

ENVIRONMENTAL DEFENSE V. DUKE ENERGY CORPORATION*

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The United States generates over half of its electric power from burning coal,¹ yet much of this production goes virtually unregulated.² Many of the largest electric utilities benefit from “grandfathered”³ status under the Clean Air Act (“CAA”),⁴ allowing them to emit higher levels of pollutants than those of more modern facilities so long as they do not undergo a “modification.” During the past three decades, the task of determining when these facilities become “modified,” and thereby lose their exemptions, has often fallen on the courts.⁵ In 2000, this litigation entered a new phase when the Clinton administration brought complaints against thirty-two utilities,⁶ alleging that they had failed to report repairs and improvements that triggered the CAA’s New Source Review (“NSR”) program.⁷ Last term, in *Environmental Defense v. Duke Energy Corporation*, the Supreme Court was asked to review one of these complaints and to interpret the definition of “modification.” The Court should remand the case on jurisdictional grounds. If the Court reaches a decision on the merits, its ruling will hamper the government’s ability to enforce a broad range of environmental protections. If the Court goes on to adopt the “modification” standard advocated by industry, its decision will significantly undermine the nation’s air quality regulation.

BACKGROUND

In singling out “new or modified sources”⁸ for regulation, the CAA leaves the Environmental Protection Agency (“EPA”) considerable discre-

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¹ See HARVEY BLATT, AMERICA’S ENVIRONMENTAL REPORT CARD: ARE WE MAKING THE GRADE? 109 (2005).

² See Deepa Varadarajan, *Billboards and Big Utilities: Borrowing Land Use Concepts To Regulate “Nonconforming” Sources Under the Clean Air Act*, 112 YALE L.J. 2553, 2555 (2003).

³ “Grandfathering,” which one author categorizes as a type of “vintage-based regulation,” allows “units produced prior to a specific date [to be] exempted from new regulation or face less stringent requirements.” Robert N. Stavins, *Vintage-Differentiated Environmental Regulation*, 25 STAN. ENVTL. L.J. 29 (2006).

⁴ 42 U.S.C. §§ 7401–7671 (2006).

⁵ See, e.g., *Ala. Power Co. v. Costle*, 636 F.2d 323, 400 (D.C. Cir. 1979) (noting that “[t]he statutory scheme intends to ‘grandfather’ existing industries; but the provisions concerning modification indicate that this is not to constitute a perpetual immunity from all standards under the PSD program”); *Puerto Rican Cement Co. v. EPA*, 889 F.2d 292 (1st Cir. 1989) (upholding the so-called “actual-to-potential” test to define a modification).

⁶ See *New York v. EPA*, 413 F.3d 3, 16 (D.C. Cir. 2005).

⁷ See 42 U.S.C. §§ 7470–7492.

⁸ 42 U.S.C. § 7503(a)(1)(A).

tion to define “modification.” Congress introduced the distinction between old and new facilities when it passed the 1970 CAA Amendments, which ordered EPA to establish “New Source Performance Standards” (“NSPS”).⁹ The 1970 CAA Amendments defined “modification” as “any physical change in, or change in the method of operation of, a stationary source which *increases* the amount of any air pollutant emitted by such source.”¹⁰ Later amendments to the CAA cross-reference this definition. The provision has invited a stream of litigation, much of it concerning what measure of “increase” determines whether a modification has occurred. As a result of the complexity of this assessment, and the huge costs at stake for regulated entities,¹¹ challenges to the EPA “modification” regulations have become a fixture in the D.C. Circuit.¹² While the D.C. Circuit has exclusive jurisdiction over challenges to nationally applicable CAA rules and regulations,¹³ challenges to EPA’s on-the-ground interpretations of these regulations have also proliferated across the circuits.¹⁴

These proceedings have been complicated by multiple regulations that define the term “modification” and carve out exceptions for so-called “routine maintenance.” EPA’s 1975 NSPS regulations contain two overlapping definitions of “modification.”¹⁵ One definition refers to increases in a source’s “emissions rate”¹⁶ while the other refers to increases in the “amount of any air pollutant”¹⁷ emitted by the source. The 1974 Prevention of Significant Deterioration (“PSD”) regulations offer little clarification, employing similarly indeterminate language.¹⁸ Unlike the NSPS program, which imposes technology-based emissions limits tailored to specific industrial classes, the PSD program was designed to protect overall air quality in areas that met or exceeded national standards.¹⁹ With its requirement of precon-

⁹ *Id.* § 7411. The NSPS provisions set standards according to the industrial category of the source, and without regard to whether the emitting facility is a “major” source for the purposes of other CAA programs.

¹⁰ *Id.* § 7411(a)(4) (emphasis added).

¹¹ A top of the line “scrubber” to cut down sulfur dioxide emissions can cost several hundreds of millions of dollars to install. See Bruce Barcott, *Changing All the Rules*, N.Y. TIMES, Apr. 4, 2004, § 6 (Mag.), at 38.

¹² See *Ala. Power Co. v. Costle*, 636 F.2d 323, 346–49 (D.C. Cir. 1979); *New York v. EPA*, 413 F.3d 3, 14–16 (D.C. Cir. 2005) (discussing the history of the rulemaking proceedings).

¹³ See 42 U.S.C. § 7607 (2006).

¹⁴ See, e.g., *Puerto Rican Cement Co. v. EPA*, 889 F.2d 292 (1st Cir. 1989); *Wis. Elec. Power Co. v. Reilly (WEPCo)*, 893 F.2d 901 (7th Cir. 1990).

¹⁵ See Modification, Notification, and Reconstruction, 40 Fed. Reg. 58,416, 58,418 (Dec. 16, 1975).

¹⁶ *Id.* at 58,419.

¹⁷ *Id.* at 58,416, 58,418.

¹⁸ See Prevention of Significant Air Quality Deterioration, 39 Fed. Reg. 42,510, 42,514 (Dec. 5, 1974). The preamble to the regulations states that the definition of “modified source” was changed in order “to be consistent with the final definition of the term under the [NSPS] program.” *Id.* at 42,513. The 1974 PSD regulations make no reference, however, to an hourly emissions rate.

¹⁹ See *Ala. Power Co. v. Costle*, 636 F.2d 323, 346–49 (D.C. Cir. 1979).

struction permits, the PSD program continued the NSPS regime's tradition of preferential treatment for older facilities. When Congress incorporated the PSD regulations into the CAA Amendments of 1977, it merely cross-referenced the preexisting statutory definition of modification,²⁰ leaving the precise meaning of the various regulatory definitions unclear.

Despite the statute's use of identical terminology, the regulatory standards for "modification" under NSPS and PSD diverged. In 1978 EPA issued New Source Review ("NSR") regulations²¹ governing both the PSD program and its counterpart in areas with substandard air quality.²² These regulations contained yet another definition of "modification," which EPA revised in 1980.²³ The revised definition also differed from both of the original NSPS program definitions. In ensuing litigation, EPA came to defend the position that, while the NSPS program applied only to sources whose hourly emissions of pollutants increased as a result of a physical change, the NSR regulations applied where an annual emissions increase occurred. This inconsistent treatment signifies a lower threshold for triggering NSR, since an increase in annual emissions may result from extending a source's hours of operation, at the same or an even lower hourly emissions rate.

In 1989, the First Circuit affirmed an EPA ruling that a cement plant's proposed improvements would constitute a modification even though the new cement kilns that the company sought to install would reduce the plant's hourly emissions rate.²⁴ EPA reasoned that because the improvements would create the potential to emit significantly more on an annual

²⁰ See generally 42 U.S.C. §§ 7501–7515 (2006). Initially, the PSD program contained no reference to "modification." Months later, Congress passed "technical and conforming amendments" to the CAA, which expanded the definition of "construction" under the PSD provisions to "include[] the modification (as defined in §7411(a) [the NSPS provisions] of this title) of any source or facility." Pub. L. No. 95-190, 91 Stat. 1293, 1402 (1977). Compare Clean Air Act Amendments of 1977, Pub. L. No. 95-95, 91 Stat. 685, 735 (1977) (requiring PSD permits for "construction" only) with 42 U.S.C. § 7502(c)(5) (requiring "permits for the construction or operation of new or modified major stationary sources anywhere in the nonattainment area").

²¹ See Prevention of Significant Air Quality Deterioration, 43 Fed. Reg. 26,380, 26,403–04 (June 19, 1978).

²² The Nonattainment New Source Review ("NNSR") program complements the PSD program's regulatory coverage. See 42 U.S.C. § 7502 (2006). Because NSR encompasses both PSD and NNSR, this Comment refers to both PSD and NNSR as simply NSR. While the PSD and NNSR programs have important differences, those differences have little bearing on the analysis here.

²³ The 1980 regulations define a "major modification" as "any physical change in or change in method of operation . . . which would result in a significant net emissions increase," and define "net emissions increase" as "any increase in actual emissions" after taking into account a process known as "netting." Requirements for Preparation, Adoption, and Submittal of Implementation Plans, 45 Fed. Reg. 52,676, 52,735 (Aug. 7, 1980). Finally, the regulations state that "actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which proceeds the particular date and which is representative of normal source operation." *Id.* at 52,735–36.

²⁴ *Puerto Rican Cement Co. v. EPA*, 889 F.2d 292 (1st Cir. 1989).

basis, they constituted a modification, and the First Circuit agreed. The next year, however, the Seventh Circuit ruled against EPA, holding that the agency's future emission projections could not assume that a source would operate at full capacity after making a change, thus invalidating the so-called "actual-to-potential" test.²⁵ In response to the Seventh Circuit, the EPA promulgated a new test known as the "actual-to-projected-actual-test," which projects future emissions on the basis of a facility's past operating conditions, and compares this with the current annual emissions level.²⁶ This rule was challenged in the D.C. Circuit, which stayed the proceedings pending a new rulemaking process.²⁷

During the extended rulemaking process, the Clinton administration launched investigations into numerous facilities for noncompliance with the existing NSR program.²⁸ As of 1999, over three-quarters of the nation's thousand largest fossil fuel-fired power plants continued to operate without NSR permits.²⁹ EPA eventually brought complaints against thirty-two utilities, alleging that they had performed unpermitted modifications. Eight such complaints were brought against Duke Energy Corporation ("Duke").³⁰

The complaints against Duke, filed in December of 2000, took issue with twenty-nine plant improvement projects that the company performed between 1988 and 2000. Duke defended the improvements as "routine maintenance, repair, and replacement,"³¹ although for one overhaul project the company spent more than seven times the original cost of the unit.³² Duke also argued that, because the work would not result in an increase in the plants' hourly rate of emissions, it did not fall within the regulatory definition of "modification."³³ EPA sought partial summary judgment regarding the proper method for evaluating whether a modification had taken place. EPA argued that the proper method was the actual-to-projected-actual test, and that the relevant change was in Duke's annual aggregate emissions, not its hourly emissions rate as Duke asserted.

²⁵ *WEPCo*, 893 F.2d 901, 916–18 (7th Cir. 1990).

²⁶ *See New York v. EPA*, 413 F.3d 3, 15 (D.C. Cir. 2005).

²⁷ *Id.* Among the parties to that challenge, and to the subsequent settlement agreements aimed at amending the regulations, was Duke Energy Corp. *See Reply Brief of Petitioners at 5*, *Env'tl. Def. v. Duke Energy Corp.*, 126 S. Ct. 2019 (2006) (No. 05-848).

²⁸ *New York*, 413 F.3d at 16.

²⁹ *See U.S. DEP'T OF ENERGY, ENERGY INFO. ADMIN., ANNUAL ENERGY REVIEW 1999*, available at <http://tonto.eia.doc.gov/FTP/ROOT/multifuel/038499.pdf>.

³⁰ *See United States v. Duke Energy Corp.*, 278 F. Supp. 2d 619, 622 (M.D.N.C. 2003). The following year, Environmental Defense and the North Carolina chapters of the Sierra Club and the Public Interest Research Group Citizen Lobby entered the case on a motion to intervene as plaintiffs. *Id.*

³¹ *Id.* at 630. According to Duke, industry practice, rather than a case-by-case evaluation of "common-sense factors such as nature and extent, purpose, frequency and cost," determine what work qualifies as "routine." *Id.*

³² *See United States v. Duke Energy Corp.*, 411 F.3d 539, 544 (4th Cir. 2005).

³³ *Id.* at 544–45. The parties agreed that EPA's 1980 rule governed the issue. *Id.* at 544 n.1; *see also supra* note 23 and accompanying text.

In August of 2003, the District Court for the Middle District of North Carolina granted summary judgment to Duke.³⁴ Judge Frank W. Bullock held that only an hourly emissions rate increase triggers the NSR provisions, basing his interpretation on the regulatory language,³⁵ contemporaneous statements made by EPA officials,³⁶ and legislative intent.³⁷ Addressing the statutory text, the court noted that “the NSPS definition of ‘modification’ . . . was incorporated by explicit reference into [NSR].”³⁸ Judge Bullock acknowledged the distinction between the NSPS program’s technology-based prescriptions versus the NSR program’s focus on maintaining local air quality.³⁹ He maintained, however, that a uniform standard for measuring an “increase” was consistent with the two programs’ distinct objectives. According to the court, an hourly increase in emissions would always trigger NSPS, but an additional “two conditions for PSD applicability—significance levels⁴⁰ and netting⁴¹—effectuate the air quality purpose of the PSD program.”⁴² Judge Bullock thus reasoned that the NSR program’s definition of “increase,” while necessarily different from that of the NSPS program, should be narrower instead of broader.

The United States appealed to the Fourth Circuit, which affirmed.⁴³ Although the Fourth Circuit agreed with the ultimate outcome of the case, it bypassed the district court’s reliance on EPA regulations and official commentary, finding that “Congress has indeed directly spoken to the precise question at issue.”⁴⁴ Viewing the definition of “modification” in the CAA as analogous to the definition of “wages” in the Internal Revenue Code, Judge Diana Gribbon Motz relied on the Supreme Court’s decision in *Rowan Companies Inc. v. United States*⁴⁵ to reach what she deemed

³⁴ *Duke Energy Corp.*, 278 F. Supp. 2d at 630.

³⁵ *Id.* at 641. The court noted that the definition of “physical [or operational] change,” 40 C.F.R. § 51.166(b)(2)(iii)(a) (2005), expressly excluded an “increase in the hours of operation,” and thus the NSPS regulation defining “increase” in terms of an hourly rate necessarily applied.

³⁶ *Id.* The court cited a letter and memorandum written by EPA’s director of the Division of Stationary Source Enforcement, Edward E. Reich.

³⁷ *Id.* at 630.

³⁸ *Duke Energy Corp.*, 278 F. Supp. 2d at 642.

³⁹ *Id.* at 643.

⁴⁰ *Id.* Increases of annual emissions that fall below the regulatory “significance levels,” enumerated in 40 C.F.R. § 51.166(b)(23) (2005), are excluded from the definition of “net increase.” *See id.* at 51.166(b)(3). Judge Bullock held that this determination only becomes relevant once a source has been shown to have increased its hourly emissions rate.

⁴¹ Netting is also measured on an annual basis, allowing a facility to credit, or “offset,” contemporaneous decreases in annual emissions against emissions increases for the purposes of NSR. *See id.* § 51.166(b)(3).

⁴² *Duke Energy Corp.*, 278 F. Supp. 2d at 643.

⁴³ *United States v. Duke Energy Corp.*, 411 F.3d 539, 542 (4th Cir. 2005).

⁴⁴ *Id.* at 546 (quoting *Chevron, U.S.A., Inc. v. Natural Res. Def. Council*, 467 U.S. 837 (1984)).

⁴⁵ 452 U.S. 247, 250 (1981) (holding that the Commissioner of the Internal Revenue Service must employ the same definition of wages for the statute governing income-tax withholding as that used for the Federal Insurance Contributions Act and Federal Unemployment Tax Act).

the “common sense” result.⁴⁶ According to her reading of *Rowan*, “when Congress itself provided ‘substantially identical’ statutory definitions of a term in different statutes, the agency charged with enforcing the statutes could not interpret the statutory definitions ‘differently.’”⁴⁷ Judge Motz reasoned that because NSPS regulations used an hourly rate standard to define “modification” and the NSR statute incorporated the statutory NSPS provision, EPA must “interpret its [NSR] regulations defining ‘modification’ congruently.”⁴⁸ The Fourth Circuit judge was careful to qualify the decision, however, stating that EPA could use an annual standard so long as it did so consistently, in both the NSPS and NSR regulations.⁴⁹

The Bush Administration declined to petition the Supreme Court for certiorari. The government attributed its about-face to the promulgation of new NSR regulations in 2002, which made the Fourth Circuit’s ruling “of limited practical import now.”⁵⁰ Environmental Defense, a national non-profit environmental organization, nevertheless filed its own petition,⁵¹ joined by the other plaintiffs granted intervenor status in the district court.⁵² Their argument for certiorari was bolstered when the D.C. Circuit, just nine days after the *Duke* decision, issued an opinion upholding EPA’s “actual-to-projected-actual” test.⁵³ The Supreme Court granted Environmental Defense’s petition for certiorari on the question of regulatory construction facing the Fourth Circuit, as well as on whether the Fourth Circuit overstepped its jurisdictional authority by deciding an issue reserved for the D.C. Circuit.⁵⁴ The case represents the first time since 1971 that the Supreme Court has granted certiorari over government opposition in an environmental case.⁵⁵

In its brief, Environmental Defense advances two arguments. First, it maintains that the Fourth Circuit encroached upon the D.C. Circuit’s exclusive subject-matter jurisdiction, and contravened other statutory conditions governing judicial review of CAA regulations.⁵⁶ Specifically, Environmental Defense invokes CAA Section 307(b),⁵⁷ which stipulates that

⁴⁶ *Duke Energy Corp.*, 411 F.3d at 547.

⁴⁷ *Id.*

⁴⁸ *Id.* at 550.

⁴⁹ *Id.* at 551.

⁵⁰ Brief for the United States in Opposition at 7–8, *Env’tl. Def. v. Duke Energy Corp.*, 126 S. Ct. 2019 (2006) (No. 05-848). The government switched sides once again after the Court granted certiorari. See Reply Brief for the United States as Respondent Supporting Petitioners, *Duke Energy Corp.* (2006) (No. 05-848) (D.C. Cir. 2005).

⁵¹ See Petition for a Writ of Certiorari, *Duke Energy Corp.*, 126 S. Ct. 2019 (2006) (No. 05-848) [hereinafter Brief for Petitioners].

⁵² See *supra* note 30.

⁵³ See *New York v. EPA*, 413 F.3d 3 (D.C. Cir. 2005).

⁵⁴ *Env’tl. Def. v. Duke Energy Corp.*, 126 S. Ct. 2019 (2006) (No. 05-848).

⁵⁵ See Clair Windsor, Medill News Service, *The Bush Administration’s Shift on Clean Air and Duke Energy* (June 2006), <http://docket.medill.northwestern.edu/archives/003706.php> (last visited Nov. 17, 2006) (on file with the Harvard Environmental Law Review).

⁵⁶ See Brief for Petitioners, *supra* note 51, at 3–4.

⁵⁷ Codified at 42 U.S.C. § 7607(b) (2006).

nationally applicable regulations implementing the CAA are subject to review only in the D.C. Circuit. Environmental Defense argues that through its *de facto* invalidation of national CAA regulations, the Fourth Circuit undermined Section 307(b)'s objective of harmonizing environmental regulation across the country,⁵⁸ and failed to follow Supreme Court precedent interpreting the judicial review provision.⁵⁹ Environmental Defense further points to Section 307(b)'s requirements that challenges to final agency actions be filed within sixty days and that otherwise reviewable EPA actions "shall not be subject to judicial review" in enforcement proceedings.⁶⁰ The petitioners argue that the Fourth Circuit disregarded these limitations in allowing Duke to challenge authoritative EPA interpretations of the NSR regulations after the sixty-day window had closed and enforcement proceedings had begun.⁶¹

Duke responds to the jurisdictional argument that EPA promulgated ambiguous regulations and the Fourth Circuit reviewed EPA's rule interpretation as applied to the agency's enforcement action against Duke.⁶² Because the Fourth Circuit struck down EPA's application of the 1980 rule, but not the rule itself, the Section 307(b) jurisdictional mandate fails to apply.⁶³ To buttress this contention, Duke recites the district court's findings that the regulatory construction, plus contemporaneous statements made by EPA officials, support an interpretation that the regulation applies an hourly rate test.⁶⁴ Duke further maintains that EPA issued no final action or authoritative interpretation of its NSR regulation, but rather shifted its position indeterminately, depriving Duke of any real opportunity for review until enforcement proceedings began.⁶⁵

Environmental Defense's second argument addresses the merits of the Fourth Circuit's decision. The petitioners distinguish *Rowan* as supporting the proposition that identical language provides "strong evidence"⁶⁶ of Congress' intent, but not an effectively irrebuttable presumption of uniform usage, as the Fourth Circuit held.⁶⁷ Environmental Defense notes that other factors influenced the *Rowan* court, such as the legislative history of the tax bill defining wages.⁶⁸ Moreover, Environmental Defense maintains that even if the same regulatory definition applies across the NSR and NSPS programs, the question remains as to which of the two

⁵⁸ See Brief for Petitioners, *supra* note 51, at 3.

⁵⁹ *Id.* at 14–16.

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² See Brief for the Respondent Duke Energy Corporation in Opposition at 24–26, *Env'tl. Def. v. Duke Energy Corp.*, 126 S. Ct. 2019 (2006) (No. 05-848) [hereinafter Brief for Duke].

⁶³ *Id.*

⁶⁴ *Id.*

⁶⁵ *Id.* at 29.

⁶⁶ *Rowan Companies Inc. v. United States*, 452 U.S. 247, 253 (1981).

⁶⁷ Brief for Petitioners, *supra* note 51, at 22.

⁶⁸ *Id.* at 23.

original NSPS regulations should apply.⁶⁹ In response to the district court's rationale, petitioners argue that the "plain language" of the NSR regulations "contain[s] no requirement that there be an increase in a source's hourly rate."⁷⁰ They maintain that no plausible interpretation of the regulations supports Duke's position, and they point out that Duke and other industry petitioners attempted to have the regulations amended to include an hourly rate.⁷¹ These efforts make little sense, the petitioners argue, if in fact Duke believed that the regulations already applied an hourly rate test.

According to Duke, however, EPA officials' contemporaneous interpretations of the NSR regulations established an hourly rate standard.⁷² EPA later attempted to adopt a new standard, the "actual-to-potential" test, and when the Seventh Circuit rejected it, EPA failed to comply with the Seventh Circuit's remand instructions in elaborating its "actual-to-projected-actual" test.⁷³ The only valid rule was thus, by default, the hourly rate standard. Duke disputes the petitioners' broad reading of *New York*, noting that the D.C. Circuit primarily considered challenges to later 2002 regulations, and declined to rule on an interpretation of the 1980 regulations within the preamble to those regulations.⁷⁴ The Fourth Circuit's ruling therefore does not conflict with *New York*, and moreover, the weight of precedent clearly favors its position, since not "a single case . . . has held that identical statutory definitions can be interpreted differently by an agency charged with enforcement of the statute."⁷⁵

ANALYSIS

Irrespective of the outcome, if the Court reaches the merits of Duke's claim, the case will deal a blow to environmental interests in the legal and policy arenas. Several enforcement actions remain to be decided in

⁶⁹ *Id.* at 22.

⁷⁰ Reply Brief of Petitioners at 3, *Duke Energy Corp.*, 126 S. Ct. 2019 (2006) (No. 05-848).

⁷¹ Environmental Defense points out that, pursuant to a settlement with Duke and other industry petitioners in 1982, EPA proposed for comment a change in the 1980 regulations adding "new regulatory language expressly providing [for] hourly emissions rates," and "removing the references to 'actual' emissions" in the definition of "net increase." *Id.* at 5.

⁷² See *supra* note 36 and accompanying text. The Fourth Circuit's analysis did not rely on these contemporaneous interpretations, referred to in the proceedings as the "Reich memoranda." The Supreme Court showed some willingness in oral argument to resurrect them, however, with Justice Scalia voicing his concern "that companies can get whipsawed," when the agency's favorable interpretation persuades them not to challenge a regulation, and then later, "when it turns out the agency is using a different interpretation, you have the jurisdictional bar." Transcript of Oral Argument at 6, *Duke Energy Corp.*, 126 S. Ct. 2019 (2006) (No. 05-848).

⁷³ Brief for Duke, *supra* note 62, at 11.

⁷⁴ See *id.* at 21; *New York v. EPA*, 413 F.3d 3, 20 (D.C. Cir. 2005).

⁷⁵ See Brief for Duke, *supra* note 62, at 22.

the lower courts.⁷⁶ Should the Court rule in favor of Duke's narrow interpretation of "modification," the case would have a direct and tangible impact on air quality. Because the 2002 regulations significantly relax emissions standards,⁷⁷ many utilities that escape liability for failure to comply with the older regulations will have little reason to take further abatement measures. Even if the Court rejects Duke's regulatory interpretation, however, reaching the merits of that claim will invite litigation on a broad range of matters previously barred under the judicial review provisions of the CAA and other environmental statutes.⁷⁸ Moreover, granting EPA broad authority to construe the Clean Air Act and other environmental statutes may come back to haunt environmentalists, quite possibly in this very term.⁷⁹ By contrast, a decision recognizing the jurisdiction of the D.C. Circuit would produce lasting gains for all sides by diminishing uncertainty and litigation costs, and curbing the distortions wrought by the NSR program.

Admittedly, the integrity of the D.C. Circuit's jurisdictional authority did not appear to worry some of the Justices during oral argument.⁸⁰ This is unfortunate, because the D.C. Circuit's treatment of the NSR program is more consistent with the program's history. Congress created NSR in response to the increasingly evident failures of technology-based standards and NSPS in particular. NSPS relies on EPA to identify appropriate technologies and to set emissions limits that force industry to adopt these technologies. Across environmental law, technology-based regulations like NSPS have proven unwieldy, often assigning a separate emissions standard to classes of facilities within industry subcategories. For example, different standards apply to six different types of coal-fired power plants.⁸¹

⁷⁶ See, Brief for Petitioners, *supra* note 51, at 29 (citing *United States v. Am. Elec. Power*, Consol. Nos. C2-99-1182 and C2-99-1250 (S.D. Ohio filed June 28, 2005); *United States v. Ala. Power*, No. 01-152-VEH (N.D. Ala. filed Jan. 12, 2002); *United States v. E. Ky. Power Coop.*, No. CV-04-34 (E.D. Ky. filed January, 2004).

⁷⁷ See Varadarajan, *supra* note 2, at 2583 (discussing the "gigantic" reductions of emissions levels compared to past administrations' regulations).

⁷⁸ See, e.g., 33 U.S.C. § 1369(b)(2) (2006) (Clean Water Act); 42 U.S.C. § 9613(a) (Comprehensive Environmental Response, Compensation, and Liability Act); 15 U.S.C. § 2618(a) (Toxic Substances Control Act); 42 U.S.C. § 6976(a)(2) (Resource Conservation and Recovery Act). As the National Parks Conservation Association notes, "[i]n statute after statute, Congress has consistently established a sensible system for judicial review. Challenges to regulations must be brought in the D.C. Circuit, and usually within 90 days of promulgation. Enforcement actions are not to be hindered by such challenges." Brief of Amici Curiae National Parks Conservation Association, et al. at 14, *Envtl. Def. v. Duke Energy Corp.*, 126 S. Ct. 2019 (2006) (No. 05-848).

⁷⁹ See *Massachusetts v. EPA*, 126 S. Ct. 2960 (2006) (No. 05-1120) (whether EPA has the discretion *not* to regulate greenhouse gases).

⁸⁰ See Transcript of Oral Argument, *Envtl. Def. v. Duke Energy Corp.*, 126 S. Ct. 2019 (2006) (No. 05-848). The Justices questioned the litigants at length on the substantive interpretation of the regulations. To an extent the jurisdictional question turns on these same issues, but the Court spent little time discussing the scope of the *New York* opinion. Moreover, Justice Kennedy expressed concern, particularly regarding the operation of Section 307(b)'s timing requirement, that courts would have to "take as binding a legal proposition that they think is dead wrong." *Id.* at 20.

⁸¹ Shi-Ling Hsu, *Fairness Versus Efficiency in Environmental Law*, 31 *ECOLOGY L.Q.*

The administrative burden of updating the myriad NSPS standards quickly overwhelmed EPA. Air quality suffered as a result. The NSR program, which “focuses on where the plant will be located and its potential effect on its environs,”⁸² emerged as a “harm-based” safeguard for maintaining ambient standards.

The lower court’s handling of the distinction between NSR and NSPS fits awkwardly into this historical context. NSPS typically imposes less stringent standards on sources than NSR does,⁸³ and the notion that a source should more easily trigger the lower standard has intuitive appeal. But this logic breaks down upon consideration of the different practical objectives motivating the NSPS hourly rate standard and the actual, annual emissions test. An hourly rate standard addresses the concern that industry could produce at a given level more cleanly; an annual standard addresses the concern that human health and welfare cannot tolerate further degradations of air quality, regardless of the offending mode of production, and if necessary, regulation should limit production. Unfortunately, the NSR program, by definition, contemplates factors other than the ambient air quality, most obviously whether a source is new or exempt. This regulatory gap, however, does not counsel a further retreat from NSR’s harm-based orientation, certainly not all the way back to the NSPS’ hourly-rate test.

Substantial harm already occurs as a result of the continued operation of so many “unmodified” sources. Coal-fired electric power plants account for more air pollution in the United States than any other source.⁸⁴ The impacts on public health are severe.⁸⁵ The emissions of these facilities raise the acidity levels of rainwater to levels that threaten aquatic ecosystems.⁸⁶ Even in the relatively unindustrialized territory encompassing North and South Carolina, where Duke’s plants are located, the acid-

303, 307–08 (2004) (citing 40 C.F.R. §§ 76.5–.7 (2004)). Hsu blames a “fairness orientation” for creating “an enormously complicated maze of statutes and regulations that do not necessarily protect the public or our ecosystems as much as they protect a byzantine system of concessions.” *Id.*

⁸² *Citizens for Clean Air v. EPA*, 959 F.2d 839, 849 (9th Cir. 1992).

⁸³ NSPS requires new or modified sources to adopt standards commensurate with the “Best Demonstrated Available Technology” (“BDAT”). NSR imposes “Best Available Control Technology” (“BACT”) standard, and “Lowest Achievable Emissions Reduction” (“LAER”) standard, in PSD and nonattainment areas, respectively. Both LAER and BACT are more stringent than BDAT. *See* ROGER W. FINDLEY ET AL., *CASES AND MATERIAL ON ENVIRONMENTAL LAW* 297 (6th ed. 2004).

⁸⁴ *See* BLATT, *supra* note 1, at 109–10. (“Coal is the single biggest air polluter in the United States.”). According to the Department of Energy, electric power plants used 1039 million short tons of coal in 2005, compared with a combined industry, residential, and commercial use of 90 million tons. *See* U.S. DEP’T OF ENERGY, *ANNUAL ENERGY REVIEW 2005* (2005), available at <http://www.eia.doe.gov/aer/coal.html>.

⁸⁵ *See* Brief of the States of New York, et al. at 3, *Env’tl. Def. v. Duke Energy Corp.*, 126 S. Ct. 2019 (2006) (No. 05-848) [hereinafter *New York Amicus Brief*] (“For example, power plant emissions of sulfur dioxide and nitrogen oxides, two of the pollutants at issue here, lead to the formation of fine particulate matter (soot) and ground level ozone (smog), which will kill tens of thousands of Americans annually and sicken hundreds of others.”).

⁸⁶ BLATT, *supra* note 1, at 158.

ity of rainwater ranges from a pH of 4.7 to 4.28, or between nine and thirteen times as acidic as the natural level.⁸⁷ The sulfur dioxide, nitrogen oxides, and fine particulate matter emitted by electric utilities produce a haze that destroys visibility in the nation's parks and wildlife areas.⁸⁸ Electric utilities' carbon dioxide, methane, and nitrous oxides emissions account for nearly twenty-eight percent of the United States' greenhouse gas emissions, which themselves represent nearly a quarter of the world's anthropogenic emissions each year.⁸⁹

These environmental and health costs are all the more troubling given the paucity of benefits that accrue from exempting electric utilities under the NSR program. The NSR program was intended to ease the transition of industry towards cleaner standards. Installing pollution-abatement technologies on new plants, instead of retrofitting older facilities, can produce efficiency gains, at least in the short-term. At the time of the CAA Amendments' passage, some legislators expressly acknowledged this rationale, and estimated that the transition to the next generation of electric utilities would be completed in five to ten years.⁹⁰ But the NSR program has instead created perverse incentives for electric utilities to rely on older plants far beyond their normal life spans. Empirical studies show an inverse relationship between new capital investment and the extent of air quality regulation in a given industry.⁹¹ When industry does invest in equipment, ongoing compliance burdens that do not apply to older plants, such as the operation costs of a "scrubber,"⁹² lead firms to underutilize newer facilities.⁹³ NSR thus imposes pollution controls where they are least needed and artificially inflates the value of the dirtiest plants. This has led some critics to question whether NSR results in higher levels of pollution than would occur in the absence of regulation.⁹⁴

⁸⁷ *Id.* at 160.

⁸⁸ See Brief of Amici Curiae National Parks Conservation Association, et al. at 14, *Env'tl. Def. v. Duke Energy Corp.*, 126 S. Ct. 2019 (2006) (No. 05-848).

⁸⁹ See U.S. EPA, INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990-2004 (Apr. 2006), available at <http://yosemite.epa.gov/oar/globalwarming.nsf/content/Emissions.html>.

⁹⁰ See Brief for Petitioners, *supra* note 51, at 5 (citing H.R. Rep. No. 94-1175 at 159 (1976); S. Rep. No. 95-127 at 128 (1977)).

⁹¹ Stavins, *supra* note 3, at 50 (citing Michael T. Maloney & Gordon L. Brady, *Capital Turnover and Marketable Pollution Rights*, 31 J.L. & ECON. 203, 207-09 (1988); Randy A. Nelson, et al., *Differential Environmental Regulation: Effects on Electric Utility Capital Turnover and Emissions*, 75 REV. ECON. & STAT. 368, 371 (1993)).

⁹² A scrubber is one of the most commonly used sulfur dioxide abatement measures, falling within the broader category of flue gas desulfurization systems. The scrubber itself is the vessel within which a neutralizing chemical, typically calcium carbonate contained in a mixture of water and pulverized limestone slurry, reacts with emissions to remove sulfur dioxide. See EDWARD S. RUBIN ET AL., INTRODUCTION TO ENGINEERING AND THE ENVIRONMENT 197, 200-01 (2001).

⁹³ See *id.* This is unfortunate because scrubbers can reduce emissions rates by up to ninety-five percent. See Barcott, *supra* note 11, at 38.

⁹⁴ See Stavins, *supra* note 3, at 30.

Adopting the definition of modification that Duke advocates would further prolong a transition that has already dragged on for three decades. Relaxing the NSR standard would free electric utilities to invest in plant improvements and efficiency upgrades that were previously avoided for fear of triggering a modification. This increased efficiency, in turn, would reduce pollution levels. These are one-time, short-term gains, however, and the preservation of NSR exemptions would continue to retard the development of new abatement technologies that favor the long-term interests of environmentalists and industry. Moreover, allowing older sources to continue producing with significantly lower pollution control costs creates a barrier to entry for new power companies, which potentially threatens the supply of electricity. Adopting Duke's definition of modification would exacerbate these distortions, because an hourly rate standard further accentuates the divide between new and old sources.

If the Court nevertheless agrees with Duke's argument, the decision will impact pending enforcement actions in courts across the country,⁹⁵ and install the minority rule on what triggers a "modification" under NSR. Not long after the Supreme Court granted certiorari in the *Duke Energy* case, the Seventh Circuit sided with the *New York* court and expressly disagreed with the Fourth Circuit's opinion. The defendant in *United States v. Cinergy Corp.*⁹⁶ argued that because improvements to its coal-fired utility plant had not increased hourly emissions, they did not trigger the NSR program's modification standard as interpreted by the Fourth Circuit in *Duke Energy*. The Seventh Circuit did not mince words in rejecting the *Duke Energy* defense, stating that the Fourth Circuit was both jurisdictionally "out of bounds" and "incorrect" on the merits.⁹⁷ The Seventh Circuit characterized the Fourth Circuit's reading of the CAA as irreconcilable with the *New York* opinion.⁹⁸ In fact, even though the *New York* court dodged the specific question of whether identical regulatory definitions of modification must apply across the NSPS and PSD programs, the D.C. Circuit concluded that "the CAA unambiguously defines 'increases' in terms of actual emissions."⁹⁹ Its interpretation thus begs the question: If Congress intended EPA to employ identical emissions tests under the NSPS and NSR programs, why does the hourly rate standard take precedence over the alternative test that was in place before Congress amended the statute?

⁹⁵ See *supra* note 76 and accompanying text.

⁹⁶ 458 F.3d 705 (7th Cir. 2006).

⁹⁷ *Id.* at 710.

⁹⁸ "Cinergy's argument was rejected by the D.C. Circuit in *New York v. EPA* . . . which upheld the EPA's interpretation of the regulation. But it was accepted by the Fourth Circuit in [*Duke Energy*] creating a circuit conflict that the Supreme Court presumably granted certiorari in the *Duke Energy* case to resolve." *Id.* (emphasis added).

⁹⁹ *New York v. EPA*, 413 F.3d 3, 39 (D.C. Cir. 2005).

The Supreme Court may avoid this question by siding with Environmental Defense' regulatory interpretation, but this would deliver a hollow victory to environmentalists. The CAA's jurisdictional mandate, section 307(b),¹⁰⁰ requires that challenges to regulations be brought in the D.C. Circuit within sixty days of promulgation. Section 307(b) mirrors the judicial review provisions of various other environmental protection statutes.¹⁰¹ The Fourth Circuit's position—that EPA's interpretation of its rule, rather than the NSR regulation itself, failed to implement Congress' clear mandate—blurs the line between implementation and enforcement. Affirming this position will enable litigants outside of the D.C. Circuit to challenge more regulations that are susceptible to alternative interpretations. On its face, opening the door to these actions is neutral, and could provide a tool to environmentalists for battling their least favorite of the Bush Administration's environmental policies.¹⁰² In the long term, however, a surge in litigation expenses will clearly favor regulated industry, which has the financing to wage a legal war of attrition against government and public interest groups in multiple jurisdictions. A broad reading of the D.C. Circuit's jurisdictional mandate will allow litigants to focus their resources and will reduce the uncertainty and waste of overlapping adjudications.

Reaching the merits of Duke's claim would diminish Section 307(b)'s requirements for the timing and procedure of appeals as well. These provisions require parties to challenge a "final action" of the EPA, such as an applicability determination, within sixty days of its promulgation. Section 307(b) bars challenges to final agency actions in the context of an enforcement proceeding. Duke, however, never sought an applicability determination from EPA regarding its plant modifications. Instead, the company waited until EPA initiated its enforcement action to challenge the agency's interpretation of the NSR regulations.¹⁰³ Even if Duke is correct in asserting that EPA promulgated ambiguous regulations and took no final action with respect to the modification,¹⁰⁴ this should not relieve the company of its responsibility to consult with EPA and seek out an official agency opinion before engaging in hundreds of millions of dollars worth of improvements. Rewarding this type of "wait-and-see" behavior will inevitably tax EPA's and other agencies' enforcement capacity.

¹⁰⁰ 42 U.S.C. § 7607(b) (2006).

¹⁰¹ See *supra* note 78.

¹⁰² See Zygmunt Plater, *Law, Media and Environmental Policy: A Fundamental Linkage in Sustainable Democratic Governance*, 33 B.C. ENVTL. AFF. L. REV. 511, 535–36 (2006) ("[T]he current administration has acted largely through low-visibility shifts in regulatory definitions and procedures, as well as through litigation settlement strategies.").

¹⁰³ Cf. *Puerto Rican Cement Co. v. EPA*, 889 F.2d 292 (1st Cir. 1989); *WEPCo*, 893 F.2d 901 (7th Cir. 1990).

¹⁰⁴ Environmental Defense asserts that EPA took such an action in the wake of the *WEPCo* decision. See Petitioner's Brief, *supra* note 56, at 12.

A rejection of Duke's regulatory claim poses difficulties beyond the realm of judicial review, moreover, since assigning EPA more discretion in how it chooses to enforce its regulations will likely hurt environmental interests outside of the immediate context of this case. The current administration has received harsh criticism from environmentalists,¹⁰⁵ many of whom fear that increased executive authority to interpret environmental statutes will primarily benefit regulated industry. For example, the administration's 2002 NSR regulations expand the "routine maintenance" exception, and make other changes that the American Lung Association denounced as "the most harmful and unlawful air-pollution initiative ever undertaken by the federal government."¹⁰⁶ These regulations have been issued against a backdrop of legislative inertia, with much of environmental law, including the CAA, dating back to bills passed in the 1970s. These bills purport to advance the type of demanding environmental standards that policymakers have shown little interest in revisiting since 1990,¹⁰⁷ despite strong public support for existing environmental protections.¹⁰⁸ To the extent that the courts can preserve the operation of the older statutes, environmentalists may come to regret a transfer of interpretive authority from the courts to EPA. Strict and uniform judicial oversight may provide the best protection for environmental interests until the "legislative paralysis"¹⁰⁹ on environmental issues subsides.

Of course, the legislature's torpor could lend support to Duke's position, insofar as a victory for Duke drives the proverbial nail into the coffin of NSR and ushers in a more effective regulatory regime. An emissions tax or cap-and-trade¹¹⁰ program, for example, would improve upon the current emissions regime in many respects, giving electric utilities a dynamic incentive to reduce emissions with new technologies.¹¹¹ These programs, however, can coexist with the current NSR regulations. In a cap

¹⁰⁵ See, e.g., Patrick Parenteau, *Anything Industry Wants: Environmental Policy Under Bush II*, 14 DUKE ENVTL. L. & POL'Y F. 363, 363 (2004) ("[T]his administration has compiled the worst environmental record of any administration in history.").

¹⁰⁶ Barcott, *supra* note 11, at 41.

¹⁰⁷ The 1990 Clean Air Act Amendments, Pub. L. No. 101-549, 104 Stat. 2399-2712 (1990) included "a generally applicable permit provision for major pollution sources," and "an ambitious tradable emissions program Since 1990, however, congressional passage of new significant environmental authorization legislation has virtually ground to a halt." Richard Lazarus, *Congressional Descent: The Demise of Deliberative Democracy in Environmental Law*, 94 GEO. L.J. 619, 628 (2006).

¹⁰⁸ See generally *id.*

¹⁰⁹ *Id.* at 632.

¹¹⁰ As its name suggests, a cap and trade program designates a limit or "cap" on aggregate levels of a given pollutant (usually measured annually) and allows sources to buy and sell the right to pollute some share of the total. See, e.g., Alexander E. Farrell & Lester B. Lave, *Emissions Trading and Public Health*, 25 ANN. REV. PUB. HEALTH 119 (2004).

¹¹¹ See *New York v. EPA*, 413 F.3d. 3, 45 (D.C. Cir. 2005) (Williams, J., concurring) ("[E]missions charges or marketable pollution entitlements provide incentives for firms to use—at any and every plant—all pollution control methods that cost less per unit than the emissions charge or the market price of an entitlement, as the case may be.").

and trade program, NSR would act as a secondary constraint on a regulated firm's emissions, and counteract the potential for sources to concentrate the use of pollution credits and threaten the air quality of any given region. Unfortunately, recent legislative proposals, such as the President's Clear Skies Act of 2003, fail to appreciate this complementary dynamic. The Clear Skies Act sought to effectively replace the basic assurances of the CAA with a cap-and-trade system. The proposed legislation would have abandoned the CAA's mandate of safeguarding human health without respect to cost, repealed EPA authority to regulate certain pollutants,¹¹² and according to some estimates, only cut half of the pollution that enforcement of existing law would achieve.¹¹³ The Act made little headway towards becoming law, but unfortunately, current regulatory policy advances a similar agenda. This agenda calls for a renewed urgency in the enforcement of existing law, in order to prevent the erosion of foundational pollution control measures.

By refusing to recognize Duke's claim to judicial review in this case, the Supreme Court can help to push environmental policymaking back into the democratic process. Even without delivering a victory to Duke, however, reaching the merits of the company's claim will affect a broad range of environmental laws. Running roughshod over the D.C. Circuit's exclusive jurisdiction will set not only a bad precedent in the instant case, but also invite future litigants to set more of them. If the Supreme Court affirms the Fourth Circuit's ruling and extends the exemptions enjoyed by so many of the nation's largest polluters, its decision will literally threaten to cloud the nation's skies.

¹¹² In setting the cap on emissions of sulfur dioxide and nitrogen oxides, EPA is directed to consider "whether adjusting any of these limitations would have benefits that would justify the costs of such adjustment," instead of simply assuring that the minimal standards imposed by the CAA are met. *See* H.R. 999, sec. 2, § 483(a) (2003); Gregory Gotwald, *Cap-and-Trade Systems, With or Without New Source Review? An Analysis of the Proper Statutory Framework for Future Electric Utility Air Pollution Regulation*, 28 VT. L. REV. 423, 432-37 (2004) (offering a comprehensive analysis of the Clear Skies Act and its inadequacy as a replacement to existing law).

¹¹³ *See* Varadarajan, *supra* note 2, at 2583.

