

A CRITIQUE OF THE REGULATIONS REVISING THE U.S. CLEAN AIR ACT'S NEW SOURCE REVIEW PROGRAM

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INTRODUCTION

The U.S. Environmental Protection Agency's (EPA) recent rules revising the Clean Air Act's New Source Review (NSR) program have been touted as a new approach to environmental management and regulation focusing more on regulatory flexibility than traditional controls. They have been controversial, particularly in the electric utility industry. Utilities believe the new rules allow them to pursue energy efficiency projects without incurring burdensome regulatory review. Others believe the rules allow illegal power plant modifications that increase emissions, and hamper NSR enforcement actions against utilities. For these reasons, they represent a step backward, not a fresh perspective on environmental problems.

THE NSR PROGRAM

The Clean Air Act (CAA)[1] is the United States' most comprehensive air pollution control law. In 1977, Congress decided that existing control mechanisms were inadequate to clean the nation's air, and amended the CAA to require the timely installation of industrial pollution controls.[2] The new NSR program required preconstruction permits for new or modified major stationary sources of "criteria pollutants." [3] The amendments divided air quality control regions into attainment areas (where air quality standards were being met) and nonattainment areas (where air quality standards were not being met). The NSR control requirements in nonattainment areas are stricter than those in attainment areas.[4]

The definition of "modified" requires that (1) there must be "[a] physical change . . . which increases the amount of any air pollutant emitted," and (2) there must be a significant net emissions increase.[5] Thus, NSR only applies if the modification results in an increase in pollution above a certain amount. If the change does not increase pollution there is no need for an NSR permit. Electric utilities can use the "actual-to-future-actual" test, approved in *Wisconsin Electric Power Co. v. Reilly*, [6] to compare emissions before the change and after the change to determine if the change would result in a significant increase in emissions.[7]

THE ROUTINE MAINTENANCE EXCLUSION

Industrial representatives claim it is difficult to determine whether the EPA will decide that a specific "physical change" at an existing facility triggers NSR. As a federal appeals court put it, it is conceivable that "the most trivial activities--the replacement of leaky pipes, for example--may trigger the modification provisions if the change results in an increase in the emissions of a facility." [8] To allow facilities to conduct minor repairs without having to worry about triggering NSR, the EPA promulgated regulations that provided *inter alia* that a modification would not include "(1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category . . ." [9]

The EPA did not define “routine,” using instead a multi-factor test focusing on (1) the nature of the work; (2) the extent of the work; (3) the purpose behind the activity; (4) the frequency of the activity, (5) the cost; and (6) any other relevant factors.[10] Utilities contended that this was unhelpful and that NSR had the opposite effect of what Congress intended. Instead of carrying out beneficial replacements or upgrades, utilities avoided or delayed essential maintenance, contributing to infrastructure deterioration and continued pollution.[11]

THE CALL FOR REFORM AND THE NEW RULES

The NSR program has been controversial. Industry alleges it is costly and time consuming,[12] as it averages approximately seven months from application to issuance of a permit.[13] More importantly, industry argues that the EPA’s case-by-case approach to evaluating permit applications creates excess uncertainty. Throughout the 1990s, stakeholders responded by working to reform NSR, but no major changes occurred. In 1992, the EPA announced it would issue guidance to clarify the routine maintenance exclusion (but did not do so); in 1996 it proposed a reform rule which did not become law.[14] The 2000 Presidential election brought further impetus for change. In 2001, the Bush Administration directed the EPA to review the NSR program’s impacts on the electric utility industry.[15]

In response, the EPA advanced two final reform rules. The first, promulgated on December 31, 2002, incorporates five separate changes that give industry a range of flexible compliance options before NSR is triggered.[16] A group of attorneys general of fifteen states, the District of Columbia, nine Democratic senators and a coalition of environmental groups challenged this rule on procedural and statutory grounds (claiming the rule violated the CAA).[17] As of mid-2004, this lawsuit is ongoing, but the court did not stay implementation of the rule while the challenge continues.[18]

The more controversial rule focuses on the routine maintenance exclusion. The purpose of this rule is to provide certainty by excluding from NSR an equipment replacement if (1) it involves replacement of any existing component(s) of a process unit with an identical or functionally equivalent component(s); (2) the fixed capital cost of the replaced component . . . does not exceed 20 percent of the replacement value of the entire process unit; (3) the replacement(s) does not change the basic design parameters of the process unit; and (4) the replacement(s) does not cause the unit to exceed any emissions limits.[19] An activity that does not meet these criteria may qualify as routine under the case-by-case approach.[20]

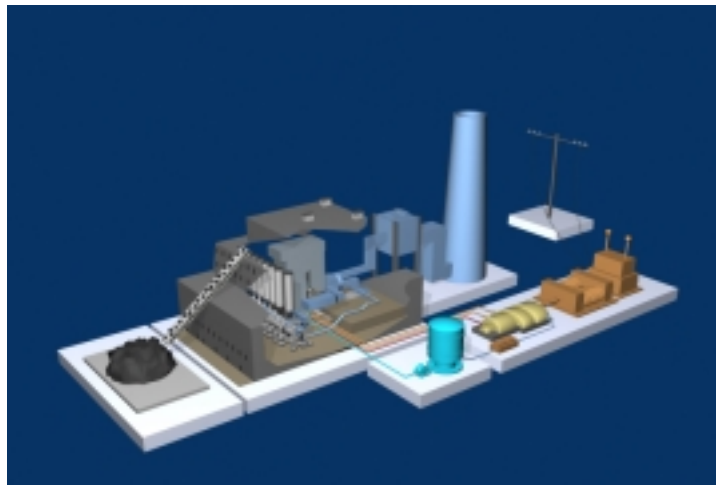
This rule was to take effect on December 26, 2003.[21] In response, the attorneys general of 13 states and a number of environmental groups filed suit to enjoin its implementation.[22] On December 24, 2003, a federal appeals court blocked the rule, stating that its opponents “demonstrated the irreparable harm and likelihood of success on the merits.”[23] The appeals court will not hear oral arguments until after the November 2004 presidential election.[24]

POTENTIAL ADVERSE IMPACTS

There are important reasons to consider the rule’s impacts on the utility industry. It is “the industry most responsible for conventional air pollutant emissions” and an optimal target for pollution control strategies.[25] However, power plants existing in 1977 were grandfathered

in and new air pollution control equipment has not been installed unless NSR required it. Congress expected that NSR would encourage utilities to retire power plants over time, but it has had precisely the opposite effect, as utilities keep aging dirty power plants running. This is inconsistent with the CAA's technology-forcing and pollution-reducing intent. As a federal court has observed, "The development of emissions control systems [at power plants] is not furthered if operators could, without exposure to [CAA] standards, increase production (and pollution) through the extensive replacement of deteriorated generating systems." [26]

Figure 1
Definition of "Process Unit" Allows Parts Replacement Without Regulatory Oversight



Depiction of a utility "process unit" under EPA's exemption: 20% of the cost – in today's dollars -- of replacing ALL of these structures is exempt – even if pollution increases by massive amounts.

(Courtesy Mr. John Walke, Director of Clean Air Programs, NRDC)

Large-scale overhauls of power plants would be permissible under the new rule without regulatory review. In *United States v. Ohio Edison Co.*, [27] a federal district court held in 2003 that eleven construction projects performed by Ohio Edison at seven generating units at its Sammis plant did not fall within the routine maintenance exclusion. Ohio Edison had made 34 part replacements including new superheater tubes, economizer tubes, reheater tubes, burners, coal pipes, pulverizers and low pressure turbine rotors, at a total cost of over \$135 million. [28] Under the new rule, by contrast, Ohio Edison could have made many of these replacements without applying for NSR permits by calling its entire facility a "process unit" and applying the 20% threshold. This is demonstrated in Figure 1.

Moreover, the new rule would allow significant increases in pollution if the changes kept the plants within the 20% threshold. The Natural Resources Defense Council (NRDC) has found (*see* Figure 2, below) that coal-fired power plants in several states could increase their emissions significantly and remain within their permitted limits, avoiding regulatory scrutiny.

Figure 2

Potential Pollution Increases Under the New NSR Rule

(Courtesy Mr. John Walke, Director of Clean Air Programs, NRDC)

Ohio: of the largest 21 coal-fired power plants in Ohio, some plants could increase their soot-forming sulfur dioxide emissions by 650% and all of the plants in Ohio could increase their sulfur dioxide emissions by at least 220,000 tons annually.

Illinois: 23 power plants could increase sulfur dioxide emissions by as much as 87 percent, or 355,900 tons annually.

New York: 23 power plants could increase sulfur dioxide emissions by as much as 296,700 tons annually.

Tennessee: Analysis of permits of Tennessee power plants demonstrates that under their current air permits these plants could increase their emissions of sulfur dioxide by nearly 100,000 tons per year under EPA's new NSR rule.

Also, the utility industry has a poor NSR compliance record, which calls into question the wisdom of allowing it to police itself. In 2001, NSR enforcement actions were pending against companies with 32 power plants located in 10 states.[29] A former EPA enforcement official called the utilities' record of performing multi-million-dollar projects on their plants without obtaining NSR permits the "most significant noncompliance pattern EPA had ever found." [30] The new rule has created uncertainty about these cases. Some tentative settlements were withdrawn when the Bush Administration proved more accommodating to industry.[31] As of mid-2004, the EPA has settled several cases, but others are bogged down by uncertainty over the new rule's status.[32] Industry won a recent victory in the *Duke Energy* case, where a federal district court ruled against the EPA on the critical issue of determining whether a replacement is "routine." [33] This and the Supreme Court's refusal to review the *TVA* case suggests that the Supreme Court may have to resolve the issues.[34]

Industry representatives believe there would be less litigation under the new 20% threshold, as it accommodates their need to make repairs to aging infrastructure.[35] They also argue the new rule introduces needed regulatory flexibility: utilities can decide on their own how to stay under the 20% target, rather than apply for permits on a case-by-case basis. However, there is no support in the CAA for the 20% figure.[36] It appears arbitrary and much higher than figures used in internal EPA discussions before the rule's promulgation.[37] As noted above, this allows rapid turnover of equipment at power plants without regulatory scrutiny.

CONCLUSION: RECONSIDERING THE RULES

President Bush's challenger, Senator John F. Kerry, has stated that as President he would "immediately reverse the Bush-Cheney rollbacks of our nation's Clean Air laws, plug loopholes in the laws, and vigorously enforce them." [38] Even the Bush Administration has had second thoughts. The EPA recently announced that it disagrees with the coalition challenging the rules, but will reconsider the 20% provision and other aspects of the rules.[39] This reconsideration is in order. While the new NSR rules give industry more flexibility, they are inconsistent with the Clean Air Act and likely to increase air pollution and lead to delays in important enforcement cases against some of the nation's worst polluters.

REFERENCES

- [1] 42 U.S.C. §§ 7401–7671q (2003).
- [2] See David G. Mandelbaum, *Thoughts on the Bush Clean Air “Strategy” So Far and a Suggestion for What Might Work*, 21 TEMP. ENVTL. L. & TECH. J. 1, 4 (2002).
- [3] 42 U.S.C. § 7502(c)(5) (2003).
- [4] See Michael Settineri, *Reforming the New Source Program*, 13 FORDHAM ENVTL. L.J. 107, 118 (2001) (comparing the differing requirements).
- [5] 42 U.S.C. § 7411(a)(4) (2003).
- [6] *Wisconsin Electric Power Co. v. Reilly*, 893 F.2d 901 (7th Cir. 1990).
- [7] Arnold W. Reitze, Jr., *State and Federal Command-and-Control Regulation of Emissions from Fossil-Fuel Electric Power Generating Plants*, 32 ENVTL. L. 369, 383 (2002).
- [8] *Wis. Elec. Power Co.*, 893 F.2d at 905.
- [9] 40 C.F.R. § 52.21(b)(2)(iii) (2003).
- [10] *Wis. Elec. Power Co.*, 893 F.2d at 910.
- [11] See THE HERITAGE FOUNDATION, NEW SOURCE REVIEW RECOMMENDATIONS, at <http://www.heritage.org/Research/EnergyandEnvironment/WM111.cfm> (last visited June 2, 2004).
- [12] A typical discussion is found in EDISON ELEC. INST., STRAIGHT TALK ABOUT ELECTRIC UTILITIES AND NEW SOURCE REVIEW 4 (2001), at http://www.eei.org/industry_issues/environment/air/New_Source_Review/NSRST.pdf. (last visited June 3, 2004).
- [13] U.S. ENVTL. PROT. AGENCY, NSR 90-DAY REVIEW BACKGROUND PAPER 7 (2001), available at <http://www.epa.gov/nsr/bkgrnd/nsr-review.pdf> (last visited June 4, 2004).
- [14] See John Boyd, Note, *The New New Source Review: Teaching Old Sources New Tricks?*, 11 SOUTHEASTERN ENVTL. L.J. 401, 401 (2003).
- [15] NAT’L ENERGY POLICY DEV. GROUP, RELIABLE, AFFORDABLE, AND ENVIRONMENTALLY SOUND ENERGY FOR AMERICA’S FUTURE 7-14 (2001), available at <http://www.whitehouse.gov/energy/> (last visited June 3, 2004).
- [16] 67 Fed. Reg. 80,186 (Dec. 31, 2002) (to be codified at 40 C.F.R. pts. 51 & 52).
- [17] A news story on the progress of the litigation is Darren Samuelson, *U.S. Appeals Court Denies N.Y.-led Motion To Delay NSR Implementation*, GREENWIRE, Mar. 7, 2003, at http://www.eenews.net/Greenwire/searcharchive/test_search-display.cgi?q=&file=%2FGreenwire%2Fsearcharchive%2FNewsline%2F2003%2FMar7%2F03070309.htm (last visited June 3, 2004).
- [18] See Robert J. Martineau, Jr. & Michael K. Stagg, *New Source Review Reform: A New Year’s Eve To Remember*, NAT. RESOURCES & ENV’T., Winter 2004, at 3, 6–7.
- [19] 68 Fed. Reg. 61,248, 61,252 (Oct. 27, 2003) (to be codified at 40 C.F.R. pts. 51 & 52).
- [20] 68 Fed. Reg. at 61,251.
- [21] 68 Fed. Reg. at 61,276.
- [22] The challenge is reported in Darren Samuelsohn, *Spitzer, 13 Other States Seek Injunction To Block NSR Reforms*, GREENWIRE, Nov. 17, 2003, at <http://www.eenews.net/Greenwire/Backissues/111703/11170306.htm> (last visited June 3, 2004).
- [23] *New York v. EPA*, No. 02-1387, 2003 U.S. App. LEXIS 26520, at *10 (D.C. Cir. Dec. 24, 2003).

- [24] Darren Samuelsohn, *Court Schedule Indicates NSR Rules' Fate Rests on Next Presidential Administration*, GREENWIRE, Feb. 26, 2004, at http://www.eenews.net/Greenwire/searcharchive/test_search-display.cgi?q=%22New+Source+Review%22+OR+%22NSR%22&file=%2FGreenwire%2Fsearcharchive%2FNewsline%2F2004%2FFeb26%2F02260410.htm (last visited June 4, 2004).
- [25] Reitze, *supra* note 10, at 371 (“In 1998, electric utilities emitted 67.2% of the nation’s SO₂, 24.9% of NO_x, and about 10.6% of the small particulate emissions.”).
- [26] *Wis. Elec. Power Co.*, 893 F.2d at 910.
- [27] *Ohio Edison Co.*, 276 F. Supp. 2d 829 (S.D. Ohio 2003).
- [28] *Id.* at 834.
- [29] U.S. ENVTL. PROT. AGENCY, COAL-FIRED POWER PLANT ENFORCEMENT INITIATIVE, at <http://www.epa.gov/compliance/civil/programs/caa/coal/index.html> (last visited June 3, 2004). Only one new NSR enforcement case has been filed during the Bush Administration against the electric power industry. See Darren Samuelson, *First NSR Lawsuit in Three Years Filed Against Kentucky Power Co-op*, GREENWIRE, Jan. 29, 2004, at <http://www.eenews.net/Greenwire/Backissues/012904/01290401.htm> (last visited June 3, 2004).
- [30] See Bruce Barcott, *Changing All the Rules*, N.Y. TIMES, Apr. 4, 2004, sec. 6, at 38.
- [31] *Id.*
- [32] See DOJ, *Alabama Power Agree to Reopen NSR Case*, GREENWIRE, June 1, 2004, at <http://www.eenews.net/Greenwire/Backissues/060304/060304gw.htm#11> (last visited June 4, 2004).
- [33] *United States v. Duke Energy Corp.*, 278 F. Supp. 2d 619, 637 (M.D.N.C. 2003). See also *United States v. Duke Energy Corp.*, Order and Final Judgment, No. 1:00CV1262, 2004 U.S. Dist. LEXIS 8724 (M.D.N.C. Apr. 15, 2004) (granting of summary judgment).
- [34] See Darren Samuelsohn, *Kerry's NSR Promises Offer New Direction in Long-Fought Debate*, GREENWIRE, June 1, 2004, at <http://www.eenews.net/Greenwire/Backissues/060104/060104gw.htm#2> (last visited June 4, 2004).
- [35] Jay Holloway, *2004 Update: EPA's Utility Enforcement Initiative and NSR Rules*, in SYMPOSIUM MATERIALS, THE BLACKOUT OF 2003: WHAT'S NEXT (Univ. of Richmond Sch. of L., Robert R. Merhige, Jr. Ctr. of Env'tl. L., 2004).
- [36] Environmental groups argue that, “Because the [CAA] expressly encompasses ‘any physical change’ that increases emissions, EPA lacks authority to exempt some such changes—*e.g.*, those that represent less than 20% of replacement cost and fit within the facility’s original design.” Environmental Petitioners’ Reply in Support of Stay Motion at 1–2, *New York v. EPA*, No. 02-1387, 2003 U.S. App. LEXIS 26520 (D.C. Cir. Dec. 12, 2003) (internal citations omitted), available at http://www.earthjustice.org/news/documents/12-03/EnvironmentalGroup_RMRR_Stay_Reply_Dec2003.pdf (last visited June 4, 2004).
- [37] Barcott, *supra* note 34.
- [38] *John Kerry for President, A Cleaner and Greener America, Protect our Health by Reducing Dangerous Emissions*, at <http://www.johnkerry.com/issues/energy/> (last visited June 3, 2004).
- [39] See Darren Samuelsohn, *EPA to Reconsider Key Components of NSR Reforms*, GREENWIRE, June 30, 2004, at <http://www.eenews.net/Greenwire/Backissues/063004bn/063004bn.htm> (last visited June 30, 2004).