United States Department of Justice
Office of Legal Policy

NEW SOURCE REVIEW: AN ANALYSIS OF THE CONSISTENCY OF ENFORCEMENT ACTIONS WITH THE CLEAN AIR ACT AND IMPLEMENTING REGULATIONS

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Executive Summary

The Clean Air Act Amendments of 1970 required major stationary sources of air pollution to install devices to reduce pollution. Sources existing at the time were not required to retrofit pollution controls, but would be required to install such controls if and when they modified their facilities. In 1977, Congress amended the Clean Air Act to establish the new source review program, which requires preconstruction review and a permit for almost any major new source or modification of an existing source of air pollution.

The current controversy over the new source review program centers on what constitutes a "modification." If a facility's construction project is a modification, then it is subject to the new source review process and the requirement that pollution controls be installed. If the project is not a modification, then there is no need for a permit or new pollution controls. The Clean Air Act defines "modification" to be "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 or which results in the emission of any air pollution not previously emitted."[1]

Between 1975 and 1980, the Environmental Protection Agency ("EPA") promulgated regulations which elaborate on the meaning of "modification" under the Clean Air Act. Together, the various statutory and regulatory requirements provide that physical changes that constitute routine maintenance, repair, or replacement are not modifications subject to the new source review permitting process. In addition, even physical changes considered to be modifications do not trigger new source review requirements if they do not result in a significant emissions increase.

[1] 42 U.S.C. § 7411(a)(4) (1994).

To date, EPA has not promulgated any regulations detailing what types of activities it considers routine and therefore exempt from the new source review process. EPA gave some guidance in a preamble to a 1992 rulemaking, where the agency stated that its previous regulations had defined modification to include "common-sense exclusions from the 'physical or operational change' component of the definition."[2] In 1994, EPA staff circulated a proposal that would have equated "routine" with "minor" modifications, but this language was not formally promulgated in subsequent rulemakings.[3]

EPA's efforts to enforce the new source review provisions over the past two decades focused primarily on facilities outside of the electric utility industry. The principal action related to power plants involved a 1988 request by the Wisconsin Electric Power Company ("WEPCO"), which operated a coal-fired steam generating plant, for an "applicability determination" regarding whether its proposed physical changes would constitute "modifications." EPA concluded that the proposed construction, which included repairs and replacements of equipment, was not "routine" and therefore triggered new source review. In ruling on WEPCO's subsequent petition for review, the Seventh Circuit upheld EPA's interpretation and application of the routine maintenance exception.[4]

Until recently, EPA had not filed any enforcement actions relating to alleged violations of the new source review requirements arising out of modifications to plants in the electric utility

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[2] 57 Fed. Reg. 32,314, 32,316 (July 21, 1992). Further, in the preamble to a 1992 final rulemaking relating to electric utility steam generators, EPA stated that it "has always recognized that Congress obviously did not intend to make every activity at a source subject to new source requirements." In that rulemaking, EPA recognized that a broad definition of modification "could, standing alone, encompass the most mundane activities at an industrial facility (even the repair or replacement of a single leaky pipe, or a change in the way that pipe is utilized)." *Id*.

[3] As discussed in Section II.D of this report, EPA issued several "applicability determinations" requested by industry members. Most recently, in May 2000 (subsequent to the filing of the pending new source review actions), EPA issued an applicability determination to Detroit Edison in which it applied its test and concluded that the proposed changes were not routine repair or replacement. *See* Letter from EPA Region V Administrator to Detriot Edison (May 23, 2000).

[4] *See* Wisconsin Electric Power Company v. Reilly, 893 F.2d 901 (7th Cir. 1990).

industry.[5] Nor did many electric utilities request that EPA determine whether the new source review rules applied to their proposed projects. In late 1996, EPA began to investigate suspected new source review violations in the coal-fired electric utility industry. After receiving and analyzing information on modification history and emissions increases from numerous companies, in 1999 EPA sent a number of referrals to the Department of Justice (the "Department") for civil enforcement actions against those companies, alleging widespread violations of the new source review provisions and related requirements of the Clean Air Act.[6] The Department filed seven actions against various coal-fired electric utilities in 1999 and an additional action in 2000. One of the actions has settled;[7] the others are in varying stages of litigation and/or settlement negotiations. The defendants vigorously contest these cases, arguing in part that EPA is impermissibly attempting to effect a change through litigation in what the defendants regard as the agency's long-standing policy of not enforcing the new source review requirements against similar projects in the industry.

In May 2001, the National Energy Policy Development Group recommended that the Attorney General "review existing enforcement actions regarding New Source Review to ensure that the enforcement actions are consistent with the Clean Air Act and its regulations."[8] The Department has reviewed the applicable law, agency action, and representative pleadings filed in the pending

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[5] During the late 1980s and early 1990s, EPA did seek to enforce in court the new source review provisions of the Clean Air Act with respect to certain wood-products industry participants. Similarly, EPA issued several applicability determinations with respect to proposed modifications of existing facilities under the Clean Air Act in other industries. In the mid-1990s EPA staff also issued two letters relating to new source review issues. *See* Letter from Mary D. Nichols, Assistant Administrator for Air and Radiation, U.S. EPA, to William R. Lewis, partner, Morgan, Lewis and Bockius at 19 (May 31, 1995); Letter from John Seitz, Director, U.S. EPA, Office of Air Quality Planning and Standards to the Hon. Robert C. Byrd, U.S. Senate (Jan. 26, 1996).

[6] The Department also is pursuing, or has recently settled, other enforcement actions against facilities in the refinery, wood-products, mini-steel, food manufacturing, and chemical processing industries.

[7] United States v. Tampa Elec. Co., No. 99-2524, CIV-T-23F (M.D. Fla., filed Nov. 3, 1999).

[8] REPORT OF THE NATIONAL ENERGY POLICY DEVELOPMENT GROUP, ch.7, at 14 (2001).

cases and hereby reports that EPA reasonably may conclude that the enforcement actions are consistent with the Clean Air Act and its regulations.

This report's ultimate conclusion is informed by several subsidiary determinations. First, the report focuses principally on enforcement actions against coal-fired power plants, because defendants in other industries generally have not alleged that EPA's actions are inconsistent with the Clean Air Act. Second, in matters where, as here, the Department is not the agency authorized by Congress to administer a statute, the authority to make policy determinations and promulgate statutory or regulatory interpretations rests primarily with the responsible agency—here, the EPA. The present review therefore does not extend to the policy considerations underlying EPA's interpretation of the Clean Air Act and its regulations or EPA's current enforcement strategy. Third, in order not to compromise the Department's advocacy role in the pending enforcement actions, the level of scrutiny applied to EPA's views is a modest one: Our task is to decide whether the agency's enforcement policy judgments are supported by a reasonable basis in fact and law. We have no occasion to consider whether a different set of policy judgments made by EPA likewise would be reasonably supported in fact and in law. Accordingly, this report neither constitutes nor modifies a position advanced by the United States in litigation, and no part of this report may be relied on by parties in new source review enforcement actions to support any positions advanced in litigation.

In reviewing the new source review actions against electric utilities, the Department focused on two questions. First, does filing the new source review enforcement actions constitute a substantive change in EPA's interpretation of the Clean Air Act and its regulations that would require notice and comment rulemaking under the Administrative Procedure Act? Second, notwithstanding the want of notice and comment, is EPA's interpretation of the routine maintenance

exception reasonable in light of the Clean Air Act, its implementing regulations, and other previously issued guidance?

With respect to the first question, the Department concludes that the existing new source review actions do not constitute an impermissible reinterpretation of the Clean Air Act and its regulations such as to require notice and comment rulemaking. EPA has a reasonable argument under existing law that enforcement of the new source review provisions in these cases does not amount to an interpretation of the regulations that departs from a prior authoritative interpretation. Although the parties to the actions vigorously dispute the proper characterization of EPA's history of enforcing the new source review provisions, there is a reasonable basis for EPA's claim that it has not issued any authoritative interpretation which is at odds with the arguments it presents in the pending litigation. For these reasons, EPA reasonably may distinguish the pending actions from existing caselaw holding that subsequent agency action—such as the issuance of a formal guidance interpreting a regulation—effected an amendment to a regulation which required notice and comment rulemaking.[9]

With respect to the second question, the Department concludes that EPA's interpretation of the Clean Air Act, as reflected in the existing regulations defining "modification," would be entitled to deference under *Chevron, U.S.A., Inc. v. NRDC*;[10] and that its interpretation of the regulations' routine maintenance exception as not extending to the projects undertaken by the industry defendants, would be entitled to deference under *Bowles v. Seminole Rock & Sand Co.*[11] At minimum, the plain language of the regulations affords EPA the discretion to assert in the

[9] *See* Appalachian Power Co. v. EPA, 208 F.3d 1015 (D.C. Cir. 2000).
[10] 467 U.S. 837 (1984).
[11] 325 U.S. 410 (1945).

enforcement actions that a particular plant modification is "major," or encompasses more than "routine maintenance."

In light of this review's conclusions, the Department's Environment and Natural Resources Division ("ENRD") will continue, as it has during the pendency of this review, to prosecute vigorously the EPA's civil actions to enforce the new source review provisions. And it will continue, as it has during the pendency of this review, to pursue talks to settle those actions where appropriate on mutually acceptable terms. Because the existing enforcement actions are supported by a reasonable basis in law and fact, any decision to withdraw, terminate, or otherwise circumscribe them would rest in the discretion of ENRD, which must assess the relative strengths and weaknesses of a given case.

Frequently Used Abbreviations

AAR	Association of American Railroads
APA	Administrative Procedure Act
CAA	Clean Air Act
ENRD	Environment and Natural Resources Division
EPA	Environmental Protection Agency
FERC	Federal Energy Regulatory Commission
FRA	Federal Railroad Administration
NAAQS	National Ambient Air Quality Standards
NSPS	New Source Performance Standards
NSR	New Source Review
PSD	Prevention of Significant Deterioration
TECO	Tampa Electric Company
TRAC	Telecommunications Research Action Center
TVA	Tennessee Valley Authority
VEPCO	Virginia Electric Power Company
WEPCO	Wisconsin Electric Power Company

I. Introduction

In May 2001, the National Energy Policy Development Group ("NEPDG") directed that the Attorney General "review existing enforcement actions regarding new source review to ensure that the enforcement actions are consistent with the Clean Air Act and its regulations."[12] Many of those actions, brought by the Department of Justice ("Department") at the behest of the Environmental Protection Agency ("EPA"), allege that construction projects undertaken by various regulated entities constitute "major modifications" within the meaning of the Clean Air Act ("CAA"), and therefore are subject to the requirements of the new source review program. Pursuant to the NEPDG's directive, the Department has reviewed the enforcement actions it currently is pursuing, and submits its conclusions in this report.

The new source review program involves enforcement actions against a number of facilities in a number of industries. The Department currently is pursuing, or recently has settled, actions against facilities in the coal-fired power plant, refinery, wood-products, mini-steel, food-manufacturing, and chemical-processing industries. For the most part, the defendants in these cases do not argue that EPA's enforcement actions are inconsistent with the CAA or its implementing regulations. Rather, they dispute a number of essentially factual propositions, including whether the enforcement actions were brought within the applicable statute of limitations, whether their facilities withheld information from inspectors, and whether their facilities emitted more pollutants than their permits authorized. In fact, a number of parties settled soon after the enforcement actions were filed, and raised neither legal nor factual defenses to EPA's allegations.

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[12] REPORT OF THE NATIONAL ENERGY POLICY DEVELOPMENT GROUP, ch.7, at 14 (2001).

The electric utility defendants, by contrast, assert that EPA's enforcement actions are inconsistent with the CAA and its regulations. These defendants claim that EPA's interpretation of "major modification" is unlawful, and that the Administrative Procedure Act ("APA") required the agency to engage in notice and comment rulemaking before initiating its enforcement actions. Because the NEPDG directed the Department to evaluate the enforcement actions for consistency with the CAA and its regulations, and because defendants in other industries do not address that issue, this report emphasizes EPA's efforts to apply the Act to coal-fired power plants.

This report expresses no view on whether, as a policy matter, EPA's decision to enforce the CAA against the regulated entities was appropriate. Rather, the Department's role in this review of the existing enforcement actions is much more limited: determining whether the Department may properly advance in court EPA's views as being consistent with the CAA and applicable regulations.[13] The underlying question is, therefore, under what circumstances will the Department advance a federal agency's enforcement actions before the courts?

In resolving that question, the Department is "faced with conflicting demands."[14] As a 1982 memorandum from the Office of Legal Counsel explains, the Department "must serve the interests of the 'client' agency as well as the broader interests of the United States as a whole."[15] On the one hand, the Department has an obligation to advance EPA's litigation position deriving from its status as the Executive's litigator,[16] and to honor specific commitments made in formal arrangements with

[13] No part of this report or the analysis or conclusions set forth herein, may be relied on by any party to any new source review enforcement action as support for any position advanced in litigation.

[14] The Attorney General's Role as Chief Litigator for the United States, 6 Op. Off. Legal Counsel 47, 62 (1982).

[15] *Id*.

[16] *See* 28 U.S.C. § 516 (1994).

that agency.[17] Moreover, the Attorney General "will generally defer to the policy judgments of the client agency," because it has been entrusted by Congress with administering the substantive statute.[18]

On the other hand, the Department is "obligated to represent the broader interests of the Executive" — for instance, by coordinating litigation activities among various "client" agencies.[19] Independently, as governmental actors and officers of the court, Department lawyers have a duty to act in accordance with the laws and Constitution of the United States. And the Department traditionally has maintained an independent role in setting litigation strategy or making tactical judgments for any given case.[20]

The Department thus may face conflicting demands when it has "supervisory authority,"[21] by virtue of its independent litigating authority, with respect to the client agencies. Although EPA has concurrent litigating authority under the CAA, holding the power to litigate independently if the Department declines to represent it,[22] the Department remains subject to conflicting demands here. That is so because, even when the Department's litigating powers are supplemented by those wielded by an agency, it retains its unique obligation of representing the Executive's overall interests.

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[17] *See* 42 U.S.C. § 7605(a) (1994); Memorandum of Understanding Between Department of Justice and Environmental Protection Agency, 42 Fed. Reg. 48,942 (Sept. 26, 1977).

[18] *The Attorney General's Role*, 6 Op. Off. Legal Counsel at 54-55; *see also Memorandum of Understanding*, 42 Fed. Reg. at 48,943 ("In conducting litigation for the Administrator, the Attorney General shall defer to the Administrator's interpretation of scientific and technical matters.").

[19] *The Attorney General's Role*, 6 Op. Off. Legal Counsel at 54.

[20] *Id*. at 55.

[21] *Id*. at 47 & n.1.

[22] *See* 42 U.S.C. § 7605(a) (providing that "attorneys appointed by [EPA's] Administrator shall appear and represent him" unless "the Attorney General notifies the Administrator that he will appear in such action"); *Memorandum of Understanding*, 42 Fed. Reg. at 48,942 (explaining that "the Agency may be represented by its own attorneys" if the Attorney General "decline[s] to represent the Agency in particular civil actions").

Moreover, as a practical matter, we are aware of no instance in which EPA independently has brought an enforcement action after the Department declined to do so.

The decision whether to advance a federal agency's enforcement actions thus involves a careful evaluation of several potentially conflicting considerations, including deference to the agency's policy views and an important measure of independent legal judgment. In carrying out the NEPDG's directive "to ensure that the enforcement actions are consistent with the Clean Air Act and its regulations,"[23] the Department has engaged in the sort of analysis which it typically brings to bear in evaluating any enforcement action. That is, the Department has carefully and closely re-evaluated whether the current enforcement actions are indeed reasonably supported in fact and in law to warrant continued prosecution. In light of this limited standard of review, the Department is agnostic on whether EPA's enforcement actions are wise as a matter of policy; it asks only whether there is a reasonable basis in law and fact to support the agency's views and positions.

This report concludes that EPA may reasonably argue that the new source review enforcement actions against coal-fired power plants are consistent with the CAA, as well as with the APA. First, EPA's alleged past failure to bring enforcement actions may not be an "authoritative" interpretation of the CAA and its implementing regulations. The APA therefore may not require the agency to have engaged in notice and comment rulemaking before initiating its enforcement actions. Second, EPA's announced interpretation of "modification"—that the projects undertaken by the electric utility industry trigger new source review permitting requirements—is a reasonable one, given that the agency is entitled to deference on the meaning of the CAA and its regulations.[24] This

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[23] REPORT OF THE NATIONAL ENERGY POLICY DEVELOPMENT GROUP, ch.7, at 14 (2001).

[24] The electric utility defendants have challenged EPA's enforcement actions on other grounds. For example, they argue that certain claims for relief are time-barred by the applicable statute of limitations, and that the agency has failed to (continued...)

report devotes less attention to EPA's enforcement actions in other industries, in which the defendants generally do not allege that the actions are inconsistent with the CAA, and which therefore are not implicated by the NEPDG's charge.

Part II of this report provides an overview of the CAA, relevant regulations, and EPA's past enforcement activities thereunder. Part III contains the Department's analysis. It consists of two subsections that correspond to the two principal legal issues: first, whether EPA was required to promulgate a formal rule before initiating its enforcement actions; and second, whether the EPA's interpretation is consistent with the CAA and its implementing regulations. Part IV concludes the Department's analysis of the pending new source review enforcement actions.

II. Background

A. History of the Clean Air Act and Implementing Regulations

Congress first addressed the problem of air pollution in the CAA of 1963, which funded research into air quality. In 1967, Congress passed the Air Quality Control Act, which established both Air Quality Control regions and a system for defining Ambient Air Quality Standards so states can set limits on the emission of certain air pollutants. Prior to the enactment of the CAA of 1970, however, air pollution generally was regulated by state or local government.

With the CAA of 1970, the federal government took a more active role in controlling air pollution. The CAA, which regulates air emissions from area, stationary, and mobile sources, authorized the EPA to establish National Ambient Air Quality Standards ("NAAQS"). The CAA's goal was for all states to meet these standards by 1975. In order to achieve this goal, the Act

[24](...continued)
provide the industry with fair notice of the conduct required by the applicable new source review regulations. Because these defenses do not allege that EPA acted outside the scope of the CAA and its regulations, this report does not address them.

required, among other things, certain types of facilities to conform to "New Source Performance Standards" ("NSPS"). The NSPS provisions require major stationary sources of air pollution to install pollution controls based on the "best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair [sic] quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated."[25]

The new requirements did not apply to existing sources of air pollution. Such existing sources, however, would be required to install pollution controls in the event they were modified.[26] (The scope of what constitutes a "modification," thus requiring pollution controls, is the crux of this review and is discussed in greater detail below.) Older sources were exempted because it was thought to be more efficient to add new pollution controls at the time of construction activity, rather than requiring all sources to be retrofitted with pollution controls immediately.[27] In addition, Congress presumed that many of the existing plants would soon be retired and replaced by new plants subject to the permitting requirements.[28]

EPA's NSPS regulations, first issued in 1971, identified the industries that were the most significant sources of air pollution in the country, including fossil-fuel fired steam generators in the energy sector.[29] The regulations specified emission limits or "standards of performance" that the

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[25] 42 U.S.C. § 7411(a)(1) (1994).

[26] *See id*. § 7411(a)(2). Pursuant to this provision, "[t]he term 'new source' means any stationary source, the construction or modification of which is commenced after the publication of regulations (or, if earlier, proposed regulations) prescribing a standard of performance under this section which will be applicable to such source."

[27] *See* H.R. REP. NO. 95-294, at 185-86 (1977), *reprinted in* 1977 U.S.C.C.A.N. 1077, 1264-65 ("Building control technology into new plants at time of construction will plainly be less costly than requiring retrofit when pollution ceilings are reached. For example, testimony from the electric utility industry indicates that it costs about 25 percent less to purchase and install flue gas desulfurization technology on a new plant than it would cost to retrofit that plant subsequently . . . . For some of the older and smaller sources, it is not physically or economically feasible to retrofit sulfur oxide control technology.").

[28] *See, e.g., id.*

[29] *See* 36 Fed. Reg. 24,876 (Dec. 23, 1971).

regulated sources must achieve, based on the available technology, cost, and other criteria described above. The rules applied to all sources constructed or modified after the effective date of the regulations.

In 1977, Congress amended the CAA and set new deadlines for attaining NAAQS. The 1977 amendments also established the new source review program, which requires a preconstruction review and the issuance of a permit for the construction of any new "major emitting facility," or for the modification of an existing facility. The new source review program comprises two parts: 1) Prevention of Significant Deterioration ("PSD") provisions for areas that are meeting NAAQS or are unclassifiable due to the absence of sufficient data (referred to as "attainment areas"),[30] and 2) Nonattainment new source review provisions for areas that are not meeting air quality standards (referred to as "nonattainment areas"). Congress stated that the purpose of the PSD provisions was "to insure that economic growth will occur in a manner consistent with the preservation of the existing clean air resources" and "to assure that any decision to permit increased air pollution . . . is made only after careful evaluation of all the consequences of such a decision and after adequate procedural opportunities for informed public participation in the decisionmaking process."[31]

The new source review program is designed to prevent modified or new facilities from causing increased emissions that could cause or contribute to violations of applicable air quality standards. In order to receive a construction permit, the facility must show that the project would

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[30] The first PSD regulations actually preceded the 1977 amendments. Following the ruling in Sierra Club v. Ruckleshaus, 344 F. Supp. 253 (D.D.C. 1972), *aff'd per curiam*, 2 Envtl. L. Rep. 20,656 (D.C. Cir. 1972), *aff'd by an equally divided court sub nom.* Fri v. Sierra Club, 412 U.S. 541 (1973), that EPA's regulations implementing the 1970 amendments failed to make adequate provisions to prevent the deterioration of air quality in areas of the country that had attained the NAAQS, EPA issued regulations requiring states to include PSD provisions in their State Implementation Plans. 39 Fed. Reg. 31,000 (1974).

[31] 42 U.S.C. § 7470(3), (5) (1994).

not result in a violation of a NAAQS or of any applicable PSD regulations in local or downwind areas currently in compliance with NAAQS. (These permitting requirements vary depending on whether the facility is located in an attainment or nonattainment area for a particular pollutant.) The basic PSD provision is set forth in Section 165 of the Clean Air Act:

> No major emitting facility on which construction is commenced after August 7, 1977, may be constructed in any area to which this part applies unless [*inter alia*] a permit has been issued for such proposed facility in accordance with this part setting forth emission limitations for such facility which conform to the requirements of this part . . . [and] the proposed facility is subject to the best available control technology for each pollutant subject to regulation under this chapter emitted from, or which results from, such facility.[32]

CAA § 169(2)[33] defines "construction" to include "modification." The term "modification" in turn is defined 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 or which results in the emission of any air pollutant not previously emitted."[34] In 1975, EPA promulgated a rule that announced a two-prong test governing whether a modification has occurred. First, the facility must have made a "physical change." Second, the physical change must have resulted in an increase in air pollution.[35] EPA first issued regulations implementing the statutory PSD provisions in 1978.[36] While the PSD statutory definition of "modification" applied to "any physical change . . . which increases the amount of any air pollutant," the PSD regulations limited application of the PSD

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[32] *Id.* § 7475(a).
[33] *Id.* § 7479(2)(C).
[34] *Id.* § 7411(a)(4).
[35] *See* 40 Fed. Reg. 58,416, 58,418 (Dec. 16, 1975).
[36] *See* 43 Fed. Reg. 26,380, 26,403 (June 19, 1978).

requirements to "*major* modifications," *i.e.*, those resulting in a "*significant* net emissions increase."[37]

EPA consistently has recognized that Congress never meant to subject all construction projects to new source review. In 1975, EPA promulgated a rule exempting various types of projects from new source review under the NSPS regulations. For example, "[m]aintenance, repair, and replacement which the Administrator determines to be routine for a source category" are not considered to be review-triggering modifications.[38] The agency added regulations providing a similar exception to the PSD rules in 1978.[39] Explaining the purpose behind these exceptions, the preamble of a 1992 final rulemaking stated that "EPA has always recognized that Congress obviously did not intend to make every activity at a source subject to new source requirements."[40] EPA's preamble also warned that a broad definition of modification "could, standing alone, encompass the most mundane activities at an industrial facility (even the repair or replacement of a single leaky pipe, or a change in the way that pipe is utilized)," and stated that the agency's understanding of "modification" permits "common-sense exclusions from the 'physical or operational change' component of the definition."[41]

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[37] 40 C.F.R. § 52.21(b)(2)(i) (2001) (emphasis added). That regulation provides in relevant part that:

> Major modification means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act.

The significance levels specified by the regulations are slightly different for the criteria pollutants, *e.g.*, 40 tons per year for nitrogen oxides (NOx) and sulfur dioxide (SO_2), 25 tons per year for particulate matter. *See id*. § 52.21(b)(23)(i).

[38] 40 C.F.R. § 60.14(e). That regulation provides, in pertinent part, that:

> The following shall not, by themselves, be considered modifications under this part: (1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category . . . .

[39] *See id*. § 52.21(b)(2)(iii). That regulation provides in relevant part:

> A physical change or change in the method of operation shall not include: (a) Routine maintenance, repair and replacement . . . .

[40] 57 Fed. Reg. 32,314, 32,316 (July 21, 1992).

[41] *Id.*

The CAA of 1977 also established a program for major emitting facilities located in nonattainment areas of the country (known as the "nonattainment NSR" program).[42] The nonattainment NSR requirements parallel the PSD requirements described above, but require more stringent pollution controls for major emitting facilities in nonattainment areas.[43] In 1980, EPA promulgated regulations to implement the nonattainment NSR requirements regarding major modifications.[44] These regulations also provided an exception for "routine maintenance, repair, and replacement."[45]

EPA has not promulgated any regulations specifying what types of projects should be considered routine, and therefore exempt from the new source review process. In 1994, EPA staff circulated an informal draft proposal that would have equated "routine" with "minor" modifications.[46] This draft stated that "routine activities would generally include . . . minor maintenance or repair of parts or components and the replacement of minor parts or components with identical or functionally equivalent items."[47] Industry participants, however, apparently objected to this suggested definition, and EPA chose not to propose this language in any subsequent rulemakings.

B. Previous Enforcement Actions

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[42] *See* 42 U.S.C. §§ 7501-15 (1994).
[43] *See generally* 40 C.F.R. § 52.24 (2001).
[44] *See* 45 Fed. Reg. 52,676, 52,747 (Aug. 7, 1980).
[45] 40 C.F.R. § 52.24(f)(5) (2001). This regulation states, in pertinent part:

> Major modification means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act. . . . A physical change or change in the method of operation shall not include: (a) Routine maintenance, repair, and replacement . . . .

[46] *See* NEW SOURCE REVIEW REFORM 106-09 (EPA, Preliminary Staff Draft 1994).
[47] *Id.*

The CAA's basic enforcement provisions are found in section 113,[48] which provides for both administrative and judicial enforcement proceedings. EPA has the authority to issue administrative compliance and penalty orders for violations of, among other things, the CAA, its implementing regulations, or a permit. In addition, EPA can seek injunctive relief and civil monetary penalties by referring matters to the Department for filing in the appropriate U.S. District Court. Courts may impose penalties of up to $27,500 per day for each violation. CAA § 113(e) specifies the criteria to be used by EPA and the courts in determining the appropriate amounts of penalties, including "the economic benefit of noncompliance, and the seriousness of the violation."[49]

EPA's enforcement of the new source review program through judicial proceedings began in the late 1980s. The earliest cases involved violations at individual facilities. For example, an enforcement action was filed against the Louisiana Pacific Co., which constructed a new wood-products manufacturing facility, because it neither applied for a PSD permit nor installed pollution control technology. In *United States v. Louisiana-Pacific Corp.*,[50] the court ruled that the company had violated the applicable PSD requirements.

EPA then investigated other wood-products manufacturers and concluded that some had committed similar PSD violations. As a result, enforcement actions were brought and settlements were reached that required multiple facilities owned and operated by Louisiana Pacific, Georgia Pacific, and Willamette Industries to obtain PSD permits and install pollution controls in 1993,[51]

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[48] *See* 42 U.S.C. § 7413 (1994).
[49] *Id.* § 7413(e)(1).
[50] 682 F. Supp. 1141 (D. Colo. 1988).
[51] *See* United States v. Louisiana Pacific, No. CV 93-0869 (W.D. La. 1993).

1996,[52] and in 2000.[53] Further, in 2000, EPA issued a Notice of Violation for alleged new source review violations to Boise Cascade, and entered into settlement negotiations.

The seminal decision on the issue of PSD applicability to modifications by electric utilities, however, is the Seventh Circuit's 1990 ruling in *Wisconsin Electric Power Company v. Reilly* ("*WEPCO*").[54] The *WEPCO* petitioners challenged the EPA's position that modifications intended to restore lost capacity at a coal-fired steam generating facility triggered new permitting requirements. The company wanted to renovate the plant so it could operate beyond its planned retirement date of 1992.[55] To that end, the company needed to repair or replace the turbine-generators, boilers, rear steam drums, air heaters, mechanical and electrical auxiliaries, and common plant support facilities. To make these repairs, the facility would have to take various units out of service for nine-month periods.[56] The court found that EPA was not arbitrary and capricious in considering the cost, magnitude, frequency, and nature of these repairs and upheld EPA's determination that these changes were not routine.[57]

One of the key disagreements between EPA and certain electric utilities relates to the agency's enforcement of the CAA between the time of the *WEPCO* decision and the filing of the recent enforcement actions in 1999. In the early 1990s, EPA began to evaluate sources of significant pollution in a number of major industrial sectors. The EPA issued "Sector Notebooks" describing

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[52] *See* United States v. Georgia Pacific, 960 F. Supp. 298 (N.D. Ga. 1996).
[53] *See* United States v. Willamette, No. CV 00-1001 HA (D. Or. 2001).
[54] 893 F.2d 901 (7th Cir. 1990).
[55] *See id.* at 906.
[56] *See id*. at 906-08.
[57] *See id*. at 913.

these industries and their various sources of pollution. In particular, Sector Notebooks were issued for the refinery industry in 1995 and for the fossil-fuel fired electric generating industry in 1997.[58]

In the mid- to late 1990s, EPA began investigations of several industrial sectors that were emitting high levels of pollution and that were suspected of possible new source review violations. These investigations focused on coal-fired power plants, refineries, steel mini-mills, wood products manufacturers, and pulp and paper manufacturers. As a result of these investigations, a number of referrals for judicial enforcement action were sent to the Department for consideration.

EPA began its investigation of the coal-fired electric utility industry in 1996. The agency sent information requests under CAA § 114[59] to a number of utilities, particularly in the Midwest and Southeast, seeking access to the power plants' facilities and their documents. EPA believed that the documents were necessary to ascertain the facilities' modification histories and to provide information that would allow EPA to conduct an emission increase analysis. After considering the utilities' records, EPA concluded that a large number of facilities had made modifications that triggered the new source review permit and pollution control requirements, but had failed to seek PSD permits or install pollution controls. EPA notified the companies and asked them to enter into settlements to cure these violations without litigation. The facilities, however, strongly disputed EPA's allegations.

Beginning in 1999, EPA sent a number of referrals to the Department for civil judicial enforcement action against the owners and operators of some of the largest coal-fired power plants in the country, alleging widespread violations of new source review, NSPS, and "minor source"

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[58] These notebooks are available via the internet at http://es.epa.gov/oeca/sector.
[59] 42 U.S.C. § 7414 (1994).

permitting and pollution control requirements. EPA had made no referrals pertaining to the electric utility industry prior to that time. The Department's Environmental and Natural Resources Division ("ENRD") reviewed and evaluated the information provided by EPA, conducted legal research into the basis for the proposed allegations, consulted with EPA and independent experts regarding the proposed legal and factual allegations, and concluded that the referrals should be filed as enforcement actions.

After ENRD's review, the Department in November 1999 filed seven enforcement actions in U.S. District Courts against: 1) American Electric Power Co. (S.D. Ohio); 2) Ohio Edison and First Energy (S.D. Ohio); 3) Cinergy Corp. (S.D. Ind.); 4) Southern Indiana Gas & Electric Co. (S.D. Ill.); 5) Illinois Power Co. (S.D. Ind.); 6) Southern Company affiliates including Alabama Power Co. and Georgia Power Co. (N.D. Ga.); and 7) Tampa Electric Co. (M.D. Fla.). The complaints alleged that defendants made major modifications to their coal-fired power plants without applying for required new source review permits and installing required pollution controls. The complaints alleged violations at more than 25 power plants located in Ohio, Indiana, Illinois, West Virginia, Georgia, Alabama, and Florida. The complaints seek both injunctive relief and civil monetary penalties. The injunctive relief sought would require the facilities to remedy alleged past new source review violations by installing appropriate pollution control technology and by applying for permits.

Due to an adverse jurisdictional decision, Alabama Power Co. was dismissed from the case brought against subsidiaries of the Southern Company in *United States v. Alabama Power Co.* (now

known as *United States v. Georgia Power*).[60] The United States refiled against Alabama Power in the Northern District of Alabama in January 2001.[61] Of the seven judicial enforcement actions filed in November 1999, one has been settled (*United States v. Tampa Electric Co.*),[62] and six are still pending. An agreement in principle has been reached in *United States v. Cinergy Corp.*,[63] but, since a final settlement has not been reached, that case is still pending.

Finally, on December 22, 2000, the Department, on behalf of the EPA, filed a lawsuit against Duke Energy in the United States District Court for the Middle District of North Carolina. The complaint charged that Duke Energy made major modifications to its coal-fired power plants in the Carolinas without applying for permits or installing the necessary emissions-control equipment. Additional EPA referrals for judicial action against other companies and facilities have been submitted to the Department, but no further actions have been filed to date.

In November of 1999, EPA's Regional Administrator for Region IV issued an Administrative Compliance Order to the Tennessee Valley Authority ("TVA") alleging multiple new source review and other CAA violations at nine of TVA's eleven coal-fired power plants located in Kentucky, Tennessee, and Alabama. TVA strongly opposed the Administrative Compliance Order and requested that EPA reconsider the order. The two agencies negotiated unsuccessfully for almost nine months in an attempt to reach an administrative settlement of EPA's claims.

On May 4, 2000, the Administrator granted TVA's request for administrative reconsideration, and referred the matter to EPA's Environmental Appeals Board (the "Board"). After a limited period of information sharing and informal discovery, a one-week evidentiary hearing on TVA's alleged

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[60] No. 1:99-CV-2859-JEC (N.D. Ga. amended complaint filed May 14, 2001)
[61] No. CV-01-B-0152-S (N.D. Ala. filed Jan. 16, 2001).
[62] No. 99-2524 CIV-T-23F (M.D. Fla. filed Nov. 3, 1999).
[63] No. IP99-1693 C-Y/G (S.D. Ind. amended complaint filed Mar. 1, 2000).

CAA violations was held before an EPA administrative law judge in August of 2000. The hearing consisted of cross-examination of several witnesses, pre- and post-hearing briefing, and document submissions. The record of that proceeding then was submitted to the Board for a decision upon reconsideration. On September 15, 2000, the Board issued a written decision finding that TVA had made many "major modifications" to its power plants in violation of new source review and NSPS permit requirements. The Board's decision addressed the defenses raised by TVA, reviewed the applicable case law, and ruled, *inter alia*, that none of TVA's fourteen projects qualified for the "routine maintenance" exception from new source review and NSPS applicability. The Board also vacated 13 violations alleged in the Administrative Compliance Order as to which it found EPA either abandoned or failed to carry its burden of proof, and denied EPA some of the relief it sought.

TVA on May 4, 2000 filed a petition to review the Administrative Compliance Order in the Eleventh Circuit. Four other industry parties, three of whom—Alabama Power Company, Duke Energy Corporation, and Georgia Power—have been sued by the United States as part of the ongoing new source review enforcement initiative, joined TVA either by separate petition or intervention. The Department filed a motion to dismiss all of the petitions based on, among other grounds, the lack of a justiciable case or controversy between two federal agencies. The parties completed briefing on the petitions challenging the Administrative Compliance Order in October of 2000.

Following the Board's decision that TVA had made "major modifications" to its plants, TVA and three of the four industry petitioners challenging the Administrative Compliance Order filed additional petitions to review the decision in the Eleventh Circuit. The new petitions were consolidated with the petitions challenging the Administrative Compliance Order. The Justice

Department re-asserted most of its jurisdictional claims and briefing on the merits was completed in March 2001.

On January 8, 2002, the Eleventh Circuit issued a decision denying the Department's motion to dismiss the petitions for review.[64] "While a number of EPA's challenges present complex and close questions,"[65] it concluded that the EPA-TVA intrabranch controversy is justiciable; that TVA wields independent litigating authority; that the Environmental Appeals Board's decision is a reviewable final agency action; and that the private petitioners have standing to sue. The court has yet to rule on the merits of the petitions.[66]

There are now a total of eight pending enforcement actions against the owners and operators of coal-fired utilities for new source review, NSPS, and minor source violations—plus the action filed by TVA and the industry parties. The list of cases, and the status of each, are detailed in Appendix I (Table of Ongoing New Source Review Enforcement Actions).

In addition to the ongoing enforcement actions against the coal-fired power plants, the United States also has litigated new source review claims against other types of facilities. In the mid-1990s, EPA began its Petroleum Refinery Initiative. After EPA publicly announced its concern that widespread non-compliance existed in the refinery industry, several large refiners responded with expressions of willingness to negotiate settlements without litigation. From this general outreach emerged seven company-wide settlements with Koch Petroleum Corp., BP Exploration & Oil Co., Motiva/Equilon/Shell, Marathon Ashland Petroleum LLC, Conoco, Inc., Navajo Refining Co., and Montana Refining Co., which cumulatively cover 32 refineries and 31% of the nation's domestic

[64] TVA v. EPA, No. 00-12310, 2002 WL 21785 (11th Cir. Jan 8, 2002).

[65] *Id*. at *1.

[66] *See id*. at *22 (indicating that, by separate order, "oral argument will be scheduled on the merits involved in this appeal").

refining capacity (5,243,000 barrels per day). Settlement discussions continue with several other refiners.

In the same time frame, the Department commenced civil judicial actions against two refiners, *United States v. Murphy Oil Co.*,[67] and *United States v. Clark Refining and Marketing*.[68] These two actions allege, in part, that the companies violated the PSD provisions of the CAA by modifying units at their refineries and causing significant increases in emissions of NOx or SO_2 without obtaining the necessary permits and installing the appropriate pollution controls.

In *Murphy Oil Co.*, involving a refinery in Superior, Wisconsin, the United States alleged not only Clear Air Act claims but also claims arising under the Clean Water Act and the Resource Conservation and Recovery Act. The new source review component of the case involved allegations that Murphy twice modified emission units at the refinery without securing an appropriate permit or installing controls, and that Murphy withheld material information from the State of Wisconsin's permitting authorities when it sought state approval for one of the modifications. Following a trial in June 2001, the court ruled that Murphy Oil violated the new source review provisions.

In *Clark Refining and Marketing*, the United States alleged new source review violations at a Hartford, Illinois, facility, arising from a major "turnaround" at the refinery's fluid catalytic cracking unit. The case was settled recently just prior to trial, and a consent decree has been lodged with the court pursuant to which, among other things, the refinery will install a wet gas scrubber on the fluid catalytic cracking unit, pay a civil penalty, and provide other relief that will reduce NOx and particulate matter emissions.

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[67] No. 00-C-0409-C (W.D. Wis. 2000).
[68] No. 99-87 (S.D. Ill. 1999).

The United States is not currently litigating any multi-facility refinery cases. EPA has transmitted several referrals to the Department, but these have not yet been approved for filing.

Finally, the Department has brought other new source review enforcement actions against other companies and industries, including both single-facility and multiple-facility actions. Appendix II (Table of Additional New Source Review Enforcement Actions) summarizes these actions.

C. Settlement Negotiations and Agreements to Date

The United States has entered into one final consent decree and two agreements in principle to settle claims against three utilities operating coal-fired electric power plants. The consent decree in *United States v. Tampa Electric Company* ("*TECO*") was lodged in February 2000.[69] Agreements in principle with Virginia Electric Power ("VEPCO"), a subsidiary of Dominion Resources, and Cinergy were announced on November 15, 2000, and December 22, 2000, respectively. The United States had not filed a civil action against VEPCO. Cinergy, however, was one of the original seven utilities against which the United States filed suit in November 1999. By agreement of the parties, the text of the agreements has not been released. Negotiations over the terms and language of final consent decrees with both parties continue. In addition to these three parties, the Department and EPA have been engaged in continuing discussions to varying degrees with several other utilities.

The key elements of the agreements announced with VEPCO and Cinergy are the companies' agreement to install and operate pollution controls for SO_2 and NOx on significant portions of their

[69] *See* No. 99-2524 CIV-T-23F (M.D. Fla. filed Nov. 3, 1999). The *TECO* decree has been amended to accommodate some limited concerns the company expressed over the application of certain scheduling provisions, and over a prohibition on its securing power from other sources on a spot basis, unless TECO could be sure that those sources were subject to the same emission controls as it is. The United States agreed to some modifications of scheduling provisions, and also agreed to delete the prohibition on TECO securing power on a spot basis from "uncontrolled" sources because of the recognition that, in practice, the actual generating source of electricity purchased on a grid cannot be precisely identified.

entire coal-fired generating system pursuant to negotiated schedules that extend through 2012. In exchange, the companies will receive covenants not to sue from the United States under the new source review and related NSPS provisions of the CAA. These covenants not to sue are intended to resolve claims based on alleged past violations of law and also will extend forward for the life of the consent decree (which typically would last until 2015). The effect of the future covenant not to sue would be to provide regulatory certainty—a "safe harbor"—to the companies, while they are subject to and in compliance with the consent decree. This safe harbor will permit the companies to modify their plants without concern over further new source review enforcement actions. The settlements attempt to balance the significant emission reductions to be achieved against the flexibility and certainty provided by the covenant not to sue.

D. EPA Guidance on New Source Review

EPA has provided no formal guidance on when a project will be considered "routine maintenance" that is exempt from new source review requirements, but it has issued several applicability determinations to members of the electric utility industry and in other industries. An applicability determination is an advance ruling on whether a source's proposed changes would be subject to new source review requirements.[70] For instance, EPA issued an applicability determination to the Wisconsin Electric Power Company in 1988. That document, which later formed the basis of the Seventh Circuit's *WEPCO* decision, established a five-part test for determining, on a case-by-case basis, whether a proposed project would be considered routine: the 1) nature, 2) extent, 3) purpose, 4) frequency, and 5) cost of the work, as well as any other relevant

[70] *See* 40 C.F.R. § 60.5 (2001).

factors.[71] In upholding this test, the *WEPCO* court condensed EPA's five factors into four by combining the nature and extent-of-the-project factors.[72] To date, the Seventh Circuit is the only court to examine in depth EPA's interpretation of the routine maintenance exception.

EPA issued another applicability determination to an electric utility in August 1996, when it responded to a request from the Sunflower Electric Power Corporation regarding its plan to upgrade a turbine. The Agency noted that the proposed changes were not routine maintenance since they incorporated redesigned and upgraded turbine blades. On May 23, 2000, EPA issued an applicability determination to Detroit Edison, in which it applied the *WEPCO* test and concluded that the utility's proposed changes did not qualify for the routine maintenance exemption.[73] Because this letter post-dates the filing of the recent new source review enforcement actions, it may not be helpful in determining EPA's historical interpretation of "modification."

As noted above, disagreements over the meaning of "major modification" generally are confined to the electric utility industry. But EPA has issued several applicability determinations to

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[71] *See* Memorandum from Don R. Clay, Acting Assistant Administrator for Air and Radiation, U.S. EPA, to David A. Kee, Air and Radiation Division, EPA Region V, at 3 (Sept. 9, 1988).

[72] *See* Wisconsin Electric Power Company v. Reilly, 893 F.2d 901, 910-11 (7th Cir. 1990).

[73] *See* Letter from the EPA Region V Administrator to Detroit Edison (May 23, 2000). The Detroit Edison applicability determination also discussed 24 specific facts relevant to whether the proposed project was a new source review triggering "modification." They are: 1) repair/replacement enhances efficiency; 2) repair/replacement involves improved designs/materials; 3) repair/replacement combines several projects that, individually, would be routine, but become non-routine when combined; 4) few units in the industry have undertaken the repair/replacement; 5) a typical facility performs the repair/replacement infrequently; 6) affected unit has performed the repair/replacement infrequently at its facility; 7) absolute cost of the repair/replacement is high: i.e., EPA has rejected a project that cost less in absolute terms, in this or another industrial category; 8) the relative cost of the repair/replacement is high in comparison to the cost of a brand new facility; 9) the relative cost of the proposed replacement is high in comparison to the cost of a typical identical replacement of a worn part; 10) the cost of the project is heavily capitalized; 11) repair/replacement improves the facility beyond its pre-change (i.e., deteriorated) condition; 12) repair/replacement makes the unit more attractive to run from an economic standpoint; 13) repair/replacement increases the capacity of the unit; 14) repair/replacement is made to major components; 15) goal of project is "life-extension;" 16) repair/replacement involves a net addition of parts; 17) repair/replacement requires the pre-approval of state commission; 18) source characterizes repair/replacement as non-routine in internal reports or other documents; 19) repair/replacement requires unit shutdown; 20) repair/replacement requires materials from off-site; 21) facility replaces entire emissions unit; 22) change requires "significant" time to accomplish; 23) replacement is at unit nearing end of useful life; and 24) repair/replacement allows for less frequent maintenance.

companies in other industries, addressing whether certain physical changes would trigger new source review. For example, in August 1975, the Weyerhaeuser Company requested an applicability determination regarding its plan to install pressure parts in boilers at its Oregon pulp mill. EPA reviewed these proposed changes and found that they were not routine because the additional parts would increase the superheater surface of each boiler. Also, in 1987, the Cyprus Casa Grande Corporation requested an applicability determination regarding efforts to make a shut-down copper processing facility operational. Although EPA found that certain aspects of this rehabilitation would be considered routine if performed while the facility were operational, the repairs when viewed as a whole would not. The industry defendants and EPA dispute whether these applicability determinations are relevant to the agency's historical understanding of the routine maintenance exception. But because this report focuses on enforcement actions against coal-fired power plants, the Department does not find it necessary to address this disagreement.

Industry points to several informal documents that it claims shed light on EPA's interpretation of the routine maintenance exception. For instance, although not issued by EPA, the General Accounting Office ("GAO") released a report addressing, in part, the *WEPCO* decision's impact on power plants' willingness to undertake life extension projects. GAO reported that "[a]ccording to EPA policy officials, WEPCO's life extension project is not typical of the majority of utilities' life extension projects, and concerns that the agency will broadly apply the ruling it applied to the WEPCO's project are unfounded."[74] EPA disputes the significance of GAO's report,

[74] GENERAL ACCOUNTING OFFICE, PUB. NO. GAO/RCED90200, ELECTRICITY SUPPLY: OLDER PLANTS IMPACT ON RELIABILITY AND AIR QUALITY 65, at 3031 (1990).

arguing that it is not a statement or position by EPA and that it does not specifically address the routine maintenance exemption.

Next, industry cites a May 31, 1995, letter from Mary D. Nichols, EPA Assistant Administrator for Air Programs, to William R. Lewis, which states that "EPA believes that the routine maintenance exclusion already included in the existing NSR regulations also has the effect of excluding 'routine restoration.'"[75] EPA denies that the Nichols letter is relevant, arguing that it is not an authoritative statement of the agency's interpretation, and that in any event it does not suggest a broad scope to the exemption.

Industry also relies on a 1996 letter in which EPA responded to a query from Senator Robert Byrd concerning an EPA proposal for a revised NSPS for boilers. The letter states :

> To date, no existing unit has become subject to the utility NSPS under either the modification or reconstruction provision. Since it is anticipated that no existing utility will become subject to the revision due to being modified or reconstructed, as defined under the general provisions, no change to the applicability of the revision is currently planned for this rulemaking.[76]

For its part, EPA claims that the Byrd letter is irrelevant, since it does not even mention the routine maintenance exemption.

III. Analysis

"New source review" is the process by which the construction of large, new sources of air pollution and modifications to large, existing sources are subject to preconstruction review and permitting. The National Energy Policy Development Group ("NEPDG") directed the Attorney

[75] Letter from Mary D. Nichols, Assistant Administrator for Air and Radiation, U.S. EPA, to William R. Lewis, partner, Morgan, Lewis and Bockius at 19 (May 31, 1995).

[76] Letter from John Seitz, Dir., EPA, OAQPS to the Hon. Robert C. Byrd, U.S. Senate (Jan. 26, 1996).

General to "review existing enforcement actions regarding New Source Review to ensure that the enforcement actions are consistent with the Clean Air Act and its regulations."[77] A number of those actions were brought in 1999 following EPA's investigation of several coal-fired electric utilities for allegedly making major modifications to their plants without installing appropriate pollution control equipment. EPA also has brought enforcement actions against members of the refinery, wood-products, mini-steel, food-manufacturing, and chemical-processing industries.

With respect to the electric utility enforcement actions, this report asks two questions. First, did filing the actions, which allege that the contested projects are subject to new source review permitting requirements, constitute a substantive change in EPA's interpretation of the CAA and its regulations that would require APA-compliant notice and comment rulemaking? Second, notwithstanding the absence of notice and comment rulemaking, is EPA's interpretation of the routine maintenance exception reasonable in light of the CAA, its other implementing regulations, and previously issued guidance?

As previously explained, the Department's role in this report in answering both questions is limited to determining whether EPA's position is supported by a reasonable basis in law and fact. The Department recognizes that the pending litigation involves many case-specific issues that go beyond the scope of these two questions, and which may or may not be dispositive of the matters in contention in these cases. This review does not undertake to analyze the full spectrum of those issues. Instead, it focuses on these two key controversies which, in the Department's view, control whether the government properly may continue to pursue these actions.

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[77] REPORT OF THE NATIONAL ENERGY POLICY DEVELOPMENT GROUP, ch.7, at 14 (2001).

This report emphasizes EPA's enforcement actions against coal-fired power plants because actions in other industries are not implicated by the NEPDG's charge. The defendants in those cases generally do not argue that EPA's interpretation of the CAA is inconsistent with the statute's requirements. Rather, they advance a number of essentially factual arguments, including whether an enforcement action was time-barred by the statute of limitations,[78] whether a facility withheld information from inspectors,[79] and whether a facility emitted more pollutants than its permit authorized.[80] In fact, several of these actions settled days after EPA filed its initial complaint, with the facilities raising no defense to the agency's allegations.[81] The Department's report therefore centers on electric utility enforcement actions, which have generated claims that the agency's actions are inconsistent with the CAA and its regulations.

A. Did EPA Reinterpret Its Implementing Regulations in Violation of the APA?

As a general matter, the APA requires administrative agencies to engage in notice and comment rulemaking when they wish to impose new substantive regulatory requirements.[82] It does not, however, by its terms require notice and comment procedures for the promulgation of "interpretative" rules.[83] The Department concludes that there is a reasonable basis to argue that EPA's new source review enforcement actions do not constitute a departure from a prior authoritative interpretation of "routine maintenance," and that notice and comment rulemaking therefore was not necessary.

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[78] *See, e.g.*, United States v. Westavco Corp., Civil Action No. MJG-00-2602 (D. Md. 2001).

[79] *See, e.g.*, United States v. Brotech Corp., Civil Action No. 00-2428 (E.D. Pa. 2000).

[80] *See, e.g.*, United States v. Gallatin Steel Co., Civil Action No. 99-30 (E.D. Ky. 1999).

[81] *See, e.g.*, United States v. Nucor Corp., Civil Action No. 4-00:3945-24 (D.S.C. 2000); United States v. Cenco Ref. Co., No. CV 01-00512 AHM (AIJx) (C.D. Cal. 2001).

[82] *See* 5 U.S.C. § 553 (1994); Citizens to Preserve Overton Park v. Volpe, 401 U.S. 402, 417 (1971); Home Box Office v. FCC, 567 F.2d 9, 35 (D.C. Cir. 1977).

[83] *See* 5 U.S.C. § 553(b)(3)(A).

The essence of industry's APA argument is that EPA was required to announce its underlying interpretation of "routine maintenance" through notice and comment rulemaking before initiating the enforcement actions. A similar claim was raised, but was not addressed by the court, in *New York State Electric & Gas Corp. v. FERC*.[84] In that case, a utility believed that it was being overcharged by the companies from which it was purchasing electricity. It therefore petitioned FERC for a declaration that the rates were unlawful. The electricity vendors intervened and argued, as the industry defendants do now, that "any revision of the implementing regulations would have to be done through rulemaking, not in the course of an enforcement action."[85] The D.C. Circuit did not reach the intervenors' argument that notice and comment rulemaking was necessary; it instead concluded that it lacked jurisdiction to review FERC's decision.[86]

Industry and EPA in the enforcement actions under review vigorously dispute the meaning of prior cases analyzing the circumstances under which agency actions reflect a substantive interpretation or policy determination that can only be changed through notice and comment rulemaking. The Department concludes that the applicable caselaw does not preclude EPA from asserting that it has not through its past actions articulated an interpretation of "routine maintenance" that is inconsistent with the interpretation underlying the existing enforcement actions, and that can only be changed through APA procedures.[87] These cases reasonably can be read to support the proposition that the APA's notice and comment requirement is not implicated unless a prior

[84] 117 F.3d 1473 (D.C. Cir. 1997).
[85] *Id*. at 1475.
[86] *See id*. at 1477.
[87] This portion of the report relies principally on D.C. Circuit decisions for two reasons. First, these are the cases the industry defendants cite in their briefs, and second, other courts do not appear to have considered the issue.

interpretation of a substantive regulatory standard, which the agency now seeks to change, represented the agency's "authoritative,"[88] "definitive,"[89] or "official"[90] view.

In *Appalachian Power Co. v. EPA*,[91] the D.C. Circuit struck down EPA's attempt to substantively change its CAA Title V permitting program—specifically, to expand a regulation's definition of "periodic monitoring"—by issuing a guidance. EPA failed to demonstrate that either the controlling regulation, or its accompanying commentary at the time it was issued, had the broad scope now reflected in the guidance.[92] The guidance therefore would have "in effect amended" the agency's regulations, which "cannot legally [be done] without complying with the rulemaking procedures required by [the Clean Air Act]."[93] The court rejected EPA's argument that its interpretation was not a change but was within the scope of its regulations.[94] "In fact," the court pointed out, "EPA's promise in the 1992 rulemaking—that if federal standards were found to be inadequate in terms of monitoring it would open rulemaking proceedings—is flatly against EPA's current position."[95]

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[88] Alaska Professional Hunters Assoc., Inc. v. FAA, 177 F.3d 1030, 1035 (D.C. Cir. 1999); Paralyzed Veterans v. D.C. Arena L.P., 117 F.3d 579, 586 (D.C. Cir. 1997); *cf.* United States v. Mead Corp., 121 S. Ct. 2164, 2177 (2001) (Scalia., J., dissenting) (arguing that "a reasonable agency application of an ambiguous statutory provision" should be sustained "so long as it represent[s] the agency's authoritative interpretation").

[89] Ass'n of American Railroads v. Dep't of Transportation, 198 F.3d 944, 948, 949, 950 (D.C. Cir 1999).

[90] *Id*. at 947 (quoting *Alaska Professional Hunters*, 177 F.3d at 1032).

[91] 208 F.3d 1015 (D.C. Cir. 2000).

[92] *See id.* at 1026. The court also found that the guidance failed to address adequately other aspects of the controlling regulation. The regulation uses the phrases "periodic monitoring," "periodic testing," and "instrumental or noninstrumental monitoring." The guidance issued by the EPA appeared to assume that these three phrases had the same meaning. The guidance, however, does not address why the regulation used three different phrases when one phrase would have been sufficient if that was the original intention. *Id*. at 1027.

[93] *Id*. at 1028.

[94] *Id*. at 1027.

[95] *Id*. at 1026.

Similarly, in *Alaska Professional Hunters Association, Inc. v. Federal Aviation Administration*,[96] the agency "through its Alaska region, consistently advised guide pilots that they were not governed by regulations dealing with commercial pilots."[97] The FAA subsequently decided that in the future the Alaskan pilots should be treated the same as commercial operators or air carriers.[98] The D.C. Circuit held that the FAA should have submitted its new policy to notice and comment rulemaking, because its prior advice to the pilots was "an authoritative departmental interpretation" of its substantive regulation, "an administrative common law applicable to Alaskan guide pilots."[99] According to the court, "FAA's current doubts about the wisdom of the regulatory system followed in Alaska for more than thirty years does not justify disregarding the requisite procedures for changing that system."[100]

While the D.C. Circuit has faulted agencies for failing to engage in notice and comment rulemaking, it also has held that agencies were not required to have followed APA procedures before adopting an interpretation. For instance, in *Association of American Railroads v. Department of Transportation*,[101] the Federal Railroad Administration ("FRA") issued a bulletin interpreting a safety regulation. The Association of American Railroads ("AAR") alleged "that this bulletin abruptly departed from the agency's previous interpretation of the regulation and that it therefore required notice and comment rulemaking."[102] Reviewing the "random and conflicting agency letters

[96] 177 F.3d 1030 (D.C. Cir. 1999).
[97] *Id.* at 1031.
[98] *See id.* at 1033.
[99] *Id.* at 1035.
[100] *Id.*
[101] 198 F.3d 944 (D.C. Cir. 1999).
[102] *Id.* at 945.

and other documents," the court found "no evidence of a definitive agency interpretation that could be changed only through notice and comment."[103]

The *American Railroads* court distinguished *Alaska Professional Hunters*, where "all agree[d] that FAA personnel in Alaska consistently followed the interpretation in official advice to guides and guide services for approximately thirty years."[104] In *American Railroads*, by contrast, the court found "nothing in [the materials before it,] individually or taken together, that comes even close to the definitive interpretation that triggered notice and comment rulemaking in *Alaska Professional Hunters*."[105] A contrary holding, moreover, could produce untoward consequences:

> If as the AAR urges, the record in this case reflects a definitive interpretation . . . it would mean that an agency's initial, often chaotic process of considering an unresolved issue could prematurely freeze its thinking into a position that it would then be unable to change without formal rulemaking.[106]

The court in *Hudson v. Federal Aviation Administration*[107] also distinguished the *Alaska Professional Hunters* line of cases because *Hudson* did not "involve the interpretation of a regulation."[108]

> In the instant case there is no dispute as to the regulation's meaning. The regulation states that where the Administrator finds that a combination of analysis and testing provides data equivalent to an actual evacuation, the former may be used in place of the latter. Whether this test is met requires a *factual determination* [emphasis added] by the FAA, and clearly, as methods of analysis and other considerations develop over time, the FAA's response to the test can also. In 1989 the FAA did not believe that analysis would provide equivalent data when seating capacity changed over five percent, but

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[103] *Id*.
[104] *Id*. at 947 (quoting *Alaska Professional Hunters*, 177 F.3d at 1032).
[105] *Id.* at 948.
[106] *Id*. at 950.
[107] 192 F.3d 1031 (D.C. Cir. 1999).
[108] *Id*. at 1036.

> in 1998, spurred on by injuries to demonstration participants, it reviewed its policy and concluded that the situation had changed such that analysis and testing were now sufficient. This is not a different interpretation of the regulation, just an application of the regulation to a changed situation which calls for a different policy.[109]

This caselaw provides a reasonable basis for EPA's argument that it need not have submitted its interpretation of "routine maintenance" to notice and comment rulemaking, unless the agency previously had articulated a different interpretation of an "authoritative," "definitive," or "official" pronouncement. Moreover, EPA may reasonably argue that its putative failure to enforce the CAA in the electric utility industry prior to the present litigation lacks this requisite character of an authoritative pronouncement. Unlike the case in *Alaska Professional Hunters*, where the FAA provided guide pilots with an "authoritative departmental interpretation" of commercial pilot regulations,[110] the electric utilities here cite little more than EPA's asserted failure to act as evidence of the agency's prior interpretation. Instead, the new source review enforcement actions more closely resemble *American Railroads*. In the same way that the FRA's "random and conflicting agency letters and other documents" did not purport to establish "a definitive agency interpretation" of the safety regulation,[111] EPA did not expressly articulate a contrary prior understanding of the routine maintenance exception "in official advice" to the electric utilities.[112]

Even assuming that EPA's failure to file enforcement actions can constitute an "authoritative," "definitive," or "official" policy pronouncement, the agency reasonably denies, as a factual matter, that it declined to enforce the CAA against the electric power industry before 1999. Before initiating the present enforcement actions, EPA engaged in a number of activities—such as

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[109] *Id.* (citation omitted).
[110] *Alaska Professional Hunters*, 177 F.3d at 1035.
[111] *American Railroads*, 198 F.2d at 945.
[112] *Id.* at 947.

issuing applicability determinations, releasing informal letters, publishing "sector notebooks," and investigating suspected CAA violators—on the basis of which a court could conclude that the agency's interpretation of "routine" modifications has remained reasonably consistent.

The industry claims that EPA had knowledge of, and declined to apply the CAA to, other modifications performed by utilities during the relevant period—the so-called "life extension" projects. It concludes that EPA therefore must have viewed those modifications as "routine" ones to which the CAA's permitting requirements do not apply. For its part, the agency argues that its announced understanding of which "modifications" trigger new source review permitting requirements has been constant throughout the 1990s, and that it had no knowledge that plants were undertaking "major modifications."

Even taking into account industry's factual claims, the Department cannot say that the record bears no other interpretation. EPA engaged in a number of other actions a court might reasonably view as evidence that EPA has not reinterpreted the routine maintenance exception. As discussed above, EPA pursued new source review enforcement actions in the wood-products industry. It then expanded its investigations to include other industries with significant emissions, including coal-fired power plants. In late 1996, EPA began investigating various utilities to discover if a similar problem existed. While EPA might have acted more expeditiously, and with more clarity, a court reasonably could conclude that the agency did not, before it filed enforcement actions in 1999, maintain a different interpretation of the routine maintenance exception for the electric utility industry.

The proposition that EPA was not required to engage in notice and comment rulemaking draws additional support from analogous lines of caselaw. For example, EPA's alleged

nonenforcement of the CAA arguably did not constitute an authoritative interpretation because, pursuant to *Heckler v. Chaney*,[113] agencies have broad discretion to decide whether or not to bring enforcement actions. Indeed, an agency's discretion not to enforce might be safeguarded by the Constitution. As the D.C. Circuit recently explained, because the executive branch holds "the prerogative to decline to enforce a law, or to enforce a law in a particular way," "*Chaney*'s recognition that the courts must not require agencies to initiate enforcement actions may well be a requirement of the . . . Constitution."[114] By declining to bring enforcement actions against electric utilities, EPA may not have been articulating a definitive interpretation of the CAA; it simply may have been exercising its constitutional prerogative not to act. More specifically, EPA's putative failure to enforce the CAA in the electric utility industry may represent, not an authoritative interpretation, but simply the agency's judgment that, in light of other pending enforcement litigation, it lacked the resources to pursue new source review violations.

Further, the Department recognizes that EPA's position—that its putative inaction is not authoritative policy—may prevent the adoption of a contrary rule that would create perverse incentives. If an agency's practice of not enforcing a given law constitutes an authoritative interpretation, it will always have an incentive to enforce to the utmost bounds of the law. Otherwise, it risks being locked in to a particular interpretation by its forbearance.[115] The incentive to enforce would have the effect, not just of calcifying agency enforcement policy, but of subjecting covered entities to pervasive enforcement actions.

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[113] 470 U.S. 821 (1985).
[114] Baltimore Gas & Elec. Co. v. FERC, 252 F.3d 456, 459 (D.C. Cir. 2001).
[115] *Cf. American Railroads*, 198 F.3d at 950.

The apparent direction of caselaw—that agency inaction does not constitute an authoritative interpretation—does not appear to be undermined by *Telecommunications Research & Action Center v. FCC*.[116] In that case, the D.C. Circuit held that an agency's "unreasonable delay" in resolving pending adjudications could be deemed a "final agency action" that conferred jurisdiction on the federal courts.[117] *TRAC* deals with a narrow question of administrative law—the scope of the judiciary's power under the APA to review "final agency action"—and courts do not appear to have extended more broadly its condemnation of agency inaction. The Department's research disclosed no case in which a court read *TRAC* to require an agency to undertake a notice and comment rulemaking before abandoning an alleged practice of nonenforcement. Indeed, the Department has found no case holding that agency inaction amounts to an authoritative interpretation that can only be changed by following APA procedures.

The Department therefore concludes that there is a reasonable basis for EPA's position that filing the existing enforcement actions was not an interpretive change that could be adopted only after engaging in notice and comment rulemaking. Instead, the cases reasonably can be read to suggest that agency nonenforcement is not an "authoritative," "definitive," or "official" policy. Given the state of the law, the Department believes that it is not unreasonable to argue that EPA's asserted failure to enforce the CAA does not amount to an authoritative interpretation of "routine" modifications that could only be abandoned through APA procedures.

B. Is EPA's Interpretation of the Applicable New Source Review Regulations Lawful?

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[116] 750 F.2d 70 (D.C. Cir. 1984).
[117] *Id.* at 79-81.

This review of EPA's enforcement actions seeks to determine whether the agency's interpretation of "modification"—specifically, that the types of changes the industry defendants have made to their electric plants are "modifications" that require new source review—is consistent with the CAA and its implementing regulations. Reasonable arguments support EPA's interpretation of "modification," especially given that an agency's interpretation of its own regulations are afforded considerable deference. (The agency's interpretation of the CAA itself—that new source review is necessary only for "major modifications"—has not been challenged by the electric industry.) Because a reasonable case can be made for the agency's understanding of "modification," the Department is justified in continuing to pursue EPA's enforcement actions before the judiciary.

The CAA broadly defines "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 or which results in the emission of any air pollutant not previously emitted."[118] In other words, under the statute, a project is a new-source-review-triggering "modification" if it involves (1) any physical change that (2) causes an increase in air pollution. EPA's new source review regulations contain a somewhat narrower definition. According to the agency, new source review is necessary only for "major modifications"; i.e., physical changes that produce a "significant net emissions increase."[119]

EPA has not promulgated a regulation reflecting in any greater detail its current view of what constitutes a "major modification." Rather, EPA's interpretation was articulated in a series of case-

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[118] 42 U.S.C. § 7411(a) (1994).

[119] 40 C.F.R.§ 52.21(b)(2)(i) (2001); *see also id.* § 52.24(f)(5)(iii)(a) (excepting "routine maintenance, repair, and replacement" from new source review requirements); *id.* § 60.14(e)(1) explaining that "[m]aintenance, repair, and replacement which the Administrator determines to be routine for a source category" are not considered to be "modifications").

specific pronouncements. They include: (1) an applicability determination in the electric industry that later formed the basis of the *WEPCO* case, and the Sunflower and Detroit Edison applicability determinations discussed above; (2) applicability determinations in the wood-products, copper-processing, and other industries; (3) by initiating the present enforcement actions. (The parties dispute whether other EPA-issued documents—(4) an applicability determination to Detroit Edison, sent after EPA initiated the present enforcement actions; (5) a letter to William Lewis, a private attorney; and (6) a letter to Senator Robert Byrd—reflect the agency's interpretation of "routine" modifications.)[120]

Chevron, U.S.A., Inc. v. NRDC[121] obliges courts to defer to an agency's reasonable construction of an ambiguous statute it is charged with administering. In two recent cases, *United States v. Mead Corp.*[122] and *Christensen v. Harris County*,[123] the Supreme Court refused to afford *Chevron* deference to a Customs Service tariff classification ruling or an agency opinion letter, reasoning that such informal pronouncements do not "carry the force of law." Agency positions that do not receive *Chevron* deference nonetheless are entitled to "respect proportional to [their] 'power to persuade,'" based on factors such as agency expertise.[124]

However, these principles may not apply to an agency's interpretation of its own regulations.[125] As a general matter, agencies deserve the utmost deference when interpreting regulations that they have promulgated. Under so-called *Seminole Rock* deference, such views are

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[120] *See supra* Part II.D.
[121] 467 U.S. 837 (1984).
[122] 121 S. Ct. 2164, 2168 (2001).
[123] 529 U.S. 576, 587 (2000).
[124] *Mead*, 121 S. Ct. at 2175-76 (quoting Skidmore v. Swift & Co., 323 U.S. 134, 140 (1944)).
[125] *See generally* Scott H. Angstreich, *Shoring Up* Chevron*: A Defense of* Seminole Rock *Deference to Agency Regulatory Interpretations*, 34 U.C. DAVIS L. REV. 49 (2000).

"controlling unless plainly erroneous or inconsistent with the regulation."[126] The D.C. Circuit recently concluded that "agency interpretations that lack the force of law" do not deserve deference "when they interpret ambiguous *statutes*, but they do receive deference . . . when interpreting ambiguous *regulations*."[127] While an informal document setting forth an agency's interpretation of an ambiguous statute normally will not merit full deference, an informal document that clarifies the meaning of an ambiguous regulation may. Indeed, in *Christensen* itself, the Court arguably reaffirmed that *Seminole Rock* applies where an agency seeks to interpret an ambiguous regulation.[128]

At least two of the pronouncements by which EPA has interpreted its own regulations—the WEPCO applicability determination and by commencing the present enforcement actions—may be entitled to judicial deference. The WEPCO applicability determination sets forth a five-factor test governing whether construction shall be deemed "routine" within the meaning of EPA's regulations: the (1) nature; (2) extent; (3) purpose; (4) frequency; and (5) cost of the work, as well as any other relevant factors.[129] As in the case of opinion letters and tariff classification rulings, applicability determinations may lack "the force of law"—no court appears ever to have considered the question—and courts might not defer to any statutory interpretations contained therein. But because the WEPCO applicability determination interprets EPA regulations, the agency's views nevertheless could be entitled to deference.

Similarly, deference may be due to the understanding EPA evinced by initiating an enforcement action. An interpretation announced as an agency's litigation position ordinarily

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[126] Auer v. Robbins, 519 U.S. 452, 461 (1997) (citing Bowles v. Seminole Rock & Sand Co., 325 U.S. 410, 414 (1945)).

[127] Akzo Nobel Salt, Inc. v. Fed. Mine Safety & Health Review Comm'n, 212 F.3d 1301, 1304 (D.C. Cir. 2000).

[128] *See Christensen*, 529 U.S. at 588.

[129] *See* Memorandum from Don R. Clay, Acting Assistant Administrator for Air and Radiation, U.S. EPA, to David A. Kee, Air and Radiation Division, EPA Region V, at 3 (Sept. 9, 1988).

commands no deference,[130] but this general rule does not appear to apply to a litigation stance in which an agency seeks to clarify the meaning of its own regulations. A recent D.C. Circuit case suggests that such views deserve deference so long as (1) "there is no basis to suspect that the agency's position represents anything less than its considered judgment"; and (2) there are "no past practices or pronouncements that are inconsistent with the [agency's] current interpretation."[131]

A reasonable argument can be made that EPA's litigation position is entitled to deference under these principles. First, there is no reason to believe that the views EPA advances in the pending actions do not reflect the agency's "considered judgment." On the contrary, the agency expressly avows that it understands "modification" to encompass the construction the utilities have performed.[132]

Second, EPA can reasonably argue that its past practices and pronouncements are not inconsistent with the interpretation advanced in the pending enforcement actions. As discussed in Part III.A above, the industry and the agency sharply disagree on whether EPA's current enforcement actions represent a shift in policy. The utilities maintain that EPA declined to enforce the CAA against the electric power industry before 1999, while the agency submits that its CAA enforcement never lapsed. Deciding between these two differing characterizations is ultimately a task for the courts adjudicating the matter; but for the limited purposes of this review, it is sufficient that the record reasonably supports EPA's account.

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[130] *See* Bowen v. Georgetown Univ. Hosp., 488 U.S. 204, 213 (1988) ("Deference to what appears to be nothing more than an agency's convenient litigating position would be entirely inappropriate.").

[131] Bigelow v. Dep't of Defense, 217 F.3d 875, 878 (D.C. Cir. 2000).

[132] *See* Brief for Respondent, United States Environmental Protection Agency, TVA v. Whitman at 55-73.

When interpreting regulations, agencies receive deference only when the regulations are ambiguous.[133] EPA argues that, especially in light of the Seventh Circuit's *WEPCO* decision, its regulations unambiguously state that the industry's projects do not qualify for the routine maintenance exception. But even if a court did find the regulations to be ambiguous, it would defer to EPA's efforts to assign meaning to them through particular enforcement actions.

Under such deference, a court will uphold EPA's construction so long as it is not "plainly erroneous or inconsistent with the regulation."[134] EPA's understanding of "modification" reasonably clears this hurdle. The agency's regulations do not expressly foreclose its interpretation; they do not contain a definition of "routine maintenance" that EPA now seeks to shirk. Even taking the reading least favorable to EPA, the regulations are silent on the meaning of this and other critical terms. Because EPA's regulations do not clearly preclude its understanding, *a fortiori* a reasonable argument can be made that the agency's interpretation is not inconsistent with them.

Finally, setting aside the question of deference, EPA's regulations may specifically assign the agency broad discretion to determine whether a given project is eligible for the routine maintenance exception. The NSPS regulations—although not the PSD or nonattainment NSR regulations—state that "[m]aintenance, repair, and replacement *which the Administrator determines to be routine* for a source category" will not be considered new source review triggering modifications.[135] Therefore, when EPA determined that certain projects were not routine, it arguably was not violating its regulations, but rather exercising the discretion granted by its regulations.

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[133] *See Christensen*, 529 U.S. at 588; *see also Auer*, 519 U.S. at 461 (cautioning that an agency's interpretation may not be "inconsistent with the regulation" (citation omitted)).

[134] *Auer*, 519 U.S. at 461 (citations omitted).

[135] 40 C.F.R. § 60.14(e) (2001) (emphasis added).

In short, EPA's construction of the CAA and its implementing regulations may be entitled to deference. Courts normally defer to an agency's interpretation of an ambiguity in its own regulations, even when that view is articulated in a pronouncement that does not "carry the force of law." And EPA's regulations may give the agency the discretion to determine that a particular project is "major," or encompasses more than "routine maintenance." EPA therefore has a reasonable basis for concluding that its interpretation of "modification" is consistent with the CAA and its regulations, and that new source review requirements extend to the types of construction in which the industry defendants engaged.

IV. Conclusion

The Department's analysis of the new source review enforcement actions is limited to the issue of whether they are consistent with the Clean Air Act and its implementing regulations. This report does not attempt to address whether the Department or the EPA could have chosen other methods of achieving reductions in air pollution emissions. In addition, the review leaves untouched any policy implications the new source review enforcement actions may have on the national energy policy of the United States.

Within this limited scope, the Department concludes that EPA may reasonably argue that the enforcement actions are consistent with the Clean Air Act and its regulations, as well as the Administrative Procedure Act. The ultimate resolution of the issues raised by the pending litigation remains to be made by the appropriate courts, and this review is not intended to affect the positions taken in, or the disposition of, these cases.

In light of this review's conclusions, the Department's Environment and Natural Resources Division will continue, as it has during the pendency of this review, to prosecute vigorously the

EPA's civil actions to enforce the new source review provisions. And it will continue, as it has during the pendency of this review, to pursue talks to settle those actions where appropriate on mutually acceptable terms. Because the existing enforcement actions are supported by a reasonable basis in law and fact, any decision to withdraw, terminate, or otherwise circumscribe them would constitute policy determinations as to Clean Air Act enforcement strategy or regulatory interpretation—determinations that properly rest with EPA, the agency charged by statute with the responsibility to make such decisions.

Appendix I

Table of Ongoing New Source Review Enforcement Actions Against Coal-Fired Power Plants

CASE	COURT	STATUS
U.S. v. Illinois Power Co. and Dynegy Midwest Generation Inc.	S.D. Ill.	In fact discovery; liability trial set for February 2003.
U.S. v. Southern Indiana Gas & Electric Co.	S.D. Ind.	In discovery; liability trial set for October 2002.
U.S. v. Cinergy Corp.	S.D. Ind.	Stayed for settlement negotiations based on agreement-in-principle.
U.S. and States of New York, New Jersey, Connecticut, Massachusetts, Vermont, New Hampshire, Rhode Island and Maryland v. American Electric Power Service Corp. et al ("AEP"), consolidated with Ohio Citizens Action, et al. v. American Electric Power Service Corp. et al.	S.D. Ohio	In discovery; no trial schedule currently set. The States of New York, New Jersey, Connecticut, Vermont, New Hampshire, Massachusetts, Rhode Island and Maryland are plaintiff-interveners. The Natural Resources Defense Council and the Clean Air Task Force, representing a number of citizen groups, filed actions against AEP and its affiliates in the U.S. District Court for the Southern District of Ohio alleging the same or similar violations that are alleged in the United States' Complaint. The Court consolidated the citizen groups' action with the action by the United States and the intervening States.
U.S. and States of New York, New Jersey and Connecticut v. Ohio Edison Co. et al.	S.D. Ohio	In discovery; liability trial set for November 2002. The States of New York, New Jersey and Connecticut are plaintiff-interveners.
U.S. v. Georgia Power Co. and Savannah Electric & Power Co.	N.D. Ga.	Stayed pending resolution of defense motion to stay until the Eleventh Circuit issues a ruling in *TVA v. EPA*. Four citizens' groups represented by the Southern Environmental Law Center (Physicians for Social Responsibility, Campaign for a Prosperous Georgia, U.S. Public Interest Research Group, and Alabama Environmental Council) were granted leave to intervene as plaintiffs.
U.S. v. Alabama Power Co.	N.D. Ala	Stayed pending resolution of defense motion to stay until the Eleventh Circuit issues a ruling in *TVA v. EPA*. The Alabama Environmental Council was granted leave to intervene as a plaintiff.
U.S. v. Duke Energy Corp.	M.D.N.C.	In discovery; liability trial September 2003. The North Carolina Sierra Club, North Carolina Public Interest Research Group Citizen Lobby/Education Fund, and Environmental Defense, represented by the Southern Environmental Law Center, have filed a Motion to Intervene as plaintiffs.

CASE	COURT	STATUS
TVA, et al. v. Whitman	11th Cir.	Court ruled on January 8, 2002 that it has jurisdiction to address merits; merits briefing completed; no date set yet for oral argument.

Appendix II

Table of Additional New Source Review Enforcement Actions as of January, 2002 (Industries Other Than Refineries and Coal-Fired Power Plants)

CASE	COURT	STATUS
U.S. v. Cenco Refining	C.D. Cal.	• Industry: Oil refining • Construction or modification involved: reactivation of dormant refinery • Filed and settled 2001
U.S. v. Westvaco	D. Md.	• Industry: pulp and paper • Construction or modification involved: expansion of pulp mill, digester, rebuild of steam turbine and paper machines • Complaint filed in 2000; in discovery
U.S. v. Goelitz Candy	E.D. Cal.	• Industry: Food (candy) manufacturing • Construction or modification involved: expansion of manufacturing facility • Complaint filed in 2000; in litigation
U.S. v. Nucor Corporation	D.S.C.	• Industry: Mini-steel • Construction or modification involved: modifications of electric arc and reheat furnaces • Complaint and Consent Decree for nationwide settlement reached 2000, entered 2001
U.S. v. Arkansas Steel	E.D. Ark.	• Industry: Mini-steel • Construction or modification involved: modifications of electric arc and reheat furnaces • Complaint and Stipulation of Settlement filed 2001
U.S. v. Gallatin	E.D. Ky.	• Industry: Mini-steel • Construction or modification involved: construction of a mini-steel mill (electric arc furnace) without a PSD permit • Complaint was filed in 1999; settled
U.S. v. Coastal Lumber	N.D. Fla.	• Industry: wood products • Construction or modification involved: construction of new boilers and dryers, modifications to temperature controls • Complaint filed 2001; in litigation
U.S. v. Brotech Corp.	E.D. Pa.	• Industry: chemical processing • Construction or modification involved: process equipment • Complaint filed May 10, 2000; in litigation

Appendix III

Table of Complaints in Power Plant Cases: Major Modifications

CASE	PLANT	MAJOR MODIFICATIONS	COMMENTS
U.S. v. Alabama Power Co.	Barry	(1) installation of a new design spiral fin economizer in Unit 5 in 1993; (2) installation of new primary superheater top and intermediate bundle in Unit 1 in 1994; and (3) installation of a new reheater section in Unit 2 in 1997.	Violation of PSD requirements.
U.S. v. Alabama Power Co.	Gaston	(1) replacement of the front reheater for Unit 5 in 1991.	Violation of PSD requirements.
U.S. v. Alabama Power Co.	Gorgas	(1) a balance draft conversion of Unit 10 in 1985; (2) installation of a new design spiral fin economizer in Unit 10 in 1994; and (3) installation of redesigned air heaters in Unit 10 in 1994.	Violation of PSD requirements.
U.S. v. Alabama Power Co.	Greene	(1) replacement of the primary reheater for Unit 2 in 1989.	Violation of PSD requirements.
U.S. v. Alabama Power Co.	Miller	(1) construction of Miller Unit 3 on or after June 1, 1975; and (2) construction of Miller Unit 4 on or after June 1, 1975.	Violation of PSD requirements.
U.S. v. Cinergy Corp., PSI Energy, Inc., and Cincinnati Gas & Electric Co.	Cayuga	(1) replacement of the Unit 1 and Unit 2 forced draft fans in 1988 and 1990, respectively; (2) replacement of the Unit 1 and Unit 2 boiler reheater front pendants in 1995 and 1994, respectively; (3) replacement of the Unit 1 high pressure heater in 1995; (4) replacement of the Unit 1 boiler lower slope tubes in 1996; and (5) replacement of the upper section of the economizer at Unit 1 and Unit 2 in 1985 and 1984, respectively.	Violation of PSD requirements.
U.S. v. Cinergy Corp., PSI Energy, Inc., and Cincinnati Gas & Electric Co.	Gallagher	(1) replacement of the Unit 1 radiant superheater tubes in 1992; (2) replacement of the Unit 1 boiler high temperature superheater section in 1994; (3) installation of the Unit 2 high temperature pendent sections in 1986; (4) replacement of the Unit 2 radiant superheater tubes in 1992; (5) retubing the Unit 2 condenser with titanium tubing in 1990; (6) installation of the Unit 3 high temperature superheater pendant sections in 1987; and (7) installation of the Unit 4 high temperature superheater outer pendant sections in 1986.	Violation of Nonattainment NSR requirements and PSD requirements.

CASE	PLANT	MAJOR MODIFICATIONS	COMMENTS
U.S. v. Cinergy Corp., PSI Energy, Inc., and Cincinnati Gas & Electric Co.	Wabash River	(1) replacement of the Unit 1 intermediate and finishing superheater sections and upper reheater sections in 1989; (2) replacement of the Unit 1 and Unit 2 front wall radiant superheater tubes in 1989; (3) replacement of the Unit 2 high temperature finishing superheater and upper reheater assemblies in 1992; (4) replacement of the Unit 2 reheater and superheater outlet sections in 1997; (5) replacement of the Unit 3 finishing superheater, intermediate superheater, radiant superheater, and lower reheater tube bundles in 1989; (6) replacement of the Unit 4 radiant superheater front wall in 1991; (7) replacement of the Unit 4 finishing superheater tubes in 1995; (8) replacement of the Unit 4 outlet reheater tube assemblies in 1996; (9) replacement of the Unit 5 upper economizer boiler tube hangers and hanger rods, repair of boiler structure, and realignment of steam headers in 1990; (10) installation of stainless-steel-tubed feedwater heaters in Unit 6 in 1987; (11) replacement of the Unit 6 induced draft fan wheels in 1989; and (12) replacement of the Unit 6 bottom ash hopper in 1994.	Violation of Nonattainment NSR requirements and PSD requirements.
U.S. v. Cinergy Corp., PSI Energy, Inc., and Cincinnati Gas & Electric Co.	Beckjord	(1) replacement of the superheater, economizer, reheater header, wall tubes, and coal bunker on Unit 1 in 1987; (2) replacement of the furnace wall tubes, superheater, reheater header, and coal bunker on Unit 2 in 1987; (3) replacement of the superheater and reheater on Unit 3 in 1985; (4) replacement of the waterwall tubing, superheater, turbine blades, and other turbine equipment on Unit 4 in 1989; (5) replacement of the economizer, high temperature reheater, and condenser tubing on Unit 5 in 1991; and (6) replacement of the condenser tubing and turbine blades on Unit 6 in 1995.	Violation of Nonattainment NSR requirements and PSD requirements.
U.S. v. Georgia Power Co., Savannah Electric and Power Co.	Bowen	(1) installation of a new economizer in Unit 2 in 1992.	Violation of PSD requirements.
U.S. v. Georgia Power Co., Savannah Electric and Power Co.	Scherer	(1) construction of Scherer Unit 3 on or after June 1, 1975; and (2) construction of Scherer Unit 4 on or after June 1, 1975.	Violation of PSD requirements.
U.S. v. Georgia Power Co., Savannah Electric and Power Co.	Kraft	(1) balanced draft conversion of Unit 3 in 1985.	Violation of PSD requirements.

CASE	PLANT	MAJOR MODIFICATIONS	COMMENTS
U.S. v. Illinois Power Co.	Baldwin Station	(1) replacement of a cold end air heater section for Unit 1 by replacing all air heater tubes in 1986 and 1990; (2) replacement of 14 cyclones and front and rear furnace walls, among other things, at Unit 1 in 1992; (3) replacement of a cold-end air heater section at Unit 2 by replacing all air heater tubes in 1988 and 1991; (4) replacement of the entire boiler floor at Unit 2 in 1991, including the inlet headers, floor tubing, and the lower 3 feet of the front and rear walls; (5) complete change-out of the economizer at Unit 3 in 1982; (6) replacement of the Unit 3 reheater in 1994; and (7) the addition of 20,000 square of feet of secondary superheater surface at Unit 3 in 1994.	Violation of PSD requirements.
U.S. v. Ohio Edison Co., Pennsylvania Power Co.	Sammis Station	(1) replacement of the reheater, furnace ash hopper boiler tubes, and secondary superheater outlet header of Sammis Unit 1 in 1993; (2) replacement of the reheater, furnace ash hopper boiler tubes, and secondary superheater outlet header of Sammis Unit 2 in 1991; (3) replacement of the reheater, furnace ash hopper boiler tubes, secondary superheater outlet header, front wall south cell boiler tubes, radiant downflow tubes, and furnace south sidewall tubes of Sammis Unit 3 in 1992; (4) replacement of the furnace ash hopper boiler tubes, waterwall tubes, superheater third pass outlet header, and superheater control condenser tubes of Sammis Unit 4 in 1990; (5) replacement of the vertical tube furnace with a spiral tube furnace on Sammis Unit 5 in 1984; (6) replacement of the economizer, secondary superheater outlet pendant, and reheater outlet bank of Sammis Unit 5 in 1990; (7) replacement of the horizontal reheater and economizer of Sammis Unit 6 in 1987; (8) replacement of the burners, front and rear waterwall tubes, reheater riser and pendant tubes, first through third pass mix area walls, and coal pulverizer pipes of Sammis Unit 6 in 1992; (9) replacement of the coal pulverizers of Sammis Unit 6 in 1998; (10) replacement of the economizer, horizontal reheater, reheater riser tubes, turbine rotors, and front ash hopper tubes of Sammis Unit 7 in 1989; and (11) replacement of the waterwall panels of Sammis Unit 7 in 1991.	Violation of Nonattainment NSR requirements and PSD requirements.
U.S. v. Southern Indiana Gas and Electric Co.	Culley Station	(1) replacement of numerous components of Unit 3 in 1997, including, replacing all tubes in the secondary superheater outlet bank, replacing the reheater outlet bank and overhauling the Unit 3 turbine generator, exciter, boiler feed pump turbine and boiler feed pump; (2) the replacement of the Unit 3 economizer bank in 1994; (3) installation of a new economizer for Unit 1 in 1991; and (4) the installation of a new outlet section for the secondary superheater for Unit 2 in 1992.	Violation of PSD requirements.

CASE	PLANT	MAJOR MODIFICATIONS	COMMENTS
U.S. and State of New York v. American Electric Power Service Corp., et al.	Tanners Creek	(1) replacement during or about 1988 of the outlet bank and outlet tube assemblies for the reheater, the primary superheater outlet tube assemblies, outlet headers, and vestibule casing for Unit 3; (2) the replacement of eleven cyclone furnaces during or about 1987; (3) the replacement during or about 1992 of the Unit 4 tubular air heater; (4) the replacement during or about 1989 of the furnace arch and floor tubes for Unit 4; and (5) the replacement during or about 1995 of the primary furnace floor and side wall tube panels for Unit 4.	Violation of Nonattainment NSR requirements and PSD requirements.
U.S. and State of New York v. American Electric Power Service Corp., et al.	Cardinal Plant	(1) replacement of all five pulverizers at Unit 1 and the addition of ten burners constructed on the front and rear walls of the primary furnace from approximately 1980 through 1981; (2) removal of the horizontal primary superheater from Unit 1 and the addition of wingwalls and replacement of a redesigned horizontal reheater constructed from approximately 1980 through 1981; (3) replacement of a redesigned economizer for Unit 1in approximately 1989; (4) replacement of all five pulverizers at Unit 2 and the addition of ten burners constructed on the front and rear walls of the primary furnace from approximately 1979 through 1980; (5) removal of the horizontal primary superheater from Unit 2 and the addition of wingwalls and the replacement of a redesigned horizontal reheater from approximately 1980 through 1981; (6) replacement of a redesigned economizer for Unit 2 in approximately 1990; and (7) replacement of most or all of the components of the lower primary furnaces for Units 1 and 2 from about 1992 through 1993.	Violation of Nonattainment NSR requirements and PSD requirements.
U.S. and State of New York v. American Electric Power Service Corp., et al.	Conesville	(1) replacement of 4 cyclones, primary burners, and re-entrant throats at Units 1and 2 during approximately 1987; (2) replacement of furnace floor tubing at Units 1 and 2 during approximately 1990 and 1989; (3) replacement of the economizer bank at Unit 3 during approximately 1988; and (4) replacement of secondary superheater outlet head at Unit 3 during approximately 1993.	Violation of Nonattainment NSR requirements and PSD requirements.

CASE	PLANT	MAJOR MODIFICATIONS	COMMENTS
U.S. and State of New York v. American Electric Power Service Corp., et al.	Muskingum River	(1) replacement, during approximately 1987 through 1989, of 10 substantially redesigned cyclone furnaces, primary burners, and related equipment, constructed at Units 3 and 4; (2) replacement, during approximately 1988, of the roof tubing at Units 1, 2, 3, and 4; (3) replacement, during approximately 1988, of the inlet and outlet tube assemblies for the secondary superheaters at Units 1 and 2; (4) replacement from approximately 1980 through 1981 of the secondary superheater outlets, reheat inlets, intermediate and outlet platens, for Units 3 and 4; (5) replacement of all five pulverizers at Unit 5 and the addition of ten burners constructed on the front and rear walls of the primary furnace from approximately 1979 through 1980; (6) removal of the primary superheater from Unit 5 and the installation of wingwalls and the replacement of a redesigned horizontal reheater from approximately 1980 through 1981; (7) redesign and replacement during or about 1985 of an upgraded economizer for Unit 5; and (8) removal and replacement of the lower furnace tubes for Unit 5 in about 1992.	Violation of Nonattainment NSR requirements and PSD requirements.
U.S. and State of New York v. American Electric Power Service Corp., et al.	John E. Amos	(1) replacement of the economizer and increase the surface support system and retube the main condenser at Unit 1 in approximately 1989; (2) replacement of the low pressure reheat outlet bank and header and the heat recovery area rear wall at Unit 2 in approximately 1994; and (3) retubing of the main condenser at Unit 3 in approximately 1995.	Violation of Nonattainment NSR requirements and PSD requirements.
U.S. and State of New York v. American Electric Power Service Corp., et al.	Kammer	(1) replacement of the furnace floor tubing in Units 1, 2 and 3 during approximately 1992 and 1993; and (2) replacement of the secondary superheat outlet bank and the reheat outlet banks at Unit 2 during approximately 1999.	Violation of PSD requirements.
U.S. and State of New York v. American Electric Power Service Corp., et al.	Kanawha River	(1) retubing the main condenser at Unit 1 in approximately 1991.	Violation of Nonattainment NSR requirements and PSD requirements.
U.S. and State of New York v. American Electric Power Service Corp., et al.	Mitchell	(1) replacement of the low pressure reheat outlet banks on both Units 1 and 2 from approximately 1992 through 1993; (2) conversion and redesign of the #15 MBF pulverizer to an MPS-89 pulverizer on Unit 1 from approximately 1990 through 1991; (3) replacement of front screen tubes on Unit 1 in approximately 1997; (4) replacement of tubes in the main condensers in Unit 2 in approximately 1989; and (5) installation of a redesigned economizer on Units 1 and 2 from approximately 1987 through 1988.	Violation of PSD requirements.

CASE	PLANT	MAJOR MODIFICATIONS	COMMENTS
U.S. and State of New York v. American Electric Power Service Corp., et al.	Philip Sporn	(1) replacement of the lower waterwall headers in the rear and side wall in Unit 1 in approximately 1990; (2) replacement of the rear and side wall lower furnace headers on Units 2, 3, and 4 from approximately 1990 through 1991; (3) replacement of all tubes in the main condensers in Units 1, 2, and 4 from approximately 1990 through 1991; (4) replacement of the primary and reheat and superheater outlet banks and outlet headers in Unit 4 during approximately 1990; (5) replacement of all lower furnace tubes and related components in Unit 5 in approximately 1993; (6) replacement of upper three banks of the first reheater and first reheater inlet header in Unit 5 in approximately 1990 and 1991; and (7) retubing of the low pressure, high pressure and auxiliary condensers in Unit 5 during approximately 1992 and 1993.	Violation of PSD requirements.
U.S. and State of New York v. American Electric Power Service Corp., et al.	Clinch River	(1) replacement of the primary, secondary and reheat superheater banks and headers at Units 1, 2 and 3 between approximately 1994 and 1996.	Violation of PSD requirements.
U.S. v. Duke Energy Co.	CG Allen Steam Plant	(1) major boiler and turbine overhaul for Unit 5 in 2000; (2) replacement of the economizer in the superheat and reheat furnaces for Unit 5 in 1996; (3) replacement of both banks of the economizer and the superheat header and crossover tubing for Unit 4 in 1996; (4) major boiler and turbine overhaul for Unit 4 in 1998; (5) replacement and redesign of major components of the boiler for Unit 2 in 1988; (6) replacement and redesign of major components of the boiler for Unit 1in 1989; and (7) replacement of pendant superheater assemblies, replacement of cross-over tubes with two steam lines, and installation of a redesigned superheat header for Unit 3 in 1994.	Violation of PSD requirements.
U.S. v. Duke Energy Co.	Belews Creek	(1) replacement and redesign of both banks of the economizer, and replacement of the horizontal reheater for Unit 2 in 1999; (2) redesign and replacement of the pendant reheater section for Unit 2 in 1996; and (3) redesigning and replacing both banks of economizers, replacement of the horizontal reheater for Unit 1 in 2000.	Violation of PSD requirements.
U.S. v. Duke Energy Co.	Buck	(1) redesign and replacement of the pendant heater section, and resulted in the refurbishment of the Unit for Unit 5 in 1991; (2) refurbishment of Unit 4 in 1994; (3) replacement of tubing, and replacement of the backpass with redesigned components for Unit 3 in 1994; and (4) replacement of the reheater pendants, superheat and reheat crossover tubes, replacement of crossover supports, and waterwall tubes for Unit 6 in 1990.	Violation of PSD requirements.

CASE	PLANT	MAJOR MODIFICATIONS	COMMENTS
U.S. v. Duke Energy Co.	Marshall	(1) replacement of horizontal reheater and other boiler components for Unit 4 in 1990; (2) replacement of reheat assemblies, the ignition system, superheat outlet expansion loops, and superheat platen outlet expansion loops for Unit 3 in 1999; (3) replacement of the waterwall, replacement of the lower economizer and other boiler work for Unit 2 in 1989; (4) replacement of primary superheater convection pass front wall and other work at Unit 2 in 1996; and (5) replacement of all superheater front steam cooled wall tubes, replacement of the lower economizer bank, replacement of significant portions of the waterwall, and replacement of the oil ignition system for Unit 1 in 1992.	Violation of PSD requirements.
U.S. v. Duke Energy Co.	Cliffside	(1) refurbishment of Unit 2 in 1993; (2) refurbishment of the Unit, including but not limited to replacement of tubes, replacement and redesign of the back pass, and replacement and redesign of the ignition system for Unit 3 in 1990; (3) replacement of tubing, replacement of upper economizer banks and pendant superheater assemblies, turbine rehabilitation, and a fuel system upgrade for Unit 4 in 1990; (4) redesign and replacement of the Unit 5 economizer, and other work, in 1992 and 1995; and (5) replacement of economizer banks, replacement of the burner panels, and replacement of pendant reheater tubes for Unit 1 in 1993.	Violation of PSD requirements.
U.S. v. Duke Energy Co.	Dan River	(1) replacement and redesign of tubing, replacement and redesign of the backpass, and replacement of the boiler ignition system for Unit 3 in 1988.	Violation of PSD requirements.
U.S. v. Duke Energy Co.	W.S. Lee	(1) removal and redesign of the platen superheater, replacement of waterwall tubes, replacement of reheat elements, superheat cross over tubes, and of the economizer for Unit 3 in 1990.	Violation of PSD requirements.
U.S. v. Duke Energy Co.	Riverbend	(1) replacement or refurbishment of the steam drum, economizer, waterwalls, superheater, and reheater for Unit 4 in 1990; (2) replacement or redesign of the economizer, waterwall, superheater, and reheater for Unit 6 in 1991; and (3) replacement or redesign of the economizer, waterwall, superheater, and reheater for Unit 7 in 1992.	Violation of PSD requirements.
Environmental Appeals Board TVA Decision	Paradise	(1) replace of the cyclones, lower furnace walls, and floor in 1985.	Violations of PSD and NSPS requirements.
Environmental Appeals Board TVA Decision	Colbert	(1) rehabilitation and modification of boiler, turbine, and controls in 1982.	Violations of PSD and NSPS requirements.

CASE	PLANT	MAJOR MODIFICATIONS	COMMENTS
Environmental Appeals Board TVA Decision	Allen	(1) replacement of the reheater in 1991-92	Violation of PSD requirements.
Environmental Appeals Board TVA Decision	John Sevier	(1) replacement of all waterwall and burner wall tubes, and of superheater in 1988	Violation of PSD requirements.
Environmental Appeals Board TVA Decision	Cumberland	(1) replacement of front and rear secondary super-heater outlet headers and of the inlet terminal tubes and main steam piping tee in 1993.	Violation of PSD requirements.
Environmental Appeals Board TVA Decision	Bull Run	(1) replacement of the secondary superheater outlet pendant elements and of all economizer elements in the “A” and “B” furnace in 1987.	Violation of PSD requirements.
Environmental Appeals Board TVA Decision	Kingston	(1) replaced all reheater and superheater intermediate pendant elements as well as superheater and reheater waterwalls in 1989-1990 at Units 6 and 8	Violation of PSD requirements.
Environmental Appeals Board TVA Decision	Shawnee	(1) replaced secondary reheater and superheater intermediate pendant elements and crossover elements in 1989-90 at Units 1 and 4	Violation of PSD requirements.