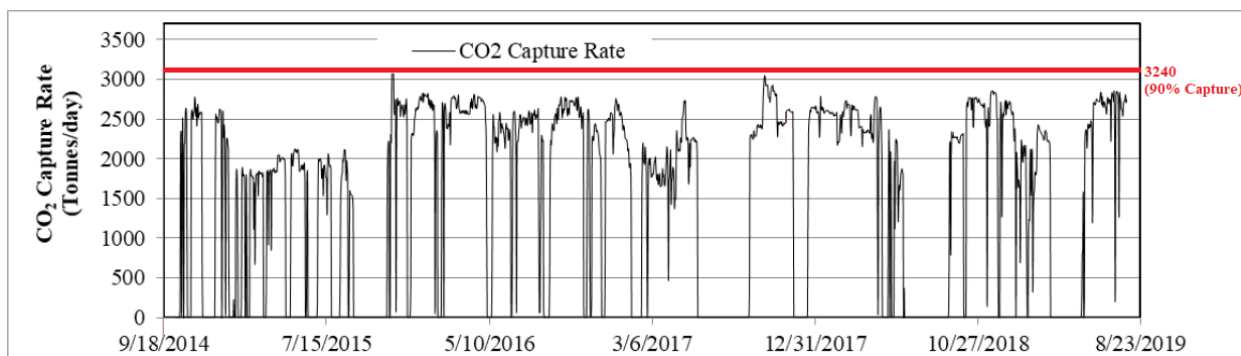
EPA’s primary “best system of emission reduction” comprises three main components: (1) capturing CO₂ at a rate of 90%; (2) transporting it by pipeline to a storage site; and (3) storing it in deep underground sites. Contrary to the D.C. Circuit’s conclusory statement, EPA has not shown that each of these components “has been adequately demonstrated” as an integrated “system of emission reduction” for EGUs. And developments since EPA issued its rule only further confirm that CCS does not have a proven track record.

1. EPA Failed to Show That 90% Capture of CO₂ from EGUs Had Been Adequately Demonstrated.

To start, EPA has not shown any—much less a proven—track record for 90% capture of CO₂ from EGUs. Indeed, EPA concedes that “no commercial power plant is consistently achieving 90% capture,” Resp’ts’ Opp’n to Mots. to Stay Final Rule at 44, *West Virginia*, No. 24-1120, yet that is precisely what the Rule requires.

EPA acknowledges that the primary example it offers—Unit 3 of Saskatchewan Power’s Boundary Dam coal plant—has failed to demonstrate capture at the sustained rate of 90 percent required by the Rule. EPA cites a report detailing the facility’s operations and efforts to make Unit 3 more reliable despite technical

challenges.³ Although the report states that the facility was *designed* to achieve a 90% capture rate, 89 Fed. Reg. at 39,848; Giannaris at 3, the report shows that such a rate was rarely achieved. As EPA acknowledged, “the capture plant has not consistently operated” at 90% total capture efficiency. 89 Fed. Reg. at 39,848. That is an understatement. The chart below (included in Giannaris at 10, Fig. 8) indicates that the facility achieved 90% capture on just a few days during a five-year period of operation—in other words, less than 1% of the time.



The data above align with more recent statements by SaskPower indicating that Boundary Dam Unit 3 cannot achieve 90% capture. The “carbon capture rate in 2021 was less than 37% of the official target of 90%.”⁴ Monthly reports dating back to early 2020 show “frequent” outages due to issues like “wet coal,” “plugging,” “issues in the powerhouse,” “trip,” “water cooling issues” and other technical issues. *Ibid.* As SaskPower itself said in comments on the Rule: “SaskPower’s CCS facility is not capturing 90 percent of emissions from Boundary Dam Unit 3.”

³ See 89 Fed. Reg. at 39,848, n.290 (citing Stavroula Giannaris, et al., *SaskPower’s Boundary Dam Unit 3 Carbon Capture Facility—The Journey to Achieving Reliability*, Proceedings of the 15th International Conference on Greenhouse Gas Control Technologies (Mar. 15-18, 2021), EPA-HQ-OAR-2023,0072-0053_Attachment 28 (“Giannaris”)).

⁴ Karen Rives, *Only still-operating carbon capture project battled technical issues in 2021*, S&P GLOBAL MARKET INTELLIGENCE (Jan. 6, 2022), available at <https://tinyurl.com/2mzruwwx>.

SaskPower Comment (Aug. 4, 2023), EPA-HQ-OAR-2023-0072-0687; see also 89 Fed. Reg. at 39,848 (“Boundary Dam has more recently been *capable* of achieving capture rates of 83 percent *when the capture plant is online*”) (emphasis added). Another report similarly concluded: “Boundary Dam 3, the only active carbon capture project in the power sector worldwide, has captured less than its pre-specified target by a wide margin (about 50%).”⁵ Contrary to EPA’s claims, Boundary Dam’s record is strong evidence that CO₂ capture at 90% has *not* been adequately demonstrated.

EPA also errs in claiming that 90% CO₂ capture “has been further demonstrated at other coal-fired steam generating units” and “other industrial processes.” 89 Fed. Reg. at 39,888, 39,926. EPA relies on a 2009 report⁶ to assert that certain plants “clearly show the technical feasibility of post-combustion carbon capture.” *Id.* at 39,849. But that report states that only “[a] small fraction of the power plant[s] overall CO₂ [was] captured”; the rest was “vented to the atmosphere.”⁷

Finally, EPA mistakenly claims that the former CO₂ capture facility at the Bellingham Energy Center demonstrated the viability of carbon capture on a combined cycle (natural gas-fired) combustion turbine EGU.⁸ The agency report cited by EPA actually states that carbon capture systems for natural gas systems “have

⁵ Institute for Energy Economics and Financial Analysis, *The carbon capture crux: Lessons learned* at 47 (Sept. 2022), available at <https://tinyurl.com/mv8m4r4a>.

⁶ *Id.* at 39,849 n.301 (citing J.J. Dooley et al., Pacific Northwest National Laboratory, PNNL-18520, *An Assessment of the Commercial Availability of Carbon Dioxide Capture and Storage Technologies as of June 2009* (June 2, 2009), EPA-HQ-OAR-2023-0072-0053_Attachment 4).

⁷ J.J. Dooley et al., Pacific Northwest National Laboratory, PNNL-18520, *An Assessment of the Commercial Availability of Carbon Dioxide Capture and Storage Technologies as of June 2009* at 8 (June 2, 2009), EPA-HQ-OAR-2023-0072-0053_Attachment 4).

⁸ 89 Fed. Reg. at 39,926 n.763 (citing DOE, *Carbon Capture Opportunities for Natural Gas Fired Power Systems*, EPA-HQ-OAR-2023-0072-9008 (“DOE Natural Gas CCS Report”).

not been proven at full scale” and that “more effort and R&D is required to advance into full commercial application.”⁹

2. EPA Failed to Show That Development of a Sufficient Pipeline System for CO₂ Transportation Had Been Adequately Demonstrated.

Next, EPA also has not shown any—much less a proven—track record for the development of a pipeline system sufficient to transport CO₂ from generating facilities nationwide, each capturing CO₂ at a 90% capture rate, to sequestration sites. According to EPA, 20,000 to 25,000 additional miles of pipeline are needed to capture over 1 billion metric tons of CO₂ emissions from large coal and gas EGUs per year. Proposed Rule, “New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule,” 88 Fed. Reg. 33,240, 33,369 (May 23, 2023). In its proposal, EPA asserted that such build-out is feasible because the domestic CO₂ pipeline network has “steadily expanded and appears primed to continue to do so.” *Id.* at 33,293. But EPA acknowledged that only 5,339 miles of CO₂ pipelines currently exist in the U.S., which is only a “13 percent increase in CO₂ pipeline miles since 2011.” *Id.* at 33,294. Put another way, on average over the last 12 years, only 50 miles of CO₂ pipelines have been constructed per year. At that rate, only a few hundred miles of additional

⁹ DOE Natural Gas CCS Report at 2, 4.

CO₂ pipeline would be constructed by 2030, falling woefully short of the 20,000 to 25,000 miles that EPA indicates are necessary. *Id.* at 33,369.

In the Rule, EPA does not address this fundamental problem, but rather attempts to sidestep it. EPA still “anticipates . . . in the coming years” that a “large-scale interstate pipeline network *may* develop to transport CO₂.” 89 Fed. Reg. at 39,855 (emphasis added). But it admits that it did “not base its analysis of the availability of CCS on the projected existence of a large-scale interstate pipeline network.” *Ibid.*

Instead, EPA pivots to predicting “the construction of relatively short lateral pipelines that extend from the source to the nearest geologic storage reservoir.” *Ibid.* But this would require a massive number of shorter pipelines to be rapidly permitted and constructed. There is no basis in the Rule, or reality, to believe that will happen.

Pipeline permitting and construction face significant obstacles. In a 2022 report, for example, the Congressional Research Service noted that pipeline developers repeatedly “face opposition among affected landowners and advocacy groups,” often struggling to secure “agreements with landowners for pipeline rights-of-way through their properties.”¹⁰ Certain representatives of environmental justice communities recently vowed to stop the build-out of CCS infrastructure “in the permitting stage.”¹¹ Without landowner agreements, “developers may . . . secure property rights through eminent domain authority,” but CO₂ pipeline “siting

¹⁰ Paul W. Parfomak, CONG. RESEARCH SERV., IN11944, *Carbon Dioxide Pipelines: Safety Issues* at 2 (June 3, 2022), available at <https://tinyurl.com/mrxa6v69>.

¹¹ Timothy Puko, Washington Post, *Why these environmentalists are resisting part of Biden’s climate push* (June 25, 2023), available at <https://tinyurl.com/432636v2>.

authorities, landowner rights, and eminent domain laws reside with the states and vary from state to state, so securing rights-of-way for interstate projects is not guaranteed.”¹² The end result, in the words of the Congressional Research Service, is that (1) opposition “may prevent CO₂ pipeline development in certain localities and increase development time and costs in others”; and (2) the “actual or perceived risks associated with CO₂ pipelines may limit the potential of CCS as a greenhouse gas mitigation option.”¹³

Nevertheless, EPA suggests that the design and implementation of CO₂ transport can be completed within 3.5 years. 89 Fed. Reg. at 39,875 n.594. But EPA cannot point to any CO₂ pipeline project that has been permitted, constructed, and operational within that timeframe. The two main projects that EPA cites have either been cancelled (Heartland Greenway) or significantly delayed (Midwest Carbon).¹⁴ With respect to the latter, Midwest Carbon’s CEO recently announced that the company was pushing back the estimated operational date of its proposed CO₂ pipeline from 2024 to 2026, citing “regulatory hurdles and environmental and landowner opposition.”¹⁵ And in November 2023, Wolf Carbon Solutions withdrew its application for a proposed 260-mile CO₂ pipeline in light of concerns expressed by state regulators.¹⁶

¹² Parfomak, *Carbon Dioxide Pipelines: Safety Issues* at 2.

¹³ *Ibid.*

¹⁴ Leah Douglas, *Navigator CO2 Ventures cancels carbon-capture pipeline project in US Midwest*, REUTERS (Oct. 20, 2023), available at <https://tinyurl.com/44r57b8u>.

¹⁵ Jared Strong, *Summit says pipeline system won't be operational until 2026*, IOWA CAPITAL DISPATCH (Oct. 19, 2023), available at <https://tinyurl.com/2mzfnfdpn>.

¹⁶ Nara Schoenbert, *Wolf Carbon Solutions pauses its bid for Illinois approval of a controversial 260-mile CO2 pipeline* (Nov. 26, 2023), available at <https://tinyurl.com/3hmkjszd>.

3. EPA Also Failed to Show that a Sufficient System of CO₂ Sequestration Had Been Adequately Demonstrated.

Finally, EPA has not shown a proven track record for geologic sequestration of CO₂ at the scale required by the Rule. Commercial storage for the amount of CO₂ that would result from a 90% rate of capture is neither available now nor anticipated in the near term. Application of NRECA for Immediate Stay App. 288–89a, No. 24A96 (U.S. July 23, 2024).

Instead of identifying available commercial storage, EPA again turns to speculation. EPA claims to have satisfied its burden by identifying “*potential* geolog[y]” for storage within 100 kilometers of every state with existing units affected by the Rule. 89 Fed. Reg. at 39,857 (emphasis added). But “potential” storage sites are very different from storage sites that can be used today, or even tomorrow. As EPA admits, it will require significant study to determine whether these storage sites can ever be used for sequestration, and if so, how much capacity they have. *Id.* at 39,855 n.378.

The regulatory hurdles to CO₂ storage further mean that storage at the scale contemplated by the Rule will not be possible in the near future. Geologic storage of CO₂ may take place only through compliance with regulations under one of two regulatory classes—Class II or Class VI—in EPA’s Underground Injection Control (UIC) program. Class II with respect to CO₂ refers to the process of enhanced recovery. But opportunities for enhanced recovery are limited to a subset of oil- and gas-bearing formations, which are not distributed throughout all areas of the country.

With respect to the Class VI program, only a small number of permits have been issued since 2015 (eight by EPA and 11 by States).¹⁷

4. Since EPA Promulgated The Rule, It Has Become Even Clearer That EPA’s BSER Is Based On Crystal Ball Speculation.

Recent developments only confirm that 90% CCS for EGUs has not been adequately demonstrated and will not be anytime soon. Illinois recently passed a law that will significantly delay the construction of CO₂ pipelines there. On July 19, 2024, for example, the Governor of Illinois signed a bill that banned the construction of CO₂ pipelines until July 1, 2026, unless the Pipeline and Hazardous Materials Safety Administration (“PHMSA”) finalizes new federal safety regulations before that date.¹⁸ Even after July 1, 2026, however, the new law does not allow the Illinois Commerce Commission to issue a certificate to construct until the applicant has obtained “all required permits or approvals from [PHMSA], the U.S. Army Corps of Engineers, and the Illinois Department of Agriculture, in addition to all other permits and approvals necessary for the construction and operation of the pipeline prior to the start of any construction.”¹⁹ As explained, the permitting and approval process alone can take several years and often times far longer in light of significant local and national opposition to the construction of CO₂ pipelines.

¹⁷ Angela C. Jones, CONG. RESEARCH SERV., R48033, *Class VI Carbon Sequestration Wells: Permitting And State Program Primacy* at 7–8 (2024), available at <https://tinyurl.com/cd8ks2b9>.

¹⁸ Andrew Adams, *After years of controversy, Illinois pauses CO2 pipeline construction, for now*, CAPITOL NEWS ILLINOIS, July 19, 2024, available at <https://tinyurl.com/pskbfsak>.

¹⁹ Ill. Pub. Act 103-0651.

There is other local opposition, too. Just last month, the Indiana Office of Utility Consumer Counselor (“OUCC”) filed testimony opposing a proposed CCS study for a power plant in the state, claiming that “the feasibility and affordability of a CCS system” is “speculative.”²⁰ Across the Midwest, local residents are continuing their “fight[] to kill” the construction of CO₂ pipelines through their states.²¹ In North Dakota, a utility is reconsidering its planned \$2 billion CCS power plant project in light of the significant amount of “uncertainty” created by EPA’s section 111 rule, as well as economic concerns.²² And in Louisiana, environmental groups recently challenged an EPA rule granting the state authority over wells used to sequester captured carbon, arguing that Louisiana lacks the requisite expertise “in light of . . . the state’s past failures regulating less complicated wells.”²³ If history is any indication, such litigation can take years to resolve.

The timeline for regulatory approvals has also not improved. Approvals for CO₂ capture wells continue to lag at the federal level, with 145 applications pending before EPA as of July 19, 2024, and only four final permit decisions issued.²⁴ In some cases, EPA projects that it will take nearly three years to complete its “technical review” of a single well application.

²⁰ Sean Wolfe, *Indiana’s consumer advocate wants to thwart Duke Energy’s carbon capture study*, POWER ENGINEERING (July 16, 2024), available at <https://tinyurl.com/4tej2n7k>.

²¹ Nina Elkadi, *A battle in rural Midwest as farmers fight carbon capture pipeline*, THE NEW LEDE (July 16, 2024), available at <https://tinyurl.com/3rwkm69v>.

²² Carlos Anchondo, *Major coal CCS project hits delays, cost spikes*, E&E NEWS, June 25, 2024, available at <https://tinyurl.com/4wsuhrst>.

²³ Opening Brief of Petitioners at 1, *Deep S. for Env’tl Just. v. EPA*, No. 24-60084 (5th Cir. June 12, 2024).

²⁴ Underground Injection Control (UIC) Class VI Permit Tracker (last updated July 19, 2024), available at <https://tinyurl.com/34h4tm6d>.

II. The Equities Favor A Stay Because EPA’s Rule Will Jeopardize the Reliability of the Nation’s Power.

As this Court recently recognized, when “parties seek to stay the enforcement of a federal regulation against them, often the harms and equities [will be] very weighty on both sides” and thus the resolution of the stay requests often “ultimately turns on the merits.” *Ohio*, 144 S. Ct. at 2052–53 (cleaned up). This case is no different.

Applicants showed that, absent a stay, they will suffer substantial irreparable harm from complying with the Rule during the pendency of this litigation.²⁵ Though the deadlines are still years away, States and other entities must begin taking actions now if they are to have any chance of meeting those deadlines. The D.C. Circuit puzzlingly belittled these actions as “long-term planning,” States’ Emergency Application for Immediate Stay at App. 2a, No. 24A95, but that was clearly wrong. These are the same kinds of “weighty” harms that this Court recognized as irreparable in *Ohio*, 144 S. Ct. at 2053, and in granting the stay in *West Virginia v. EPA*, 577 U.S. 1126 (2016).²⁶

²⁵ See, e.g., States’ Emergency Application for Immediate Stay at 26–38, No. 24A95; Nat’l Mining Ass’n Application for Immediate Stay at 17–26, No. 24A97 (U.S. July 23, 2024); NACCO Application for Immediate Stay at 33–35, No. 24A98 (U.S. July 23, 2024); NRECA Application for Immediate Stay at 35–39, No. 24A96 (U.S. July 23, 2024); Electric Generator for a Sensible Transition Application for Immediate Stay at 23–33, No. 24A116 (U.S. July 26, 2024).

²⁶ See, e.g., *U.S. Steel Corp. v. EPA*, No. 23A384, 2023 WL 7163329, at *24 (Oct. 26, 2023) (“U.S. Steel cannot wait before it must incur substantial costs on work plans that EPA does not have the authority to impose, and on the design, permitting and installation of boiler and reheat furnace modifications that are unnecessary and may be subject to withdrawal or modification in a revised rule.”); *Am. Forest & Paper Ass’n v. EPA*, No. 23A351, 2023 WL 7040199, at *25-26 (Oct. 13, 2023) (“[t]o reach compliance in time, [Applicants and their members] will have to immediately begin the process of installing prohibitively expensive emissions controls, incurring hundreds of millions of dollars in capital compliance and construction costs” and that “sources ‘will need to immediately make a decision . . . on whether to upgrade or retire’ units”); Application of Utility and Allied Parties for

The D.C. Circuit also clearly erred in reasoning that “a stay will not help because the risk remains” that the Rule’s deadlines will “come back into force at the end of the case.” States’ Emergency Application for Immediate Stay at App. 2a, No. 24A95. It is well settled that, in the event that a stayed rule survives judicial review, a court has the power to order the rule’s deadlines to be extended day-for-day for the period of the stay. See, e.g., *Michigan v. EPA*, No. 98-1497 (D.C. Cir. June 22, 2000), Doc. No. 540209 (extending SIP deadline after expiration of stay so that states would “have 1,309 days for implementing SIP revisions, as provided in the original rule”); *id.*, Doc No. 524995 (granting covered States the same 128 days they had left for compliance at the time of the stay in order to “restore the status quo preserved by the stay”). And parties that obtain a stay of a rule can and do cease compliance efforts in reliance on that expectation. Were it otherwise, there would often be no point in seeking a stay.

The balance of the equities and the public interest also support a stay here. Precisely because the Rule sets unworkable standards based on unrealistic assumptions, the Rule will threaten electric reliability, as well as impose major costs on regulated parties and the U.S. economy that cannot be recovered if the Rule is later set aside. Because it imposes a system that has not yet been adequately demonstrated and currently is very costly, the Rule is likely to cause widespread

Immediate Stay at 12, *Basin Elec. Power Coop.*, 577 U.S. 1126 (No. 15A776) (“to meet the rule’s requirements and have replacement generation online by 2022, the power industry must act now”); Coal Industry Application for Immediate Stay at 31, *Murray Energy Corp. v. EPA*, 577 U.S. 1127 (2016) (No. 15A778) (“Decisions to implement [plant] closures must begin immediately, and planning for future retirements is underway *now*.”).

retirement of dispatchable generation while simultaneously preventing the development of new, dispatchable generation resources. That is particularly concerning because such generation is needed to balance the expansion of renewables and to satisfy the significant increase in electricity demand that is expected over the coming years and decades, due in part to data center and AI growth, as well as the widespread electrification of transportation, manufacturing and housing sectors. EPA’s own modeling projects that the vast majority of regulated EGUs will not implement CCS but will instead retire to achieve “efficient compliance” with the Rule. Regulatory Impact Analysis at 3-25 to 3-28 (Apr. 2024), EPA-HQ-OAR-2023-0072-8913 (“RIA”). That prospect is highly concerning—not only to the Chamber, but to regional and independent electric power system operators.

For example, the Midcontinent Independent System Operator, Inc. (“MISO”), which manages the delivery of energy to roughly 45 million people throughout the middle of the United States, is already operating near the limits of its resource capacity. In a recent report, MISO stated that it is time “to face some hard realities,” including “immediate and serious challenges to the reliability of our region’s electric grid.”²⁷ MISO recognized the need for “new dispatchable generation”—that is, generation “that can be turned on and off and adjusted as needed”²⁸—in light of “the conventional dispatchable coal and natural gas resources that are being retired.”²⁹ “[A] key risk is that many ‘dispatchable’ resources . . . are being replaced with

²⁷ MISO, Response to the Reliability Imperative at 1 (Feb. 2024), available at <https://tinyurl.com/ya7tz7y9>.

²⁸ *Id.* at 1, 2.

²⁹ *Id.* at 2.

weather-dependent resources such as wind and solar,” which lack “certain key reliability attributes that are needed to keep the grid reliable every hour of the year.”³⁰ While “several emerging technologies may someday change that calculus, they are not yet proven at grid scale.”³¹ Until then, MISO “will continue to need dispatchable resources for reliability purposes.”³²

MISO’s warnings about grid reliability are echoed by the North American Electric Reliability Corporation (“NERC”), the Electric Reliability Organization that the Federal Energy Regulatory Commission (“FERC”) has certified pursuant to the Federal Power Act to establish and enforce reliability standards, subject to FERC review, for the nation’s bulk-power system.³³ In a recent assessment, NERC found “clear evidence of growing resource adequacy concerns over the next 10 years,” and identified large areas of the country at a “high” risk of failing to meet demand, including MISO’s 15-state area.³⁴ In just four years, “MISO is projected to have a 4.7 GW shortfall if expected generator retirements occur despite the addition of new resources that total over 12 GW.”³⁵

PJM Interconnection, the regional grid operator responsible for ensuring reliability for 65 million people across 13 states and the District of Columbia, has

³⁰ *Id.* at 1 (emphasis omitted).

³¹ *Ibid.*

³² *Ibid.*

³³ See, e.g., *S.C. Pub. Serv. Auth. v. FERC*, 762 F.3d 41, 51, 79 (D.C. Cir. 2014) (discussing NERC); 16 U.S.C. § 824o(a).

³⁴ NERC, 2023 Long-Term Reliability Assessment at 6-9 (Dec. 2023), available at <https://tinyurl.com/bdm36c27>.

³⁵ *Id.* at 7-9. For context, 1 GW is generally enough energy to power about 750,000 homes. California ISO, *Understanding electricity*, available at <https://tinyurl.com/2p9tbykp>.

expressed similar concerns.³⁶ According to PJM, EPA’s rule is likely to “drive premature retirement” of EGUs and “dissuade new gas resources from coming online,” even though such resources are needed to meet “significant increases” in demand “as a result of new data center load, electrification of vehicles and increased electric heating load.”³⁷ This new reality has also led to the recent, dramatic increases in electric generation capacity prices across the PJM region.³⁸ The functioning of our national economy, and the vast majority of the small and large businesses within it, depends on a power system that can routinely handle demand increases without risking interruptions in service or dramatic market disruptions.

EPA does not explain how the fossil generation forced to retire as a result of its Rule can or will be replaced at current levels and with similar dispatch characteristics, notwithstanding strong evidence that electricity demand is expected to grow rapidly in the coming years and decades, as noted above. As one global environmental organization recently put it: “the United States . . . does not have a plan to manage the reliable transition of its electricity sector.”³⁹ EPA has finalized “binding power plant emissions reduction targets, but fully decarbonizing the electricity sector requires coordinated, regional planning and targeted investments for specific types of resources, many of which are not yet commercially available.”⁴⁰

³⁶ PJM, *PJM Statement on the Newly Issued EPA Greenhouse Gas and Related Regulations* at 2-3 (May 8, 2024), available at <https://tinyurl.com/3uu34edn>.

³⁷ *Ibid.*

³⁸ Ethan Howland, *PJM capacity prices hit record highs, sending build signal to generators*, UTILITYDIVE (July 31, 2024), available at <https://tinyurl.com/bdzfzr78>.

³⁹ World Resources Institute, Working Paper, *Meeting the Reliability Challenges of the Clean Energy Transition* (Nov. 2023), available at <https://tinyurl.com/mr7exsv4>.

⁴⁰ *Ibid.*

CONCLUSION

This Court should grant the applications for immediate stay of the Rule.

Respectfully submitted,

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