No. ____

In the Supreme Court of the United States

EDISON ELECTRIC INSTITUTE, OKLAHOMA GAS AND ELECTRIC COMPANY, AND IDAHO POWER COMPANY,
Applicants,

v.

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

**TO THE HONORABLE JOHN G. ROBERTS, JR.,
CHIEF JUSTICE OF THE UNITED STATES
AND CIRCUIT JUSTICE FOR THE D.C. CIRCUIT**

APPLICATION FOR IMMEDIATE STAY OF FINAL AGENCY ACTION PENDING APPELLATE REVIEW

Thomas A. Lorenzen
Amanda Shafer Berman
Elizabeth B. Dawson
CROWELL & MORING LLP
1001 Pennsylvania Ave., N.W.
Washington, D.C. 20004

Counsel for Edison Electric Institute

Aaron M. Streett
Counsel of Record
J. Mark Little
BAKER BOTTS L.L.P.
910 Louisiana Street
Houston, TX 77002
(713) 229-1234
aaron.streett@bakerbotts.com

Megan H. Berge
BAKER BOTTS L.L.P.
700 K Street, N.W.
Washington, D.C. 20001

Counsel for Oklahoma Gas and Electric Company and Idaho Power Company

PARTIES TO THE PROCEEDINGS AND RELATED PROCEEDINGS

Applicants are Edison Electric Institute, Oklahoma Gas and Electric Company, and Idaho Power Company. Respondents are the United States Environmental Protection Agency and Michael Regan, in his official capacity as Administrator of the United States Environmental Protection Agency.

The parties to the consolidated proceedings below are:

Petitioners: State of West Virginia; State of Alabama; State of Alaska; State of Arkansas; State of Florida; State of Georgia; State of Idaho; State of Indiana; State of Iowa; State of Kansas; Commonwealth of Kentucky; State of Louisiana; State of Mississippi; State of Missouri; State of Montana; State of Nebraska; State of New Hampshire; State of North Dakota; State of Ohio; State of Oklahoma; State of South Carolina; State of South Dakota; State of Tennessee; State of Texas; State of Utah; Commonwealth of Virginia; State of Wyoming; America's Power; Appalachian Region Independent Power Producers Association; Edison Electric Institute (also an Intervenor); Electric Generators for a Sensible Transition; Idaho Power Company; International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers, AFL-CIO; International Brotherhood of Electrical Workers, AFL-CIO; Midwest Ozone Group; Montana-Dakota Utilities Co.; National Mining Association; National Rural Electric Cooperative Association; Oklahoma Gas and Electric Company; Rainbow Energy Center, LLC; NACCO National Resources Corporation; United Mine Workers of America, AFL-CIO; Westmoreland Mining Holdings LLC; Westmoreland Mining LLC; and Westmoreland Rosebud Mining LLC.

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

Amici Curiae: The Chamber of Commerce of the United States of America; Environmental Defense Fund; Professor Rachel Rothschild; and Sierra Club.

The related proceedings are:

West Virginia v. *EPA,* No. 24-1120 (D.C. Cir.) (lead case), consolidated with: *Ohio* v. *EPA,* No. 24-1121 (D.C. Cir.); *National Rural Electric Cooperative Association* v. *EPA,* No. 24-1122 (D.C. Cir.); *National Mining Association* v. *EPA,* No. 24-1124 (D.C. Cir.); *Oklahoma Gas and Electric Company* v. *EPA,* No. 24-1126 (D.C. Cir.); *Electric Generators for a Sensible Transition* v. *EPA,* No. 24-1128 (D.C. Cir.); *United Mine Workers of America* v. *EPA,* No. 24-1142 (D.C. Cir.); *International Brotherhood of Electrical Workers*

v. *EPA,* No. 24-1143 (D.C. Cir.); *International Brotherhood of Boilermakers* v. *EPA,* No. 24-1144 (D.C. Cir.); *Midwest Ozone Group* v. *EPA,* No. 24-1146 (D.C. Cir.); *Edison Electric Institute* v. *EPA,* No. 24-1152 (D.C. Cir.); *NACCO Natural Resources Corporation* v. *EPA,* No. 24-1153 (D.C. Cir.); *Idaho Power Company* v. *EPA,* No. 24-1155 (D.C. Cir.); *Appalachian Region Independent Power Producers Association* v. *EPA,* No. 24-1222 (D.C. Cir.); *Rainbow Energy Center, LLC* v. *EPA,* No. 24-1226 (D.C. Cir.); *Montana-Dakota Utilities Co.* v. *EPA,* No. 24-1227 (D.C. Cir.); and *Westmoreland Mining Holdings LLC* v. *EPA,* No. 24-1233 (D.C. Cir.).

CORPORATE DISCLOSURE STATEMENT

Pursuant to Supreme Court Rule 29.6, Applicants submit the following corporate disclosure statement.

Applicant Edison Electric Institute ("EEI") states that it is a national association of investor-owned electric utility companies. It has no parent companies, subsidiaries, or affiliates. EEI has no outstanding shares or debt securities in the hands of the public, and no publicly owned company has a 10% or greater ownership interest in EEI.

Applicant Oklahoma Gas and Electric Company ("OG&E") states that it is a wholly owned subsidiary of OGE Energy Corp., a holding company that is exempt from registration under the Public Utility Holding Company Act of 2005. The Vanguard Group and BlackRock Fund Advisors each has a 10% or greater ownership interest in OGE Energy Corp. No other publicly held company has a 10% or greater ownership interest in OGE Energy Corp. OGE Energy Corp. has no parent company.

Applicant Idaho Power Company states that it is a wholly owned subsidiary of IDACORP, Inc., an Idaho corporation. The publicly traded corporation, IDACORP, Inc., owns 100% of the stock of Idaho Power Company. The Vanguard Group (11.41% as of its most recent filing with the U.S. Securities and Exchange Commission ("SEC") on February 13, 2024), and BlackRock, Inc. (11.8% as of its most recent filing with the SEC on January 23, 2024) hold a 10% or greater ownership interest in IDACORP, Inc. IDACORP, Inc. has no parent company.

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Page(s)

Cases

Statutes

Regulatory Authorities

Books

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

Applicants Edison Electric Institute ("EEI"), Oklahoma Gas and Electric Company ("OG&E"), and Idaho Power Company ("IPC") request an immediate stay of the United States Environmental Protection Agency's ("EPA") final rule entitled *New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule*, 89 Fed. Reg. 39,798 (May 9, 2024) (the "Final Rule").

INTRODUCTION

Applicants challenge EPA's determination that carbon capture and storage/sequestration ("CCS") has been adequately demonstrated as the best system of emission reduction ("BSER") under Section 111 of the Clean Air Act despite no operating plants anywhere deploying this technology and achieving the 90%-CO_2-capture required by EPA. Applicants support EPA's established authority to regulate greenhouse-gas emissions under the Act. Applicants will also continue to achieve significant carbon emission reductions through their own voluntary efforts. But EPA cannot violate statutory directives in exercising its regulatory muscles. It crossed that line in the Final Rule.

As relevant here, EPA's statutory charge is to set a "standard of performance * * * which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which * * * has been adequately demonstrated." 42 U.S.C. § 7411(a)(1). But rather than analyze the emission-reduction technologies that

"ha[ve] been adequately demonstrated," EPA instead turned to a system still very much in the beginning phases of development—CCS—and declared it as the BSER for large swaths of the power industry. Then, based on application of that theoretical CCS system, EPA set a 90%-carbon-capture standard of performance that has never been "adequately demonstrated" and is not "achievable." EPA's setting of this impossible standard directly contradicts the statutory text and constitutes arbitrary and capricious agency action, which means that Applicants are highly likely to succeed on the merits of their challenge to the Final Rule.

Applicants cannot wait for ultimate vindication, however, because they face imminent and unavoidable irreparable harm. To both comply with the Final Rule's CCS deadlines and bring new, needed power online in time to meet growing demand, companies must spend many millions of dollars and make irreversible choices among compliance options *now*. See App.763 (Declaration of Ryan Adelman); App.777 (Declaration of Erik Bakken); App.794 (Declaration of Matthew Bulpitt); App.808 (Declaration of Robert Burch). These costs cannot be recovered for utilities or their customers if the Final Rule is later vacated. As this Court recently held, incurring significant "nonrecoverable" compliance costs "during the pendency of th[e] litigation" constitutes a "strong argument[]" on "[irreparable] harm[]." *Ohio* v. *EPA*, 144 S. Ct. 2040, 2053 (2024).

The equities and public interest favor a stay as well, as power companies have a demonstrated track record of voluntarily reducing their greenhouse-gas emissions and there is no public interest in enforcing an unlawful regulation.

Further, for the Justices that consider it, there is "a reasonable probability that four Justices will consider the issue sufficiently meritorious to grant certiorari" and "a fair prospect that a majority of the Court w[ould] vote to reverse * * * ." *Hollingsworth* v. *Perry*, 558 U.S. 183, 190 (2010). The Court has regularly granted certiorari in similarly important Clean Air Act cases over the last decade. See *West Virginia* v. *EPA*, 597 U.S. 697 (2022); *Michigan* v. *EPA*, 576 U.S. 743 (2015); *EPA* v. *EME Homer City Generation, L.P.*, 572 U.S. 489 (2014). The Final Rule's enormous economic implications and profound errors likewise render it an excellent candidate for review.

In sum, it is difficult to imagine a more compelling set of circumstances for a stay pending review.

DECISION BELOW

The D.C. Circuit's order denying Applicants' motion for a stay pending review is unpublished. It is reproduced at App.268-270. EPA's Final Rule is published at 89 Fed. Reg. 39,798 (May 9, 2024) and reproduced at App.001-267.

JURISDICTION

This Court has jurisdiction under 28 U.S.C. § 1254(1). It has the authority to grant the requested relief under the Administrative Procedure Act, 5 U.S.C. § 705; the All Writs Act, 28 U.S.C. § 1651; and Supreme Court Rule 23.

STATUTORY PROVISION INVOLVED

42 U.S.C. § 7411(a)(1) provides:

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

STATEMENT

I. Statutory And Regulatory Background

Section 111 of the Clean Air Act governs performance standards for "stationary sources" of air pollution. 42 U.S.C. § 7411. It grants EPA the authority to set "standards of performance" for new sources of air pollution and to establish guidelines that States will apply to set "standards of performance" for existing sources of air pollution. *Id.* §§ 7411(b), (d). For both new and existing sources, the standards must be "achievable through application of the best system of emission reduction * * * [that] the Administrator determines *has been adequately demonstrated*." *Id.* § 7411(a)(1) (emphasis added).

To determine the "best system of emission reduction" that "has been adequately demonstrated," "EPA first identifies the 'system[s] of emission reduction' that are 'adequately demonstrated,' and then determines the 'best' of those systems, 'taking into account' factors including 'cost,' 'non-air quality health and environmental impact,' and 'energy requirements.'" 89 Fed. Reg. at 39,824 (quoting 42 U.S.C. § 7411(a)(1)). Then, once EPA identifies the BSER, EPA and the States set a standard of performance, typically a numeric emission limit or rate that would follow from installing and operating the technology identified as the BSER.

II. EPA's Final Section 111 Rule

The Final Rule makes BSER determinations and sets standards of performance for both existing coal-fired units and new gas-fired units.[1]

For existing units, the Final Rule sets different standards of performance based on their fuel types and enforceable dates for permanently ceasing operation. 89 Fed. Reg. at 39,840-39,841. For existing coal-fired electric generating units that plan to continue operation after January 1, 2039, EPA identifies the BSER as CCS with 90% capture of emitted CO_2. *Id.* at 39,841. Based on that BSER determination, these existing coal-fired units must achieve 90% capture through CCS or an equivalent system of emissions reduction by January 1, 2032. *Id.* at 39,801.[2] For existing coal-fired units that plan to operate on or after January 1, 2032, but will retire before January 1, 2039, EPA identifies the BSER as 40% natural gas co-firing (based on the unit's annual heat input) and mandates that these units achieve 40% co-firing beginning January 1, 2030. *Id.* at 39,841, 39,890. Lastly, existing coal-fired units that plan to permanently cease operating before January 1, 2032 are exempt from any BSER requirements, but still must follow recordkeeping and reporting obligations. *Id.* at 39,801, 40,061.

For new and modified gas-fired units, the Final Rule determines the BSER and sets standards of performance based on their annual capacity factor, *i.e.*, the percentage of their maximum power output that will be produced annually. For "base load" units with a 40%

[1] To be more precise, the Final Rule regulates new gas-fired turbines, but not new gas-fired boilers.

[2] EPA has identified no technology or compliance option other than CCS that sources could use to meet that reduction requirement.

capacity factor or greater, EPA identifies CCS as the BSER and requires all sources in this subcategory to achieve 90% capture through CCS or an equivalent system of emissions reduction by 2032. *Id.* at 39,913, 39,938.[3] For "intermediate load" units that have a capacity factor between 20% and 40%, EPA identifies the BSER as highly efficient simple cycle technology with best operating and maintenance practices. *Id.* at 39,918. For "low load" units that have a capacity factor of less than 20%, EPA identifies the use of lower-emitting fuels as the BSER. *Id.* at 39,917.

III. Procedural History

After filing petitions for review in the D.C. Circuit, Applicants moved to stay the Final Rule pending judicial review on May 24, 2024. The D.C. Circuit denied Applicants' motion on July 19, 2024. App.268-270.

REASONS FOR GRANTING THE APPLICATION

The Court considers four factors when resolving a stay request: (1) likelihood of success on the merits; (2) irreparable harm to the applicant absent a stay; (3) harm to other parties from a stay; and (4) the public interest. *Ohio*, 144 S. Ct. at 2052. All four factors favor a stay. CCS technology is not "adequately demonstrated" and cannot be implemented nationwide to "achiev[e]" 90% capture of emitted CO_2. 42 U.S.C. § 7411(a)(1). Yet, absent a stay, EEI's members[4] will have to begin work *immediately* to comply with the Final Rule's new requirements and spend many millions of dollars to do so *while this litigation is pending*. The equities and public interest favor a stay as well, given power companies'

[3] EPA has identified no technology or compliance option other than CCS that sources could use to meet that reduction requirement.
[4] Both OG&E and IPC are members of EEI.

established record of voluntarily reducing their greenhouse-gas emissions and the lack of a public interest in keeping in force a patently unlawful regulation.

I. Applicants Are Likely To Prevail On The Merits.

EPA's BSER determination stacks error upon error. Its foundational error was to determine the BSER based not on what "has been adequately demonstrated," as Section 111 commands, but rather on "project[ions] [of] the development of a control system at a future time." 89 Fed. Reg. at 39,801. That disregard of its statutory charge caused EPA to exceed its authority under the Act. But at least it helps to explain how EPA erroneously concluded it should mandate a CCS system that has never achieved the required facility-wide 90% CO_2 capture in practice—for either coal- or gas-fired units. Yet even if EPA could cast aside the statutory text and rely on predictions, CCS still would be far from "adequately demonstrated" given the insurmountable barriers to building from scratch all the pieces of a 90%-CO_2-capture CCS system—which includes distinct capture, transport, and storage components—in the seven-and-a-half-year timeframe the Final Rule demands. In this way, EPA's BSER determination combines a breach of statutory authority with arbitrary and capricious action. The outcome is a high likelihood that Applicants will succeed on the merits of their challenge to the Final Rule.

A. EPA impermissibly based its standards on what may be possible in the future rather than on what "has been adequately demonstrated" now.

1. Standards of performance under Sections 111(b) and (d) must "reflect[] the degree of emission limitations achievable through the application of the best system of emission reduction which * * * the Administrator determines *has been adequately demonstrated*." 42 U.S.C. § 7411(a)(1) (emphasis added). Here, however, because EPA is

unable to show that CCS *has been* adequately demonstrated today for either coal- or gas-fired units, it pivots to claiming authority to "reasonably project the development of a control system at a future time and establish requirements that take effect at that time." 89 Fed. Reg. at 39,801; see also *ibid.* ("BSER can be forward-looking in nature and take into account anticipated improvements in control technologies."); *id.* at 39,830 n.202 (arguing that EPA may "make a projection regarding the way in which a particular system will develop to allow for greater emissions reductions in the future"); *id.* at 39,831 (defending the propriety of making a "projection of what that particular system may be expected to achieve going forward"); *id.* at 39,878 n.610 ("EPA may extrapolate based on its findings and project technological improvements in a variety of ways.").

But the question—as set forth in the statute's plain text—is not what technology may be developed in the future; it is what "*has been* adequately demonstrated" today. 42 U.S.C. § 7411(a)(1) (emphasis added). Contemporaneous dictionaries confirm the already evident meaning of that text. "Demonstrate" means "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" and "to explain or make clear by using examples, experiments, etc."). "Adequate" means "sufficient for a specific requirement." *Webster's Seventh New Collegiate Dictionary* 11 (1970); see also *Webster's New World Dictionary of the American Language* 16 (1970) (defining "adequate" as "enough or good enough for what is required or needed; sufficient; suitable"). Accordingly, to "adequately demonstrate[]" an emission-

reduction technology, EPA must "show clearly," using "evidence" and "examples," that the technology is "sufficient for [the] specific [emission-reduction] requirement" that is being imposed. EPA therefore must provide concrete examples of its chosen BSER's achieving the standard of performance and "show clearly" that it can do so in all of the settings to which the regulation extends. See *Nat'l Lime Ass'n* v. *EPA*, 627 F.2d 416, 431 n.46 (D.C. Cir. 1980) ("[T]o be achievable, * * * a uniform standard must be capable of being met under [the] most adverse conditions which can reasonably be expected to recur * * * .").

The backwards-looking nature of "has been" confirms that this adequate demonstration must have already been made at the time of the rule's enactment. "Congress' use of a verb tense is significant in construing statutes." *United States* v. *Wilson*, 503 U.S. 329, 333 (1992). That is why this Court "ha[s] frequently looked to Congress' choice of verb tense to ascertain a statute's temporal reach." *Carr* v. *United States*, 560 U.S. 438, 448 (2010). As the present-perfect tense of "to be," "has been" denotes "an action as having been completed at some indefinite time in the past * * * [or] indicates that an action continues to the present." Garner, *Garner's Modern English Usage* 1080-1082 (2022). Applied here, both senses of that verb tense require that the BSER's adequate demonstration take place by the time of the rule's enactment. Either it was "completed at some indefinite time in the past"—*i.e.*, before the rule's enactment—or the state of adequate demonstration "continues to the present"—*i.e.*, the time of the rule's enactment.

In light of the statute's remarkably clear text, EPA cannot defend its interpretation as "the best reading of the statute." See *Loper Bright Enters.* v. *Raimondo*, 144 S. Ct. 2244, 2266 (2024).

2. EPA attempts to deny just how much its Final Rule depends on future projections concerning a technology system that has not been adequately demonstrated today. For example, while EPA doggedly defends its power to set a BSER based on such projections, it also insists that it need not use that power here because "CCS is already in existence." 89 Fed. Reg. at 39,830 n.202. To be sure, CCS does indeed exist. But there is a wide gulf between CCS with some unspecified level of capture operating in certain settings and adequate demonstration of CCS with a consistent 90%-capture capable of operating at every existing coal-fired power plant and new gas-fired power plant across the country, as the Final Rule requires. The Final Rule impermissibly tries to rely on "projection[s]," "prediction[s]," "extrapolation[s]," "anticipated improvements," and other "forward-looking" mechanisms to bridge that yawning gap. See, *e.g.*, *id.* at 39,801, 38,830 n.202, 39,831, 39,832, 39,878 n.610, 39,889, 39,926.[5]

Similarly, EPA elsewhere states that "although the EPA is not relying on this point for purposes of these rules, it should be noted that the EPA may determine a system of emission reduction to be adequately demonstrated based on some amount of projection, even if some aspects of the system are still in development." *Id.* at 39,832 n.223. Yet in the very next sentence, EPA explains that "the authorization for lead time [in the Final Rule] accommodates *the development of projected technology*." *Id.* (emphasis added). If EPA is

[5] In this same vein, EPA also repeatedly insists that a BSER "need not be in widespread use at the time EPA's rule is published." 89 Fed. Reg. at 39,830; see also *id.* at 39,831-39,832, 39,878. But that misses the point. Here, no plant anywhere has installed a CCS system and achieved the 90%-capture the Final Rule requires. BSER may not need to be in widespread use, but it must be in use and achieving the mandated standard of performance somewhere before it can be required everywhere.

not relying on projections of technological development, then why does it emphasize that it is allowing "lead time" for just such technology development? See *Ark. Dep't of Health & Hum. Servs.* v. *Ahlborn*, 547 U.S. 268, 292 (2006) (rejecting an agency's "reasoning [that] couple[d] internal inconsistency with a conscious disregard for the statutory text"). The reality is that EPA has no choice but to unlawfully rely on projections of future technological development to defend its BSER determination and standard of performance that not a single power plant anywhere has yet achieved.

* * *

EPA's embrace of 90%-CO_2-capture CCS as the BSER therefore rests on a fundamental overreach of statutory authority. EPA's misconception of its statutory powers caused it to ask the wrong question at the outset of its BSER analysis and thereby infected the entire exercise. This error alone warrants vacatur. See *Utility Air Regulatory Group* v. *EPA*, 573 U.S. 302, 325-326 (2014) (vacating in relevant part a regulation that "rewr[ote] unambiguous statutory terms" and therefore "went well beyond the bounds of [EPA's] statutory authority" (internal quotation marks omitted)).

B. EPA exceeded its statutory authority and acted arbitrarily and capriciously in determining that the Final Rule's 90%-capture CCS system "has been adequately demonstrated."

It is axiomatic that a technology has not "been adequately demonstrated" when *no one* has ever successfully employed it. Here, EPA cannot cite even a single example of a power-generating facility achieving the Final Rule's 90%-capture standard with a CCS system. That disqualifies 90%-capture CCS from being the BSER. Faced with comments detailing this fault during the rulemaking process, EPA failed entirely to "supply 'a

satisfactory explanation for its action'" and "instead ignored '[this] important aspect of the problem' before it." *Ohio*, 144 S. Ct. at 2054 (quoting *Motor Vehicle Mfrs. Assn. of United States, Inc.* v. *State Farm Mut. Automobile Ins. Co.*, 463 U.S. 29, 43 (1983)). Armed with only a few scattered examples that indisputably fall short of the 90%-capture CCS required by the Final Rule, EPA forged ahead with its BSER conclusion. That action exceeds the clear bounds of its statutory authority and exemplifies arbitrary and capricious agency action. See *FCC* v. *Fox Television Stations, Inc.*, 556 U.S. 502, 536 (2009) ("[A]gency action must not be 'in excess of statutory jurisdiction, authority, or limitations, or short of statutory right.'" (quoting 5 U.S.C. § 706(2)(C)); *FCC* v. *Prometheus Radio Project*, 592 U.S. 414, 423 (2021) ("The APA's arbitrary-and-capricious standards requires that agency action be reasonable and reasonably explained").

1. EPA describes a few "industrial applications" of CCS to support its claim that "all components of CCS—CO_2 capture, CO_2 transport, and CO_2 sequestration—have been demonstrated concurrently, with each component operating simultaneously and in concert with the other components." 89 Fed. Reg. at 39,846. But none of those has achieved the 90%-capture the Final Rule requires, much less paired that with a system to transport and sequester the captured CO_2. Claiming that a BSER "has been adequately demonstrated" without identifying a single facility that has ever achieved it (or satisfactorily explaining why that does not matter) is definitionally arbitrary agency action.

EPA first points to the Searles Valley Minerals/Argus Cogeneration Plant that provides power to a soda ash plant and captures approximately 270,000 metric tons of CO_2 annually. *Id.* at 39,846-39,847. But critically, EPA does not explain whether this represents

capture of 90% of facility emissions—which is what the Final Rule requires. Moreover, EPA cannot claim that this facility transports or stores the captured CO_2—because it does not. App.310 (Technical Support Document). Accordingly, this example demonstrates only that some unspecified level of CO_2 capture—without the transport and storage of the captured CO_2 that the Final Rule requires—can be achieved in an industrial setting.

EPA also cites the Shute Creek Facility and the Great Plains Synfuels Plant, but once again it identifies only the total volume of CO_2 sequestered per year, ignoring whether that amount represents the required 90% capture. 89 Fed. Reg. at 39,847. Worse, at least for the Great Plains Synfuels Plant, the record demonstrates that it attained only "partial" (50%) CO_2 capture, without providing further details on the degree of efficiency achieved. App.311 (Technical Support Document). EPA's refusal to consider the actual capture percentage cannot be countenanced in light of the Final Rule's strict 90%-capture mandate.

Lastly, EPA relies on the Quest steam methane reformer facility in Alberta, which purportedly "capture[s] and sequester[s] approximately 80 percent of the CO_2 in the produced syngas." 89 Fed. Reg. at 39,847. That falls below EPA's 90%-capture requirement. And, as EPA acknowledges, the CO_2 capture methods employed there are "tailored to the flue gas conditions of a particular industry," rendering the efficiency metric reported for Quest less instructive for power plants. *Id.* at 39,847.

2. As for coal-fired power plants, EPA proffers one facility in Canada and two domestic examples of partial CCS implementation. But none of those even come close to achieving the 90% capture, transport, and storage that the Final Rule mandates—a deficiency that EPA wholly ignores.

EPA notes that Boundary Dam 3, located in Saskatchewan, has been shown "capable of achieving capture rates of 83 percent *when the capture plant is online*." *Id.* at 39,848 (emphasis added). But Boundary Dam does not regularly achieve even that carbon capture rate; indeed, its "CCS facility has only operated at full nameplate capacity for a few days shortly after it was commissioned," App.761 (SaskPower Comments), and has been continually "affected by technical issues," 89 Fed. Reg. at 39,848. For those reasons, Boundary Dam does not approach 90%-capture when judged on the Final Rule's continuous, facility-wide metric. App.543 (EEI Comments). EPA's only response consists of forward-looking optimism—claiming that those technical issues "will definitively not occur in a different type of * * * system" and that "[b]ased on the experiences of Boundary Dam Unit 3, key improvements can be implemented in future CCS deployments during initial design and construction." 89 Fed. Reg. at 39,849.

EPA next cites Plant Barry, a coal-fired power plant operated by EEI member Southern Company, as an example of a "fully integrated 25 MWe CCS project with a capture rate of 90 percent." *Id.* at 39,850. But that CCS project captures just a *fraction* of the CO_2 output of *one unit*, not the total CO_2 output of the entire plant that is required under the Final Rule. App.743 (Buckeye Institute Comments). Judged by the Final Rule's continuous, facility-wide standard, it achieved less than 5% capture. *Ibid.* As such, it cannot demonstrate the continuous, facility-wide 90% capture that the Final Rule mandates. EPA offers no response to this serious critique in its Final Rule.

EPA also points to the Petra Nova system, which "was designed to capture 90 percent of 37 percent of the flue gas produced by a single EGU that was part of the larger

facility." App.541 (EEI Comments); see 89 Fed. Reg. at 39,849-39,850. But it achieved that rate of capture only sporadically, with the result being that Petra Nova captured only 33% of the unit's (and less than 10% of the eight-unit facility's) CO_2 emissions when judged under the Final Rule's metric. App.541 (EEI Comments); App.747 (Buckeye Institute Comments). While EPA acknowledges that Petra Nova "experienced some technical challenges," it wholly ignores that Petra Nova's facility-wide capture rate is an order of magnitude below what the Final Rule requires. 89 Fed. Reg. at 39,849-39,850.

EPA's remaining examples fare worse. CCS demonstration projects at the Warrior Run power plant in Maryland and the Shady Point power plant in Oklahoma captured 10% and 5% of facility-wide CO_2 emissions, respectively. *Id.* at 39,849. Project Tundra in North Dakota and Project Diamond Vault in Louisiana are still in development—not yet built, let alone operational—and thus provide no support for EPA's position that CCS at 90% efficiency has been adequately demonstrated today. *Id.* at 39,850-39,851.

3. EPA's BSER determination for new and modified gas-fired units has even less real-world support. EPA's main example of CCS at a gas-fired unit is the Bellingham, Massachusetts facility. *Id.* at 39,926. EPA asserts the facility achieved 85-95% CO_2 capture, *ibid.*, but that number represents only the capture rate from a small subset of the facility's total CO_2 emission sources. App.549-550 (EEI Comments). Judged under the Final Rule's facility-wide metric, Bellingham's CCS captured less than 10% of the facility's emissions—an important marker that EPA ignores. *Ibid.* Moreover, the facility neither transported nor stored captured CO_2, as required by the Final Rule. App.550 (EEI Comments). And it closed in 2005. *Ibid.*

EPA also cites the Mongstad technology demonstration center that is testing carbon capture on a small subset of a facility's emissions. 89 Fed. Reg. at 39,852, 39,927 & n.768. However, EPA declined to provide the CO_2 capture rate of that test project when measured on the continuous, facility-wide basis that the Final Rule requires, thereby rendering it unable to support the Final Rule's 90%-capture requirement.

In an effort to shore up this grossly deficient record for *gas*-fired units, EPA invokes uses of CCS on *coal*-fired units. *Id.* at 39,924. But EPA does not explain how those examples support establishing CCS as the BSER for an entirely different type of generation (turbines instead of boilers) that uses a different fuel (natural gas instead of coal). See App.551 (EEI Comments) ("EPA * * * examines some demonstrations at coal-based steam generating units and other industrial processes, but that * * * experience is not comparable or applicable to natural gas-based units given the different engineering between coal powered steam turbines and natural gas combined cycle units."). In any event, EPA's coal examples have fatal problems of their own, as detailed above, and thus could not save EPA's baseless BSER determination for new and modified gas-fired units even if they were applicable.

* * *

This is not a close call. No power generation facility has deployed a 90%-capture CCS system required by the Final Rule. By definition, that means the Final Rule's selected BSER has not "been adequately demonstrated." Given that dispositive fact, EPA is unable to "supply 'a satisfactory explanation for its action.'" *Ohio*, 144 S. Ct. at 2054 (quoting *State Farm*, 463 U.S. at 43). And its attempt to rely upon far inferior CCS outcomes only confirms

the emerging, still-developing nature of CCS technology. EEI's members are committed to CCS and hope that it has a bright future, but much work remains to be done before it can be "adequately demonstrated" and mandated for deployment nationwide.

C. EPA exceeded its statutory authority and acted arbitrarily and capriciously in determining that the Final Rule's 90%-capture CCS system "has been adequately demonstrated" to be deployable by the Final Rule's January 1, 2032 deadline.

Even if—contrary to the statute—EPA could show adequate demonstration by using a crystal ball, CCS with 90%-capture still would not be adequately demonstrated to be deployable in the seven-and-a-half-year timeframe the Final Rule mandates.

As support for its timeline, EPA relies on a report illustrating a "baseline project schedule for the CO_2 capture plant"—*i.e.*, the schedule for installing and deploying carbon capture at a single plant. 89 Fed. Reg. at 39,874 (citing App.328 (Sargent & Lundy Report)). EPA cannot reasonably extrapolate from a single hypothetical plant's construction timeline to conclude that every unit subject to the 2032 CCS mandate could do so in the same timeframe, given the resulting demand for equipment and labor and strain on permitting resources, among other issues. See App.699 (EEI Supplemental Comments) (explaining how heightened demand and supply chain challenges have extended timeframes to obtain certain components); App. 714 (EEI Supplemental Comments) ("[D]evelopers of [CO_2 pipelines] have cited permitting challenges as the rationale for their decisions to delay, withdraw, or cancel.").

Importantly, the report EPA relies on admits that it "does not consider the timeline or requirements associated with transporting and sequestering the CO_2 that is ultimately captured" and yet emphasizes that "these other infrastructure aspects of the CCS value

chain are critical to the feasibility and timeline of implementing a CCS project." App.332 (Sargent & Lundy Report); see also *id.* at App.342. In other words, even the single-plant timeline only evaluates the lead time for *one part* of the CCS system—the capture of carbon. And the unconsidered transport and storage aspects of CCS present heightened timing challenges. Recent experience demonstrates the difficulty of constructing transport pipelines, as three projects to build 3,650 miles of new pipeline—which EPA trumpeted in the proposal—have since been either postponed or cancelled. App.714 (EEI Supplemental Comments). EPA asserts that *most* units have nearby access to geologic storage for carbon, rendering extended pipeline networks unnecessary. 89 Fed. Reg. at 39,856, 39,861-39,862. But it ignores the many units that it concedes lack such access. That is impermissible, because "[t]o be achievable, * * * a uniform standard must be capable of being met under [the] *most adverse* conditions which can reasonably be expected to recur." *Nat'l Lime Ass'n*, 627 F.2d at 431 n.46 (emphasis added). EPA cannot look only to the *most favorable* conditions instead.

In any event, pipelines of any distance must be permitted by relevant authorities, and EPA's unsupported claim that shorter pipelines "would not likely be as challenging to permit and build," 89 Fed. Reg. at 39,861, ignores the reality of constructing modern pipeline infrastructure. See *PennEast Pipeline Co.* v. *New Jersey*, 594 U.S. 482, 490-492 (2021) (describing six-plus years of regulatory proceedings and litigation to secure right to condemn land needed for a relatively short (116-mile) natural gas pipeline). EPA has little more than blind faith that the vast CO_2 pipeline network necessary for CCS will spring into existence before 2032. See 89 Fed. Reg. at 39,855 ("The EPA *anticipates* that in the coming

years, a large-scale interstate pipeline network *may* develop to transport CO_2.") (emphases added).

Similar hurdles plague storage facilities. EPA's discussion of permitting timelines for sequestration sites is long on optimism and short on record support. EPA notes that from 2021 to 2023 the number of permit applications for CO_2 injection wells for long-term storage increased tenfold. *Id.* at 39,870. Unfortunately, EPA's permitting resources have not increased correspondingly; EPA has 130 applications under review but has issued only *eight permits*. *Ibid.* EPA claims it "is devoting increased resources to the Class VI program" and "expect[s] that the additional resources * * * will lead to increased efficiencies." *Ibid.* These "expectations" are indistinguishable from the "speculation or surmise" that renders agency action arbitrary and capricious. *Bennett* v. *Spear*, 520 U.S. 154, 176 (1997).

And that assumes that appropriate storage sites can be located in the first place. EPA claims that "*[m]ost* coal-fired steam EGUs * * * are located in relatively close proximity to deep saline formations that have the *potential* to be used as long-term CO_2 storage sites." 89 Fed. Reg. at 39,855 (emphases added). But that, once again, improperly focuses on the Final Rule's application in the most favorable rather than the "most adverse" operating conditions. *Nat'l Lime Ass'n*, 627 F.2d at 431 n.46. And even then, there is no guarantee that these "potential" storage sites will prove to be suitable for long-term CO_2 storage in practice.

In sum, EPA's seven-and-a-half-year timeline is built on best-case scenarios and speculation. EPA may have demonstrated that if everything goes perfectly, some units

somewhere may be able to meet that timeline. But it plainly has not "been adequately demonstrated" that most—much less all—of the power-generating units subject to the Final Rule can do so. Instead, EPA impermissibly "ignore[d] * * * 'important aspect[s] of the problem.'" *Ohio*, 144 S. Ct. at 2053 (quoting *State Farm*, 463 U.S. at 43). Therefore, EPA's seven-and-a-half-year timeframe exceeds its statutory authority and is arbitrary and capricious even if its other BSER determinations could somehow survive review.

II. Applicants Face Imminent And Irreparable Injury.

Absent a stay, EEI's members face imminent irreparable harm. The D.C. Circuit shrugged off Applicants' serious harms by remarking that the "actual compliance deadlines do not commence until 2030 or 2032—years after this case will be resolved." App.269. But it ignored the demonstrated fact that the Final Rule's 2032 CCS deadline forces electric companies to make costly and effectively irreversible decisions *now*. During the pendency of this challenge, companies must decide whether to attempt the seemingly impossible task of timely installing CCS on existing coal and new gas generation or instead seek to avoid the CCS requirement at great cost. Either option inflicts substantial irreparable harm.

There simply is not sufficient time to install CCS on existing coal and new gas generation. The U.S. Department of Energy estimates that doing so will take between 8 and 14.5 years—which is longer than the less-than-eight-years the Final Rule provides. App.356 (Dep't of Energy Funding Opportunity Announcement). EPA attempted to downplay its sister agency's analysis by claiming that it was focused on more experimental, advanced CCS technologies rather than existing ones. But DOE's analysis explicitly addressed the precise kind of CCS technologies that the Final Rule requires—those that can "capture, transport (if required), and store CO_2 from new or existing [coal or gas units]

and * * * achieve the [minimum] *unit-wide* 90% CO_2 capture efficiency (or greater) once stable operations are achieved." App.352-353 (emphasis original). Further confirming DOE's timeline, the declarants' intensive, technical assessments conclude that it will take more than a decade for their companies to install CCS, with many unknowns that could add months or years. App.772-774 (Adelman Decl. ¶¶ 30-37); App.785 (Bakken Decl. ¶¶ 25-36); App.802-806 (Bulpitt Decl. ¶¶ 21-29); App.814-823, 830-831 (Burch Decl. ¶¶ 23-46, 76).

Due to these long lead times, any company opting to pursuing CCS installation must start *immediately* (and even then surpass the most optimistic of both DOE's and the declarants' time estimates) to have 90%-capable CCS functioning by the Final Rule's 2032 deadline. Indeed, the Final Rule itself "assumes" that companies will have to begin "work" on their compliance efforts by "June 2024." 89 Fed. Reg. at 39,874, 39,893. That would require the expenditure of many millions of dollars during the pendency of this challenge. App. 775 (Adelman Decl. ¶ 44); App.801, 806-807 (Bulpitt Decl. ¶¶ 19, 30); App.823-826 (Burch Decl. ¶¶ 47-59). Those substantial sums of money cannot be recovered by Applicants or their customers if they ultimately prevail in their challenge to the Final Rule. App. 775-776 (Adelman Decl. ¶¶ 43-45); App.784-785, 789 (Bakken Decl. ¶¶ 23-24, 36); App.806-807 (Bulpitt Decl. ¶ 30); App.812-813 (Burch Decl. ¶ 19).

Such expenditures are classic irreparable harm, as this Court confirmed in staying an EPA rule last Term. See *Ohio*, 144 S. Ct. at 2053 (holding that incurring significant "nonrecoverable" compliance costs "during the pendency of th[e] litigation" constitutes a "strong argument[]" on "[irreparable] harm[]"); see also *Thunder Basin Coal Co.* v. *Reich*, 510 U.S. 200, 220-221 (1994) (Scalia, J., concurring) ("[C]omplying with a regulation later

held invalid almost *always* produces the irreparable harm of nonrecoverable compliance costs.") (emphasis original); *Ala. Ass'n of Realtors* v. *Dep't of Health & Hum. Servs.*, 594 U.S. 758, 765 (2021) (recognizing a "risk of irreparable harm by depriving [landlords] of rent payments with no guarantee of eventual recovery"); *Philip Morris USA Inc.* v. *Scott*, 561 U.S. 1301, 1304 (2010) (economic losses may be considered irreparable "[i]f expenditures cannot be recouped").

The alternative compliance options also inflict irreparable harm. A company may avoid the CCS requirement by operating new gas units at less than 40% capacity. Consequently, one option is to build more units that are designed for base-load operation and then operate them less efficiently to remain below the 40% threshold. App.768-769, 774 (Adelman Decl. ¶¶ 23, 38-39); App.782-783, 789-790, 792 (Bakken Decl. ¶¶ 20, 38, 40, 48); App.830-831 (Burch Decl. ¶ 76). Another is to build different kinds of units that are designed to operate at lower capacity, but those types of units produce power less efficiently. App.769, 774 (Adelman Decl. ¶¶ 24, 39); App.783, 789, 790, 792 (Bakken Decl. ¶¶ 21, 38, 40, 48); App.831 (Burch Decl. ¶ 77). Both paths lead to a less efficient and more costly generation fleet.

Companies must decide among those generation options now and spend many millions of dollars building that new generation *during the pendency of this challenge*, if they are to navigate the long timelines required for building new generation and meet growing demand for electricity. App.764, 767-771, 775-776 (Adelman Decl. ¶¶ 7, 18-19, 22-23, 26, 28-29, 40-45); App.780-782 (Bakken Decl. ¶¶ 15-18, 41-48); App. 798-799 (Bulpitt Decl. ¶¶ 10-11); App.831-832 (Burch Decl. ¶¶ 80-81). Beyond those immediate costs, companies

risk being effectively locked-in to building less efficient and more costly generation sources that would inflict harm on themselves and their customers for decades, even if this challenge were successful. App. 775-776 (Adelman Decl. ¶ 45); App.833 (Burch Decl. ¶ 84).

The non-CCS options for existing coal units also inflict irreparable harm. Each route to avoiding CCS—accelerated retirement or conversion to gas—requires that millions of dollars be spent imminently. App.812-814, 826-832 (Burch Decl. ¶¶ 18, 21-22, 60-82).

The D.C. Circuit wrote off this substantial showing of irreparable harm by concluding that "a stay will not help because the risk remains that the distant deadlines in EPA's rule will come back into force at the end of the case." App.269. But that is not how the irreparable-harm test for stays works. If it were, then this Court's recent stay in *Ohio* would have been improper because the significant "nonrecoverable" compliance costs that would have been incurred "during the pendency of th[e] litigation" would have had to be expended anyway since the same compliance deadlines would spring back into force if EPA prevailed. 144 S. Ct. at 2053. Yet this Court held that those compliance costs constitute a "strong argument[]" on "[irreparable] harm[]." *Ibid.* That makes sense because a stay of a rule necessarily tolls the rule's compliance deadlines, as that is the only way to truly preserve the status quo.[6] Otherwise, a stay would be utterly useless, and there would be no

[6] EPA's consistent practice reflects this reality. See 88 Fed. Reg. 67,102, 67,103-67,104 (Sept. 29, 2023) ("EPA generally anticipates that any future action bringing the Good Neighbor Plan's requirements into effect after a stay would phase in the requirements so as to provide lead times to implement the Good Neighbor Plan's identified emissions control strategies comparable to the lead times that the Good Neighbor Plan would have provided in the absence of the stay, thereby giving parties sufficient time to prepare for implementation."); 79 Fed. Reg. 71,663, 71,665 (Dec. 3, 2014) ("[T]his action tolls by three calendar years dates and years in the regulatory text as previously amended that had not passed as of December 30, 2011, the date of the stay order.").

way to obtain much-needed interim relief from regulations that impose serious harm before judicial review can be completed.

In sum, all roads lead to substantial irreparable harm if a stay is not granted. Applicants do not have the luxury of waiting to see how this litigation turns out before acting. They must spend many millions of dollars and make effectively irreversible decisions *now*. As a result, an eventual victory in their challenge to the Final Rule will be hollow, for much of the damage will already have been done. Only a stay can prevent that injustice.

III. The Balance Of Harms And The Public Interest Favor A Stay.

Whereas EEI's member companies face imminent irreparable harm should the CCS-based standards and guidelines remain in effect, there is no possibility of substantial and imminent harm to non-Applicants if a stay is granted. EPA admits that utilities have already achieved unprecedented emission reductions. 89 Fed. Reg. at 39,813; see also *West Virginia*, 597 U.S. at 755 (Kagan, J., dissenting) ("Market forces alone caused the power industry to meet the [Clean Power] Plan's nationwide emissions target."). Moreover, most EEI members that own generation have made voluntary commitments to reduce their CO_2 emissions to net-zero and are actively working to accomplish those goals. App.499 (EEI Comments). A stay would not affect these extant and ongoing emission reductions.

Equally importantly, there is no public interest in requiring compliance with an unlawful rule. *Ala. Ass'n of Realtors*, 594 U.S. at 766 ("[O]ur system does not permit agencies to act unlawfully even in pursuit of desirable ends."). Rather, the public has a strong interest in regulatory stability. See *In re EPA*, 803 F.3d 804, 808 (6th Cir. 2015) (staying EPA water rule to "temporarily silence[] the whirlwind of confusion that springs

from uncertainty about the requirements of the new Rule and whether they will survive legal testing"). A stay directly serves that interest here.

Furthermore, the public possesses an intense interest in ensuring that the ongoing clean energy transition is affordable and reliable. EPA should allow sufficient time for major technological shifts so that electric companies and their customers are not required to fund and deploy emerging, not-yet-demonstrated technologies. That is especially true here, where it is doubtful at best that power companies could fully deploy CCS to achieve 90% CO_2 capture by 2032. Once 90%-capture CCS is in fact adequately demonstrated, EPA can commence a new Section 111 rulemaking establishing it as the BSER. But that is decidedly *not* the case today based on EPA's own record.

CONCLUSION

This Court should stay the Final Rule pending resolution of the merits below, any petition for writ of certiorari, and merits review (if any) in this Court.

Dated: July 29, 2024

Respectfully submitted,

/s/ Amanda Shafer Berman
Thomas A. Lorenzen
Amanda Shafer Berman
Elizabeth B. Dawson
CROWELL & MORING LLP
1001 Pennsylvania Ave., N.W.
Washington, D.C. 20004

Counsel for Edison Electric Institute

/s/ Aaron M. Streett
Aaron M. Streett
Counsel of Record
J. Mark Little
BAKER BOTTS L.L.P.
910 Louisiana Street
Houston, TX 77002
(713) 229-1234
aaron.streett@bakerbotts.com

Megan H. Berge
BAKER BOTTS L.L.P.
700 K Street, N.W.
Washington, D.C. 20001

Counsel for Oklahoma Gas and Electric Company and Idaho Power Company