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OA/ID Number: 45144
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Folder Title:
Clean Air Act/WEPCO [2]

Stack:	Row:	Section:	Shelf:	Position:
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For the reasons set forth in the preamble, Part 52 of Chapter I of Title 40 of the Code of Federal Regulations is proposed to be amended as follows:

Part 52-APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for Part 52 is amended to read as follows:

(TO BE ADDED)

2. Section 52.21 is proposed to be amended to read as follows:

52.21 Prevention of significant deterioration of air quality.

* * * * *

(b) * * *

(2) * * *

(iii) A physical change or a change in the method of operation shall not include:

* * * * *

(h) the addition, replacement or use of a pollution control project at an existing electric utility steam generating unit, unless the Administrator determines that such addition, replacement, or use is not environmentally beneficial, and except:

(a) when the pollution control project would result in an significant net increase in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of Title I, if any, and

(b) the Administrator determines that the pollution control project will cause or contribute to a violation of any ambient standard, PSD increment, or visibility violation.

(i) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

(i) the State implementation plan for the State in which the project is located, and

(ii) other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(j) The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.

(k) The reactivation of a very clean coal-fired electric utility steam generating unit.

* * * * *

(21) * * *

(iv) For any emissions unit (other than an electric utility steam generating unit specified in paragraph (v) of this subsection) that has not begun normal operations on a particular date, actual emissions shall equal the potential to emit of the unit on that date unless the source owner or operator agrees to federally enforceable limitations that restrict the allowable emissions of the source to a rate that is not significantly greater than the source's baseline level of actual emissions.

(v) For an electric utility steam generating unit (other than a unit that constitutes the addition of a new unit or the replacement of an existing unit) actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit.

(31) "Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

(32) "Pollution control project" means any physical change or change in the method of operation, at an existing electric utility steam generating unit for purposes of reducing emissions from such unit in order to comply with Title IV.

Such changes are limited to:

(i) the installation of conventional or innovative pollution control technology, including but not limited to advanced flue gas desulfurization, sorbent injection for sulfur dioxide and nitrogen oxides controls and electrostatic precipitators;

(ii) a physical change, or change in the method of operation, to accommodate switching to fuel which is lower in sulfur content than the fuel use prior to the change, including natural gas or coal re-burning, co-firing of natural gas and other fuels for the purpose of controlling sulfur dioxide and nitrogen oxide emissions;

(iii) a permanent clean coal technology demonstration project conducted under Title II, section 101(d) of the Further Continuing Appropriations Act of 1985 (section 5903(d) of title 42 of the United States Code), or subsequent appropriations, up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency; or

(iv) a permanent clean coal technology demonstration project that constitutes a repowering project.

(33) "Representative actual annual emissions" means the average rate, in tons per year, at which the source is projected to emit a pollutant for the two-year period after a physical change or change in the method of operation of a unit, (or a different consecutive two-year period within 10 years after that change, where the Administrator determines that such period is more representative of normal source operations), considering the effect any such change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the Administrator shall:

(i) consider all relevant information, including but not limited to, historical operational data, the company's own representations, filings with the State or Federal regulatory authorities, and compliance plans under Title IV of the Clean Air Act; and

(ii) exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that is attributable to an increase in projected capacity utilization at the unit that is unrelated to the

particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.

- (34) "Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.
- (35) "Clean coal technology demonstration project" means a project using funds (1) appropriated under the heading 'Department of Energy-Clean Coal Technology', up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or (2) similar projects funded through appropriations for the Environmental Protection Agency. The Federal contribution for a qualifying project shall be at least 20 percent of the total cost of the demonstration project.
- (36) "Temporary clean coal technology demonstration project" means a clean coal technology demonstration project that is operated for a period of five years or less, and which complies with the State implementation plans for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.
- (37) (i) "Repowering" means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.
- (ii) Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.
- (iii) The Administrator shall give expedited consideration to permit applications for any

source that satisfies the requirements of this subsection and is granted an extension under §409 of the Clean Air Act.

- (38) "Reactivation of a very clean coal-fired electric utility steam generating unit" means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

(i) has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the permitting authority's emissions inventory at the time of enactment;

(ii) was equipped prior to shut-down with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;

(iii) is equipped with low-NOx burners prior to the time of commencement of operations following reactivation; and

(iv) is otherwise in compliance with the requirements of the Clean Air Act.

3. Section 52.24 is proposed to be amended to read as follows:

52.24 Statutory restriction on new sources.

* * * * *

(f) * * *

(5) * * *

(iii) A physical change or change in the method of operation shall not include:

* * *

(h) the addition, replacement or use of a pollution control project at an existing electric utility steam generating unit, unless the Administrator determines that such addition, replacement, or use is not environmentally beneficial, and except:

(1) when the pollution control project would result in an significant net increase in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of Title I, if any, and

(2) the Administrator determines that the pollution control project will cause or contribute to a violation of any ambient standard, PSD increment, or visibility violation.

(i) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

(1) the State implementation plan for the State in which the project is located, and

(2) other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(j) The reactivation of a very clean coal-fired electric utility steam generating unit.

* * * * *

(13) * * *

(iv) For any emissions unit (other than an electric utility steam generating unit specified in paragraph (v) of this subsection) that has not begun normal operations on a particular date, actual emissions shall equal the potential to emit of the unit on that date unless the source owner or operator agrees to federally enforceable limitations that restrict the allowable emissions of the source to a rate that is not significantly greater than the source's baseline level of actual emissions.

(v) For an electric utility steam generating unit (other than a unit that constitutes the addition of a new unit or the replacement of an existing unit) actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit.

(18) "Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

(19) "Representative actual annual emissions" means the average rate, in tons per year, at which the source is projected to emit a pollutant for the two-year period after a physical change or change in the method of operation of a unit, (or a different consecutive two-year period within 10 years after that change, where the Administrator determines that such period is more representative of normal source operations), considering the effect any such change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the Administrator shall:

(i) consider all relevant information, including but not limited to, historical operational data, the company's own representations, filings with the State or Federal regulatory authorities, and compliance plans under Title IV of the Clean Air Act; and

(ii) exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.

(20) "Temporary clean coal technology demonstration project" means a clean coal technology demonstration project that is operated for a period of five years or less, and which complies with the State implementation plans for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(21) "Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.

(22) "Clean coal technology demonstration project" means a project using funds (1) appropriated under the heading 'Department of Energy-Clean Coal Technology', up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or (2) similar projects funded through appropriations for the Environmental Protection Agency. The Federal contribution for a qualifying project shall be at least 20 percent of the total cost of the demonstration project.

(23) "Reactivation of a very clean coal-fired electric utility steam generating unit" means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

(i) has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the permitting authority's emissions inventory at the time of enactment;

(ii) was equipped prior to shut-down with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;

(iii) is equipped with low-NOx burners prior to the time of commencement of operations following reactivation; and

(iv) is otherwise in compliance with the requirements of the Clean Air Act.

For the reasons set forth in the preamble, Part 60 of Chapter I of Title 40 of the Code of Federal Regulations is proposed to be amended as follows:

PART 60-STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

1. The authority citation for Part 60 is amended to read as follows:

(TO BE ADDED)

2. Section 60.2 is proposed to be amended by adding the following definitions:

"Clean coal technology demonstration project" means a project using funds appropriated under the heading 'Department of Energy-Clean Coal Technology', up to a total amount of \$2,500,000,000 for commercial demonstrations of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency.

"Electric utility" means all units or systems which principally supply electricity to a system for widespread distribution and use, and are subject to, or regulated by, a public utility commission or equivalent body.

"Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

"Repowering" means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990. Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

"Reactivation of a very clean coal-fired electric utility steam generating unit" means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

(i) has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the permitting authority's emissions inventory at the time of enactment;

(ii) was equipped prior to shut-down with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;

(iii) is equipped with low-NOx burners prior to the time of commencement of operations following reactivation; and

(iv) is otherwise in compliance with the requirements of the Clean Air Act.

3. Section 60.14 is proposed to be amended to read as follows:
60.14 MODIFICATION.

* * * * *

(h) No physical change, or change in the method of operation, at an existing electric utility steam generating unit shall be treated as a modification for the purposes of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.

(i) Repowering projects that are awarded funding from the Department of Energy as permanent clean coal technology demonstration projects (or similar projects funded by EPA) are exempt from the requirements of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.

(j)(1) Repowering projects that qualify for an extension under § 409(b) of the Clean Air Act are exempt from the requirements of this section, provided that such change does not

increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.

(2) This exemption shall not apply to any new unit that:

(a) is designated as a replacement for an existing unit;

(b) qualifies under section 409(b) of the Clean Air Act for an extension of an emission limitation compliance date under section 405 of the Clean Air Act; and

(c) is located at a different site than the existing unit.

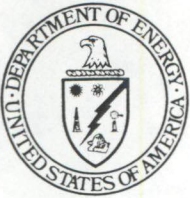
(k) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project is exempt from the requirements of this section. A "temporary clean coal control technology demonstration project", for the purposes of this section is a clean coal technology demonstration project that is operated for a period of five years or less, and which complies with the State implementation plan for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(l) The reactivation of a very clean coal-fired electric utility steam generating unit is exempt from the requirements of this section.

* * * * *

TALKING POINTS

- All the issues were resolved last night with the exception of one footnote. I believe that we need to resolve this matter with EPA as soon as possible.
- Our purpose is to ensure that, at any time after the proposed rule is published, EPA cannot by sending a letter to an individual company reintroduce their actual-to-actual/potential-to-potential bright-line tests. As you know, such letters are not subject to OMB review.
- I understand that good progress toward that goal was made last night. However, in my view, it does not go far enough, because, at least in non-attainment areas, it enables EPA to have a single bright-line test of what is considered environmentally beneficial -- no net increase in actual emissions.
- The footnote introduced by David last night tried to finesse this problem by stating that all EPA determinations of what is environmentally beneficial have to be done on a case-by-case basis, and no generic guidance can be promulgated in this area. It has met with extremely strong objections from EPA, which argued that, even though they have committed themselves not to reintroduce formally any generic bright-line tests, they find it offensive if such a limitation on their authority is stated explicitly.
- We have substantially modified the footnote and removed the language they consider offensive. Our revised footnote simply clarifies that all facts and circumstances need to be considered in determining the environmental impacts of any pollution control project, and thus no single factor can be construed by EPA to be determinative or dispositive. In short, the new footnote accomplishes what we want and can be presented to EPA as meeting the concerns they expressed last night.



Department of Energy

Washington, DC 20585

May 20, 1991

MEMORANDUM TO: Richard Schmalensee

FROM: Linda Stuntz *LS*

SUBJECT: Comments on Draft WEPCo Legislative Rule

Enclosed is a marked up copy of EPA's draft WEPCo legislative rule dated May 16. As you can see, our comments are extensive. This is necessary in order to properly interpret existing law and regulations. As you recall, we agreed that the preamble to a legislative rule would serve as an interpretative rule. Appropriately, our comments are based largely on EPA's draft interpretative rule of May 1 and, in certain instances, our understanding of Justice's position (e.g., the interpretation of the WEPCo and Puerto Rican Cement cases). Note that the emphasis on proper interpretation of existing law and regulations accomplishes the same result as (and more simply than) many of the proposed rule changes. As a consequence, fewer rule changes need to be proposed.

By COB today, I will also be sending you a summary of differences between the original draft rule and the draft rule as it would be revised by our comments. However, I wanted to send you our mark-up in the mean time.

WEPCO LEGISLATIVE RULE DRAFT
MAY 16, 1991

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 51, 52, and 60

[FRL -----]

Requirements for Preparation, Adoption,
and Submittal of Implementation Plans;
Approval and Promulgation of
Implementation Plans; Standards of
Performance for New Stationary Sources.

AGENCY: Environmental Protection Agency.

ACTION: Notice of Proposed Rule

SUMMARY: The applicability of the new source requirements of Title I of the Clean Air Act to ^{physical and operational changes} ~~modifications~~ at electric utility generating units is an issue of considerable concern and controversy at this time. The utility industry, because it is a primary source of sulfur dioxide emissions, must carry the full economic burden of reducing emissions linked to acid rain. Many utilities will be undertaking major pollution control projects at their units in the next few years. At the same time, the applicability of existing new source regulations to other utility ^{projects} ~~modifications~~ has been the source of two recent, ~~and arguably~~ ~~conflicting~~, federal appellate decisions, Wisconsin Electric Power Co. v. Reilly and Puerto Rican Cement Co. v. EPA. As a result, EPA is today ~~proposing~~ clarifying ~~amendments to these~~ ~~regulations and confirming~~ its current interpretations of some of these provisions ^{as they apply to these projects.} ~~pending adoption of the proposed amendments.~~ ~~EPA today proposes to adopt a broad prevention of~~ ~~significant deterioration (PSD) exclusion for modifications~~

~~constituting pollution control projects and, until these proposed regulations are adopted in final form, to adhere to its interpretation that its existing new source regulations already exclude coverage of most pollution control projects at existing electric utilities. Similarly, EPA today proposes to adopt an "actual to future actual" methodology for determining whether all other utility modifications are subject to new source review under either PSD or nonattainment provisions and to maintain in the interim its interpretation that this methodology can be applied to utilities undertaking "like kind" modifications. For~~

for those utility projects which undergo PSD new source review, today's notice proposes a presumption that for EPA-issued permits, "low-NOx burners" ^{satisfies} ~~can satisfy~~ the best available control technology (BACT) requirements.

In addition, EPA also proposes to modify its regulations implementing the modification provisions of the Title I new source performance standards (NSPS) program to provide that a utility may use for its pre-^{change} ~~modification~~ baseline the highest hourly emissions rate achievable at any time during the five years prior to the modification. EPA also proposes to modify its regulations to reflect changes made by Congress in the 1990 Amendments to the applicability of new source requirements to Clean Coal Technology (CCT) and repowering projects.

DATES: Comments. Comments on the revisions proposed today must be received on or before _____ (60 days after publication in the Federal Register).

Public Hearing. A public hearing is scheduled for 10:00 a.m., July __, 1991, at the U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460. The hearing may be canceled if no speakers have requested time to present their comments 15 days prior to the scheduled hearing date. Written comments in lieu of testimony are encouraged.

ADDRESSES: Supporting information used in developing this proposed rule is contained in docket A-90-06. This docket is available for public inspection and copying between 8:30 a.m. and 3:30 p.m., weekdays at EPA's Air Docket (LE-131), Room M-1500, 401 M Street S.W., Washington, D.C. 20460. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Chebryll Edwards, New Source Review Section (MD-15), Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, (919) 541-2343.

SUPPLEMENTARY INFORMATION:

I. INTRODUCTION

EPA today proposes to amend its regulations implementing the various Title I new source requirements ~~for modifications at electric utility generating units~~ and also announces certain interim interpretations of these provisions ^{as applied to electric utility generating units.} Specifically, these proposed changes and interpretations are ^{being issued} ~~intended~~ to clarify the

coverage of the NSPS, PSD and nonattainment preconstruction review requirements of Title I of the Clean Air Act for ~~projects undertaken~~ ~~modifications~~ at electric steam utility generating units.¹

~~EPA proposes to amend the definition of "major modification" in 40 CFR Parts 51 and 52 to set forth the conditions under which~~
Under the interpretations presented below,
the addition, replacement or use at existing electric utility generating units of any system or device whose primary function is the reduction of air pollutants (including the switching to a less polluting fuel where the primary purpose of the switch is the reduction of air pollutants) ~~will or~~ will not subject the source to preconstruction review. Specifically, EPA proposes in ~~and nonattainment~~ PSD areas to exclude pollution control projects which ~~do not~~ ^{are} environmentally beneficial and identifies how the environmentally ~~beneficial test applies to electric utility pollution control~~ ~~beneficial test applies to electric utility pollution control~~ ~~EPA proposes to exclude pollution control projects in non~~ ~~projects.~~ ~~attainment areas that do not increase actual annual emissions of~~ ~~any pollutant.~~ Pending final adoption of this proposal, EPA will ~~continue its policy of excluding pollution control projects on a~~ ~~case by case basis where the modification will not result in an~~ ~~increase in actual emissions of any regulated or criteria~~ ~~pollutant.~~

¹ The proposed regulations define electric utility steam generating units as any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW of electrical output to any utility power distribution system for sale. See, e.g., proposed 40 CFR 51.165(xx).

clarifying

EPA is today also ~~proposing to amend~~ its PSD and nonattainment new source review regulations (40 CFR Parts 51 and 52)² ~~to~~ ^{with respect} (1) ~~clarify~~ the NSR baseline for determining whether a proposed ~~modification~~ ^{physical or operational change} will subject a utility to the preconstruction review requirements of these provisions; (2) ~~codify an~~ ^{the applicability of the} actual to future actual methodology for determining whether ~~utility modifications are~~ ^{a physical or operational change is} subject to NSR; (3) ~~provide further clarification of~~ the existing regulatory requirement that only those increases in emissions that actually result from the physical change or change in the method of operation can be considered in determining whether the proposed ~~modification~~ ^{change} subjects the utility to NSR requirements, ~~and (4) implement~~ ^{EPA is also proposing to amend its NSR regulations to} sections 409 and 415 of Title IV of the Clean Air Act Amendments of 1990 which create special NSPS treatment for certain repowering projects and limited NSR exemptions for temporary and permanent CCT projects. To the extent the proposed amendments codify existing EPA interpretations, EPA will continue to administer its regulations in a manner consistent with these interpretations pending adoption of the regulations proposed today.

Finally, EPA is also proposing to amend its NSPS regulations (40 CFR Part 60) to allow a utility to use as its pre~~modification~~ ^{change}

² For the purposes of this notice, references to "new source review" (or "NSR") refer to the preconstruction review requirements of both Part C (PSD) and Part D (nonattainment) of the Clean Air Act, unless otherwise indicated.

baseline its highest hourly emissions rate achievable during the five years prior to the modification.

~~As a general matter, today's proposal is intended to conform to the Administration's legislative proposal on WEPCC, which was set forth in letters dated July 23 and September 11, 1990 from Dr. Richard Schmalensee, Member, Council of Economic Advisors, to Senator Wendell H. Ford, Chairman, Subcommittee on Energy Research and Development, Committee on Energy and Natural Resources, and in testimony presented by Dr. Schmalensee to the Committee on May 8, 1990 and March 18, 1991.~~

~~The thrust of the Administration's position is that new source requirements as they have been implemented by EPA under current regulations may deter utilities from undertaking pollution control projects and refurbishment that could result in increases in actual emissions from the plant even though such post modification emissions are no greater than the plant's maximum legal and physical potential to emit prior to the modification. Rather than seeking the most extensive use of the modification provisions of the Act's new source review provisions, which may have been appropriate prior to enactment of the Title IV cap on total atmospheric loadings of sulfur compounds resulting from power plant emissions, today's proposal seeks to minimize, within the bounds set by the various statutory provisions, the applicability of new source requirements to physical and operational changes at existing utility units. The~~

~~policy choices reflected in today's proposal merely acknowledge that the market-based approach that Congress chose to follow in adopting the acid deposition provisions in Title IV of the Act will, on balance, provide a more cost-effective means of addressing power plant emissions while still assuring that the local air quality concerns addressed in the new source provisions are adequately met through other provisions of the Act such as the SIP planning and review process.~~

~~In Dr. Schmalensee's March 18, 1991 testimony, and in other pronouncements, the Administration had previously indicated that EPA would both issue an interpretative ruling and conduct legislative rulemaking through the notice and comment process to address the WEPCO matter. The passage of time has largely vitiated the usefulness of a separate interpretative ruling. Accordingly, EPA is proceeding with today's proposed regulatory revisions without issuing a prior interpretative ruling. However, large portions of the preamble of today's proposal set forth EPA's present interpretation of the current regulations, and may be relied on as such pending final action on today's proposal.~~

The interpretations of current regulations set out in this notice are intended solely as guidance, do not represent final agency action, and are not ripe for judicial review. They are not intended, nor can they be relied upon, to create any rights enforceable by any party in litigation with the United States.

EPA officials may decide to follow these interpretations, or to act at variance with them, based on an analysis of specific circumstances. The Agency also may change these interpretations at any time without public notice.

~~In addition, the fact that the effect of many of the interpretations contained in this notice is largely identical to that of the regulatory changes proposed today should not be viewed as an attempt to circumvent the public comment process.~~

EPA believes that each of the interpretations in questions represents a reasonable construction of existing regulations, for which no prior notice and opportunity for comment is required by law. See Clean Air Act section 307(d)(1), 42 U.S.C. 7607(d)(1) (Clean Air Act rulemaking procedure requirements incorporate the exemption from notice-and-comment requirements for interpretative rulings set forth in section 553(b)(A)) of the Administrative Procedure Act, 5 U.S.C. 553(b)(A). ~~Insofar as the regulatory changes proposed today track these interpretations of existing regulations, the purpose of the regulatory changes is to clarify and codify those interpretations.~~ However, the Agency retains an open mind on these issues. Accordingly, EPA will pay close attention to the comments received in response to today's notice. ~~and may, upon further consideration, decide not to make the changes proposed, but instead retain the current regulations or adopt other changes emerging from the public comments or further consideration of the issues by EPA.~~ This process may ^{therefore} also result

in revisions to the interpretations set forth in the preamble portion of this notice.

II. BACKGROUND

- A. The New Source Performance Standards, Prevention of Significant Deterioration and Nonattainment Programs of Title I

~~Title I of the Clean Air Act has three programs specifically designed to ensure that no new air pollution whether from new sources or from modifications to existing sources can be emitted unless the source complies with new source requirements.~~

The 1970 Clean Air Act required EPA to promulgate technology-based new source performance standards applicable to the construction or modification of stationary sources that cause or contribute significantly to air pollution which may reasonably be anticipated to endanger public health or welfare. Clean Air Act ("CAA") § 111(b)(1)(A), 42 U.S.C. 7411(b)(1)(A). The NSPS provisions were "designed to prevent new air pollution problems" by regulating newly-constructed sources and changes occurring at existing sources that result in emissions increases. See National Asphalt Pavement Assoc. v. Train, 539 F.2d 775, 783 (D.C. Cir. 1976); see also H.R. Rep. No. 1146, 91st Cong., 2d Sess. 3, reprinted in 1970 U.S. Code Cong. & Admin. News 5356, 5358. Congress defined the term "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." See CAA § 111(a)(4), 42 U.S.C. 7411(a)(4).

In 1977, Congress adopted additional amendments to the Clean Air Act. These changes included preconstruction permitting requirements for major new and modified sources under two programs, prevention of significant deterioration (PSD) and nonattainment new source review (respectively, Parts C and D of the Clean Air Act). ~~Congress intended these programs to apply where "industrial changes might increase pollution in an area." Alabama Power Co. v. Costle, 636 F.2d 323, 400 (D.C. Cir. 1979).~~

The NSR program for PSD (CAA §§ 160-169) applies in attainment areas, i.e., those areas which have attained the national ambient air quality standards (NAAQS). To receive a PSD permit, a prospective major new source or major modification must (among other things) show that (1) it will not cause or contribute to a violation of the available air quality "increment" (designed to prevent ambient air quality from deteriorating by more than certain specified levels), (2) it will not cause or contribute to a violation of a NAAQS, and (3) it will use the best available control technology, which must be at least as stringent as any applicable NSPS or hazardous pollutant standard under section 112 of the Act.

Part D of the 1977 Amendments applies to nonattainment areas, i.e., those areas which have not met the NAAQS under section 109. To receive a permit in such areas, major new and

modified sources must (among other things) (1) obtain emissions offsets, thereby assuring the reasonable progress toward attainment of the NAAQS will occur, and (2) comply with the "lowest achievable emission rate (LAER)." See CAA § 171-173.³

B. The Two-Step Test for Modifications

The modification provisions of the NSPS and NSR programs ~~are based on~~ ~~grow from a single statutory basis,~~ the ~~broad~~ NSPS definition of "modification" in section 111(a)(4) of the Act. ~~Under both the~~ *That section* ~~contemplates~~ ~~NSR and NSPS programs, EPA has developed~~ a two-step test for determining whether activities at an existing facility constitute a modification subject to new source requirements. In the first step, which is largely the same for NSPS and NSR, the reviewing authority determines whether a physical or operational change will occur. If so, the reviewing authority proceeds in the second step to determine whether the physical or operational change will result in an emissions increase over baseline levels. In this second step, the applicable rules branch apart, reflecting the fundamental distinctions between the ~~technology-~~ *hourly emission rate focus* ~~based provisions~~ of NSPS and the *annual emission rate focus* ~~air quality-based provisions of~~ ~~NSR.~~

³ The 1970 Clean Air Act also included a rudimentary new source review program applicable to construction or modification of any stationary source. This provision is presently set forth in section 110(a)(2)(C). Briefly, it requires any new or modified source to demonstrate that it will not violate any NAAQS. See 40 CFR 51.160-164.

Briefly, the NSPS ~~program is concerned with~~ ^{regulations examine} maximum hourly emissions rates, expressed in kilograms per hour,⁴ ~~Emissions increases for NSPS purposes are determined by changes in the hourly emissions rates at maximum physical capacity. On the other hand, the NSR regulations are concerned with total actual emissions, to the atmosphere. For applicability determination purposes, emissions increases under NSR are determined by changes in annual emissions to the atmosphere as expressed in tons per year (tpy).~~⁵

C. Step One: Physical or Operational Change

EPA has always recognized that
1 The definition of physical or operational change in section 111(a)(4) 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). However, EPA has always recognized that

⁴ An hourly emissions rate may be determined by a stack test or calculated from the product of the instantaneous emissions rate, i.e., the amount of pollution emitted by a source, after control, per unit of fuel combusted or material processed (such as pounds of sulfur dioxide emitted per ton of coal burned) times the production rate (such as tons of coal burned per hour). See section 60.14.

⁵ Annual emissions may be calculated as the product of the hourly emissions rate times the utilization rate, expressed as hours of operation per year, or as the product of an emissions factor (e.g., from Compilation of Air Pollutant Emission Factors, AP-42, 4th Ed. and subsequent supplements) in units of mass emitted per unit of process throughput times the annual throughput. See 40 CFR 52.21(b)(21).

Physical or operational change
Congress obviously did not intend to make every ~~activity~~ at a source subject to new source requirements.

As a result, ~~in practice~~, EPA has ~~clarified the definition of~~ ^{defined} "modification" in the NSPS and NSR regulations ~~through the adoption of~~ ^{to include} common-sense exclusions from the "physical or operational change" component of the definition.* For example, both sets of regulations contain similar exclusions for routine maintenance, repair, and replacement; for ^{increases} ~~certain changes~~ in the hours of operation or in the production rate; and for certain types of fuel switches. See e.g., 52.21(b)(2)(iii) and 60.14(e). In addition, with respect to pollution control equipment, the NSPS regulations contain an exclusion for:

The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emissions control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.

40 CFR 60.14(e)(5). As will be discussed, EPA has, through individual applicability determinations, followed a similar "environmentally beneficial" test in determining NSR applicability to pollution control projects.

D. Step Two: Emissions Increases for NSPS Applicability

EPA's NSPS regulations define the term "modification" as any "physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies." See 40 CFR 60.2 and 60.14. Under current NSPS regulations, emissions increases, for

* These exclusions are consistent with Congress' intent to grandfather existing sources from new source requirements. Thus, EPA described these exclusions shortly after their adoption as reflecting an intent to establish "a modification regulation . . . which minimizes [the] impact [of] new source requirements on existing sources." A SADA . . . EDA

applicability purposes, are calculated by comparing the hourly emission rate, at maximum physical capacity, before and after the physical or operational change. That is, to determine whether a change to an existing facility will increase the emissions rate, the existing NSPS regulations authorize the use of an "emissions factor analysis," or a materials balance, continuous monitoring, or manual emissions test to evaluate emissions before and after the change. 40 CFR 60.14(b)(2).

Absent the exclusions from modifications specified at 40 CFR 60.14(e), any increase in emissions to the atmosphere over the previous emissions rate will subject the modification to NSPS. See 40 CFR 60.14(a) and (b). In addition, under the "reconstruction rules," physical or operational changes which would cost 50 percent or more of the total cost of a comparable new facility ^{may be} ~~are~~ classified as reconstructions (see 40 CFR 60.15) ~~that are~~ ^{that are} subject to NSPS as a new source, even if there is no emissions increase.

E. Step Two: Emissions Increases Under NSR Requirements

1. Existing Regulations

EPA's regulations implementing the PSD and nonattainment programs require preconstruction review for sources undertaking a "major modification," i.e., a physical change or change in the method of operations "that would result in a significant net emissions increase of any pollutant subject to regulation under the Act." 40 CFR 52.21(b)(2)(i) and (3)(i);

52.24(f)(5).⁶ A "net emissions increase" is defined as the increase in "actual emissions" from the particular physical or operational change together with any other "contemporaneous" increases or decreases in actual emissions. 40 CFR

52.21(b)(3)(i).⁷

Applicability of the Act's new source review provisions must be determined in advance of construction and is pollutant specific. In cases involving ~~existing sources,~~ ^{existing sources,} ~~modifications,~~ this requires a pollutant-by-pollutant projection of the emissions increases, if any, that will result from the physical or operational change. Specifically, to determine whether a ~~proposed modification~~ ^{physical or operational change} will

⁶ The current PSD program is set forth in two sets of regulations. One of the regulations cited (40 CFR 52.21) is part of the federal PSD permit program which applies as part of a Federal implementation plan for States that have not submitted a PSD program meeting the regulatory requirements of 40 CFR 51.166 (standards for PSD provisions in State implementation plans). In most States where the federal requirements apply, EPA has delegated the authority to implement the PSD program back to the State. Roughly two-thirds of the States are implementing their own PSD program pursuant to an EPA-approved state implementation plan. Sections 52.21 and 51.166 have identical modification provisions.

EPA's regulations for nonattainment areas are set forth at 40 CFR § 51.165, 52.24 and in Part 51, Appendix S. These sections contain applicability provisions regarding modification that are largely identical to those in the PSD provisions.

⁷ Roughly speaking, "contemporaneous" ^{change} emissions increases or decreases are those which have occurred between the date five years preceding the proposed ~~modification~~ ^{physical or operational change} and the date that the increase from the ~~modification~~ occurs. 40 CFR 52.21(b)(3)(ii). Once a modification is determined to be major, the PSD requirements apply only to those specific pollutants for which there would be a significant net emissions increase. E.g., 40 CFR 52.21(j)(3) (best available control technology); 40 CFR 52.21(m)(1)(b) (air quality analysis).

result in an emissions increase, the source must first determine a baseline level of actual emissions. The regulations define actual emissions on a particular date as "the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation." The Administrator "shall" allow use of a different time period "upon a determination that it is more representative of normal source operation." Id. EPA has typically used the two years immediately preceding ^{physical or operational change} the ~~modification~~ to establish the baseline.

See 45 Fed. Reg. 52676, 52705, 52718 (1980). However, ~~in some~~ ^{can} cases it ~~has~~ allowed the use of ^{an} ~~earlier~~ ^{two-year} periods ^{that is more representative of normal source operations.} For example, in WEPCO, EPA found the fourth and fifth years prior to the modification more representative of WEPCO's normal operations since the source's capacity had deteriorated.

Because the applicability determination must be made in advance of construction, EPA's NSR regulations provide that when an emissions unit "has not begun normal operations," actual emissions equal the "potential to emit of the unit." 40 CFR 52.21(b)(21)(iv). This regulatory provisions may be overcome -- and new source review will not apply -- if the source owner agrees, in a federally enforceable instrument -- not to increase its actual emissions above baseline levels. See e.g., 40 CFR 52.21(b)(4). This approach is referred to as the actual to potential methodology.

Both decisions involved physical changes at existing units and addressed whether EPA's ¹⁷ actual to potential methodology applied.

2. The WEPCO and Puerto Rican Cement Decisions

EPA's modification provisions have been the subject of two recent ~~and in some ways conflicting~~ federal appellate

decisions. In the Puerto Rican Cement v. EPA, 889 F.2d 292 (1st

Cir. 1989), the First Circuit upheld EPA's actual to potential methodology ^{in view of the changes involved} ~~as it was applied~~ in the case. In the case, the

owner of a cement plant sought to convert a "wet" cement kiln to a "dry" kiln and to combine that kiln with another kiln. 889

F.2d at 293. ^{As the court observed, the "new [dry] kiln"} ~~The modernized production facilities would be more~~

~~exceeded the design capacity of the "two [wet] kilns" by efficient and thus would provide an economic incentive to "about 35 percent." Id. at 293. Therefore, in the Puerto Rican~~

~~increase utilization and actual emissions above baseline Cement case, therefore, the physical changes had created a levels. See id. at 297. Since the company would not agree to single kiln using a different process and having significantly limit its actual post-modification emissions to baseline levels, greater capacity than the pre-existing kilns. In this context, EPA argued that the kiln as modified had not begun normal~~

~~the court found that the "new" dry kilns had not operations and the Agency was required, pursuant to section begun normal operations and therefore was subject 52.21(b)(21)(iv), to measure the plant's post-modification~~

~~to the actual to potential methodology. emissions by the plant's potential to emit. The petitioner~~

~~argued that this reading of EPA's regulations was improper,~~

~~arbitrary and contradicted by earlier EPA decisions. The court~~

~~rejected all attacks and upheld EPA's methodology, pointing out,~~

~~among other things, that in the preamble to its regulations, EPA~~

~~had stated that the actual to potential methodology generally~~

~~would apply to a "new or modified unit." Id. at 297 (citing 45-~~

~~Fed. Reg. 52677).~~

In Wisconsin Elec. Power Co. v. Reilly, 893 F.2d 901

(7th Cir. 1990), the court reviewed EPA's determination that "life-extension" renovations planned for several older ^(35 to 50 years) coal-fired utility boilers generating units (specifically, repair and replacement of turbine-generators, steam drums and other major components)

brought the units within the PSD new source review provisions.

Unlike ~~As in Puerto Rican Cement~~, none of these repairs or replacements would have "changed or altered the design of the modified had not begun 'normal operations' and were thus subject facility." Id. at 908. After the changes, the units would ~~to the actual to potential test. Since the company would not combust fuel, produce steam, and generate electricity agree to limit its post-modification actual emissions to baseline levels, EPA found the plant subject to PSD. See WEPCO, 893 F.2d at 906.~~ ^{in the same way that they had for the past 35 to 50 years of operation.} Thus, the emissions units in WEPCO were coal-fired boilers before the changes and would be coal-fired boilers after the changes and the design capacity before the changes would not be greater than found instead that EPA's existing regulations do not support the design capacity after the changes. In this context, "EPA's decision [to] wholly disregard past operating conditions at the plant," because the modification in the case involved potential methodology since that methodology only applies ^{to units that have not begun normal operations.*} ~~"like-kind replacement." Id. at 917, 918. On remand, EPA determined PSD applicability by comparing WEPCO's representative~~ EPA interprets these decisions as requiring it to use an actual emissions for the baseline period to estimated future actual to actual methodology whenever a repair or replacement actual emissions based on all the available facts in the ^{at a utility boiler does not either transform that boiler record.⁸} EPA continues to apply this approach to "like-kind" into a different process (e.g., pulverized coal boiler

* [↑] See letter from William G. Rosenberg, Assistant Administrator, EPA, to John Boston, President, WEPCO (June 18, 1990).

On remand, EPA determined PSD applicability by comparing WEPCO's representative actual emissions for the baseline period to estimated future actual emissions based on all the available

into a fluidized bed boiler¹⁹) or increase the ~~changes. Today's proposal would make this actual to future~~ capacity of that boiler. Today's notice explains ~~actual methodology available to all utilities undertaking~~ how EPA will apply the actual to future actual ~~modifications.~~ methodology to utility projects.

F. The Clean Air Act Amendments of 1990

1. New Source Review and the Acid Rain Provisions

The Clean Air Act Amendments of 1990 made numerous changes in the nonattainment provisions of the Clean Air Act and added a new title to address the problem of acid rain. The amendments attack nonattainment problems with a broad array of new requirements all designed to bring all areas of the country into attainment with the national ambient air quality standards for all pollutants. These requirements include traffic reduction strategies, use of alternative clean fuels, increased offset requirements for stationary sources, and changes in the threshold size of stationary sources subject to new source review. A principal theme of the legislation is the establishment of categories of nonattainment areas based on the severity of the pollution problem. The more severe the area, the more controls Congress required be imposed.

The Amendments also establish, in Title IV, a new control scheme for addressing the acid rain problem. The exclusive focus of this program is on utility power plant emissions of sulfur dioxide and nitrogen oxides. The 1990 Amendments require sulfur dioxide emissions from utilities to be reduced by approximately 10 million tons annually in two phases -- the first to take

effect in 1995, the second in 2000. 111 specific plants are targeted in Phase I, and will be required to reduce their SO₂ emissions to a specified emissions rate. In Phase II, these plants and almost all others must reduce their SO₂ emissions to an even lower emissions rate. This reduction program is to be implemented through a new market-based system under which power plants are to be allocated SO₂ "emissions allowances" that will require plants to reduce their emissions or acquire allowances from others to achieve compliance.

Because of these requirements, many of the plants subject to Phase I controls must make compliance decisions within the next year in order to assure that the complicated control equipment that may be necessary to meet Phase I standards is in place by the 1995 deadline. While Congress did not suspend any Title I requirements for this work, the massive industry-wide undertakings of pollution control projects warrants a clarification of the new source review requirements of Title I. In particular, NSR provisions should not inadvertently bias a utility towards or against any means of complying with the acid rain provisions. ^{clarification of its current interpretations of its NSR regulations} EPA believes the ~~amendments proposed today~~ ^{actions} provide adequate assurances that utilities can undertake Title IV pollution control projects without uncertainty as to the applicability of the various Title I new source requirements.

Finally, aside from provisions addressing utility repowering and CCT projects, the 1990 Amendments made no significant changes

in the new source review and NSPS modification provisions. While Congress considered several amendments which would have addressed industry concerns relating to the WEPCO and Puerto Rican Cement cases, only the CCT and repowering proposals were included in the final version of the Act. Instead, the Conference Committee provided the following guidance to EPA in its Joint Explanatory Statement:

"[T]he deletion of most provisions relating to the WEPCO decision is not intended to affect or prejudice in any way the issues or resolution of the WEPCO matter. At the same time, the conferees urge a quick resolution of the WEPCO matter by EPA as appropriate."

Conference Comm., Joint Explanatory Statement of the Committee of the Conference to Accompany S. 1630, Rep. 101-952, 101st. Cong., 2nd Sess. (1990) pp. 344-45.

2. Repowering and CCT Projects

In Title IV of the 1990 Amendments, which creates the acid rain program, Congress did make changes in the ^{applicability} ~~treatment~~ of ^{new source requirements to} ~~modifications involving~~ repowering and CCT projects.

Section 409 grants an extension of the acid rain controls deadline to sources that seek to comply with the acid rain reductions by repowering a unit with qualifying clean coal technology. Section 402(12) defines repowering as:

[The] replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification

fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of the date of enactment of the Clean Air Act Amendments of 1990. Notwithstanding the provisions of §409(a), for the purpose of this title, the term 'repowering' shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

See CAA, §§ 402(12) and 409(a).

Congress provided that repowering projects that qualify for a Phase II compliance extension would also be exempt from NSPS requirements, so long as the repowering "does not increase actual hourly emissions for any pollutant regulated under the Act." See CAA, § 409(d). An operator can qualify for the ⁴8-year extension of the Phase II emissions limitation by demonstrating (by December 31, 1997) to the permitting authority that one or more units will be repowered with a qualifying clean coal technology to meet the Title IV restrictions. The operator must provide, no later than January 1, 2000, additional documentation of the repowering project including a preliminary design and engineering effort for the project and a binding contract for the majority of the equipment needed, as well as any additional information the reviewing authority requires.

Today's proposal also implements an exemption from new source requirements for CCT demonstration projects created by Congress in section 415 of Title IV of the 1990 Amendments. In these provisions, CCT is defined as any technology not in widespread use on the date of enactment that achieves significant reductions in SO₂ or nitrogen oxides (NO_x) emissions associated with burning coal in the generation of electricity, process steam, or industrial products. See § 415(a). A CCT "demonstration project" is a project funded under DOE's CCT program or a similar project funded by EPA.⁹

Repowering projects that are awarded funding from the Department of Energy (DOE) as permanent CCT demonstration projects (or similar projects funded by EPA) are exempt from NSPS and PSD requirements so long as potential emissions (see 52.21(b)(4)) from the unit do not increase as a result of the project. Id. § 415(b). ~~Although~~ These funded projects ~~are~~ ^{may} be required to ~~exempt from NSPS and PSD requirements, they must~~ still comply with the nonattainment NSR provisions of Title I of the Act, unless they are excluded as a pollution control project. The installation, operation, cessation, or removal of a temporary CCT demonstration project that is operated for 5 years

⁹ Section 415(b)(1) defines a CCT project as a project "using funds appropriated under the heading 'Department of Energy-Clean Coal Technology', up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the EPA."

or less is exempt from NSPS and both PSD and nonattainment new source requirements. See § 415(b)(2). However, the facility still must comply with the applicable SIP and other requirements necessary to attain and maintain the NAAQS.

III. DISCUSSION

A. Pollution Control Projects

- Treatment of*
1. ~~Proposed Regulatory Changes for Pollution Control Projects for NSR Purposes~~

is today clarifying how
~~EPA proposes to amend its PSD and nonattainment regulations as they pertain to utility modifications that constitute pollution control projects.~~ *are to be treated for purposes of NSR*
In many instances, it is clear that pollution control projects at existing stationary sources are not major modifications subject to new source review requirements for the simple reason that they do not result in an increase in actual emissions. In addition, EPA has always recognized that Congress did not intend that every activity at an existing facility be considered a physical or operational change for purposes of the new source requirements of the PSD program.¹⁰ Also, as has been discussed, the new acid rain provisions will require most electric utilities to undertake pollution control projects within the next few years and their decisions regarding the a pollution control strategy for Phase I

¹⁰ For instance, EPA has specifically recognized that routine maintenance, repair and replacement, and changes in hours of operation or in the production rate are not considered a physical change or change in the method of operation. See 40 CFR 52.21(b)(2)(iii).

of the acid rain program will be made within the next year. At the same time, based on the WEPCO decision, utilities are concerned that EPA will subject pollution control projects to ~~an~~ ^{NSR.} ~~actual to potential evaluation. In fact, EPA has refrained from applying the actual to potential methodology to several recent pollution control projects and has instead used an actual to actual methodology.~~¹¹

~~To provide utilities with additional certainty, EPA is today proposing to adopt revisions to its PSD and nonattainment regulations for the addition, replacement or use at an existing utility pollution control projects are excluded from NSR, less environmentally beneficial than the device or electric utility steam generating unit of any system or device whose primary function is the reduction of air pollutants (including the switching to a less polluting fuel where the primary purpose of the switch is the reduction of air pollutants). In areas subject to PSD requirements, a proposed pollution control project will not be treated as a modification so long as the change does not result in an increase in maximum hourly emissions of any regulated pollutant above pre-modification maximum hourly emissions of that pollutant at that unit. This approach is referred to as the "potential to potential" methodology. In nonattainment areas, today's proposal~~ ^{clarifying}

¹¹ ~~See, e.g., letters from David Kee, Director, Air and Radiation Division, EPA, Region V, to Timothy J. Method, Assistant Commissioner, Indiana Department of Environmental Management (January 30, 1990 and March 8, 1990).~~

~~provides that NSR would not apply to pollution control projects so long as the change does not result in a significant net increase in representative actual annual emissions of any criteria pollutant. (The actual emissions methodology is described in more detail in the following sections.)~~

As indicated above, the key to these ~~additions to the list of~~ exclusions from the terms physical or operational change is EPA's judgment that Congress did not intend that pollution control projects be considered the type of activity that could trigger new source review. Rather, the clear focus of the Act's new source requirements are, as they relate to modifications, physical or operational changes to pollution generating equipment.

~~As discussed in greater detail in a subsequent section,~~
EPA's position in this regard is reflected in the existing regulatory exclusion for pollution control activities under NSPS which employs an "environmentally beneficial" test to determine regulations, ~~and in several case specific nonapplicability~~ its scope. ~~determinations under the new source review programs. However,~~

Despite the Agency's view that by their nature pollution control projects in general are not within the ambit of new source requirements, ~~EPA's pronouncements recognise the need for a~~ the Administrator has the authority to consider whether individual pollution control projects would somehow ~~safety valve in the form of some consideration of the~~ not be environmentally beneficial, but would instead be a ~~environmental impacts of any pollution control exclusion. The~~ major modification that should be subject to NSR. ~~NSPS regulatory exclusion employs an "environmentally beneficial"~~ EPA's initial interpretation of its NSR regulations was ~~test to determine its scope. See 40 CFR 60.15(e)(5). With~~ that environmentally beneficial pollution control projects are not physical or operational changes within the meaning of the statute or EPA's regulations. To provide utilities with additional certainty, today's

rule announces that EPA will interpret its regulations respect to new source review, EPA has also considered whether a in a manner consistent with this initial interpretation pollution control project would be environmentally beneficial, of the NSR and NSPS regulations. This interpretation but has not followed a consistent practice in determining how provides that the addition, use, or replacement of any that phrase should be applied for NSR purposes.

system or device whose primary function is the reduction of air pollutants will not constitute a physical or PSD areas, activities at existing utilities constitute bona fide operational change that could be deemed a major modification pollution control projects so long as they do not result in an increase in the potential hourly emissions of a regulated pollutant. As with NSR applicability matters generally, this

- 4 EPA's NSPS regulations exclude pollution control projects test is applied on a pollutant by pollutant basis. The Agency from the kind of activities that would be a modification, recognizes that there may be instances in which such a project unless the project is less environmentally beneficial than the could result in increases in actual emissions of pollutants other system or device it is replacing. Because the NSR than those targeted by the pollution control measure. For provisions of the statute incorporate the NSPS modification example, a scrubber might be added at a utility unit that is definition, EPA initially interpreted its PSD regulations currently at a low level of utilization. The utility may then to include this NSPS provision.* In addition, the legislative decide to take advantage of this cleaner plant as part of its history reflects that, as a general matter, Congress intended Title IV compliance strategy. Even with this increased to conform the meaning of "modification" for NSR purposes utilization, there still might be a decrease in baseline levels to usage under the NSPS program. Subsequently, the of sulfur dioxide emissions because of a large drop in the hourly Director of OAQPS issued an applicability determination sulfur dioxide emission rate. However, the scrubber would have which rejected this initial interpretation of EPA's NSR no effect on hourly emissions rates of particulate matter or regulations.** Many of the recent EPA determinations nitrogen oxides, so the increased utilization would result in assessing pollution control projects relied on the Emison letter corresponding increases in annual emissions of those pollutants to establish a "rebuttable presumption" that would subject Nevertheless, the overall character of the project as a pollution environmentally beneficial pollution control projects to NSR if control project would not be affected, and EPA believes it would

* Memorandum from Edward Reich and Wm Pedersen to Allyn M. Davis (April 21, 1983).

** Memorandum from Gerald Emison to Regional Division Director (T.L. 17, 1986)

they were followed by an increase in annual emissions.
~~be appropriate in cases of collateral increases in actual~~
4 EPA is today announcing that it is returning to its
~~emissions of the other pollutants to not subject the source to~~
~~initial interpretations of the NSR regulations which~~
~~PSD review. This conclusion is in keeping with the existing~~
~~recognizes that the NSPS "environmentally beneficial"~~
~~regulatory exclusions in, e.g., 40 CFR 52.21(b)(2)(iii).~~
test governs NSR determinations. By focusing on whether
~~These exclusions implicitly recognize that the listed activities~~
a pollution control project is a physical or operational
~~may result in an increase in actual emissions but do not subject~~
change within the meaning of the NSR regulations, today's
~~the source to PSD requirements for the same reason as that set~~
interpretation avoids the need to undertake a quantitative
~~forth in today's proposal. They simply are not the kind of~~
emissions increase calculation in every case, as would be
~~activities that are intended to fall within the scope of the PSD~~
necessary if such projects were deemed to be physical or
~~program.~~¹³
operational changes.

~~With respect to pollution control projects in nonattainment~~
~~areas, today's proposal employs an actual emissions test as a~~
~~safety valve device. EPA believes this distinction between the~~
~~treatment of pollution control projects in PSD and nonattainment~~
~~areas is appropriate in light of the Agency's greater need for~~
~~assurance in areas already exceeding the NAAQS that significant~~

¹² ~~For instance, EPA regulations explicitly provide that,~~
~~standing alone, routine maintenance, repair and replacement, and~~
~~changes in hours of operation or in the production rate are not~~
~~considered a physical change or change in the method of~~
~~operation, and are not subject to NSR, even if they result in an~~
~~increase in actual emissions. See e.g., 40 CFR~~
~~52.21(b)(2)(iii)(a), (f).~~

¹³ ~~The use of a potential emissions test as a safety valve~~
~~in determining whether certain activities constitute a pollution~~
~~control project in PSD areas is not intended to alter the general~~
~~requirement that emission increases for new source review~~
~~applicability purposes be measured in terms of changes in actual~~
~~emissions. EPA intends to address that much broader issue in a~~
~~forthcoming rulemaking.~~

~~changes at existing major stationary sources do not result in an increase in actual emissions. Absent the application of LER and offsets to such emissions, the result could be an exacerbation of the nonattainment problem and a corresponding burden on air quality planners and owners of existing sources to achieve offsetting emissions reductions elsewhere.~~

announcement,
For the purposes of this ~~proposal~~, a pollution control project ^{refers to the addition, use, or replacement at a source} ~~is defined as any physical change or change in the method of an emissions control system or device primarily designed of operation at a utility unit for purposes of reducing emissions to control or prevent air pollution emissions. Examples of from such unit in order to comply with Title IV of the 1990 electric utility pollution control projects that EPA presumes amendments. These changes are limited to the installation of to be environmentally beneficial include add-on types of conventional or innovative emissions control equipment, emissions control equipment such as conventional and advanced including, but not limited to, installation of conventional and scrubbers, sorbent injection, low-NOx burners, electrostatic advanced flue gas desulfurization, sorbent injection for SO₂, and precipitators, fabric filters, catalysts, and thermal reduction/ox- NOx controls and electrostatic precipitators. Physical changes, idation. Switching from coal with a lower sulfur content, or changes in the method of operation, to accommodate switching, switching from a more polluting fuel to natural gas, to fuel with a lower sulfur content, including natural gas or natural gas or coal reburning, and cofiring of natural coal re burning, co firing of natural gas and other fuels for the gas and other fuels where the project is designed primarily purpose of controlling SO₂ and NOx emissions shall also to reduce air pollution also constitutes an environmentally beneficial constitute a "pollution control project."~~

Any activity that is necessary to accommodate switching to a less polluting fuel is considered to be part of the pollution control project. In some instances, this may involve physical changes to the pollution generating equipment (e.g., boiler), but only if the changes are necessary to maintain the normal

operating capability of the unit at the time of the ~~modification~~ ^{project} where the capability would otherwise be impaired as a result of the fuel switch. For example, an electric utility steam generating unit that switches from a higher sulfur bituminous coal to a low-sulfur subbituminous coal may need to make certain changes to the boiler in order to avoid derating the unit.

Changes that are intended primarily to restore original capacity or to improve the operational efficiency of the facility are not considered to be part of a pollution control project for purposes of this ~~proposal~~. ^{interpretation.} Such changes are addressed elsewhere in this ^{proposal.} Also, the source still must comply with all applicable SIP limits and requirements, permit conditions and applicable NAAQS or PSD increment limits. This will ensure that the integrity of existing air pollution control systems or ~~As proposed, this pollution control project proposal will~~ devices at the source are maintained. ~~not extend to source categories other than electric utility steam generating units. EPA has so limited this provision for several reasons. First, in contrast with a general lack of experience with other industries, EPA has extensive experience in addressing new source applicability issues regarding pollution control projects in the utility industry. That experience has led EPA to conclude in numerous individual cases that pollution control projects in the utility industry are generally environmentally beneficial. In addition, the acid rain provisions of Title IV of the Clean Air Act Amendments of 1990 place a unique burden upon the utility industry to undertake pollution control projects in the near future.~~

2. ~~Additional~~ Modeling Requirements

A proposed ~~modification, whether a~~ pollution control ^{project} ~~safe~~ harbor project or ^{a physical or operational change} other change cannot result in an emissions increase that will cause or contribute to a violation of a national ambient air quality standard, PSD increment, or visibility limitation. See CAA §§ 110(a)(2)(c), 165, 169A(b), 173. Nothing in today's notice is intended to authorize any increase in emissions that would have this proscribed impact. ~~As has been discussed, it is possible that a pollution control or safe harbor project, while not causing any increase in maximum hourly emissions, will cause an increase in actual emissions, which in turn could threaten a NAAQS, increment or visibility limitation. For this reason, Under today's~~ ^{proposal} ~~notice,~~ the reviewing authority may require a source to perform an air quality impact analysis (modeling) whenever it appears that ^{a proposed change} ~~the pollution control project~~ will result in an increase in actual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis. ~~If this modeling indicates that the increase in emissions will cause or contribute to a violation of any ambient standard, PSD increment or visibility violation, the pollution control exclusion exemption does not apply.~~

3. ~~EPA's Existing Interpretation Regarding Pollution Control Projects~~

~~As noted above, it is often clear that pollution control projects at existing stationary sources are not major~~

~~modifications subject to new source review because they do not result in an increase in actual emissions. In addition, EPA believes that, in general, pollution control projects were not intended by Congress to be considered physical or operational changes for purposes of the new source requirements of the PSD program. With respect to pollution control projects, EPA has in recent years issued numerous nonapplicability determinations and "no action" letters to utility sources based on a finding that environmentally beneficial pollution control projects are not the type of physical or operational change intended to be covered by the statute or EPA's regulations.¹⁴ To provide utilities with a greater degree of certainty pending adoption of today's proposed regulations, EPA is today formally announcing a regulatory interpretation that is consistent with these individual letters as well as the provisions of the New Source Performance Standards (NSPS) regulations. This interpretation provides that the addition, or use of any system or device whose primary function is the reduction of air pollutants will not constitute a physical or operational change that could be deemed a major modification and trigger new source review, unless the Administrator~~

¹⁴ See, e.g., Letter, William G. Rosenberg, Assistant Administrator, EPA, to Andrew Aitken, Vice President, New England Power Service Co., March 26, 1991; Letter, Rosenberg to Patrick M. McCarter, Senior Vice President, Public Service Co. of Colorado, July 23, 1990; Letters, David Kee, Director, Air and Radiation Division, EPA Region V, to Timothy J. Method, Assistant Commissioner, Indiana Dept. of Environmental Management, January 30, 1990 and March 8, 1990.

~~determines that the project would result in an increase in actual emissions.~~

~~For the purposes of this interpretation, a pollution control project refers to the addition or replacement at a source of an emissions control system or device primarily designed to improve the control or prevention of air pollution emissions. Fuel switching where the project is designed primarily to reduce air pollution (as described in the prior section) also constitutes a pollution control project. As with the proposed rule, changes that are intended primarily to restore original capacity or to improve the operational efficiency of the facility are not considered to be part of a pollution control project for purposes of this ruling.~~

B.

The Actual to Future Actual Methodology
~~Representative Actual Annual Emissions~~

1. Calculating Baseline Emissions

In the WEPCO decision, the court rejected EPA's actual to potential methodology which the court found impermissibly ignored the utility's past utilization of the units. Since the proposed work consisted of the replacement of existing components with "like-kind" equipment -- which the court apparently believed would not in and of itself lead the utility to change its pattern of utilization of the unit -- the court found the methodology arbitrary as applied in that case. As a result, EPA developed a new methodology on remand -- the so-called actual to future actual emissions test. Today EPA proposes modifying its regulations to codify this methodology, and apply it to all

[Replace pp 33-40 with Insert.]

INSERT

To determine whether a proposed project at an existing source will result in an emissions increase, the source must first determine a baseline actual emissions level. As discussed above, 52.21(b)(21)(ii) defines actual emissions on a particular date as "the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation." The Administrator "shall" allow use of a different time period "upon a determination that it is more representative of normal source operation."

EPA intends to give the term "normal source operations" as broad a reading as is compatible with the regulation and statute. The utility may calculate its baseline emissions using its average annual emissions from any consecutive two-year period that is, based on the source's operating history, representative of historical operating levels. In keeping with its past practice, and consistent with the five-year period for "contemporaneous" emissions increases and decreases in 40 CFR 52.21(b)(3)(i)(b), EPA will presume that any representative two-year period within the five years preceding the modification is adequate for baseline purposes.* Source owners desiring to use other than a two-year period or a baseline period prior to the last five years are encouraged to seek the Administrator's specific determination that such period is more representative of normal operations.**

2. Future Actual Emissions

As discussed above, the actual to future actual methodology applies to utility repair, replacement or other projects that do not increase the design capacity of the unit or do not consist of a replacement or reconstruction (as defined in 40 C.F.R. §60.15) of the unit under the WEPCo decision. The actual to future actual methodology requires a utility to compare its actual baseline emissions (calculated in accordance with the prior section) with its projected future actual emissions. The future actual projection is the product of: (1) the hourly emissions rate, which is based on the unit's physical and operational capabilities following the change and federally-enforceable operational restrictions that would affect the hourly

*This ruling cannot be used to extend the five year period specified in that provision. See 40 CFR 52.21(b)(3)(1)(b).

**In addition, the level of baseline emissions selected must be consistent with current assumptions regarding the source's emissions that are used under the state implementation plans (SIP) for planning or permitting purposes. Thus, the source may not select a level of baseline emissions higher than that used by the permitting authority in issuing a PSD or other construction permit to a source in the area, if such higher level would result in NAAQS or increment violation, or violate a visibility limitation.

emissions rate following the renovation; and (2) projected capacity utilization, which is based on (a) the unit's historical annual utilization, and (b) all available information regarding the unit's likely post-renovation capacity utilization.*** As discussed below these future actual projections of annual utilization must be discounted to the degree that the unit could have achieved the projected utilization levels during the past representative period without the project.

3. The Causation Requirement

By their express terms, the PSD regulatory modification provisions require that in order for there to be a "major modification," the physical or operational change must "result in" an increase in the emissions rate over the baseline period. See 40 CFR 52.21(2)(i). Where increased operations are in response to independent factors, such as system-wide demand growth, which could have occurred in the baseline period in the absence of the physical or operational change, such increases do not result from the change and may be excluded from the projection of future actual emissions. Thus, in assessing whether the proposed change "will result in an increase in actual emissions, utilities need not include in their calculation of post-change projected use that portion of the increased rate of utilization, if any, due to factors unrelated to the physical or operational change, such as an increase in projected capacity utilization to meet electricity demand growth.

In other words, during a representative baseline period, the plant must have been able to accommodate the projected demand growth physically and legally without the project. Increased annual utilization that could not physically and legally be accommodated during the baseline period but for the proposed physical or operational change is causally linked to any projected increase in actual emissions. Conversely, annual utilization that could have been achieved during that period is not causally linked.

***In projecting future utilization and emissions factors, the company should rely on its historical operational data, filings with state or local public utility commissions or other regulatory authorities, and compliance plans developed under Title IV of the 1990 Clean Air Act Amendments.

The proposal further provides that during a representative baseline period (see supra), the plant must have been able to accommodate the projected demand growth physically and legally even absent the particular change. Increased operations that could not physically and legally be accommodated but for the proposed physical or operational change should be considered causally linked to the projected increase in actual emissions.

In addition, the utility generally must still take into account physical or operational changes which significantly alter the efficiency of the plant. See Puerto Rican Cement, 889 F.2d at 297-8. Specifically, if the change results in (a) removing bottlenecks, an outright increase in capacity or reliability, or (b) less expensive power production, which leads to greater dispatching, then the portion of capacity utilization attributable to these results from the change should be included in calculation of emissions increases.

C/D. Repowering

As previously mentioned, Title IV of the 1990 Amendments grants special treatment to utilities that seek to comply with the mandated acid rain reductions by repowering a unit with qualifying clean coal technology. 1990 Amendments §§ 402(12), 409(a). Specifically, repowering projects that qualify for a Phase II compliance extension will also be exempt from NSPS requirements, so long as the repowering "does not increase actual hourly emissions for any pollutant regulated under the Act."

§ 409(d). The EPA interprets the requirement that the repowering not lead to an increase in "actual hourly emissions" as an expression of Congressional intent that with respect to repowering projects, EPA should use the same general approach to determining applicability as it has for ^{other physical or operational changes.} ~~modifications, discussed~~ ~~above.~~ Accordingly, EPA today proposes rules that provide that a repowering ^{project} ~~modification~~ which results in an increase over baseline in a unit's post-modification hourly emissions will not be eligible for this limited NSPS exemption.

The proposed NSPS exemption applies to repowering of existing units at existing sources, so long as the project qualifies for the Phase II extension and satisfies the "actual hourly emissions" increase test. Because of this provision, the reconstruction limitations specified in 40 CFR 60.15 are not applicable to qualifying repowering projects. However, no special treatment can be afforded to a new unit which is located at a different site than the existing unit it replaces. See CAA § 409(d).

Pursuant to section 409(e), EPA will provide expedited NSR processing for repowering projects and will encourage State permitting authorities to do the same.

E. Clean Coal Technology Demonstration Projects

Today's notice also proposed ^S rules implementing the new CCT exemption created by the 1990 Amendments. For the purposes of this proposal, temporary CCT demonstration projects are defined

as those CCT demonstration projects lasting five years or less. Title IV gives these projects an exemption from NSPS, PSD and nonattainment requirements. Id., § 415(b)(2). However, the facility would still be subject to any applicable SIP and must comply with any other requirements necessary to attain and maintain NAAQS. This ruling proposes to implement this provision and clarifies that EPA considers the five year period as starting on the date of startup (as defined in 40 CFR 60.2).

Further, EPA proposes that at the end of a temporary project, the facility must be returned to pre-demonstration conditions and hourly emission rates (or lower). The return of the facility to its pre-demonstration physical and operational condition would not result in the loss of the actual emissions margin between pre-demonstration actual emissions rate and SIP-allowable emissions rates for that facility. Rather, the facility would be treated as if the temporary demonstration project had never occurred.²⁰

This ruling does not extend to emissions increases that are unrelated to the conduct of temporary demonstration projects.

²⁰ This would be the case even if there were small differences in the post-demonstration physical and operational conditions due to a technical inability to restore the unit to its precise pre-demonstration condition, or due to normal variability in the coal used. Thus, EPA would not seek to apply NSPS or NSR because of a post-demonstration emissions increase attributable solely to an increase in the hours of operation or production rate of the unit (subject to the NSPS limitation that the production rate increase must be accomplished without a capital expenditure).

EPA ~~will~~ consider^s emissions increases (above the pre-demonstration levels) that are attributable to physical or operational changes, other than those necessary to restore that unit to its pre-demonstration condition, ^{to be} ~~are~~ beyond the scope of the Congressional exemption.

A temporary demonstration project may be converted to a permanent status at any time, provided it meets all the ^{requirements that apply to a} permanent CCT project criteria at the time of conversion. ~~Thus, for example, if hourly or annual emissions had increased because of the temporary demonstration, then after the change to permanent status these emissions can be no greater than those which existed prior to initiation of the temporary demonstration project.~~

The ruling also proposes to implement an exemption from NSPS and PSD requirements for repowering projects which are awarded funding from the DOE as permanent CCT demonstration projects (or similar projects funded by EPA) so long as potential emissions (see 52.21(b)(4)) from the unit do not increase as a result of the project. § 415(b)(3). However, these projects must still comply with the nonattainment provisions of Title I of the Act.

Because these proposed rules merely implement straightforward statutory exemptions that were immediately effective upon passage of the 1990 Amendments, EPA intends, as a matter of statutory interpretation, to follow the policies set forth in today's proposal pending final action.

F. Calculation of NSPS Baseline

As discussed in section II of this notice, "any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies" is a modification for NSPS applicability purposes See 40 CFR § 60.14(a). The NSPS regulations implementing this general definition focus on increases in hourly emissions, expressed in kilograms of pollutant discharged per hour. To determine if an increase in hourly emissions has occurred at a unit, a ~~pre-modification~~^{change} baseline must be established. Under current regulations, the emissions rate before and after a physical or operational change is evaluated at each unit by comparing the current hourly potential emissions at maximum operating capacity to hourly emissions at maximum capacity after the change. In this calculation, the reviewing authority disregards the unit's maximum design capacity.²¹ The original design capacity of a unit, to the extent it differs from actual maximum capacity at the time that the baseline is established due to physical deterioration of the facility, is immaterial to this calculation.

²¹ See 39 Fed. Reg. 36,948 col. 1 (proposed rule). In WEPCO, the utility contended that baseline capacity for the purpose of determining whether an increase in emission rate occurs for purposes of an NSPS modification is the original design capacity of the facility. However, the court rejected WEPCO's argument that original design capacity or past "representative" capacity, no longer achievable at the plant, could be used for the baseline emissions rate.

Today EPA is proposing that, for an existing electric utility steam generating unit, the pre-^{change}~~modification~~ baseline for NSPS applicability purposes shall be calculated using the highest hourly emissions rate achievable at any time during the 5 years of ^{operation} ~~modification~~ prior to the ^{change}~~modification~~. This proposal retains the key concept in existing regulations that the baseline be determined during a period that is roughly contemporaneous with the proposed change at the affected facility. EPA believes that this proposed revision, while modest, is still necessary to avoid the current regulation's undue emphasis on the physical condition of the affected facility immediately prior to the change. Today's more flexible provision enables units to establish a baseline that is representative of its physical and operational capacity in recent years, while still precluding the use of a baseline tied to original design capacity, which as noted above may bear no relationship to the facility's capacity in recent years.

Without this change, the NSPS regulations may unduly burden utilities undertaking ^{physical or operational changes}~~modifications~~ in conjunction with the acid rain program. For instance, if a unit has broken down and is in need of routine repairs, the utility's baseline will be artificially low. The proposed change will allow utilities to demonstrate that an earlier, higher capacity was more representative of the unit's maximum hourly emissions rate.

G. Utility BACT Presumption for NOx

In today's notice, EPA proposes to adopt a presumption that, in the case of PSD permits issued by EPA under 40 CFR 52.21, best available control technology (BACT) for emissions of nitrogen oxides from coal-fired electric utility steam generating units is the technology required under section 407 of the Clean Air Act. In general, this will call for the use of combustion modification and/or low-NOx burners or similar, cost-effective technologies by those utilities required to obtain PSD permits for NOx emissions following final action on today's proposal.

In brief, section 407 requires ^{most} utility units subject to phase I and phase II to meet NOx emission limitations on the same date as the phase I or phase II SO₂ emission limitations become effective. The Administrator must establish annual emission limitations (based on rates listed in the section) for tangentially-fixed^r boilers and dry bottom wall-fired boilers within 18 months of enactment. These limitations must be achievable with low-NOx burner technology. CAA § 407(b)(1). The Administrator must promulgate annual emission limitations for all other boilers by January 1, 1997, based on a "best system of ... which is comparable to the cost of " low NOx burners. continuous emission reduction ~~standard~~. By the same date, the Administrator may make the rates for boilers ^{types identified in CAA § 407(b)(1)} ~~subject to the earlier standard~~ more stringent if more effective low-NOx burner technology is available. CAA § 407(b)(2).

Low-NOx burners are ^{commercially} ~~a widely~~ available and ~~easily~~ can be ^{ed} retrofitted ~~control technology for certain~~ boiler types that provide ^{ing} a high degree of emissions reduction at relatively low costs. Depending on boiler type, low-NOx burners ~~and/or~~ ~~combustion modifications~~ can reduce emissions of NOx by approximately 20 to 60 percent. Again depending on boiler type and other factors, the cost of replacing conventional burners with these controls is in the range of \$8.00 to \$16.00 per kilowatt ~~hour~~. Low-NOx burners do, however, pose some technical problems. ~~For instance, they can reduce boiler life, and generate increased carbon monoxide and smoke (carbon) emissions in certain circumstances. These problems may impose limits on fuel switching or even require a derating of the unit.~~

~~Other NOx control technologies that are available and can be retrofitted for use on coal-fired electric utility units can provide a much greater degree of emissions reductions. These include selective noncatalytic reduction (SNCR or "thermal de-NOx") and selective catalytic reduction (SCR). (In addition, DOE has funded two new technologies under its CCT demonstration program which are designed for the simultaneous removal of SO₂, NOx and particulate matter that may become commercially "available" in the future.)²² However, SNR and SNCR are not in~~

²² ~~One technology -- low NOx/SOx Burner Retrofit -- is designed specifically for cyclone boilers which cannot be retrofit with low NOx burners while the other -- the Advanced Slagging Combustor -- is applicable to a number of boiler types.~~

~~widespread use in this country as retrofit technologies for coal-fired boilers, and the DOE sponsored projects have not yet been demonstrated. Although the cost of these alternative technologies is not unreasonable per se, their cost-effectiveness is much less than that obtainable using low-NOx burners, especially when considered in the context of retrofitting existing units.~~

EPA has in the past issued guidance documents effectively creating presumptions that certain technologies constituted BACT for certain source categories. See Memorandum, Operation Guidance on Control Technology for New and Modified Municipal Waste Combustors, from Gerald A. Emison, Director, Office of Air Quality Planning and Standards, EPA, June 26, 1987, p. 5. EPA believes it is appropriate to propose to do so here as well in the case of low-NOx burners for modified coal-fired utility boilers in light of the strong congressional policy judgment favoring use of that technology for acid rain control reflected in section 407.

Section 169(3) of the Act, 42 U.S.C. 7479(3) defines BACT as:

an emissions limitation based on the maximum degree of reduction of each pollutant subject to regulation under the Clean Air Act emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods,

systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall application of "best available control technology" result in emissions of any pollutants which will exceed the emissions allowed by an applicable standard established pursuant to section 7411 or 7412 of this title. Emissions from any source utilizing clean fuels, or any other means, to comply with this paragraph shall not be allowed to increase above levels that would have been required under this paragraph as it existed prior to enactment of the Clean Air Act Amendments of 1990.

The BACT provision reflects congressional intent both to create a procedural methodology that would provide a mechanism for stimulating the widespread use of effective pollution control technologies, and to grant permitting authorities broad discretion to weigh the statutory factors as they see fit in reaching a final substantive determination on BACT.²³

EPA believes that today's proposed presumption is consistent with this Congressional intent because it does not purport to relieve the permitting authority of the obligation to consider available technologies that would provide a greater degree of control of NOx emissions than can be obtained using low-NOx burners. Rather, it reflects an exercise of policy judgment by EPA ~~where it is the permitting authority~~ that in most cases a BACT analysis of currently demonstrated technologies for

²³ See S. Rep. No. 95-217, 95th Cong., 1st. Sess. 31 (1977); Statement of Senator Muskie, 123 Cong. Rec. 59171 (June 8, 1977).

retrofitting existing utility boilers would lead to the selection of low NOx burners and/or combustion modifications identified in CAA § 407(b)(1)

Although EPA has authority under the present regulations to create this presumption regarding BACT for NOx, EPA is soliciting comment prior to adopting such a presumption in order to obtain the views of the public on the policy conclusions discussed above.

This proposed presumption would not apply in States with PSD programs that have been incorporated into state implementation plans under regulations promulgated at 40 CFR 51.166. However, such States are encouraged to adopt this presumption as a matter of state policy.

H. Applicability Determinations

In most instances, source owners or operators are able to readily ascertain whether new source review requirements apply to them. Consequently, in administering these requirements, EPA does not, ~~with one exception,~~ require sources to obtain a formal applicability determination before proceeding with construction. ~~That exception pertains to the use of alternative baselines under the new source review regulations.~~ In keeping with that practice, EPA will not require utilities to seek applicability determinations under either the revised regulations proposed today or the interpretations of existing regulations contained in this preamble. Utilities in most cases can readily ascertain how this notice will affect them. EPA anticipates, however, that

~~many~~ ~~else~~ questions will arise regarding certain aspects of this proposal, ^{such as the use of alternative baselines} ~~such as whether a particular renovation project~~ ^{under the NSR regulations.} ~~involves "like-kind" replacements or efficiency enhancing~~ ~~physical or operational changes.~~ Because ^{Some} ~~such~~ instances involve discrete judgments, utilities ^{may wish} ~~are encouraged~~ to obtain determinations of applicability. EPA will provide such determinations upon request. Such requests should be submitted together with appropriate documentation to the appropriate ~~EPA-~~ ^{permitting authority.} ~~Regional Office.~~

IV. ADMINISTRATIVE REQUIREMENTS

A. Docket

A docket has been established for this action under section 307(d)(1)(I) and (N) of the Clean Air Act, 42 U.S.C. 7607(d)(1)(I) and (N). The docket is an organized and complete file of all information considered in the development of this ruling. The docket is intended to allow the public to identify and locate documents related to this ruling. The docket number for this ruling is A-90-06.

B. Paperwork Reduction Act

No additional public reporting burden will result from this ruling. All information collection requirements of the Federal NSR and NSPS regulations have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501, et. seq., and have been assigned OMB control numbers 2060-0003 for NSR, and 2060-0023, 2060-0026

and 2060-0072 for NSPS. The effect of this rule would be a reduction in paperwork related to complying with NSR and NSPS requirements, since this ruling provides additional clarification as to modifications that may be excluded from these requirements.

C. OMB Review

Under Executive Order 12291 (E.O. 12291), EPA must judge whether a rule is "major" and therefore subject to the requirement of a regulatory impact analysis. This ruling is not a major rule, because it will not result in an adverse economic effect set forth in section 1 of E.O. 12291 as grounds for finding an action to be major. This ruling was submitted to the OMB for review as required by E.O. 12291. Any written comments from OMB to EPA and any EPA response to those comments are included in Docket A-90-06.

D. Effective Date

Section 4(d) of the Administrative Procedures Act (APA), 5 U.S.C. 553(d), requires a 30-day waiting period before making a substantive rule effective. Since the regulatory revisions being proposed today are considered substantive, they are subject to the notice-and-comment requirements of the APA and will become effective only after public comments have been received and considered, and final action has been taken. The portions of this notice that merely interpret existing regulations are effective immediately.

E. Regulatory Flexibility Act

This action is not subject to the certification provisions of section 605(b) of the Regulatory Flexibility Act (RFA) because this rule will result in a reduction of administrative costs and no increase in control costs, therefore having no significant impact on industry.

List of Subjects

40 CFR Part 51

Administrative procedure and practices, intergovernmental relations, air pollution control, NSR, CCT demonstrations, sulfur oxides, nitrogen dioxide, particulate matter, carbon monoxide, hydrocarbons, lead.

40 CFR Part 52

Air pollution control, NSR, CCT demonstrations, sulfur oxides, particulate matter, nitrogen dioxide, carbon monoxide, hydrocarbons, lead.

40 CFR Part 60

Air pollution control, NSPS, CCT demonstrations, sulfur oxides, particulate matter, nitrogen dioxide, carbon monoxide, hydrocarbons, lead.

Dated: June 3, 1991

William K. Reilly,

Administrator

For the reasons set forth in the preamble, Part 52 of Chapter I of Title 40 of the Code of Federal Regulations is proposed to be amended as follows:

Part 52-APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for Part 52 is amended to read as follows:

(TO BE ADDED)

2. Section 52.21 is proposed to be amended to read as follows:

52.21 Prevention of significant deterioration of air quality.

* * * * *

(b) * * *

(2) * * *

(iii) A physical change or a change in the method of operation shall not include:

* * * * *

~~(h) a pollution control project at an existing electric utility steam generating unit that does not increase maximum hourly emissions of a regulated pollutant above past maximum hourly emissions of that pollutant at that unit, except:~~

~~(a) when the pollution control project would result in an increase in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of Title I, if any, and~~

~~(b) the Administrator determines that the result will cause or contribute to a violation of any ambient standard, PSD increment, or visibility violation.~~

~~(i) any physical change or change in the method of operation at an existing electric utility generating unit (other than the addition of a new unit or the replacement of an existing unit) that would not result in a significant net increase in representative actual annual emissions of a regulated pollutant at the unit.~~

~~(k)~~ The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project,

provided that the project complies with:

(i) the State implementation plan for the State in which the project is located, and

(ii) other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

* * * * *

(31) "Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

(32) "Pollution control project" means any physical change or change in the method of operation, at an existing electric utility steam generating unit for purposes of reducing emissions from such unit in order to comply with Title IV. Such changes are limited to:

(i) the installation of conventional or innovative pollution control technology, including but not limited to advanced flue gas desulfurization, sorbent injection for sulfur dioxide and nitrogen oxides controls and electrostatic precipitators;

(ii) a physical change, or change in the method of operation, to accommodate switching to fuel which is lower in sulfur content than the fuel use prior to the change, including natural gas or coal re-burning, co-firing of natural gas and other fuels for the purpose of controlling sulfur dioxide and nitrogen oxide emissions;

(iii) a permanent clean coal technology demonstration project conducted under Title II, section 101(d) of the Further Continuing Appropriations Act of 1985 (section 5903(d) of title 42 of the United States Code), or subsequent appropriations, up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency; or

(iv) a permanent clean coal technology demonstration project that constitutes a repowering project.

(33) "Representative actual annual emissions" means (i) a period prior to a physical change or change in the method of operation of a unit, the average rate, in tons per year, at which the unit actually emitted the pollutant during the 2-year period which precedes the change. The Administrator shall allow the use of a different consecutive 2-year period within the 5 years before the change, where the Administrator determines that such a period is more representative of normal source operation; and

(ii) for the 2-year period after the physical change or change in the method of operation of a unit (or different consecutive 2-year period within 10 years after the change, where the Administrator determines that such period is more representative of normal source operations), the projected average rate in tons per year at which the source is projected to emit a pollutant, considering the effect any physical or operational changes will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the Administrator may:

(a) consider all relevant information, including but not limited to, historical operational data, the company's own representations, filings with the State or Federal regulatory authorities, and compliance plans under Title IV of the Clean Air Act; and

(b) exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, such as an amount of increased utilization proportional to the rate of electricity demand growth for the utility system as a whole. Such demand growth exclusion shall not apply, however, whenever the Administrator determines that (i) but for the particular change, the source could not physically and legally accommodate the demand growth; or (ii) the particular change results in (a) removing of bottlenecks, (b) less expensive power production, or (c) an increase in capacity or reliability of the unit.

²
(3~~4~~) "Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.

³
(3~~5~~) "Clean coal technology demonstration project" means a project using funds (1) appropriated under the heading 'Department of Energy-Clean Coal Technology', up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or (2) similar projects funded through appropriations for the Environmental Protection Agency. The Federal contribution for a qualifying project shall be at least 20 percent of the total cost of the demonstration project.

⁴
(3~~6~~) "Temporary clean coal technology demonstration project" means a clean coal technology demonstration project that is operated for a period of five years or less, and which complies with the State implementation plans for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

⁵
(3~~7~~) (i) "Repowering" means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

(ii) Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

(iii) The Administrator shall give expedited consideration to permit applications for any source that satisfies the requirements of this subsection and is granted an extension under §409 of the Clean Air Act.

3. Section 52.24 is proposed to be amended to read as follows:

52.24 Statutory restriction on new sources.

* * * * *

(f) * * *

(5) * * *

(iii) A physical change or change in the method of operation shall not include:

* * *

(h) any physical change or change in the method of operation at an existing electric utility generating unit (other than the addition of a new unit or the replacement of an existing unit) that would not result in a significant net increase in representative actual annual emissions of a criteria pollutant at the unit.

(j) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

(i) the State implementation plan for the State in which the project is located, and

(ii) other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

* * * * *

(18) "Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

(19) "Representative actual annual emissions" means (i) for a period prior to a physical change or change in the method of operation of a unit, the average rate, in tons per year, at which the unit actually emitted the pollutant during the 2-year period which precedes the change. The Administrator shall allow the use of a different consecutive 2-year period within the 5 years before the change, where the Administrator determines that such a period is more representative of normal source operation; and

(ii) for the 2-year period after the physical change or change in the method of operation of a unit (or

different consecutive 2-year period within 10 years after the change, where the Administrator determines that such period is more representative of normal source operations), the projected average rate in tons per year at which the source is projected to emit a pollutant, considering the effect any physical or operational changes will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the Administrator may:

(a) consider all relevant information, including but not limited to, historical operational data, the company's own representations, filings with the State or Federal regulatory authorities, and compliance plans under Title IV of the Clean Air Act; and

(b) exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, such as an amount of increased utilization proportional to the rate of electricity demand growth for the utility system as a whole. Such demand growth exclusion shall not apply, however, whenever the Administrator determines that (i) but for the particular change, the source could not physically and legally accommodate the demand growth; or (ii) the particular change results in (a) removing of bottlenecks, (b) less expensive power production, or (c) an increase in capacity or reliability of the unit.

19
(20) "Temporary clean coal technology demonstration project" means a clean coal technology demonstration project that is operated for a period of five years or less, and which complies with the State implementation plans for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

0
(21) "Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.

(2~~1~~) "Clean coal technology demonstration project" means a project using funds (1) appropriated under the heading 'Department of Energy-Clean Coal Technology', up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or (2) similar projects funded through appropriations for the Environmental Protection Agency. The Federal contribution for a qualifying project shall be at least 20 percent of the total cost of the demonstration project.

For the reasons set forth in the preamble, Part 60 of Chapter I of Title 40 of the Code of Federal Regulations is proposed to be amended as follows:

PART 60-STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

1. The authority citation for Part 60 is amended to read as follows:

(TO BE ADDED)

2. Section 60.2 is proposed to be amended by adding the following definitions:

"Clean coal technology demonstration project" means a project using funds appropriated under the heading 'Department of Energy-Clean Coal Technology', up to a total amount of \$2,500,000,000 for commercial demonstrations of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency.

"Electric utility" means all units or systems which principally supply electricity to a system for widespread distribution and use, and are subject to, or regulated by, a public utility commission or equivalent body.

"Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

"Repowering" means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990. Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

3. Section 60.14 is proposed to be amended to read as follows:
60.14 MODIFICATION.

* * * * *

(h) No physical change, or change in the method of operation, at an existing electric utility steam generating unit shall be treated as a modification for the purposes of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.

↑ of operation

(i) Repowering projects that are awarded funding from the Department of Energy as permanent clean coal technology demonstration projects (or similar projects funded by EPA) are exempt from the requirements of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.

(j)(1) Repowering projects that qualify for an extension under § 409(b) of the Clean Air Act are exempt from the requirements of this section, provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.

(2) This exemption shall not apply to any new unit that:

(a) is designated as a replacement for an existing unit;

(b) qualifies under section 409(b) of the Clean Air Act for an extension of an emission limitation compliance date under section 405 of the Clean Air Act; and

(c) is located at a different site than the existing unit.

(k) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project is exempt from the requirements of this section. A "temporary clean coal technology demonstration project", for the purposes of this section, is a clean coal technology demonstration project that is operated for a period of five years or less, and which complies with the State implementation plan for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

* * * * *

For the reasons set forth in the preamble, Part 51 of Chapter I of Title 40 of the code of Federal Regulations is proposed to be amended as follows:

Part 51 - REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS.

1. The authority citation for Part 51 is amended to read as follows:

(To be added)

2. Section 51.165 is proposed to be amended to read as follows:

51.165 Permit requirements.

(a) * * *

(1) * * *

(v) * * *

(C) A physical change or a change in the method of operation shall not include:

* * * *

(8) any physical change or change in the method of operation at an existing electric utility generating unit (other than the addition of a new unit or the replacement of an existing unit) that would not result in a significant net increase in representative actual annual emissions of a criteria pollutant at the unit.

(9) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

(i) the State implementation plan for the State in which the project is located, and

(ii) other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

* * * *

(xx) "Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

2

(xxi) "Representative actual annual emissions" means (a) for a period prior to a physical change or change in the method of operation of a unit, the average rate, in tons per year, at which the unit actually emitted the pollutant during the 2-year period which precedes the change. The reviewing authority shall allow the use of a different consecutive 2-year period within the five years before the change, where the reviewing authority determines that such a period is more representative of normal source operation; and

(b) for the 2-year period after the physical change or change in the method of operation of a unit (or different consecutive 2-year period within ten years after the change, where the reviewing authority determines that such period is more representative of normal source operations), the projected average rate in tons per year at which the source is projected to emit a pollutant, considering the effect any physical or operational changes will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the reviewing authority may:

(1) consider all relevant information, including but not limited to, historical operational data, the company's own representations, filings with the State or Federal regulatory authorities, and compliance plans under Title IV of the Clean Air Act; and

(2) exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, such as an amount of increased utilization proportional to the rate of electricity demand growth for the utility system as a whole. Such demand growth exclusion shall not apply, however, whenever the reviewing authority determines that (i) but for the particular change, the source could not physically and legally accommodate the demand growth; or (ii) the particular change results in (a) removal of bottlenecks, (b) less expensive power production, or (c) an increase in capacity or reliability of the unit.

(xxii) "Temporary clean coal technology demonstration project" means a clean coal technology demonstration project that is

operated for a period of five years or less, and which complies with the State implementation plan for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(xxiii) "Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.

(xxiv) "Clean coal technology demonstration project" means a project using funds (1) appropriated under the heading 'Department of Energy-Clean Coal Technology,' up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or (2) similar projects funded through appropriations for the Environmental Protection Agency. The Federal contribution for a qualifying project shall be at least 20 percent of the total cost of the demonstration project.

3. Section 51.166 is proposed to be amended to read as follows:

51.166 Prevention of significant deterioration of air quality.

* * * *

(b) * * *

(2) * * *

(iii) A physical change or change in the method of operation shall not include:

* * * *

(h) a pollution control project at an existing electric utility steam generating unit that does not increase maximum hourly emissions of a regulated pollutant above past maximum hourly emissions of that pollutant at that unit, except:

(a) when the pollution control project would result in an increase in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis in the areas conducted for the purpose of Title I, if any, and

(b) the reviewing authority determines that the project will cause or contribute to a violation of any ambient standard, PSD increment, or visibility violation.

(j) any physical change or change in the method of operation at an existing electric utility generating unit (other than the addition of a new unit or the replacement of an existing unit) that would not result in a significant net increase in representative actual annual emissions of a criteria pollutant at the unit.

^h
(X) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

(i) the State implementation plan for the State in which the project is located; and

(ii) other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

* * * *

(18) "Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose

of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

(19) "Pollution control project" means any physical change or change in the method of operation at an existing electric utility steam generating unit for purposes of reducing emissions from such unit in order to comply with Title IV. Such changes are limited to:

(i) the installation of conventional or innovative pollution control technology, including but not limited to advanced flue gas desulfurization, sorbent injection for sulfur dioxide and nitrogen oxides controls and electrostatic precipitators;

(ii) a physical change, or change in the method of operation, to accommodate switching to fuel which is lower in sulfur content than the fuel use prior to the change, including natural gas or coal re-burning, co-firing of natural gas and other fuels for the purpose of controlling sulfur dioxide and nitrogen oxide emissions;

(iii) a permanent clean coal technology demonstration project conducted under Title II, section 101(d) of the further Continuing Appropriations Act of 1985 (section 5903(d) of title 42 of the United States code), or subsequent appropriations, up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency, or

(iv) a permanent clean coal technology demonstration project that constitutes a repowering project

(20) "Representative actual annual emissions" means (i) for a period prior to a physical change or change in the method of operation of a unit, the average rate, in tons per year, at which the unit actually emitted the pollutant during the 2-year period which precedes the change. The reviewing authority shall allow the use of a different consecutive 2-year period within the five years before the change, where the reviewing authority determines that such a period is more representative of normal source apparition; and

(ii) for the 2-year period after the physical change or change in the method of operation of a unit (or different consecutive 2-year period within ten years after the change, where the reviewing authority determines that such period is more representative of normal source operations), the projected average rate in tons per year at which the source is projected to emit a pollutant, considering the effect any physical or operational changes will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the reviewing authority may:

(1) consider all relevant information, including but not limited to, historical operational data, the company's own representations, filings with the State or Federal regulatory authorities, and compliance plans under Title IV of the Clean Air Act; and

(2) exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, such as an amount of increased utilization proportional to the rate of electricity demand growth for the utility system as a whole. Such demand growth exclusion shall not apply, however, whenever the reviewing authority determines that but for the particular change, the source could not physically and legally accommodate the demand growth; or (ii) the particular change results in (a) removal of bottlenecks, (b) less expensive power production, or (c) an increase in capacity or reliability of the unit.

¹⁹
(21) "Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.

⁰
(22) "Clean coal technology demonstration project" means a project using funds (1) appropriated under the heading 'Department of Energy-Clean Coal Technology', up to a total

amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or (2) similar projects funded through appropriations for the Environmental Protection Agency. The Federal contribution for a qualifying project shall be at least 20 percent of the total cost of the demonstration project.

¹
(2~~1~~) "Temporary clean coal technology demonstration project" means a clean coal technology demonstration project that is operated for a period of five years or less, and which complies with the State implementation plan for the State in which the project is located and other requirements necessary to attain and maintain the nation ambient air quality standards during and after the project is terminated.

²
(2~~1~~) (i) "Repowering" means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

(ii) Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

(iii) The reviewing authority shall give expedited consideration to permit applications for any source that satisfies the requirements of this subsection and is granted an extension under § 409 of the Clean Air Act.

TO: Jeff Holmestead
FROM: David B. Rivkin

As per our conversation last night, provided below are two points to raise with Jonathan, et al. These are as follows:

- Pollution Control Projects. As you know, we have already obtained a satisfactory language for the PSD exclusion for pollution control projects, patterned after an identical exclusion on the NSPS side. However, it is extremely important, both from the policy and legal defensibility standpoints, to explain the genesis of this exclusion -- i.e., that it dates back to 1977, when Congress, in enacting the PSD program, incorporated, via section 169, all of the NSPS exclusions into the new PSD program. We also need to reference the evolution of EPA's views on this subject, i.e., the 1983 Pederson memorandum, the 1986 Emerson memorandum, and the reasons why EPA is now returning back to its 1983 views.

It is also extremely important to have a couple of sentences which indicate that, given the nature of this exclusion -- "no less environmentally beneficial," the process of applying it has to be on a case by case basis, and no generic guidance can be promulgated in this area. The reason I am so emphatic about it is that, in the absence of such language, nothing would prevent EPA from issuing the letter a couple of months from now, stating that their definition of the term "no less environmentally beneficial" means no increase in actual emissions for nonattainment areas, and no increase in potential emissions in attainment areas. This, of course, would totally destroy all the progress we have made on WEPCo. In my view, DOJ's support on this issue is absolutely imperative.

- WEPCo and Puerto Rican Cement. It is important that these cases be described fully and accurately, explaining how such matters as the increase in design capacity, or lack thereof, and like kind replacements relate to the key regulatory term -- "begun normal operations." The main purpose here is to make sure that EPA would not be able to wonder off the reservation a couple of months from now.
- You should know that Jonathan thoroughly understands these issues; all he is looking for is an indication from you on how resolute do you want DOJ to be.

HENRY V. NICKEL

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WEPCO LEGISLATIVE RULE

General Principles

The rule is being proposed to resolve the uncertainties created by EPA's WEPCo interpretations for utilities undertaking compliance projects to reduce emissions or projects to maintain reliable, safe, and efficient operations. The rule is also being proposed to implement the CMA settlement agreement.

In proposing these new legislative rules, EPA must interpret current rules and explain how they will be changed by the proposal. As a result, the preamble will be an "interpretive rule" that clarifies the meaning of current rules. Accordingly, the preamble can remove uncertainties created by WEPCo in the same way that a "stand alone" interpretive rule would.

Unlike EPA's earlier draft interpretive rules, the preamble should not be written in terms of "exempting" utility "modifications" from new source review. EPA has no authority to "exempt" anyone from the "modification" requirement of the Act. For the same reason, the preamble should not assert that current rules distinguish between utilities and other industries regarding the requirements that apply to determining whether "modification" has occurred (e.g., utilities cannot be found to have a pollution control exclusion whereas all other industries do not).

On the other hand, EPA can, pursuant to a legislative rule, generically resolve the application of general regulatory criteria (e.g., the "environmentally beneficial" test) to utility units based upon the Agency's knowledge of the projects undertaken in the past at utility units. Those criteria could continue to be applied to other industries on a "case-by-case" basis.

In other words, the rule can focus on the utility industry and provide specific relief for that industry but it cannot define "modification" one way for utilities and a different way for other industries. Nor, as discussed above, can the rule "exempt" utilities from the rules that apply to all other industries.

Specific Proposals

1. Pollution control projects. The proposal must state that current PSD rules include an implicit pollution control exclusion similar to the pollution control exclusion in the NSPS rules (e.g., a complete exclusion unless EPA finds that a new control system is "less environmentally beneficial" than the old system). This will require an explicit statement that the Agency is returning to its original understanding of the PSD rules -- the understanding reflected in the 1983 PSD "Pedersen" applicability determination. Amendments to the PSD rules would be proposed to make the pollution control exclusion explicit and to create a presumption that utility pollution control projects (e.g., scrubbers, low NOx burners, switches to lower emitting fuels, precipitators, fabric filters, injection techniques) are "environmentally beneficial."

2. The "Causal Link" Requirement. The preamble should make clear that current rules require a "casual link" between a "change" and an "emissions increase" (i.e., the "will result in" language). The preamble should explain that this means that, where the cause of the increase is from factors independent of the change, the increase is not to be considered in calculating the emissions increase for modification purposes. Finally, the preamble should describe new proposed regulatory language, applicable to electric utilities only, that excludes from emissions increase calculations increased utilization due to load

growth or changes in loading order of units in the utility system or power pool.

3. The CMA Settlement. The preamble should state that the "potential-potential" or "actual-actual" election contained in the CMA settlement agreement is being proposed as a change to current rules.

The preamble should also state that current rules require an "actual-to-actual" comparison for units that have begun normal operations, which includes units that have undertaken "like kind replacements" or other repairs that do not increase the original design capacity of the unit. (If the CMA settlement proposal is not agreed to by EPA, proposed regulatory language should be added that makes clear that "actual-actual" applies to all existing sources which undertake changes that do not increase the original design capacity of the unit. Every effort should be made to avoid any attempt to limit the "actual-to-actual" comparison to "like kind replacements" only or to add the additional "operational change" criteria EPA used to define "like kind replacements" in the draft interpretive rule.)

4. The NSPS Fix. The preamble should propose an amendment to EPA's NSPS rules providing that, in selecting the past maximum hourly emissions rate, EPA will use the maximum rate achievable over the past five years of unit operations. Preamble language should be included which states that, in the interim, where past maximum achievable hourly emissions immediately before a change are unrepresentative due to temporary operating conditions that either reduced emissions or constrained operations below maximum levels, EPA will use the maximum rate achievable prior to the temporary condition.



EDISON ELECTRIC
INSTITUTE



National Rural Electric
Cooperative Association

April 25, 1991

The Honorable James D. Watkins
Secretary of Energy
U.S. Department of Energy
Room 7A-257
Forrestal Building
1000 Independence Avenue, S.W.
Washington, D.C. 20585

The Honorable William K. Reilly
Administrator
U.S. Environmental Protection Agency
Room 1200 West Tower
401 M Street, S.W.
Washington, D.C. 20460

Dear Admiral Watkins and Administrator Reilly:

The purpose of this letter is to seek your help in assuring that a good WEPCo fix is issued by June 1. As you know, the electric utility industry has an obligation to make substantial reductions in SO₂ and NO_x emissions under the Clean Air Act. A large number of power plants are required to reduce emissions of both pollutants by January 1, 1995. There is widespread concern in our industry that EPA's WEPCo policy could result in the application of new source review requirements to power plants simply because they undertake pollution control measures to reduce emissions.

Meeting the June deadline is important because of the compliance decisions the electric utility industry must make by this summer and the short time allowed by the Clean Air Act Amendments to implement those decisions.

In addition to meeting the June deadline, it is absolutely critical that EPA's forthcoming WEPCo rule provide meaningful relief for pollution control measures. That rule must provide immediate clarification that utilities can begin to undertake the kind of pollution control projects called for under the 1990 Amendments to the Clean Air Act without fear of triggering new source review. In other words, at a minimum, no WEPCo rule should contain the "rebuttable presumption" approach that EPA's 1990 draft interpretive rule proposed. Instead, the WEPCo fix should simply recognize a blanket pollution control exclusion.

Finally, EPA must clarify the impact of WEPCo on projects undertaken to maintain safe, efficient, reliable operation of existing utility units. Implementation of the policies underlying the Administration's legislative WEPCo proposals are essential to accomplishing this objective.

Messrs. James D. Watkins and
William K. Reilly
April 25, 1991
Page 2

We appreciate your consideration of our concerns. Real WEPCo relief, not a partial fix, is critically important if our industry is to meet its pollution control obligations under the 1990 Amendments in a timely and cost-effective manner. It is also essential to fulfilling our obligations to provide reliable, lowest cost service to our customers.

Sincerely yours,



Thomas R. Kuhn, President
Edison Electric Institute



Larry Hobart, Executive Director
American Public Power Association



Bob Bergland, Executive Vice
President, National Rural Electric
Cooperative Association

cc: Richard L. Schmalensee
William G. Rosenberg
Linda G. Stuntz

IN THE
United States Court of Appeals
FOR THE SEVENTH CIRCUIT

Nos. 88-3264
89-1339

WISCONSIN ELECTRIC POWER COMPANY,
Petitioner,

v.

WILLIAM K. REILLY, Administrator,
United States Environmental
Protection Agency, *et al.,*
Respondents.

ON PETITIONS TO REVIEW FINAL ACTION
OF THE UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY

PETITIONER'S INITIAL BRIEF

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May 24, 1989

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PETITIONER'S INITIAL BRIEF

ISSUES PRESENTED FOR REVIEW

1. Whether EPA was required to engage in notice and comment rulemaking to amend its Clean Air Act regulations that apply to "modified" sources in order to subject a facility undertaking like-kind replacements of equipment to New Source Performance Standards (NSPS) and to Prevention of Significant Deterioration (PSD) new source permitting requirements?

2. Whether EPA's failure to follow its "modification" regulations and past administrative decisions, in determining that repairs to return Units 1, 4 and 5 at Port Washington to past maximum operating levels would subject those units to NSPS, was arbitrary and capricious and contrary to law?

3. Whether EPA acted arbitrarily and capriciously and contrary to the record in determining that like-kind replacements at Port Washington Units 1-5 would not be "routine" replacements under the NSPS and PSD "modification" regulations?

4. Whether EPA acted contrary to its NSPS "modification" regulations, which require use of "maximum production rate" in determining facility emission rates, in dictating a "test protocol" to determine the capacity of Units 1 and 4, when that protocol called for the use of each unit's lowest production rate?

5. Whether EPA acted contrary to its NSPS "modification" regulations and the Clean Air Act when it determined that Units 1 and 4 could not avoid an emissions increase by switching to a lower polluting fuel?

6. Whether EPA acted arbitrarily and capriciously in determining that "actual" emissions after replacement of equipment would be greater than past actual emissions under the PSD "modification" regulations, when the only evidence in the record showed that there would be no such increase?

7. Whether EPA's failure to follow its PSD "modification" regulations and past administrative determinations, in concluding that past "actual" emissions must be compared with future "potential" emissions to determine an emission increase at a plant like Port Washington that began "normal operations" long ago, was arbitrary and capricious and contrary to law?

8. Whether EPA's failure to follow its PSD "modification" regulations, in determining that the "hours of operation and production rate increase" exclusion in those rules does not apply where there has been a "physical change" at the plant, was arbitrary and capricious and contrary to law?

JURISDICTIONAL STATEMENT

Respondents in this case are Administrator William K. Reilly and the U.S. Environmental Protection Agency ("EPA"). EPA had jurisdiction pursuant to § 111 and Part C of the Clean Air Act, 42 U.S.C. § 7411 and §§ 7470-79 (1982); see also 40 C.F.R. §§ 52.21 and 60.5 (1988). This Court has jurisdiction over these Petitions For Review of final EPA action pursuant to § 307(b) of the Clean Air Act, 42 U.S.C. § 7607(b) (1982). Final agency action in No. 88-3264 was a letter to Wisconsin Electric Power Company ("WEPCo") from EPA dated October 14, 1988. A Petition

For Review was timely filed on November 23, 1988. Final agency action in No. 89-1339 was a letter to WEPCo from EPA dated February 15, 1989. A Petition For Review was timely filed on February 22, 1989. The cases were consolidated by Order entered herein on April 4, 1989.

STATEMENT OF THE CASE

This case focuses on the distinction made in the Clean Air Act ("CAA" or the "Act")^{1/} between "existing" sources and "modified" (or "new") sources. Under the EPA decisions at issue here, a program that involves like-kind replacement of deteriorated equipment at an "existing" facility makes that facility a "modified" (i.e., "new") facility, subject to stringent new source requirements. This result applies even though the like-kind equipment replacement would only enable the facility to operate up to its original design capacity, and to emit pollutants only up to those levels associated with that design capacity.^{2/} The following discussion summarizes the provisions of the Act and EPA's regulations addressing existing and modified (or new) facilities, how EPA has implemented these provisions in the past, and how it is applying them in this case.

^{1/} 42 U.S.C. §§ 7401 et seq. (1982). For convenience, all citations will be to sections of the Clean Air Act. Parallel citations to the U.S. Code are provided in the Table of Authorities. Copies of statutes and regulations relied on in this brief will be presented in the joint appendix filed in this case.

^{2/} As used in this brief, "like-kind replacement" means substitution of new parts that perform the same function as worn or deteriorated parts at a facility without changing the type or character of the pollutants emitted.

I. THE CLEAN AIR ACT AND EPA'S IMPLEMENTING REGULATIONS

A. The 1970 Act

The 1970 CAA required states to adopt programs to ensure that concentrations of pollutants in the ambient air would remain below levels defined by the national ambient air quality standards (NAAQS) -- standards adopted under § 109 of the Act designed to protect public health and welfare. Under "state implementation plans" or "SIPs", existing sources of emissions must be controlled as needed to meet the NAAQS.^{3/}

The 1970 Act subjected new sources to additional requirements to be implemented solely through EPA rulemaking. Under § 111 of the Act, new sources must meet stringent emissions standards, called "new source performance standards" or "NSPS." In setting these standards for "categories" of new sources, EPA is required to take into account the capabilities of the best adequately demonstrated system of emissions control for "classes, types, and sizes" of facilities in that source category, as well as the economic, energy, and non-air quality environmental implications of its proposed standards.^{4/}

Congress made clear that NSPS would not apply to facilities in existence (i.e., under construction or operating) when the NSPS were proposed, since such facilities could not incorporate

^{3/} CAA § 110; see also Bethlehem Steel Corp. v. Gorsuch, 742 F.2d 1028 (7th Cir. 1984).

^{4/} See Portland Cement Ass'n v. Ruckelshaus, 486 F.2d 375 (D.C. Cir. 1973).

the necessary control measures into facility planning and design.^{5/} Congress provided, however, that existing facilities would become new sources if they were "modified" so as to create new pollution. Congress defined "modification" as

any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted.^{6/}

B. The 1977 Amendments

In 1977, Congress amended the Act to include certain additional regulatory requirements for new sources. First, Congress provided that future NSPS for fossil fuel combustion sources must include a "percentage reduction" requirement, so that new sources would be required in most cases to use continuous control technology to comply with NSPS.^{7/}

Second, Congress added a case-by-case new source permitting program, referred to as the "prevention of significant deterioration" (PSD) program,^{8/} that required additional air quality and control technology review for new sources locating in

^{5/} CAA § 111(a)(2), (6); see S. Rep. No. 91-1196, 91st Cong., 2d Sess. 15-16 (1970).

^{6/} CAA § 111(a)(4).

^{7/} CAA § 111(a)(1)(A); see Sierra Club v. Costle, 657 F.2d 298 (D.C. Cir. 1981).

^{8/} EPA had instituted a regulatory PSD program in 1974; see 39 Fed. Reg. 42510 (1974); Sierra Club v. EPA, 540 F.2d 1114 (D.C. Cir. 1976), judgment vacated, 434 U.S. 809 (1977).

areas attaining the NAAQS.^{9/} Congress required that EPA define the scope and content of the PSD program through rulemaking.^{10/}

Finally, Congress in the 1977 Amendments did not change the 1970 definition of modification but added one clarification.^{11/} Moreover, Congress adopted the NSPS "modification" concept for the PSD program, stating that "modification [has the meaning] . . . defined in section 111(a)" ^{12/}

C. EPA's Implementation Of The Act

EPA has exercised its authority under the Act to implement the NSPS program for numerous categories of new stationary sources.^{13/} For steam electric generating units, EPA initially promulgated NSPS for large units constructed or modified after August 17, 1971, that allowed such units to use clean fuel, rather than control technology, to meet the sulfur dioxide NSPS.^{14/} In 1979, EPA revised the NSPS pursuant to the 1977

^{9/} The PSD requirements limit emissions from new sources to levels at or below those required by the NAAQS, in order to prevent deterioration of air quality in areas that already attain the NAAQS. They also require use of "best available control technology," or BACT, at new sources -- a level of control that must be at least as stringent as any applicable NSPS. See Alabama Power Co. v. Costle, 636 F.2d 323 (D.C. Cir. 1979).

^{10/} CAA § 161; see 40 C.F.R. §§ 51.166, 52.21 (1988).

^{11/} Congress made clear that certain coal conversions are not modifications. CAA § 111(a)(8).

^{12/} CAA § 169(2)(C).

^{13/} See 40 C.F.R. Part 60 (1988).

^{14/} 40 C.F.R. Part 60, Subpart D (1988).

Amendments generally to require large steam electric units constructed after September 18, 1978 to install sulfur dioxide control technology to meet a 70 to 90 percent reduction standard.^{15/}

EPA also undertook during the early 1970s NSPS rulemakings to define when changes at an existing source transform that source into a "modified" (i.e., new) source. This issue was also addressed in EPA's PSD rulemakings beginning in 1973.

1. The Modification Rule

In the early 1970s, EPA promulgated NSPS rules defining "modification." Under those rules, a "modified" facility is one at which "any physical or operational change" occurs that "results in an increase in the emission rate of any pollutant to which a standard applies."^{16/} Whether an increase occurs is determined using the facility's emission rate (in kilograms per hour) at maximum production levels.^{17/} To further clarify the scope of this definition, EPA provided examples that do not constitute a "modification," including, inter alia, "routine" maintenance, repair or replacement and "increases" in production rate or hours of operation.^{18/}

^{15/} 40 C.F.R. Part 60, Subpart Da (1988).

^{16/} 40 C.F.R. § 60.14 (1988); see 36 Fed. Reg. 24877, col. 2 (1971); 40 Fed. Reg. 58419, col. 1 (1975).

^{17/} 40 C.F.R. § 60.14(b) (1988); 40 Fed. Reg. 58419, col. 1 (1975).

^{18/} 40 C.F.R. § 60.14(e) (1988).

Because the PSD program incorporates the NSPS definition of modification, EPA used the NSPS approach to define modification in the PSD program. Thus, in 1980, EPA defined a modification for PSD purposes as a "physical change" or a "change in the method of operation" that "would result in" an "emissions increase."^{19/} Similar to the NSPS modification rule, EPA provided that "a physical change or change in the method of operation" does not include "routine" maintenance, repair or replacement, or "an increase in the hours of operation or in the production rate," unless a federally enforceable permit limits hours of operation or production rate.^{20/} EPA defined an "emissions increase" for PSD purposes in terms of total annual emissions (i.e., tons of a pollutant emitted per year), instead of in terms of kilograms per hour.^{21/}

2. The Reconstruction Rule

In developing its NSPS modification rule, EPA became concerned about replacement projects that would be exempt from the modification rule but that, when aggregated together, could be so extensive that they were substantially equivalent to totally replacing the facility "at the end of its useful life."^{22/} To address replacement projects designed to extend the

^{19/} Id. § 52.21(b)(2) (1988); see 45 Fed. Reg. 52735, col. 3 (1980).

^{20/} 40 C.F.R. § 52.21(b)(2)(iii)(a) and (f) (1988).

^{21/} Id. §§ 52.21(b)(3), 52.21(b)(21) (1988).

^{22/} 40 Fed. Reg. 58417, col. 3 (1975).

useful life of a facility, EPA in 1975 promulgated the "reconstruction" rule.^{23/}

Under the "reconstruction" rule, an existing source will not be considered "reconstructed" unless the replacement project involves expenditures that are 50 percent or more of the capital cost of a comparable new facility.^{24/} Recognizing, however, that existing sources undertaking such major projects should not automatically be subjected to NSPS, EPA provided that such sources would not be considered "reconstructed" if application of NSPS would be technologically or economically infeasible, or if consideration of costs, remaining useful life, and effect on emissions made it inappropriate to apply NSPS to the facility.^{25/} Thus, in promulgating the rule, EPA noted that it did not anticipate that many facilities would trigger the "reconstruction" rule, and stated that it would address any more specific concerns with such "life extension" existing sources in rulemaking establishing NSPS for specific categories of sources.^{26/}

After enactment of the 1977 Amendments, EPA considered applying the reconstruction rule to the PSD program. After notice and comment rulemaking, EPA decided not to adopt a

^{23/} 40 Fed. Reg. 58417 (1975); see 40 C.F.R. § 60.15 (1988).

^{24/} 40 C.F.R. § 60.15(b)(1) (1988).

^{25/} Id. §§ 60.15(b)(2), 60.15(f) (1988).

^{26/} 39 Fed. Reg. 36948, col.3 (1974).

reconstruction rule for the PSD program.^{27/}

3. Nature Of Changes Triggering
New Source Requirements

In adopting the NSPS for steam electric generating units in 1979, EPA announced that "few, if any, existing electric utility steam generating units will become subject to these standards" as a result of modification or reconstruction.^{28/} In this regard, the Background Documents explained that replacement of equipment "with similar parts would not be considered a modification."^{29/} However, a "replacement or redesign [that] . . . would substantially change the physical characteristics of the . . . emissions, may be a change" that falls within the modification rule.^{30/} Finally, the Background Documents made clear that the reconstruction rule, not the modification rule, was directed at preventing "the perpetuation of existing sources,"^{31/} and that to trigger the reconstruction rule, the "modifications or

^{27/} EPA explained that "the general PSD objective of safeguarding existing air quality from significant degradation will not be undermined by deleting the requirement for review of reconstruction." 45 Fed. Reg. at 52703, col. 2 (1980).

^{28/} 44 Fed. Reg. at 33591, col. 3 (1979).

^{29/} EPA, Electric Utility Steam Generating Units: Background Information For Proposed Particulate Matter Emission Standards at 5-4, (July 1978) [Record at 3.19] (emphasis added). Background information documents are developed to provide technical support and rationale for a proposed regulation at a level of detail beyond that possible in the Federal Register preamble.

^{30/} Id. at 5-4 to 5-5 (emphasis added).

^{31/} Id. at 5-7.

replacements" must be "so extensive as to create an essentially new source [i.e., meet the 50 percent and other tests]

. . . . "32/

In promulgating the PSD rules, EPA did not suggest any different understanding of the type of change that would constitute a "modification." As to the concerns about "perpetuation" of sources, EPA decided, as noted above, not to incorporate a reconstruction rule into its PSD program.33/

II. THE PORT WASHINGTON PROJECT

The Port Washington power plant consists of five 80 megawatt (MW) coal-fired units placed in service between 1935 and 1950. Since they were placed in operation, these units have been operated as needed to meet electricity demand. Each of the five units has functioned during its recent operating life at its 80 megawatt design capacity.34/

The Port Washington units are "existing" sources under the Act, and as such have not been subject to NSPS or PSD requirements. Instead, they are subject to emission limitations under the Wisconsin SIP that assure attainment and maintenance of the NAAQS at full power operation.

32/ Id.

33/ See supra pp. 9-10.

34/ See Memorandum from Hunton & Williams to WEPCo at 5 (July 29, 1988) [Record at 6.15].

In 1983, a program was initiated to examine and assess equipment condition and to provide a basis from which to plan future plant maintenance activities. In 1984, this program revealed that deterioration of the air heaters on Units 1-4 and the rear steam drums on Units 2-5 had become particularly severe.^{35/} While Units 2, 3, and 5 could still be operated up to full design capacity with the deteriorated rear steam drums, WEPCo determined that extended operation at full boiler pressure might create an unsafe operating condition.^{36/} As a result, WEPCo operated Units 2 and 3 at reduced capacity and Unit 5 was voluntarily shut down in 1985.^{37/} At Units 1 and 4, the deterioration of the air heaters prevented the units from continuing to operate at their maximum design capacity.^{38/}

^{35/} Air heaters raise the temperature of the air required for the combustion of the fuel. The use of preheated air improves combustion conditions and efficiency. See Babcock & Wilcox, Steam - its generation and use at 13-4 [Record at 3.1]. Defective air heaters can reduce the capacity of a unit, and thereby reduce the maximum achievable emission rate. "[S]team drums are a type of 'header' for the collection and distribution of steam and/or water within the boilers." September 9, 1988 memorandum at 4. A defective steam drum has no physical effect on the maximum achievable emission rate of a unit, as reflected by the fact that the Port Washington Unit 5 was substantially operated at maximum capacity prior to discovering severe cracking in its rear steam drum. Letter from Neil B. Childress to Gary McCutchen (September 26, 1988) [Record at 6.17].

^{36/} Letter from John W. Boston to Gary McCutchen (April 22, 1988) [Record at 6.10].

^{37/} Letter from Neil B. Childress to Gary McCutchen (October 11, 1988) [Record at 6.20].

^{38/} Attachment 4 to Letter from Mark Steinberg to J. Paisie (November 1, 1988) [Record at 6.24].

As when any equipment at an industrial facility becomes defective, WEPCo developed a program for the repair and/or replacement of the deteriorated equipment with like-kind parts.^{39/} None of the program's work elements would result in increases in the ability of the units to emit air pollutants (in either pounds/hour or pounds/MMBtu heat input) over past maximum levels at design capacity. Indeed, uncontroverted evidence submitted to EPA showed that projected annual sulfur dioxide emissions after the program would be less than past actual emissions.^{40/} Only a portion of the replacements would involve equipment which affects the Company's ability to operate these units up to full capacity (i.e., the Units 1 and 4 air heaters).^{41/} The remainder of the project would involve repairs and replacements to address safety considerations (i.e., the rear steam drums) and otherwise restore unit efficiency and reliability (e.g., updating the plant control computer).^{42/}

Following its technical and economic evaluations, WEPCo in July 1987 submitted its proposed replacement program (which WEPCo

^{39/} Letter from Thomas J. Cassidy to Jacqueline K. Reynolds (July 8, 1987) [Record at 6.1]; Memorandum from Hunton & Williams to WEPCo at 6 (July 29, 1988) [Record at 6.15].

^{40/} Attachment 3 to Letter from John W. Boston to Don R. Clay (July 14, 1988) [Record at 6.13].

^{41/} Attachment 4 to Letter from Mark Steinberg to J. Paisie (November 1, 1988) [Record at 6.24].

^{42/} Letter from Thomas J. Cassidy to Jacqueline K. Reynolds (July 8, 1987) [Record at 6.1]; Letter from J.W. Boston to Gary McCutchen (April 22, 1988) [Record at 6.10].

referred to as a "life extension" project) to the Public Service Commission of Wisconsin (PSC) for approval as required by state law.^{43/} After preliminary review, the PSC consulted the Department of Natural Resources (DNR) regarding the applicable environmental requirements. DNR determined that the project was exempt from new source review but requested EPA Region V's opinion.^{44/}

EPA Region V recognized that the proposed project would fall far short of a "reconstruction" program. Moreover, it recognized that this project would involve only like-kind equipment replacement aimed at preserving historical operating capacity. EPA Region V nevertheless concluded that the project might be a modification and referred the matter to EPA headquarters.^{45/}

III. THE EPA HEADQUARTERS' DECISIONS

After reviewing the WEPCo like-kind replacement project, EPA headquarters decided that the project would constitute a "modification" for NSPS and PSD purposes in letters dated October 14, 1988 and February 15, 1989.^{46/} EPA's decisions are

^{43/} Letter from Thomas J. Cassidy to Jacqueline K. Reynolds (July 8, 1987) [Record at 6.1]. Under state law, WEPCo is required to obtain approval of the PSC prior to commencing certain projects.

^{44/} Letter from Donald F. Theiler to Steve Rothblatt (November 9, 1987) [Record at 6.1]; Letter from Dale Ziege to Joseph Paisie (February 5, 1988) [Record at 6.2].

^{45/} Memorandum from David Kee to Gerald Emison (March 25, 1988) [Record at 3.11].

^{46/} Letter from Lee M. Thomas, EPA Administrator, to John W. Boston, WEPCo (October 14, 1988), incorporating a Memorandum from

summarized below.

A. The October 14, 1988 Letter

1. NSPS Modification

Prior to the issuance of the October 14, 1988 letter, WEPCo submitted information on the maximum capacity levels and emission rates actually achieved over the past ten years at Units 1-5. WEPCo also submitted information showing the maximum capacity levels that could currently be achieved by Units 1-5, if operations were not constrained by safety concerns with the steam drums or, in the case of Units 1 and 4, by the deteriorated air heaters.^{47/}

In the October 14 letter, EPA, after expressing concern that these projects would result in "life extension" of these units (i.e., would perpetuate the life of these facilities), found that (1) the like-kind replacements were "physical changes" under the "modification" rule, and (2) the emission rates achieved by all five units in 1987 were the "baseline" emission rates for NSPS applicability purposes. For Units 2, 3, and 5, however, these rates reflected voluntary decisions by WEPCo regarding safety

(Footnote cont'd. from previous page.)

EPA Acting Assistant Administrator, Don R. Clay, to David A. Kee, EPA Region V (September 9, 1988) (cited hereinafter as "October 14, 1988 letter" and "September 9, 1988 memorandum," respectively); Letter from Acting Assistant Administrator Clay to Mr. Boston, WEPCo (February 15, 1989) (cited hereinafter as "February 15, 1989 letter").

^{47/} See Letter from Neil Childress to Gary McCutchen (September 27, 1988) [Record at 6.18.].

considerations (e.g., the "zero" rate for Unit 5) and an electricity demand which did not require operation of the units at higher capacities. As to Units 1 and 4, their operations were physically constrained by the air heater problems, but not to the degree reflected in the 1987 operations.

The fact that these emission rates were not "representative" of historical normal source operation was, according to EPA, irrelevant to the NSPS program.^{48/} EPA further suggested that even if these units could be operated up to original design capacity in spite of the deteriorated equipment, the Company could not base the pre-replacement emissions on original design capacity unless that capacity "could be achieved on an economically sustainable basis" with deteriorated equipment.^{49/}

EPA compared the unrepresentative pre-project "baseline" emission rates with post-project emission rates at full design capacity, and concluded that the project would result in an

^{48/} October 14, 1988 letter at 5. The length of time between an equipment failure and replacement seemed important to EPA for some undisclosed reason. Thus, EPA suggested that WEPCo must use a zero baseline at Unit 5 because the company had waited too long to repair the steam drum. See February 15, 1989 letter at 12 (because "unit 5 has been shut down for over four years, not a weekend," EPA concluded that the capacity of this unit had become "zero" megawatts.) Nevertheless, EPA refused to address how long a facility would have to operate with deteriorated equipment before a lower emissions baseline would be established for NSPS purposes. See id. at 11-12 (refusing to respond to "hypothetical question whether EPA would still have found a zero baseline if Unit 5 had been shut down on a Friday . . . and WEPCo had sought to replace that component on the following Monday.").

^{49/} October 14, 1988 letter at 5.

increase in emission rates. EPA, again observing that the project would result in "life extension," then decided that the like-kind replacement in this case would not be "routine."^{50/} As a result, the October 14 letter found that Units 1-5 at the Port Washington plant would be "modified," and would have to install expensive emissions control equipment to meet the NSPS, if WEPCo proceeded with the proposed replacements.

2. PSD Modification

As in the case of NSPS, EPA examined whether the proposed like-kind replacements would "result in an emissions increase." For baseline emissions before the change, EPA used those in 1983-84 because the 1986-87 emissions were not "representative" of normal source operations.^{51/} With respect to emissions following the project, however, EPA ignored uncontroverted evidence that the projected emissions after the replacement project would not be greater than the 1983-84 emissions that EPA had found were representative of past operations.^{52/} Instead, EPA determined that "actual emissions" following the renovation must be based upon the source's "potential to emit,"^{53/}

^{50/} October 14, 1988 letter at 3; September 9, 1988 memorandum at 3-6.

^{51/} EPA determined "that the two-year period of 1983 and 1984 -- prior to the source curtailments due to discovery of cracks in the rear steam drums--are more representative of normal source operations than the most recent two-year period." October 14, 1988 letter at 5.

^{52/} Attachment 3 to Letter from John W. Boston to Don R. Clay (July 14, 1988) [Record at 6.13].

^{53/} September 9, 1988 memorandum at 7.

reflecting maximum continuous operations, 24 hours a day, 365 days per year. EPA's decision to compare past, representative actual emissions with the plant's future potential to emit by definition resulted in a finding of an emissions increase for all five units at the Port Washington plant.

EPA also examined whether the like-kind replacement project would fall within any of the PSD examples of activity that do not constitute a "modification." EPA found that the proposed project would not constitute "routine" repair and replacement.^{54/} The PSD rules explicitly exempt emission increases associated with increases in hours of operation or production rate (unless restricted by a federally enforceable limitation). However, EPA found that the projected emissions increase, due solely to assumed increases in hours of operation and production rate not limited by a federal permit, constituted a modification because, in EPA's view, a "nonroutine" physical change would occur at the plant.^{55/}

B. The February 15 Supplemental Decision

1. NSPS

Following the October 14 determination, WEPCo conducted tests at Units 1-4 to demonstrate that those units were capable of operating at higher levels than those established as the NSPS "baseline" in EPA's October 14 letter. EPA dictated a "test

^{54/} See supra p. 17.

^{55/} See September 9, 1988 memorandum at 3, 7, 8.

protocol" requiring five ten-hour tests at each unit. Under the protocol, the lowest one-hour capacity level recorded in the 50 hour test would be used by EPA to represent the "maximum capacity" of the unit.^{56/}

The tests at Units 2 and 3 showed that they could operate at their maximum design capacity. The tests at Units 1 and 4 demonstrated levels above those achieved in 1987 that were used in the October 14 determination.

In its February 15 supplemental decision, EPA agreed that Units 2 and 3 could be operated up to design capacity in spite of the equipment deterioration. For Units 1 and 4, however, EPA rejected the capacity test results primarily due to several pre-test exceedances of emissions limits, and reaffirmed use of the baseline contained in the October 14 letter.^{57/}

In its February 15 supplemental decision, EPA also found that WEPCo could not avoid NSPS by agreeing to accept a permit restriction to burn a cleaner fuel that would avoid any emission rate increase.^{58/} As a result, according to EPA, the only way WEPCo can avoid an NSPS emission rate increase would be through the application of control technology.^{59/}

^{56/} Memorandum by David Schulz (November 7, 1988) [Record at 5.13]; Letter from Mark Steinberg to David Schulz at 2 (December 6, 1988) [Record at 6.28].

^{57/} February 15, 1989 letter at 8-9. As a result, under EPA's supplemental decision, Units 1, 4 and 5 would be subject to NSPS if the Port Washington project proceeded.

^{58/} Id. at 10-11.

^{59/} Id.

2. PSD

Even though it found that Units 2 and 3 could be operated up to full design capacity, and therefore would have the same emission rate before and after any replacements, EPA found that this factor would "have no impact on the existence of a significant net emissions increase for PSD purposes."^{60/} Rather, EPA stated that, in finding an emissions increase from the Port Washington plant for PSD purposes, it had "explicitly assumed that emissions increases . . . would come not from an increase in emission rate, but rather from increases in production rate or hours of operation."^{61/} On this basis, EPA reaffirmed its PSD applicability determination for all five of the Port Washington units.

INTRODUCTION

In the action under review in the present proceeding, EPA has decided to break with its past practice and bring so-called "life extension" projects within the scope of the NSPS and PSD programs.^{62/} One would expect that an agency that has made and

^{60/} Id. at 9.

^{61/} Id.

^{62/} The term "life extension" was coined in the early 1980s to describe comprehensive repair and replacement projects at existing power plants. WEPCo used this term in describing the project to the Wisconsin PSC. See supra pp. 13-14. "Life extension" has no set meaning and the activities undertaken under such a project (i.e., repair and like-kind replacement of defective equipment) are no different than activities undertaken at plants prior to the time certain utilities began using this term. See, e.g., infra pp. 28, 42-45.

applied legislative rules to implement a regulatory program would amend those rules if it wanted to expand the program's scope. Here, however, EPA has attempted to change the scope of its regulation not through legislative rulemaking, giving affected parties the right to prior notice and an opportunity to comment^{63/} and applying the change prospectively,^{64/} but through an individual case, with no right to prior notice, no opportunity to comment, and no limitation on its retroactive effect.

In reviewing EPA's decision in this case, this Court must apply several basic principles of administrative law. As an initial matter, while many regulatory statutes give an agency discretion to change regulatory policy either through rulemaking or adjudication,^{65/} the CAA removed that discretion with respect to the NSPS and PSD programs.^{66/}

Under the NSPS provision, § 111, Congress has provided that the Agency must define by legislative rule which sources will be regulated and must determine the nature of the regulation (i.e., the stringency of controls) in light of specific statutory

^{63/} 5 U.S.C. § 553 (1982); CAA § 307(d).

^{64/} Bowen v. Georgetown Univ. Hosp., 57 U.S.L.W. 4057, 4058 (U.S. Dec. 12, 1988).

^{65/} SEC v. Chenery Corp., 332 U.S. 194, 203 (1946).

^{66/} The CAA requires EPA to conduct notice-and-comment rule-making in defining NSPS and PSD requirements. CAA § 307(d)(1)(C), (I). The CAA's rulemaking requirements include those imposed by the Administrative Procedure Act. Id. § 307(d)(3)-(6).

criteria.^{67/} Similarly, under the PSD provisions of the Act, Part C, the Agency must define by rule the kinds of sources that are subject to regulation and the kinds of measures that may be imposed on those sources.^{68/} Legislative rules under these provisions may be applied prospectively only.^{69/}

Given this regulatory scheme, EPA is not free to implement changes in its regulatory policies under § 111 and Part C through adjudication. Unless the Agency in the notice of proposed rulemaking under § 111 (in the case of NSPS) and Part C (in the case of PSD) notified affected parties that their conduct would be regulated under these programs, EPA is precluded from reaching conduct not identified in those rulemakings. This Court must review the lawfulness of EPA's action in this case with this basic principle in mind.

In conducting this review, the Court must determine whether EPA's decision is supported by the terms of its existing rules, by the purposes of those rules as revealed in EPA's notices of

^{67/} CAA § 111(a), (b). As part of any NSPS rulemaking, EPA must consider, and the public must have an opportunity to comment on, how the proposed rules meet or fail to meet the statutory criteria for NSPS. Thus, if EPA wants to make any change in the NSPS program that is inconsistent with the understanding that the Agency and the public had of the scope and meaning of the NSPS rules when they were proposed, that change may only be effected through a new rulemaking revising the NSPS.

^{68/} CAA § 161.

^{69/} See *id.* §§ 111(b)(6), 168(b). *Id.* §§ 553(b), (c), 551(4) (rules are statements of "future effect"); *Georgetown*, 57 U.S.L.W. at 4058; *id.* at 4060-63 (Scalia, J., concurring).

proposed and final rulemaking, by the Agency's and the public's understanding of those rules when they were promulgated, and by the Agency's past implementation of those rules. Any attempt by the Agency to change its rules through an individual proceeding such as the one at issue here must be set aside.^{70/}

Second, even if the decision in question were one that could be made without rulemaking, which it is not, EPA must still satisfy the standards that govern this Court's review of agency action. Thus, if the Court finds that EPA's decision here is inconsistent with EPA's prior applicability decisions under its NSPS and PSD rules, the Court must determine whether the Agency has explained and supported its new policy direction. Although an agency may choose to reverse its own precedents if the reversal is allowed by the governing statute and regulations, the agency's decision may not depart from past agency practice without compelling justification on the record before the Court.^{71/}

^{70/} "[R]egulations validly prescribed by a government administrator are binding upon him as well as the citizen, and . . . this principle holds even when the administrative action under review is discretionary in nature." Cardoza v. Commodity Futures Trading Comm'n, 768 F.2d 1542, 1550 (7th Cir. 1985) (quoting Service v. Dulles, 354 U.S. 363, 372 (1957)); see also, e.g., Pearce v. Director, Office of Workers' Compensation Programs, 647 F.2d 716, 726-727 (7th Cir. 1981).

^{71/} Greater Boston Television Corp. v. FCC, 444 F.2d 841, 852 (D.C. Cir. 1970) (Leventhal, J.) ("an agency changing its course must supply a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored, and if an agency glosses over or swerves from prior

Finally, an agency reversing prior policy must satisfy the limitations on retroactive application of agency orders.^{72/} As the D.C. Circuit has observed, "[u]nless the burden of imposing the new standard is de minimis, or the newly discovered statutory design compels its retroactive application, the principles which underlie the very notion of an ordered society, in which authoritatively established rules of conduct may fairly be relied upon, must preclude . . . retroactive" application of the new standard.^{73/}

Applying these principles in this case will show that EPA's decision violates basic principles of administrative law. The Agency's decision here effects a basic change in law through a series of strained determinations that ignore past practice, the terms of EPA's NSPS and PSD rules, and the regulatory history of those rules.

(Footnote cont'd. from previous page.)

precedents without discussion it may cross the line from the tolerably terse to the intolerably mute" (footnote omitted), cert. denied, 403 U.S. 923 (1971); see Georgetown, 57 U.S.L.W. at 4061 (Scalia, J., concurring) ("the principles announced in an adjudication cannot be departed from in future adjudications without reason"); cf. St. James Hosp. v. Heckler, 760 F.2d 1460, 1472 (7th Cir.) ("Although an agency is not rigidly bound to its own precedent, the presumption is against changes in established policy that are not justified by the rulemaking record.") (citing Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29 (1983)), cert. denied, 474 U.S. 902 (1985).

^{72/} Retail, Wholesale & Dep't Store Union v. NLRB, 466 F.2d 380, 389-90 (D.C. Cir. 1972), cited in NLRB v. Wayne Transp., 776 F.2d 745, 751 n.8 (7th Cir. 1985).

^{73/} Retail, Wholesale, 466 F.2d at 392 (D.C. Cir. 1972).

According to the Agency: (1) a "modification" can take place as a result of like-kind replacements that do not in any way change facility design; (2) an "emissions increase" can occur even though operation of a facility does not result in emissions greater than those previously occurring at the unit; (3) replacement of deteriorated equipment is not "routine" even though it only allows a facility to operate in accordance with original design and historical operations; (4) an "emissions increase" can be deemed to occur for NSPS purposes where a facility proposes to avoid any increase in emissions by burning a cleaner fuel instead of installing control equipment; (5) and increases in hours of operation and production rate trigger PSD modification, even though the PSD rule provides that such increases are neither "physical" nor "operational" changes.

For the reasons discussed below, each of these determinations is flawed and reflects an abrupt departure from controlling law and a change in policy. The consequences of this change will be severe for both industry and the public.^{74/} The Agency's attempt to change the scope of its NSPS and PSD programs through this individual proceeding is therefore arbitrary, capricious, and contrary to law, and must be set aside.

^{74/} See, e.g., *infra* pp. 26-30; Letter from J. Allen Wampler, Department of Energy, to Don R. Clay (October 12, 1988) [Supplemental Record at S.4]; Brief of Amici Curiae Alabama Power Co., et al.

ARGUMENT

The central issue in this case is whether like-kind replacement of equipment that does not alter facility design, and that creates no new emissions and no increased emissions over past levels of emissions, is a "modification" under the Clean Air Act. For the reasons discussed below, EPA's decision to find a "modification" under these circumstances in this case represents an abrupt departure from the NSPS and PSD rules and the Agency's long-standing implementation of those rules. EPA's determination that this project is a "modification" under the Act must, at a minimum, be preceded by rulemaking to change the current rules or to establish new rules.

I. EPA CANNOT SUBJECT SO-CALLED "LIFE EXTENSION" PROJECTS LIKE THE PORT WASHINGTON REFURBISHMENT TO PSD AND NSPS WITHOUT NEW RULEMAKING.

Repair or replacement projects to maintain the original, normal operating capabilities of existing plants have always been an element of industrial operations. When pumps break, pipes corrode, steam headers crack, or other equipment deteriorates or fails, thereby precluding normal operation of a plant, utilities have always undertaken like-kind replacement of those components to restore normal operations in order to maintain reliable supplies of electricity.^{75/} Without such projects, any industrial facility would quickly deteriorate and become

^{75/} See, e.g., Letter to Carroll D. Besadny from Jacqueline K. Reynolds at 1-3 (March 17, 1988) [Record at 6.8].

useless.^{76/}

Under the Clean Air Act, an existing facility will be treated as a new facility, subject to new source regulations, only if it is "modified"^{77/} or reconstructed, and "reconstruction" is not an issue in this case. The term "modification" suggests that something more has been done to a facility than work to keep the facility operating as designed. Under the plain meaning of this term, "modify" means to "change or alter"^{78/} or "to make basic or fundamental changes."^{79/}

In this case, EPA argues that, because the "Port Washington life extension project . . . would involve a substantial financial investment" in the "renewal" of the facility, and would enable operations "well beyond . . . [its] current life expectancy . . . ," the project is a "modification" that will trigger PSD and NSPS requirements.^{80/} EPA seems to view "life extended" facilities as a new category of facilities requiring regulation and wants to put that category into the new source

^{76/} By contrast, with normal repair, the Electric Power Research Institute (EPRI) has observed that existing power plants can be operated up to 50 to 60 years or more. EPRI Journal at 20 (July/August 1987) [Record at 3.10]; see Letter from J.W. Boston to Gary McCutchen at 2-3 (April 22, 1988) [Record at 6.10].

^{77/} CAA § 111(a)(4), § 169(2)(C).

^{78/} Webster's New World Dictionary at 914 (1984).

^{79/} Webster's Ninth New Collegiate Dictionary at 763 (1983); see infra pp. 32-33.

^{80/} September 9, 1988 memorandum at 12 (emphasis added).

programs through the "modification" provisions of the NSPS and PSD rules. As EPA observes, however, it "could find no examples in which the Agency had analyzed and issued an applicability determination for a 'life extension project'."^{81/}

Far from representing a new category of facilities, however, the term "life extension" describes only what utilities and other industrial facilities have done for decades.^{82/} Every time a pump, pipe, steam header, or other piece of equipment deteriorates or fails, it is replaced, and that replacement extends the life of the plant. Without that replacement the plant might no longer be capable of operating normally, or at all. In other words, this term merely reflects the truism that any repair or replacement work that enables continued operation of a facility in accordance with its original design will, by definition, extend the facility's life or, perhaps more accurately, postpone its demise.

The fundamental flaw in EPA's analysis is that EPA's NSPS and PSD modification rules have never been directed at "renewals" of existing facilities. At no time in the numerous NSPS rulemakings conducted over the past 18 years has EPA ever suggested that like-kind replacement of deteriorated or failed

^{81/} October 14, 1988 letter at 4.

^{82/} In recent years, the utility industry has used the term "life extension" to describe the type of replacement project to be undertaken in the case of the Port Washington plant. See EPRI Journal, "Longer Life for Fossil Fuel Plants" (July/August 1987) [Record at 3.10].

equipment constitutes a modification.^{83/} At no time in these rulemakings did EPA indicate that the cost of repair or like-kind replacement, or the effect of the repair on unit reliability, efficiency, or useful life, has any relevance to the modification requirements.^{84/} At no time in the PSD rulemaking did EPA hint that the modification rules would be triggered by replacements that did not affect the maximum emission rate of a unit but did improve or restore reliability and efficiency so that the unit could reliably increase hours of operation to meet increased demand.^{85/}

To the contrary, in past NSPS rulemakings, EPA made clear that like-kind replacements "would not be considered modifications."^{86/} Further, EPA emphasized that projects directed at "renewal" of facilities -- projects designed to "perpetuate" a facility -- would be evaluated under EPA's reconstruction rule.^{87/} Nowhere in the preambles or the language of past PSD rulemakings did EPA question the like-kind

^{83/} See supra pp. 7-8; infra pp. 34-35.

^{84/} Rather, EPA identified all of these factors as relevant to the reconstruction rule. See supra pp. 8-9.

^{85/} See, e.g., 45 Fed. Reg. 52704-705 (1980) (discussing examples of how PSD modification rule would be applied); supra pp. 8-11.

^{86/} EPA, Electric Utility Steam Generating Units: Background Information for Proposed Particulate Matter Emission Standards at 5-4 (July, 1978) [Record at 3.19].

^{87/} Id. at 5-7; see infra p. 35.

replacement policy embodied in the NSPS modification rule.^{88/}

If EPA believes now that more rigorous regulation of so-called "life extension" projects is needed, it must conduct an analysis under Executive Order 12291, propose changes to its NSPS and PSD rules in the Federal Register, explain why those changes are needed, solicit public comment, and adopt such final revisions as are appropriate in light of the rulemaking record.^{89/} Until the rules are changed, projects like Port Washington that fall far short of triggering the reconstruction rule can lawfully be undertaken without meeting new source requirements.

II. EPA'S EXPANSION OF THE NSPS PROGRAM TO COVER EXISTING SOURCES THAT MERELY UNDERTAKE LIKE-KIND REPLACEMENT OF DETERIORATED EQUIPMENT IS ARBITRARY, CAPRICIOUS, AND CONTRARY TO LAW.

Under 40 C.F.R. § 60.14(a) of the NSPS rules, a modification" is a "physical change" to a facility that "results in" an emissions increase. In the case of Port Washington Units 1 and 4, EPA found that a "physical change" would occur as a result of like-kind replacement of the air heaters. In the case of Unit 5, EPA found that like-kind replacement of the rear steam drum would constitute a "physical change."

^{88/} Rather, EPA specifically decided not to include the "reconstruction" concept -- the NSPS requirement that focuses on "renewal" projects designed to extend "useful life" -- in the PSD rules. 45 Fed. Reg. at 52703 (1980).

^{89/} CAA § 307(d)(3); see supra pp. 20-24.

In order to determine whether these "physical changes" would "result in an [emission rate] increase," EPA compared the emission rates at Units 1 and 4 when operating with deteriorated equipment with the maximum emission rates that could be achieved with fully functional equipment.^{90/} For Unit 5, EPA compared an emission rate of zero (due to shutdown for safety reasons) with the unit's maximum (fully functional) rate.^{91/} It is hardly surprising that comparison of an emission rate of a unit with broken equipment that is incapable of normal full load operations or of safe operations, with an emission rate of the same unit that following repair is again capable of normal full load operations, would show an increase in the emission rate.

As the following discussion demonstrates, such an application of the NSPS modification rule is contrary to congressional intent, is inconsistent with the regulatory language and history of EPA's own rules, and conflicts with EPA's past implementation of the rule.

^{90/} Units 1 and 4 at Port Washington have been unable to operate at full capacity as a result of air heater deterioration. Other repair and replacement activities at Units 1 and 4 (including the replacement of the defective rear steam drum at Unit 4) do not affect the maximum emissions capability in kilograms per hour of those units. February 15, 1989 letter at 8-9; Memorandum from David Schulz to Files (January 27, 1989) [Record at 3.29].

^{91/} Unit 5 has been voluntarily shut down for safety reasons due to cracks in its rear steam drum. Report of C-E Power Systems (January 18, 1985), attached to Letter from J. W. Boston to Gary McCutchen (April 22, 1988) [Record at 6.10]; Letter from Neil Childress to Gary McCutchen (October 11, 1988) [Record at 6.20].

A. EPA's Expansion Of The NSPS Program
To Cover Like-Kind Replacement Projects
Designed To Restore Historical Operating
Capacity Is Contrary To Congressional
Intent And The NSPS Modification Rule.

The basic issue here is whether Congress in § 111 of the Act, and EPA in promulgating the NSPS in 1979, intended the term "modification" to encompass like-kind replacement projects that neither change the nature of an existing facility, nor allow the facility to operate differently than it had in the past before that equipment degraded or failed. The plain meaning of the term "modify" and the overall thrust of the NSPS program support the view that like-kind replacement projects are not the type of projects that Congress, or EPA in 1979, intended to reach under the "modification" provision.

1. Congressional Intent

The plain meaning of "modify" is "to change or alter"^{92/} or "to make basic or fundamental changes in."^{93/} Reflecting the plain meaning of this term, Congress provided that a facility (1) must undergo a physical or operational "change" before it is evaluated under the modification provision, and (2) must create new emissions and new pollution as a result of that change.

Thus, under the plain meaning of the Act, a unit should not be deemed "modified" as a result of replacement of equipment with equipment similar to that replaced. As in the case of Port

^{92/} Webster's New World Dictionary at 914 (1984).

^{93/} Webster's Ninth New Collegiate Dictionary at 763 (1983).

Washington, such like-kind replacement does not "change or alter" the design or nature of the facility. Rather, it merely allows the facility to operate again as it had before the specific equipment deteriorated. Equally important, the replacement creates no new pollution. Emission rates at Port Washington after the change will be no greater than they have been in the past, and will be no greater than allowed under the Wisconsin SIP.

In enacting § 111 of the Act, Congress was careful to limit the applicability of NSPS to sources that could be designed to include state-of-the-art pollution control technology. The NSPS were not made applicable to existing sources because Congress recognized the difficulty and expense of retrofitting control technology on such sources.^{94/} Similarly, the House made clear that the 1977 Amendments to § 111, requiring that new oil and coal-fired electric utility plants in most instances install control technology (e.g., scrubbers), were enacted in order to ensure an adequate supply of clean oil and coal for existing sources so that those sources would not have to retrofit expensive and complex control technology.^{95/}

^{94/} H.R. Rep. No. 294, 95th Cong., 1st Sess. 185 (1977), reprinted in 1977 U.S. Code Cong. & Admin. News 1264.

^{95/} Id. at 184. Indeed, during consideration of the 1977 Amendments, high sulfur coal interests attempted to force scrubbers on existing sources to maintain markets for high sulfur coal through the so-called Metzenbaum Amendment in the Senate. See Navarro, "The Politics of Air Pollution," 59 The Public

There is nothing in the legislative history even hinting that owners of existing facilities should be forced to choose between letting their facilities deteriorate and having to retrofit expensive control technology as the price of repairs. Yet, EPA's decision in this case is predicated upon the alleged existence of such a congressional intent.^{96/} EPA's decision, therefore, is premised on a fundamental misreading of § 111 and its legislative history.

2. The Electric Utility NSPS

Congress was not alone in its view that the NSPS would not be applied to existing sources unless they created new pollution. EPA itself, in adopting the revised NSPS (Subpart Da) for the electric utility industry in 1978-79, expressed its understanding that:

(Footnote cont'd. from previous page.)

Interest 36, 39-40 (Spring 1980). The Metzenbaum Amendment, however, was itself amended to require (1) that costs to consumers be taken into account, (2) that a specific finding of "significant local or regional economic disruption" be made before control technology could be required, and (3) that a highly visible procedure for decisionmaking be followed. See CAA § 125; B. Ackerman & W. Hassler, Clean Coal/Dirty Air 46-47 (1981). Congress thereby reaffirmed its desire to focus stringent control technology requirements on new, not existing, sources.

^{96/} See October 14, 1988 letter at 5 ("Congress intended to address the type of long-term capital investments . . . at issue in the Port Washington life extension project [T]hese renovations [therefore] would be subject to the requirements of both programs.").

[f]ew, if any, existing steam generators . . . are expected to qualify under the modification/reconstruction provisions; thus, few, if any, existing electric utility steam generating units will become subject to these standards.^{97/}

Even more telling, EPA's Background Information Document for the Subpart Da NSPS specifically discussed a like-kind replacement project as a type of project that EPA would not view as a modification.^{98/} According to EPA, only where the replacement changed the character of the emissions previously associated with the unit would the modification rule even be implicated.^{99/} Moreover, as to any program designed to "perpetuate" (i.e., "life extend") a unit, EPA made clear that the "reconstruction" rule contained the test for determining the applicability of NSPS.^{100/}

In sum, the decision that like-kind equipment replacement constitutes a "modification" cannot be reconciled with EPA's view of the law when it promulgated the Subpart Da NSPS.

^{97/} 44 Fed. Reg. 33591 (1979). The revised NSPS are codified at 40 C.F.R. Part 60, Subpart Da (1988).

^{98/} EPA, Electric Utility Steam Generating Units: Background Information for Proposed Particulate Matter Emission Standards at 5-4 (July, 1978) [Record at 3.19] (hereinafter "NSPS Background Document"); see supra pp. 10-11.

^{99/} Id. at 5-4, 5-5; see supra pp. 10-11.

^{100/} Id. at 5-7; see supra pp. 8-10.

3. The NSPS Modification Rule And
Past Applicability Determinations

EPA's prior applicability determinations under the NSPS modification rule are consistent with the plain meaning of "modification" and the explanation contained in the NSPS Background Document discussed above. They show that "modification" has not been implemented to include like-kind equipment replacement projects that merely restore normal operation consistent with historical plant design and past plant operations.

For example, even where a source has been closed for a substantial period of time, EPA has found that "those steps necessary to return the plant to its former operating conditions" do not trigger NSPS.^{101/} Where an oleum production tower that had been out of use for several years prior to 1974, and that had been physically removed from the production process in 1974, was proposed to be replaced two years later (in 1976) so that the

^{101/} See Memorandum to Jack R. Farmer, Chief, Standards Development Branch, from Michael A. James, Attorney, Air Quality and Radiation Division (February 14, 1973) [Record at 2.1]. See also Memorandum from Edward Reich, Director, Division of Stationary Source Enforcement, to Sandra S. Gardebring, Director, Enforcement Division, Region V (October 3, 1980) [Record at 2.11] (A facility was permanently shut down and removed from the state's emission inventory, yet EPA found that restarting the facility after four years would not trigger NSPS, since the facility was an "existing" source.); Memorandum from Edward Reich, Director, U.S. EPA Division of Stationary Source Enforcement, to William N. Sawyer, Attorney, General Enforcement Branch, EPA Region II (September 16, 1980) [Record at 2.10] ("Resumption of operations will not increase emissions over the source's previous operating emissions.").

facility could resume normal operations, EPA found that the like-kind replacement to restore former operating conditions did not constitute a modification.^{102/} Where another facility "add[ed] . . . a baffle wall and rebrick[ed] . . . a furnace" to restore normal operations, EPA found that the work did not constitute a modification triggering NSPS.^{103/} Where a refinery replaced a deteriorated regenerator cyclone after eight years--equipment essential to the normal operation of the facility--EPA found that the work was "routine" and not a modification.^{104/} And where a facility undertook a project that cost forty-three percent of the cost of a comparable new facility, a project that would enable "20 additional years of operation," EPA did not even analyze the project under the modification rule. Rather, it addressed the project under the "reconstruction" rule, and found no reconstruction.^{105/}

^{102/} Letter from O.W. Lively, Acting Director, Enforcement Division to Gary D. Whaley, Ozark-Mahoning Company, at 1 (October 1976) [Supplemental Record at S.3]. EPA explains in this letter that "modification" would not occur where the facilities are "operated in the same manner as they had been previously designed to operate [and] emit[] no more of the specified pollutants than the original facility had." *Id.* at 2 (emphasis added). Significantly, this letter was issued one year after the NSPS modification rule was revised to its current form. 40 Fed. Reg. 58416 (1975).

^{103/} Memorandum from Edward Reich, Director, Division of Stationary Source Enforcement, to William N. Sawyer, General Enforcement Branch, Region II (September 16, 1980) [Record at 2.10].

^{104/} Letter from Kenneth Eng, Chief, Air Compliance Branch, Region II, to Dale E. Choate, Mobil Oil Corp. (September 7, 1988) [Record at 2.21].

^{105/} See Memorandum from Edward Reich, Director, Division of Stationary Source Enforcement, to Earl J. Stephenson, Director,

In sum, as EPA's past NSPS applicability decisions reveal, EPA has never considered a project to return a plant to its former operating condition to constitute a modification under the NSPS rules.^{106/}

- B. EPA's Failure To Base Pre-Change Emission Rates On Representative Unit Performance Is Arbitrary, Capricious, An Abuse Of Discretion And Contrary To The Plain Language Of Its Rules.

In this case, EPA admitted in its PSD determination that the emission levels during periods when Units 1-4 were operating in a deteriorated condition (and Unit 5, not operating at all) were not "representative" of normal unit operation.^{107/} Nevertheless, EPA concluded that the NSPS emissions increase evaluation must compare the emission rates of the units immediately prior to the project (reflecting abnormal operation with deteriorated equipment, units 1 and 4, or shutdown for safety reasons, unit 5)

(Footnote cont'd. from previous page.)

Enforcement Division, Region VII (December 8, 1977) [Record at 2.5].

^{106/} Under § 111 of the Act, EPA must identify the sources to which an NSPS will apply and must consider the cost, energy, and environmental implications of applying the standard to a particular class of sources. EPA has never considered the consequences of applying NSPS to projects like the Port Washington project which restore capacity without triggering the NSPS "reconstruction" rule.

^{107/} October 14, 1988 letter at 5 ("the two year period of 1983 and 1984 -- prior to the source curtailments . . . are more representative of normal source operations than the most recent two-year period. This conclusion is appropriate in light of WEPCo's historical operations.").

with those after the project (reflecting restored normal, safe operation for these units). The Agency attempts to justify its comparison of emissions between deteriorated and normal equipment by asserting that, in contrast to the PSD program, "there is no 'representative emissions' concept under [the NSPS] . . . program."^{108/}

EPA's decision in this regard is contrary to its own rules, as well as to the Agency's past implementation of those rules. Section 60.14(b) of the NSPS modification rule addresses the emissions increase calculation. Section 60.14(b)(1) provides for the use of EPA "emission factors" in cases, like this, where a prediction must be made whether a proposed action would result in a future increase.

Section 60.14(b)(2) also provides for testing to measure the actual emission rate of the unit before and after a change. This provision specifies that emissions testing is to be "based on representative performance of the facility."^{109/}

If "representative performance" governs the emissions testing method for determining actual emissions before and after a project, it follows that "representative performance" must also govern the "emission factor" calculation. It would make no sense to have a predictive technique like the "emission factors" be based on a fundamentally different criterion than the measurement

^{108/} Id.

^{109/} 40 C.F.R. § 60.14(b)(2) (1988) (emphasis added).

technique, because the predictive technique would always produce different results than the measurement technique. In short, under the plain language of the regulation, EPA is wrong in asserting that "there is no 'representative emissions' concept under [the NSPS] . . . program."^{110/}

EPA's use of nonrepresentative emission rates (i.e., rates reflecting deteriorated equipment) is also inconsistent with the regulatory history of the NSPS rules. Thus, under the general NSPS testing requirements, EPA has observed that "representative" conditions reflect conditions that are "representative of the highest emission levels" that reflect "normal operating conditions" for the source.^{111/} Similarly, when EPA adopted the NSPS modification rule, it provided that application of emission factors under § 60.14(a)(1) should "utilize parameters such as maximum production rate" of the facility and that emission factors should be based on "representative operating conditions."^{112/} Given this background, it was arbitrary for EPA to select, out of a ten-year emissions history that showed operation of all units at their design capacity, the emission rates achieved in a year that the units had not operated at

^{110/} October 14, 1988 letter at 5.

^{111/} Letter from Richard Wilson to R.E. Sommerland (July 6, 1973) (emphasis added) [Record at 2.2]; Memorandum from Richard Denney to Robert Duprey (May 29, 1974) (emphasis added) [Record at 2.3]; see also Memorandum from Jack Farmer to Edward Reich (November 1, 1985) [Record at 2.15].

^{112/} 39 Fed. Reg. 36947, col. 1 (1974) (emphasis added).

design capacity due to equipment deterioration (Units 1 and 4) and safety considerations (Unit 5).^{113/} Accordingly, this Court should hold that EPA erred in reading the "representative" emissions concept out of the NSPS rules and should remand to EPA with directions to apply maximum design capacities in using the NSPS emission factors for Units 1, 4, and 5.

C. EPA Acted Arbitrarily in Finding That WEPCo's Like-Kind Replacement Project Would Not Be Routine.

Under the NSPS modification rule, "routine" maintenance, repair, and replacement are not modifications.^{114/} EPA advanced four reasons for concluding that replacement of the air heaters at Units 1-4 and the steam drums at Units 2-5 of the Port Washington plant would not be "routine."^{115/} First, EPA stated that these components are "major," suggesting that replacement of

^{113/} This result is especially egregious in the case of Unit 5. This unit could still operate up to full design capacity with the cracked steam drum, but was shut down merely as a precautionary matter. Letter from Neil Childress to Gary McCutchen (October 11, 1988) [Record at 6.20]. Bringing such a facility back on line after equipment repair has not previously been considered to trigger NSPS. See supra pp. 36-38.

^{114/} 40 C.F.R. § 60.14(e)(1) (1988). This provision is "subject to . . . § 60.15" of the rules, which is the "reconstruction" provision. Replacements that are "routine" may be so substantial in cost that they trigger the reconstruction rule, thus leading to an evaluation of whether application of NSPS is technically or economically feasible regardless of the fact that an emissions increase is exempt under the modification rule. See supra pp.8-10.

^{115/} September 9, 1988 memorandum at 4-6. As noted above, in light of the February 15, 1989 letter, the only replacements now relevant to the NSPS applicability determination are the air heaters for Units 1 and 4 and the rear steam drum for Unit 5.

"major" equipment cannot be routine. Second, EPA stated that the replacements would extend the life of the units, suggesting that any work that results in a longer facility life is not routine. Third, EPA asserted that replacement of these components was not routine because it is "not frequently done." Finally, EPA noted that the work was not routine because it would be expensive.

For the following reasons, EPA's attempt to place new limitations on what can be considered "routine" is contrary to law and should be set aside. Moreover, even if EPA's new rule on what is "routine" is accepted, EPA has applied that rule in this case in a manner that is arbitrary and capricious.

1. EPA's New Definition Of What Is "Routine"
Replacement Has No Rational Basis.

A "routine" activity is, by the plain meaning of the term, an activity that is "customary" or "a regular, more or less unvarying procedure."^{116/} Under the plain meaning of this term, therefore, replacement is "routine" if it reflects a "customary" or "regular procedure." Certainly, like-kind replacement of deteriorated equipment to enable a plant to operate normally is a customary and regular procedure in industry, and should be considered "routine."^{117/}

^{116/} Webster's New World Dictionary at 1241 (1984).

^{117/} See Wisconsin PSC, Department Correspondence from R. S. Cullen and D. M. Dasho at 8-9 (March 7, 1988) [Record at 6.5] (the WEPCo project is the kind of project that is "done on a routine basis at power plants as needed This type of work goes on at power plants on a regular basis.")

This reading of "routine" is consistent with the objectives of the NSPS program. Repair and replacement activity designed to maintain plants in proper working order will not result in a fundamental change in facility size or design.^{118/} Thus, EPA has found that it is "routine" to replace major equipment (old regenerator cyclones) at a refinery, even after an extended period of time (eight years of deterioration), in order to return the facility to its normal operating capacity.^{119/}

Under the plain meaning of "routine," therefore, the frequency of replacement is not, as EPA would have it, the determinative factor. When a piece of equipment is no longer operating properly, it is customary, i.e., "routine", in industry to replace that equipment with a similar piece of equipment.^{120/}

EPA also suggests that a replacement project that is "costly" or involves a "major" piece of equipment cannot be

^{118/} See Memorandum from Edward Reich to Howard Bergman (October 3, 1978) [Record at 2.7] ("Routine replacement means the routine replacement of parts, within the limits of reconstruction."); see also Letter from Jacqueline K. Reynolds, Wisconsin PSC, to Carroll D. Besadny, Wisconsin DNR, at 2 (March 17, 1988) [Record at 6.8].

^{119/} Kenneth Eng to Dale Choate (September 7, 1988) [Record at 2.21].

^{120/} The NSPS rule states that routine "maintenance," as well as routine "repair and replacement," is not a modification. The term "maintenance" may well denote activity of a frequent or repetitive nature, and as such is very different from the term "replacement." Whether a given type of activity is "routine," however, must be determined in light of the activity in question -- i.e., in this case equipment "replacement," and not "maintenance."

routine.^{121/} The NSPS rule, however, on its face rejects the notion that the cost or importance of the equipment to be replaced is a relevant factor. Section 60.14(e)(1) provides that "routine" maintenance, repair and replacement is "subject to" the "reconstruction" rule, which applies only to projects that involve repairs and replacements that amount to more than 50 percent of the cost of a new unit. This language makes clear that, where the cost of a "routine" project increasing emissions exceeds the 50 percent test, the unit would be subject to the "reconstruction" rule notwithstanding its exemption from the "modification" rule. Thus, the routine replacement rule on its face recognizes that the high cost of a project has no bearing on whether the replacement is "routine."^{122/}

Finally, EPA suggests that a replacement project cannot be routine where it would extend the life of a facility. All repair and replacement projects, however, have such an effect. Without any repair or replacement, even a new facility could not operate normally but for a relatively short period of time. This additional restriction on what is routine therefore makes no sense.^{123/}

^{121/} September 9, 1988 memorandum, at 4-6. EPA nowhere defines how costly a project must be to be nonroutine, or what constitutes "major" equipment. See id.

^{122/} Indeed, it may be more "routine" to replace major or expensive equipment, given its central role in the production process, as compared to minor equipment that may have only a small effect on the overall production capacity of a facility.

^{123/} Moreover, the "perpetuation" of facility life was addressed by EPA under the reconstruction rule, not the modification rule. See supra pp. 8-10.

In sum, the factors EPA applied to define "routine" in this case were created for this case to produce a pre-determined result. Nothing demonstrates this better than the item of equipment that EPA used in the 1979 Steam Electric Plant NSPS rulemaking as an example of a like-kind replacement that would not be considered a modification--coal pulverizers.^{124/}

Pulverizers are major items of equipment that enable coal to be burned in the boiler. They are rarely replaced and their replacement can cost millions of dollars. When replaced, boiler efficiency may be improved and unit life is certainly extended since operations are not possible without properly functioning pulverizers. Nevertheless, EPA has stated that like-kind replacements of pulverizers are not modifications.^{125/}

In conclusion, if EPA wants to change the scope of the "routine" replacement rule to limit it to minor, inexpensive, and frequent replacement projects that have no effect on facility life, it should initiate rulemaking. EPA's attempt to impose additional conditions on the use of this rule in this case is contrary to law and must be set aside.

2. EPA's Application Of Its New
"Routine" Replacement Rule To Air
Heater Replacements At Port Washington
Is Arbitrary And Capricious.

Based upon EPA's new limitations on the routine replacement

^{124/} NSPS Background Document at 5-4 [Record at 3.19].

^{125/} Id.

rule established in the October 14, 1988 decision, WEPCo submitted to the Agency additional information showing that replacement of the air heaters at Units 1 and 4 were routine even under EPA's new view of the rule. EPA responded on February 15, 1989, rejecting the Company's additional analysis.^{126/} Even accepting EPA's new limitations on the routine replacement rule, EPA's February 15 decision does not withstand scrutiny under an arbitrary and capricious standard based on the record.

As to cost, the air heater replacements for Units 1 and 4 would be less than six percent of the cost of a new affected facility.^{127/} These costs are only twelve percent of the level that would trigger an analysis under the "reconstruction" rule.^{128/}

As to the "frequency" criteria, WEPCo presented EPA with 40 examples of air heater replacements that have occurred in the utility industry since promulgation of the modification rule.^{129/} EPA's response was twofold: (1) that the air heaters that have been replaced were of a different design than those at WEPCo's units, and (2) that although the replacements have occurred at 40 units, no one unit has had to replace an air heater more than

^{126/} February 15, 1989 letter at 7.

^{127/} Letters from J.W. Boston to Gary McCutchen (May 19 and 27, 1988) [Record at 6.11, 6.12].

^{128/} See 40 C.F.R. § 60.15 (1988).

^{129/} Letter from Mark Steinberg to Dale Ziege (January 11, 1989) [Record at 6.23].

once.^{130/}

That air heater design differs among utilities should not affect an inquiry into whether their replacement has been routine in the industry. An air heater, of whatever design, has an identical function at all power plants. So long as the air heater replacement does not alter the plant's design capacity or change the character of emissions, that replacement is "routine." The fact that the Port Washington air heater design is unique would mean that no replacement of equipment with a unique design could ever be considered "routine."

Moreover, whether any given unit has replaced an air heater frequently is not germane to whether replacement of that type of equipment is "routine" within the industry. In accordance with the plain meaning of this term, replacement of a piece of equipment only once or twice in the life of a unit may be routine if accepted industry procedure is to replace that equipment when it deteriorates, rather than to close the plant permanently. Indeed, EPA's own contractor, Radian Corporation, has found that air heater replacements are "common" in the electric utility industry.^{131/} It is significant to note that although EPA knew at least as early as 1986 (and probably long before that) that air heater replacements are common, the Agency never attempted to

^{130/} February 15, 1989 letter at 7 and note 6.

^{131/} Memorandum from Kathy Wertz, Radian Corporation, to Dianne Byrne, EPA, at 3 (July 3, 1986) [Record at 3.5].

apply the modification rule to a single one of those replacement projects before the Port Washington case.

In sum, faced with WEPCo's evidence regarding "routine" replacement, EPA simply redefined what "routine" means to place WEPCo's project outside of EPA's ever-evolving rule. As the Public Service Commission of Wisconsin, an expert in the field of electric utility regulation, has noted,

[m]aintaining a plant in good condition to insure the adequacy of its performance and reliability is a normal way for a utility to operate.^{132/}

EPA's decision that the replacement work at issue here was not routine is arbitrary and capricious, and should be set aside.

III. EPA'S FEBRUARY 15 NSPS DETERMINATIONS ON EMISSIONS TESTING AT UNITS 1 AND 4 AND ON FUEL SWITCHING TO AVOID AN EMISSIONS INCREASE SHOULD BE REVERSED.

On the assumption that the Port Washington October 14 determination was correct, WEPCo sought relief through capacity tests and a proposal to burn cleaner fuel to avoid any emissions increase at Units 1 and 4. In response, EPA's February 15, 1989 letter contains determinations (1) on the capacity to be used in predicting pre-change emissions for NSPS purposes and (2) on switching to clean fuels to avoid NSPS. Both determinations reflect, once again, the Agency's single-minded commitment to classifying Port Washington as a "modified source," without

^{132/} Letter from Jacqueline K. Reynolds, PSCW, to Carroll Besdany, Secretary, Wisconsin Department of Natural Resources at 1 (March 17, 1988) (emphasis added) [Record at 6.8].

regard to EPA's own rules or the established procedures for revising those rules.

A. EPA's Test Protocol Was Contrary To Law And Arbitrary And Capricious.

In this case, EPA had to use the "emission factor" test in its NSPS rules to determine whether there will be an emission rate increase at the Port Washington units.^{133/} EPA's rules, and their regulatory history, require the use of the "maximum production rate" of a unit in applying the "emission factor." As EPA explained in 1974,

Emissions from a source can . . . fluctuate daily in response to routine physical and operational changes. When an estimating technique such as emission factors is used to determine if emissions have increased, these fluctuations are not important since these techniques utilize parameters such as maximum production rate, which do not reflect daily fluctuations, in calculating emission rates.^{134/}

EPA's test protocol in this case dictated a 50 hour test and provided that the lowest one-hour capacity achieved would be the "baseline" for determining pre-project emission rates.^{135/} Selection of the "lowest" production rate rather than "maximum" production rate for use in the "emission factor" test is contrary to EPA's rules and, for this reason, must be set aside.

^{133/} Because this is a pre-change determination, EPA must predict whether an emission increase will occur. The "emission factor" test is the only technique available to make this prediction under EPA's rules. 40 C.F.R. § 60.14(b)(1)(1988); see 40 Fed. Reg. 58416, col. 3 (1975).

^{134/} 39 Fed. Reg. 36947, col. 1 (1974).

^{135/} See supra pp. 18-19.

B. EPA's Decision That Facilities Cannot Avoid An Emission Rate Increase Under The NSPS Modification Provision Through The Use Of Clean Fuels Is Contrary To Law.

Assuming arquendo that WEPCo's proposed like-kind replacement project for Units 1, 4, and 5 is a modification under the NSPS rules (i.e., assuming that the emission rate increase determination must be based on a comparison of operations with deteriorated equipment and operations with replacement equipment), WEPCo proposed to eliminate any possible emission rate increases at Units 1 and 4 by switching to a lower sulfur and ash coal and accepting a permit condition precluding a switch back to a higher sulfur and ash coal.^{136/} Accordingly, under WEPCo's proposal, the replacement project combined with an enforceable fuel switch would not "result[] in an increase in the [sulfur dioxide and particulate matter] emission rate[s]" from those units.^{137/}

EPA decided in response that, under the NSPS rules, an emission rate increase may not be avoided by switching to a lower emitting fuel.^{138/} EPA asserted that § 111 of the CAA as amended in 1977

^{136/} The federally enforceable condition was proposed by WEPCo in response to an earlier suggestion by EPA that WEPCo could not avoid an increase through fuel switching where the company was free to switch back to a higher polluting fuel under 40 C.F.R. § 60.14(e)(4). See February 15, 1989 letter at 10.

^{137/} 40 C.F.R. § 60.14(a) (1988).

^{138/} February 15, 1989 letter at 10-11.

reflects a basic political decision that fossil fuel-fired sources not rely only on natural occurring less-polluting fuels to comply with the NSPS. Instead, Congress declared that compliance must depend in part upon the application of . . . control technologies.^{139/}

Based on this alleged statutory requirement that a new source must achieve compliance with NSPS through the use of control technologies, EPA made a remarkable leap in logic to conclude that

it would be inconsistent with the legislative intent for EPA to allow sources to use lower-sulfur fuel to avoid coverage of NSPS If EPA were to follow such a course, numerous modifications to existing facilities could escape coverage in a manner contrary to the statutory purpose.^{140/}

In other words, because, according to EPA, new sources must use scrubbers to meet new source standards, existing sources must use scrubbers (rather than clean fuels) to avoid an emissions increase that would trigger new source standards.

The plain language of the Act provides no support for EPA's remarkable interpretation. In 1977, Congress amended the standard-setting provision of § 111 to direct that future NSPS include a "percentage reduction" requirement as a means of assuring that new sources not abandon high sulfur coal markets.^{141/} Congress did not, however, make any similar change

^{139/} Id. at 10.

^{140/} Id. at 11 (emphasis in original).

^{141/} CAA § 111(a)(1)(A).

in the "modification" provision that apply to existing sources.^{142/} Instead, Congress enacted § 125 of the Act to address fuel switching at existing sources.^{143/} In sum, EPA's attempt to read the 1977 Amendments addressing the standard-setting portion of § 111 into the modification provision has no basis in the Act. Section 125 of the Act, which is inapplicable here, is the only section of the Act that can possibly constrain fuel switches at existing sources.

Moreover, the February 15 determination is inconsistent with EPA's interpretation of the revised § 111 as allowing new sources to comply with post-1977 NSPS using clean fuels. For example, new plants burning anthracite coal, sources located in noncontinental areas, resource recovery facilities, and certain others need not install pollution control equipment under that NSPS, but can comply using clean fuels.^{144/} These provisions were not even questioned in the subsequent litigation addressing the revised NSPS for electric utilities, and the D.C. Circuit held that § 111 does not impose a rigid percentage reduction requirement on new sources.^{145/} Thus, EPA's rationale that § 111

^{142/} If anything, Congress expressed satisfaction with the existing modification provision when it incorporated it without change into the PSD program. See supra p. 6.

^{143/} See supra note 101. Under that provision, the Governor of a State must petition EPA to block a fuel switch and EPA must make a number of economic and other findings to block the use of a lower sulfur fuel.

^{144/} See, e.g., 40 C.F.R. § 60.43a(d) (1988).

^{145/} Sierra Club v. Costle, 657 F.2d 298, 318-322 (D.C. Cir. 1981).

requires existing sources to install control technology in order to avoid an emission rate increase is inconsistent with the standards that EPA itself established for new sources under the 1977 Amendments.^{146/}

Finally, even if EPA's assessment of congressional intent were correct, this is but another egregious example of the Agency's refusal to follow the only lawful means of changing NSPS regulatory requirements -- i.e., through rulemaking. EPA's NSPS modification rules were adopted prior to the 1977 Amendments. The 1977 Amendments were not self-executing. Just as EPA had to engage in rulemaking to revise its NSPS to incorporate percentage reduction, it would have to engage in rulemaking to incorporate the perceived congressional intent to bar fuel switching in the modification rules.

In sum, EPA's decision that low emitting fuels cannot be used to avoid an emission rate increase is contrary to law and should be reversed.

IV. IN FINDING THAT THE PSD RULES APPLY TO PORT WASHINGTON, EPA HAS IMPROPERLY EXPANDED THE SCOPE OF THE PSD PROGRAM WITHOUT RULEMAKING.

In the case of the PSD "modification" rule, EPA recognized

^{146/} Moreover, § 111(a)(1) requires EPA to consider the cost, energy, and environmental impacts of applying control technology standards to new sources. EPA has nowhere considered these impacts with respect to the control technology requirement discussed above for Port Washington. Rather, in promulgating the NSPS for electric utilities, EPA concluded that few sources would have to install control technology under either the modification or reconstruction rules. See supra pp. 10-11.

that the lower capacity at the operating Port Washington units and the zero capacity at Unit 5 were not "representative" of normal operations.^{147/} Thus, for PSD purposes, notwithstanding certain contradictory statements in the September 9 memorandum and October 14 letter,^{148/} EPA assumed that the Port Washington units could operate up to their design capacities and, as a result, the replacements would not cause an increase in the maximum emission rate (i.e., the maximum instantaneous, hourly, or daily emissions) of any of the units.^{149/}

One would have thought that repairs and replacements that have no impact on this emission rate of a unit could not be viewed as changes that "result in" an emissions increase for PSD purposes. According to EPA, however, the PSD requirements were triggered at Port Washington because "EPA explicitly assumed . . . emissions increases at Port Washington [that] would come not from an increase in emission rate, but . . . from increases in production rate or hours of operation."^{150/}

^{147/} October 14, 1988 letter at 5.

^{148/} For example, in finding this facility subject to PSD review, EPA stated that "[t]he purpose of the project is to significantly enhance the present [i.e., deteriorated] efficiency and capacity of the plant," see e.g., September 9, 1988 memorandum at 4, yet found that "the two-year period . . . prior to the source curtailments due to [equipment deterioration] . . . are more representative of normal source operations." October 14, 1988 letter at 5. Thus, for PSD purposes, EPA assumed that the repairs and replacements would only enhance efficiency, not increase capacity.

^{149/} February 15, 1989 letter at 9-10.

^{150/} Id. (emphasis added).

EPA's rationale underlying its PSD applicability determination ignores the plain meaning of its PSD rules and the Agency's past determinations under those rules. For the reasons discussed below, the PSD rules do not require new source review where the changes do not increase the emission rate of a unit and where there are no federally enforceable limitations on the production rate or hours of operation of that unit. EPA's PSD applicability determination must be set aside.

- A. EPA's Determination That Emissions After The Project Will Increase Due To An Increase In The Production Rate And Hours Of Operation At Port Washington Is Unsupported By Any Evidence In The Rulemaking Record, And Therefore Is Arbitrary and Capricious.

Under EPA's rules, unless a physical or operational change "results in" an increase in "actual emissions," a facility is not subject to the PSD program.^{151/} EPA's finding that the Port Washington project will result in an increase in actual emissions due to an increase in production rate and hours of operation has no factual support in the record. Indeed, all of the evidence in the record compels a contrary finding.^{152/}

^{151/} 40 C.F.R. §§ 52.21(b)(2)(i), (3)(i); see infra pp. 56-60.

^{152/} The Port Washington plant has a lengthy operating history. Based on that operating history, EPA defined representative, actual emissions from this plant for the period before the replacement project using average emissions for calendar years 1983 and 1984. October 14, 1988 letter at 5. The record indicates that the annual sulfur dioxide emissions for 1983-84 were about 24,000 tons per year. Attachment 3 to Letter from John W. Boston to Don R. Clay (July 14, 1988) [Record at 6.13]. EPA adopted this emission level in the October 14, 1988 letter at Enclosure A.

Where an Agency action rests upon a factual finding, as is the case here with EPA's finding that "actual" emissions will increase due to increases in production rate and hours of operation, the Agency's action is arbitrary and capricious if it is not supported by "[a]dequate proof" in the record.^{153/} EPA's finding that PSD will be triggered by a production rate and hours of operation increase is unsupported by any evidence in the record and therefore must be set aside.

B. EPA Was Not Authorized By Its PSD Rules To Calculate An Emissions Increase At Port Washington Based On A Comparison Of Past "Actual" Emissions With Future "Potential" Emissions.

EPA attempts to justify its actions by asserting that, under the PSD rules, evidence as to future actual emissions is not relevant to the emissions increase calculation. Rather, EPA argues that its rules require the use of future "potential emissions" (assuming operations for 365 days at full capacity) at existing sources that propose to undertake repairs and

(Footnote cont'd. from previous page.)

Based on past operating history and load projections, WEPCo projected representative, actual emissions that would occur after the replacement project. That evidence shows that sulfur dioxide emissions after renovation would range from 4,000 tons in 1989 to 13,000 tons in 1997 -- substantially less than past actual emissions that EPA determined were "representative." Attachment 3 to Letter from John W. Boston to Don R. Clay (July 14, 1988) [Record at 6.13]. EPA never challenged the factual accuracy of this evidence.

^{153/} National Lime Ass'n. v. EPA, 627 F.2d 416, 430 (D.C. Cir. 1980).

replacements.^{154/} This approach will always result in a finding of an emissions increase, since no industrial facility ever operates or is intended to operate at full capacity, twenty-four hours a day, year in and year out.

The "potential to emit" assumption was included in the rules for new units that had no operating history, not for existing facilities that had a history of operations. EPA's decision to impose such an "actual-potential" rule in this case is arbitrary, capricious, an abuse of discretion and contrary to law.

1. The PSD Modification Rule Is Based
On Actual, Not Potential, Emissions.

The first definition of modification in the PSD context was promulgated by EPA on December 5, 1974, and focused, as did the NSPS rule, on "actual" emissions from a facility.^{155/} In response to the 1977 Amendments, EPA promulgated a revised rule on June 19, 1978, that stated the measure of an emissions increase not in terms of actual emissions, but in terms of "potential to emit."^{156/} In Alabama Power Company v. Costle,^{157/} the June 1978 modification definition was remanded by the U.S.

^{154/} September 9, 1988 memorandum at 7. Presumably, if the source had begun operations following the renovation, EPA's conclusion would change.

^{155/} 39 Fed. Reg. 42510, 42514 at col. 2 (1974). This rule was promulgated, of course, before Congress amended the Act in 1977 to require a PSD program.

^{156/} 43 Fed. Reg. 26388, 26403-04 (1978), 40 C.F.R. § 52.21(b)(2) (1988).

^{157/} 636 F.2d 323, 399-402 (D.C. Cir. 1979).

Court of Appeals. When EPA promulgated final rules in response to the remand, it rejected the "potential to emit" approach.^{158/}

Under the current PSD modification rule, therefore, a "major modification" results from a net increase in "actual emissions" from a particular physical change or change in method of operation at a stationary source" ^{159/} If no increase in actual emissions will "result" from (i.e., be caused by) a physical or operational change, the inquiry is complete, and no modification exists. Thus, EPA's refusal to use actual emissions in the Port Washington analysis in favor of "potential emissions" conflicts with the terms and regulatory history of EPA's PSD regulations.

2. The Regulatory Definition Of Actual Emissions Does Not Require The Use Of "Potential To Emit" At Existing Units.

Despite the focus of the PSD modification rule on "actual emissions," EPA argues that 40 C.F.R. § 52.21(b)(21) (defining "actual emissions") requires the use of "potential to emit" to define source emissions "[w]here, as here, the source has not yet begun operations following the renovation work." ^{160/} The term "actual emissions" in this provision is defined as the "actual rate of emissions of a pollutant from an emissions unit" as computed in accordance with this subsection. ^{161/} This provision

^{158/} 45 Fed. Reg. 52676 (1980).

^{159/} 40 C.F.R. § 52.21(b)(3)(i)(a) (1988) (emphasis added).

^{160/} September 9, 1988 memorandum at 7.

^{161/} 40 C.F.R. § 52.21(b)(21)(i) (1988) (emphasis added).

then states that,

[i]n general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation.^{162/}

The provision goes on to state that where an emissions unit "has not begun normal operations . . . actual emissions shall equal the potential to emit of the unit on that date."^{163/} It is this latter provision that EPA argues requires it to use "potential to emit" to define future emissions at Port Washington.

Under the plain meaning of this rule, however, the use of "potential emissions" has a role only where there have been no "normal operations" at a facility. In other words, it only applies in the case of a proposed new emissions unit to be constructed at the site of an existing plant.

This conclusion is confirmed by EPA's past application of the PSD rule to source modifications. For example, when EPA considered whether equipment changes and additions at an existing

^{162/} Id. § 52.21(b)(21) (ii) (1988). If an earlier period is "representative," as EPA found was the case here, that period must be used. Id.

^{163/} Id. § 52.21(b)(21)(iv). The rule contains one other definition of actual emissions. See id. § 52.21(b)(21)(iii) (Where a facility has an allowable emission rate, "the Administrator may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.") If "allowable emissions" were used to define Port Washington emissions before and after the project, no emissions increase would be predicted.

pulp and paper mill would trigger PSD review, the Agency concluded that it could not use "potential emissions" to define the "actual" emissions of this plant because "this source has been in operation for some time. . . ."^{164/}

Moreover, as recently as May 1988, EPA was not applying a past actual/future potential approach. In reviewing an oil company's proposal to reactivate, after necessary equipment repair and replacement, two petrochemical plants that had been shut down since 1978 and 1981, EPA's Region II Administrator determined that because the shutdown

was not intended to be of a permanent nature, the reactivation of these facilities would not be considered equivalent to the introduction of new sources for PSD purposes.^{165/}

Accordingly, EPA compared past and future allowable emissions and determined that reactivation would not increase emissions. Had such a comparison been made in the instant case, no increase would have been projected.

For the foregoing reasons, EPA's decision represents a substantial expansion of the scope of the PSD program, accomplished without notice and comment rulemaking. Because this decision is inconsistent with EPA's current modification rule and past practice, it should be set aside.

^{164/} Memorandum from Edward E. Reich to Michael M. Johnston at 2 (July 28, 1983) (emphasis added) [Supplemental Record at S.1].

^{165/} Letter from Christopher J. Daggett to Pedro A. Santiago Rios (May 4, 1988) [Supplemental Record at S.5].

C. EPA Had No Authority To Ignore The "Production Rate/Hours Of Operation" Exclusion.

The performance of any industrial facility is in constant flux, as a result of normal variability in process equipment, product demand, and equipment deterioration and repair. All of these factors influence how much of a substance a facility emits to the air at any moment in time. The overriding characteristic of industrial operations and emissions, therefore, is variability.

The 1980 final PSD rules provided that

A physical change or change in the method of operation shall not include . . . [a]n increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975^{166/}

In the preamble to the rule, EPA explained this exclusion as follows:

While EPA has concluded that as a general rule Congress intended any significant net increase in . . . emissions to undergo PSD . . . review, it is also convinced that Congress could not have intended a company to have to get a NSR [new source review] permit before it could lawfully change hours or rate of operation. Plainly, such a requirement would severely and unduly hamper the ability of any company to take advantage of favorable market conditions.^{167/}

^{166/} 40 C.F.R. § 52.21(b)(2)(iii)(f) (1988); 45 Fed. Reg. at 52735-36 (1980) (emphasis added).

^{167/} 45 Fed. Reg. at 52704, col. 2 (1980). EPA recognized that "any change in hours or rate of operation that would disturb a prior assessment of a source's environmental impact should have

The purpose of this rule, therefore, is to allow sources to increase production rate and hours of operation up to design capacity, consistent with the terms of any new source permit.^{168/}

In this case, EPA and WEPCo agree that EPA's finding of an emissions increase was due solely to an assumed increase in the annual hours of operation and production rate at the plant and an increase in the maximum emission rate of any unit.^{169/} In rejecting WEPCo's argument that emissions increases due to an increase in "production rate or hours of operation" cannot be considered an "increase" triggering the PSD modification rule, EPA asserted, without explanation, that this portion of the

(Footnote cont'd. from previous page.)

to undergo scrutiny." Id., col. 3. This reference is to the "federally enforceable" limitation restriction on the "production rate/hours of operation" exclusion. Where there is such a limit, the limit has been used to assess the source's environmental impact. While EPA cites this language in support of its determination, September 9, 1988 memorandum at 8, the preamble statement is irrelevant to Port Washington. Port Washington has no federally enforceable limits on its "production rates" or "hours of operation" and none were assumed when Port Washington's "environmental impact" was determined under the Wisconsin SIP using allowable emissions at maximum capacity. Thus, applying the "production rate/hours of operation" exclusion to Port Washington will not disturb any prior environmental impact assessment of Port Washington's emissions.

^{168/} This portion of the PSD rule was earlier explained as allowing "an increase in the production rate, if such increase does not exceed the operating design capacity of the source." 43 Fed. Reg. at 26404 (1978). None of the replacements at Port Washington will enable the units to operate above their design capacity.

^{169/} February 15, 1989 letter at 9.

modification rule does not apply if there is a nonroutine physical change at a facility (as that term was defined by EPA in this case).^{170/}

EPA's position in this matter is diametrically opposed to the plain language of the PSD regulations stating that an emissions increase due to "[a] physical change or change in the method of operation shall not include . . . [those caused by] an increase in the hours of operation or in the production rate" unless prohibited by a federally enforceable permit term.^{171/} EPA cannot point to any language in the regulations or the Federal Register preamble which bar the production rate/hours of operation exclusion where there have been "nonroutine" physical changes at a source.^{172/} No language imposing such a limit exists.

Moreover, EPA's conclusion that 40 C.F.R. § 52.21(b)(2)(iii)(f) does not apply when preceded by a "nonroutine" physical change is contrary to EPA's prior determinations under the identical regulation. For example, when EPA issued a determination that PSD would not apply to a project that involved physically converting stationary gas turbines from oil

^{170/} September 9, 1988 memorandum at 3, 8.

^{171/} 40 C.F.R. § 52.21(b)(2)(iii)(f)(1988) (emphasis added). These regulations were promulgated at 45 Fed. Reg. 52656, 52735 (1980).

^{172/} EPA only cites an irrelevant preamble statement about disturbing a "prior assessment" of environmental impact. See supra note 167.

to gas, a "nonroutine," once-in-a-lifetime physical change that would enable the facility to burn gas and operate a greater portion of time, EPA stated that

[a]ctual emissions could increase only if there is an increase in the production rate or hours of operation, both of which are specifically exempt from PSD review. (See 40 CFR 52.21(b)(2)(iii)(f)).^{173/}

EPA was not concerned that nonroutine physical changes preceded the increase in production rate or hours of operation in finding that the project did not trigger PSD.^{174/}

Had EPA applied the plain language of its regulation in the case of Port Washington, as it had in the case of this oil-to-gas conversion, EPA would not have concluded that assumed increases in production rate and hours of operation trigger PSD review.^{175/} EPA cannot ignore its rules. It is bound by them until modified through new rulemaking.^{176/} EPA's refusal to apply the "production rate/hours of operation" exclusion, therefore, was contrary to law.

^{173/} Memorandum from Edward Reich to Amasjit Gill (June 24, 1981) [Record at 2.12].

^{174/} As recently as November 6, 1987, EPA acknowledged that the exclusions concerning physical or operational changes must be read together, not separately. The Director, Air Management Division, Region IX stated "the PSD regulations exclude from the definition of physical or operational change 'an increase in the hours of operation or in the production rate.' 40 C.F.R. § 52.21(b)(2)(iii)(f)" (emphasis added). Letter from David P. Howekamp to Robert T. Connery at 6 (November 6, 1987) [Record at 2.17].

^{175/} See supra pp. 17-18.

^{176/} See supra note 70.

- D. EPA Erred In Determining That The Port Washington Project Was A Physical Change And Did Not Involve Routine Maintenance, Repair, And Replacement.

For the reasons discussed above with respect to the NSPS modification rule, EPA's decision that the proposed like-kind replacement project at Units 1-5 is not "routine" is arbitrary and capricious and contrary to law.

CONCLUSION

For the foregoing reasons, EPA's decision that the proposed like-kind replacement project at the Port Washington power plant will trigger NSPS and PSD review should be set aside.

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Dated: May 24, 1989

SHORT APPENDIX
containing EPA's
WEPCo decisions
has been omitted

Final Form



IN THE UNITED STATES COURT OF APPEALS
FOR THE SEVENTH CIRCUIT

Nos. 88-3264
89-1339

WISCONSIN ELECTRIC POWER COMPANY,

Petitioner,

v.

WILLIAM K. REILLY, Administrator
United States Environmental
Protection Agency, et al.,

Respondents.

ON PETITIONS TO REVIEW FINAL ACTION
OF THE UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY

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RESPONDENTS' JURISDICTIONAL STATEMENT

The jurisdictional summary in the petitioner's brief is correct insofar as it asserts the jurisdiction of this Court to review the final determinations of the U.S. Environmental Protection Agency (EPA) regarding the applicability of new source performance standards (NSPS) and the prevention of significant deterioration (PSD) program to petitioner's Port Washington life extension project. Petitioner's jurisdictional statement is incorrect to the extent that its petitions for review constitute a collateral challenge to EPA's underlying NSPS and PSD regulations. Pursuant to Clean Air Act section 307(b)(1), 42 U.S.C. § 7607(b)(1), those nationally applicable regulations were subject to review only in the U.S. Court of Appeals for the District of Columbia Circuit within 60 days of their promulgation, and may not be reviewed in this Court.

ISSUES PRESENTED

1. Whether EPA reasonably interpreted the definition of "modification" under the Clean Air Act and its own regulations as encompassing any physical or operational change not specifically excluded by that definition, including "like kind replacements" under electric utility "life extension" projects.

2. Whether EPA reasonably found that WEPCO's life extension project, involving the unprecedented replacement of major components at the Port Washington plant in order to restore generating capacity lost because of age-related deterioration and to extend useful life by 20 years as the plant nears its retirement date, is not within the narrow NSPS and PSD exemptions for

"routine" maintenance, repair and replacement.

3. Whether EPA reasonably found that emissions increases made physically and economically possible by extensive renovations to WEPCO's Port Washington plant are not within the narrow NSPS and PSD exemption for emissions increases that result from increased production rates or hours of operation which are necessary to respond to market fluctuations.

4. Whether EPA reasonably interpreted its NSPS regulations as defining an increase in emissions rate as an increase in current pollution-generating capacity, without regard to fuel switches.

5. Whether EPA reasonably interpreted its PSD regulations as determining a net emissions increase by comparing representative actual emissions before prospective physical changes with potential emissions following those changes where the modified emissions unit has not begun normal operations.

STATEMENT OF THE CASE

I. STATUTORY PROVISIONS

A. The Clean Air Act

The Clean Air Act Amendments of 1970 ("CAA" or the "Act"), originally codified at 42 U.S.C. §§ 1857 et seq. (1976 ed.), established a combined federal and state program to control air pollution. Under sections 108 and 109 of the CAA,¹ EPA is to promulgate national ambient air quality standards ("NAAQS")

¹For convenience, all specific citations will be to sections of the Clean Air Act. Parallel citations to the U.S. Code are provided in the Table of Authorities.

specifying maximum permissible concentrations of air pollutants.² Section 110 of the CAA requires each state to develop and submit to EPA for approval a state implementation plan ("SIP") that provides for attainment and maintenance of the NAAQS.

In section 111(b)(1)(A) of the Act, Congress also required EPA to promulgate technology-based standards of performance for categories of new stationary sources that cause or contribute significantly to air pollution which may reasonably be anticipated to endanger public health or welfare. Under section 111(a)(2) of the Act, a stationary source for which a new source standard of performance (NSPS) is applicable is defined as

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.

"Modification" is defined broadly in section 111(a)(4) 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.

(emphasis added). Section 111 was "designed to prevent new [air] pollution problems" by regulating both newly constructed sources of pollution and existing sources that increase their emissions. National Asphalt Pavement Ass'n v. Train, 539 F.2d 775, 783 (D.C. Cir. 1976). See also H.R. Rep. No. 1146, 91st Cong., 2d Sess. 3,

² NAAQS consist of primary and secondary air quality standards which are required to protect the public health and welfare, respectively, from adverse effects resulting from exposure to criteria pollutants in the ambient air.

reprinted in 1970 U.S. Code Cong. & Admin. News 5356, 5358.

B. The 1977 Amendments to the Clean Air Act.

In August 1977, Congress adopted further extensive changes to the CAA and recodified the amended Act at 42 U.S.C. §§ 7401 et seq. (1982) (Pub. L. No. 95-95, 91 Stat. 685).

1. Revisions to the NSPS.

The NSPS provisions were revised in several ways. Congress amended section 111 to require sources regulated under that section to apply the best technological system of emissions reduction the Administrator determined to be adequately demonstrated and feasible considering a variety of factors. Section 111(a)(1). Moreover, for fossil fuel-fired stationary sources, Congress required that emissions standards could not be met by simply burning low sulfur fuels. Congress did so by providing that a standard of performance must require a percentage reduction in the emissions that would have resulted from the use of untreated fuels. Section 111(a)(1)(A)(ii). See H.R. Rep. No. 294, 95th Cong., 1st Sess. 183-88, reprinted in 1977 U.S. Code Cong. & Admin. News 1077, 1262-67.

2. The PSD Program.

The 1977 Amendments also added a new Part C to the CAA including, in sections 160 - 169, a program for the prevention of significant deterioration of air quality (the "PSD" program) in clean air areas which had achieved the NAAQS. The congressional purposes were to protect the public from adverse health and welfare effects that might result from exposure to a pollutant at

levels below the NAAQS, to maximize opportunities for economic growth consistent with the preservation of existing clean air resources, and to insure that any decision to increase air pollution is made only after a careful, public evaluation of all the consequences of such a decision. Section 160(1) - (5).

These PSD purposes are implemented through a complex preconstruction review and permitting program applicable to the construction or modification of a "major emitting facility"³ in areas of the country that have attained the NAAQS for a given pollutant. Most fundamentally, air quality is preserved by establishing incremental ceilings that limit total increases over ambient "baseline" pollutant concentrations in a given area. See sections 163, 165(a)(3), and 166. The first permit application in an area triggers the baseline; subsequent applicants may draw upon the remaining "increment."

To maximize the available increment and to further the spread of advanced pollution control technologies, section 165(a)(4) requires that PSD permits specify use of the best available control technology ("BACT"), which must be at least as stringent as any applicable NSPS.

³Section 165(a)(1) requires that every major emitting facility obtain a permit meeting the substantive PSD requirements prior to construction. Section 169(1) defines "major emitting facility" as a stationary source which emits or has the potential to emit 250 tons per year or, in the case of a source in certain industrial categories, 100 tons per year, of any air pollutant. Section 169(2)(C) defines "construction" to include "modification" of a facility as defined for NSPS purposes in section 111(a)(4).

C. Judicial Review Under the Clean Air Act.

Section 307(b)(1) of the Act authorizes the courts of appeals to review certain enumerated regulatory decisions and "any other final action of the Administrator." Actions that are locally or regionally applicable are reviewable in the appropriate circuit, while an action of nationwide scope and effect may be reviewed only in the D.C. Circuit. Section 307(b)(1). In general, a petition for review must be filed within 60 days of EPA's final action. A petition for review may be filed at a later date only if it is based solely on grounds arising after the sixtieth day. Id. As a prerequisite to appellate jurisdiction under this "arising after" exception, a party must first petition EPA for rulemaking based on the new grounds. E.g., Maine v. Thomas, 874 F.2d 883 (1st Cir. 1989); Group Against Smog & Pollution, Inc. v. EPA, 665 F.2d 1284, 1289-90 (D.C. Cir. 1981).

II. REGULATORY BACKGROUND OF THE NSPS AND PSD MODIFICATION REQUIREMENTS

A. The Two-Step Test for Modifications: Twin Branches of A Single Tree.

The modification provisions of the NSPS and PSD programs grow from a single statutory trunk, the very broad definition of "modification" in section 111(a)(4). Under both respective programs, EPA has developed a highly refined two-step test for determining whether activities at an existing facility constitute a modification subject to new source requirements. In the first step, which is largely the same for NSPS and PSD, EPA

determines whether a physical or operational change has occurred. If so, EPA proceeds in the second step to determine whether the physical or operational change will result in an emissions increase over baseline levels. In this second step, the applicable rules branch apart, reflecting the fundamental distinctions between the technology-based purposes of NSPS and the technology and air quality concerns of PSD.

Briefly, the NSPS program is concerned with hourly emissions rates, expressed in kilograms or pounds per hour.⁴ Emissions increases for NSPS purposes are determined by changes in the hourly emissions rates at maximum capacity. PSD is concerned with total annual emissions to the atmosphere, expressed in tons per year.⁵ Emissions increases under PSD are determined by changes in annual emissions. In order to understand the current requirements governing NSPS and PSD applicability determinations, it is useful to summarize the evolution of the modification rules for the respective programs.

B. Physical or Operational Change.

The very broad definition of physical or operational change in section 111(a)(4) could, standing alone, theoretically encompass the most mundane activities at an industrial facility

⁴ An hourly emissions rate is the product of the instantaneous emissions rate, i.e., the amount of pollution per unit of fuel combusted or materials processed, (such as pounds of sulfur dioxide emitted per ton of coal burned) times production rate (e.g., tons of coal burned per hour).

⁵ Annual emissions are the product of the hourly emissions rate (which is the sole concern of NSPS) times the hours of operation per year.

-- even the repair or replacement of a single leaky pipe or a change in the way that pipe is utilized. However, EPA has always recognized that Congress obviously did not intend to require every physical or operational change to be potentially subject to new source requirements, and that it would be administratively impracticable to do so. Accordingly, EPA has substantially narrowed this term in its NSPS and PSD regulatory definitions through the adoption of common-sense exemptions excluding certain categories of charges.

Regarding NSPS, EPA's original regulations provided that certain physical and operational changes would not trigger a modification. See 36 Fed. Reg. 24,876, 24,877 (1971) (codified at 40 C.F.R. § 60.2(h) (1972)). Under 40 C.F.R. § 60.2(h)(1) (1972), a routine replacement or repair would not be considered a physical change. The definition of modification also excluded from the term "change in method of operation" an increase in the production rate, if such increase does not exceed the operating design capacity of the affected facility. 40 C.F.R. § 60.2(h)(2) (1972). In 1974, EPA proposed amendments to clarify the definition of "modification" as it would be applied by the Agency in determining NSPS applicability. In particular, the proposal added a new section 60.14(e) further detailing what physical and operational changes would "not, by themselves, be considered modifications" even though the emission rate may increase. See 39 Fed. Reg. 36,946, 36,948, col. 1, 36,949, col. 3. EPA promulgated the revised NSPS rules in 1975. 40 Fed. Reg. 58,416. They

were subject to judicial review in the D.C. Circuit at that time under section 307(b), and were the subject of challenge by both industry and environmental groups. See ASARCO, Inc. v. EPA, 578 F.2d 319 (D.C. Cir. 1978). The court of appeals upheld those portions of the NSPS regulations relevant to this case.

The 1975 NSPS regulations exclude three types of physical or operational changes relevant to this case:

(1) Maintenance, repair, and replacement which the Administrator determines to be routine

(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on the stationary source containing that facility.

(3) An increase in the hours of operation.

40 C.F.R. § 60.14(e)(1) - (3) (1976).

The current PSD regulations contain similar exclusions:

(a) Routine maintenance, repair and replacement;

* * * * *

(f) An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition

40 C.F.R. § 52.21(b)(2)(iii)(a) and (f).

The preambles to the NSPS and PSD regulations adopting the exclusions for "routine" maintenance, repair, and replacement contain no specific discussion of how "routine" was to be construed. Both preambles, however, reflect that EPA specifically intended to shape the exclusions for increases in production rates and hours of operation in accordance with the purposes of the new source programs. In promulgating the NSPS production

rate exclusion, EPA expressly deleted a provision from the 1971 regulations that had applied the exclusion to production increases up to the operating "design capacity" of the facility. Instead, EPA declared, the exclusion would be limited to production rate increases that do not exceed actual operating capacity. 39 Fed. Reg. 36,948 (proposed rule).

EPA further limited the production rate exclusion to increases which can be accomplished without a "capital expenditure," i.e., investments in long-term betterments in excess of the Internal Revenue Service's annual asset repair guidelines. 40 C.F.R. § 60.14(e)(2) (1988). See 39 Fed. Reg. 36,949, col. 1 (proposed rule); 40 Fed. Reg. 58,416, col. 2 (final rule).

The exclusions for increases in production rates and hours of operation are lumped together in the PSD regulations, and contain no explicit link to capital expenditure. 40 C.F.R. § 52.21(b)(2)(iii)(f). However, EPA identified three factors as delineating the exclusions' scope, two of which echo the concerns underlying the capital expenditure limitation in the analogous NSPS exclusion. The Agency stated:

[EPA] is also convinced that Congress could not have intended a company to have to get a [PSD] permit before it could lawfully change hours or rate of operation. Plainly, such a requirement would severely and unduly hamper the ability of any company to take advantage of favorable market conditions. The emphasis of the relevant statutory provisions on "construction" strongly supports EPA's interpretation of Congress' intent. See, e.g., section 165(a), 42 U.S.C. § 7475. At the same time, any change in hours or rate of operation that would disturb a prior assessment of a source's environmental impact should have to undergo scrutiny.

45 Fed. Reg. 52,704 (1980). Thus, simple changes in production levels to keep abreast of market fluctuations do not trigger PSD, but review is required where production increases are linked to construction activity. The third factor -- disallowing the exclusion where it would affect assumptions regarding a source's environmental impact -- addresses PSD air quality planning concerns not at issue under NSPS.

C. Emissions Increases Under NSPS: The Difference Between Current Maximum Emissions Rate and Maximum Emissions Rate After the Physical or Operational Change.

Section 60.14 of 40 C.F.R. clarified the definition of an emissions increase for NSPS purposes and the methods for determining whether an increase will occur. Under section 60.14 an increase in emissions occurs if the hourly emissions rate increases. EPA considered and rejected other mechanisms such as total annual emissions. See 39 Fed. Reg. 36,947, col. 1. Section 60.14(b) of 40 C.F.R. sets forth four specific mechanisms by which EPA (or a source) can determine whether a physical or operational change results in an emissions increase: emission factors, material balances, continuous monitoring systems and manual emission tests. Where emissions factors do not demonstrate to the Administrator's satisfaction whether an increase will occur, one of the other methods may be used. Where actual emissions tests are run, tests shall be run under such conditions as the Administrator shall specify to the owner or operator based on representative current performance of the facility. 40 C.F.R. § 60.14(b)(2). All operating parameters which may affect the

emission rate are to be held constant.

D. Emissions Increases Under PSD: The Difference Between Representative Actual Emissions and Potential to Emit After the Change.

1. EPA's Initial Regulations and the Alabama Power Decision.

In 1978 EPA promulgated PSD regulations to implement the 1977 CAA Amendments. Those regulations limited PSD coverage to only "major" modifications, where a physical or operational change increased a source's "potential to emit" by the same 100 or 250 tons per year threshold that Congress established for brand new major emitting facilities, without regard to the effect of pollution control devices on uncontrolled emissions. See 43 Fed. Reg. 26,380, 26,391 (1978).

In a decision addressing numerous provisions of the 1978 regulations, the D.C. Circuit remanded EPA's definition of "modification" in three key respects. Alabama Power Co. v. Costle, 636 F.2d 323 (D.C. Cir. 1979). First, the court held that a source's potential to emit must take into account the anticipated functioning of air pollution control equipment designed into the facility. Id. at 353. The court also held open the possibility that enforceable restrictions on operations could also "limit potential to emit." Id. at 355 n.73. Second, in light of the broad definition of modification in section 111(a)(4) as "any" increase in emissions, the court ruled that EPA lacks authority to exempt emissions increases except on grounds of de minimis or administrative necessity, noting further that this would be inconvenient and costly to industry. Id. at

400. Third, the D.C. Circuit ruled that EPA had broad discretion to apply the netting or "bubble" concept, such that physical or operational changes which increase emissions could be offset by contemporaneous emissions decreases, and PSD would not apply at all if there were no net emissions increase. Id. at 402-03.

2. The Current PSD Regulations.

In response to Alabama Power, EPA substantially revised its PSD regulations in August 1980. 45 Fed. Reg. 52,676.⁶ The changes regarding modifications reflected all of the court's key findings noted above. In particular, EPA provided that increases in actual emissions would govern coverage. See id. at 52,700 (citing Alabama Power). Thus, the 1980 regulations redefined "major modification," as

any physical change in or change in the method of operation of a major stationary source that would result in a significant⁷net emissions increase of any pollutant subject to regulation under the Act.

40 C.F.R. § 52.21(b)(2)(i) (emphasis added).

⁶EPA promulgated two largely identical sets of PSD regulations. 40 C.F.R. § 51.166 (originally designated as § 51.24), established requirements that state PSD plans must meet to be approved by EPA as part of a SIP. 40 C.F.R. § 52.21 contains federal PSD regulations, presently applicable in roughly 20 states, including Wisconsin, which have failed to submit their own PSD rules under § 51.166. For most states in this category, again including Wisconsin, EPA has delegated PSD permit-issuing authority back to the state pursuant to § 52.21(u). 46 Fed. Reg. 9585 (1981). Because 40 C.F.R. § 52.21 is the relevant set of PSD regulations in this case, references in this brief will be made to that section.

⁷EPA defined "significant" in terms of de minimis values for the regulated pollutants. For example, the significance threshold for sulfur dioxide is 40 tons per year. See 40 C.F.R. § 52.21(b)(21); 45 Fed. Reg. 52,705.

EPA established a three-step process for determining net emissions increase. The first step is to determine whether the particular physical or operational change would itself result in an increase in "actual emissions." 40 C.F.R. § 52.21(b)(3)(i)(a).⁸ The second step is to quantify any other increases and decreases in actual emissions that would be contemporaneous with the particular change and otherwise creditable. 40 C.F.R. § 52.21(b)(3)(i)(b). The third step is to sum the increases and decreases and determine whether there is a significant net increase overall. See 45 Fed. Reg. 52,698, col. 3.

An integral component of the netting rules is a source's ability to gain credit for contemporaneous emissions decreases by obtaining "federally enforceable" restrictions on its "allowable emissions." Federally enforceable restrictions are those which can be enforced by EPA, such as certain types of permit conditions. 40 C.F.R. § 52.21(b)(17). A source's "allowable emissions" are essentially similar to its "potential to emit." Under both terms, maximum physical and operational capacity to emit can be restricted not only by the use of pollution control devices in accordance with Alabama Power, but also by restrictions on production rates, hours of operations, and types and amounts of materials processed or combusted. Compare

⁸In general, "actual emissions" is defined as the average emissions to the atmosphere, in tons per year, during the two-year period immediately preceding the physical or operational change in question, or such other period that the Administrator determines is more representative of normal source operation. See 40 C.F.R. § 52.21(b)(21)(ii).

40 C.F.R. § 52.21(b)(4) with § 52.21(b)(16).

In order to make applicability determinations in advance of prospective modifications, EPA's decision to use an actual emissions baseline created a need to make assumptions regarding the level of post-modification emissions before the "particular date" on which the physical or operational change would occur. EPA addressed this problem by equating "actual emissions" with "potential to emit" in such circumstances:

For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

40 C.F.R. § 52.21(b)(21)(iv) (emphasis added). In the preamble, EPA further clarified that permitting authorities would rely on this assumption both for "new or modified units, since these units are not yet operational at a normal level of operation." 45 Fed. Reg. 52,718, col. 3 (emphasis added).

Standing alone, the required comparison between representative actual emissions before a physical or operational change and potential emissions after the change could render any such change subject to PSD review whenever pre-modification actual emissions are significantly less than post-modification potential emissions. The PSD regulations avoid this result by providing that sources may avoid a net emissions increase, and hence PSD review, by obtaining federally-enforceable restrictions on potential (i.e., allowable) emissions, as discussed supra.

E. The NSPS Reconstruction Rule: The Distinction Between Modification and Reconstruction Under NSPS

In 1975, EPA added a reconstruction provision to the NSPS regulations. 40 Fed. Reg. 58,420. An existing facility that undergoes reconstruction becomes an affected facility subject to the NSPS if a very substantial portion of the facility is replaced, i.e., capital costs in excess of 50% of the cost of building an entirely new facility, without regard to whether there is an emissions increase. Id. The purpose of the reconstruction provision is to recognize that replacing most of the components of the facility can be substantially equivalent to replacing it at the end of its useful life with a new facility that would clearly be subject to the NSPS. The preamble to the final rule adopting the modification and reconstruction provisions emphasized the distinction between the two provisions. 40 Fed. Reg. 58,417. EPA also observed that in the industries subject to NSPS (the utility industry was the most significant source category at that time) "it is generally the practice to close an old existing facility rather than to reconstruct it by using a minor part of it and replacing the remaining portion." 39 Fed. Reg. 36,948 (proposed rule).

F. EPA's Issuance of NSPS and PSD Applicability Determinations

EPA has established an informal procedure by which it issues applicability determinations to owners or operators of sources contemplating some activity at a facility which may trigger NSPS or PSD applicability. For NSPS determinations, this procedure is codified in the general NSPS provisions at 40 C.F.R. § 60.5. Although there is no comparable regulatory provision for

PSD determinations, the procedure is much the same. Typically, a source will contact a state or EPA's Regional Office and present the proposed activity to it for consideration. EPA then reviews the facts and issues an informal determination. See, e.g., Supplemental PSD Applicability Determination, Cyprus Casa Grande Corp. (1987) (PSD Determination) [J.A. 121]; Memorandum From E. Reich, EPA, to W. Sawyer, EPA, EPA Region III (1980) (NSPS Determination) [J.A. 106]. Final applicability determinations generally are subject to review in the court of appeals under section 307(b)(1). See Harrison v. PPG Industries, Inc., 446 U.S. 578 (1980). In states where the NSPS and PSD programs are delegated to the state, states generally make a preliminary determination subject to review and concurrence by EPA. Wisconsin is in this category. See, e.g., Letter from Valdas V. Adamkus, EPA, to Carrol Besadny, Wisconsin DNR, ¶¶ 5, 8 (April 8, 1988) [J.A. 226-27] (NSPS delegation.)

III. EPA'S MODIFICATION REGULATIONS AND UTILITY LIFE EXTENSION PROGRAMS

Electric utilities continually undertake planning measures to meet the future demand for electricity. The expected useful lifetime of fossil-fuel power plants has been 30 to 40 years, and traditionally utilities have built new plants to meet growth in demand or to replace old plants. U.S. Department of Energy, Energy Information Administration, Estimating the Capital Costs of Life Extension for Fossil-Fuel Steam Plants at 1 (July 1988) [J.A. 159] (hereafter cited as "Capital Costs of Life

Extension"); EPRI Journal, July/August 1987, at 20 [J.A. 166].⁹

In assessing the impact of its NSPS modification and reconstruction regulations on the electric utility industry, EPA too assumed that, in general, old electric utility generating units would simply be replaced at the end of their normal operating life rather than significantly modified or reconstructed. See 39 Fed. Reg. 36,948 (proposal of NSPS reconstruction provision), discussed supra at p. 16. Thus, EPA anticipated that "[f]ew, if any, existing steam generators . . . are expected to qualify under the modification/reconstruction provisions." 44 Fed. Reg. 33,591 (1979) (promulgation of revised NSPS for electric utility steam generating units).

In recent years, however, the economic risks associated with building new plants have increased due to substantial increases in construction costs, and uncertainties in future demand, ability to recover new-plant costs, and environmental requirements. Capital Costs of Life Extension at 1; EPRI Journal, July/August 1987, at 20. As a consequence, utilities are now exploring nontraditional options as they seek the most economical method of meeting electrical demand. These new options include conservation and load management programs (to reduce total and peak demand, respectively), bulk power purchases from other utilities, and repowering -- replacing the boiler with a new combustion unit. Capital Costs of Life Extension at 1-2. Another option now being considered is "life extension" or

⁹EPRI Journal is published by the Electric Power Research Institute ("EPRI"), the principal research organization of the electric utility industry.

refurbishment of existing plants. Id. at 2. Upon consideration of all the available alternatives, life extension may be the most cost-effective choice to meet future demand because "[u]nlike the celebrated 'one-hoss shay,' which kept on going until it completely fell apart, a power plant doesn't so much wear out as become uneconomical to use." EPRI Journal, July/August 1987, at 20.

Because "life extension" is a relatively new technical term, specific definitions of the term can vary. However, the three core elements are consistent and readily identifiable: (1) a planned program of capital investments; (2) to restore and/or maintain original generating capacity at acceptable levels of efficiency and availability; (3) for an extended period of time, usually 20 years or more, beyond original design life or currently planned retirement date. Capital Costs of Life Extension at 2; EPRI Journal, July/August 1987, at 20-21; J.A. Derdiger, et al. "Life Extension -- A Glorified Maintenance Program?", at 322-23 [J.A. 153-54]. Life extension programs focus on replacement or substantial refurbishment of major components not traditionally performed during a plant's initial design life, and thus are readily distinguishable from routine corrective or preventative maintenance of major equipment and periodic replacement of minor equipment. Id. at 324.

IV. WEPCO'S PORT WASHINGTON LIFE EXTENSION PROJECT

- A. WEPCO's Renovation Proposal to the Public Service Commission: Restore Design Capacity and Extend Plant Life.

WEPCO's Port Washington power plant near Milwaukee, Wisconsin, consists of five coal-fired steam generating units placed into service between 1935 and 1950. Each has a design capacity of 80 megawatts. U.S. Dep't of Energy, Inventory of Power Plants in the United States, DOE/EIA-0095(85), at 226 (1985) [J.A. 195]. However, the capacity and performance of the units has deteriorated in recent years due to age-related degradation of the physical plant.

In 1983, WEPCO initiated a Plant Availability Study to assess the physical condition of the Port Washington plant. "The study confirmed . . . that extensive renovation of the five units and the plant common facilities is needed if operation of the plant is to be continued." Letter from Thomas J. Cassidy, WEPCO, to Jacqueline K. Reynolds, Public Service Commission of Wisconsin ("PSC"), at 1 [J.A. 231 (attachment)].

Combustion Engineering ("C-E"), the fabricator of the facilities, inspected the boilers in 1984 and reported to WEPCO that severe cracking of the steam drums had occurred.¹⁰ C-E recommended shutting down unit 5 because of the potential for catastrophic failure (steam drum blow out), and recommended reducing the maximum operating pressures, i.e., capacities, for units 2-4 where the safety concerns were less severe. WEPCO complied with these recommendations.

¹⁰Steam drums are large pressure vessels for the separation and distribution of steam and water within the boiler. Babcock & Wilcox Co., Steam -- Its Generation and Use at 1-5 (1978). [J.A. 133-138].

In light of these events, WEPCO in 1987 applied to the PSC for authority to renovate the Port Washington plant. WEPCO noted that total plant capacity had declined by 40%, and that extensive renovation was necessary to continue operation. Accordingly, WEPCO sought approval to conduct a life extension program which would restore full design capacity and enable operation beyond the units' planned retirement dates of 1992 and 1999 until the year 2010. Letter from Thomas J. Cassidy, supra, at 1-3. The renovation was expected to improve plant availability, capability, heat rate, efficiency, and reliability. Id. at 3. WEPCO pointed out that it had considered various alternatives, but rejected them as less cost-effective than the proposed renovation project. Id.

WEPCO's proposal included a four-year schedule for the renovation of the major components at Port Washington, including boilers, turbine-generators, mechanical and electrical auxiliaries, and plant support facilities. Id. at 1. Among the listed projects was replacement of the steam drums on units 2-5 and replacement of the air heaters on units 1-4. See id., Exhibit A.¹¹

In its application, WEPCO pointed out that it had not included work items "falling into the category of repetitive maintenance" which do not require PSC approval. [Record at 6.1]. The total project cost was estimated at \$83.8 million, of

¹¹Air heaters preheat combustion air and improve boiler efficiency, thereby increasing boiler capacity and associated air pollution emissions. See Steam -- Its Generation and Use, supra, at 13-4 [J.A. 139].

which \$45.6 million was designated as capital expenditures. Id. at 2.¹²

B. EPA's NSPS and PSD Applicability Determinations.

1. The September 9, 1988 Memorandum from Don R. Clay.

Between March and September 1988, EPA staff members met with representatives of WEPCO on numerous occasions to gain additional information regarding the renovations at Port Washington. In a September 9, 1988 memorandum, EPA Acting Assistant Administrator Don R. Clay reached several detailed conclusions regarding NSPS and PSD applicability to WEPCO's life extension project (cited hereafter as the "Clay Memorandum") [J.A. 9]]. The Clay Memorandum applied the known facts to the applicability criteria in EPA's regulations and concluded that, as proposed, the project would be subject to both NSPS and PSD. However, EPA declined to make any final determinations because additional factual information was still necessary. Clay Memorandum at 1-2.

a. Physical Change.

EPA found that the life extension project would

¹²The Public Service Commission referred the WEPCO proposal to the Wisconsin Department of Natural Resources. That agency concluded (1) that the life extension project would not qualify as a reconstruction, so NSPS requirements would not apply; and (2) that the project was excluded from PSD coverage as a major modification due to the exclusions for routine maintenance, repair, and replacement, and for increases in production rate or operating hours. Pursuant to the PSD delegation agreement, the State sought the concurrence of EPA Region V regarding the question of PSD applicability. [J.A. 229]; [J.A. 236]. EPA Region V disagreed with Wisconsin's conclusions, but sought advice in turn from EPA headquarters. [J.A. 174].

constitute a "physical change" for PSD and NSPS purposes. Id. at 3, 10. EPA construed the regulatory definition to include all alterations to an existing plant other than those within the exclusion for routine maintenance, repair and replacement. Id. at 3. EPA then set out the specific criteria for a finding of routineness and made a factual finding that WEPCO's project was not routine. Clay Memorandum at 3-4.

The Agency first pointed out that the work would be major and extensive. Specifically, EPA found that replacement of the steam drums -- measuring 60 feet long, 50.5 inches in diameter, and 5.25 inches thick steel -- is necessary for continued safe operation at units 2-5, and that WEPCO also intended to replace air heaters at units 1-4, as well as renovate other major components and common plant support facilities. Id. at 4. EPA further noted that WEPCO's own characterization of the work to the PSC supported a finding that it is not routine. Id.

EPA next concluded that the "purpose of the project is to significantly enhance the present efficiency and capacity of the plant and substantially extend its useful economic life," pointing to WEPCO's own statements regarding the 40 percent decline in capacity, near-term retirement dates, need for renovation to continue operations, and prospective life extension to the year 2010. Id.

Third, EPA found that the work in question is rarely, if ever, performed, citing WEPCO's statement to the PSC that these items "would normally occur only once or twice during a

unit's expected life cycle." Id. at 5 (quoting Letter from Thomas J. Cassidy, supra, at 1). ¹³

b. Increase in Production Rate and Hours of Operation.

EPA found that the regulatory exemptions for increases in production rate and operating hours would not apply.

Regarding NSPS, EPA pointed out that WEPCO's renovation investments apparently would be large enough to qualify as capital expenditures, and thus outside of the regulatory exclusion. Id. at 9.

Regarding PSD, EPA determined that the exemption does not apply to production or operational increases associated with non-excluded physical or operational changes. Id. at 7. EPA cited the preamble to the PSD regulations for the proposition that the exemptions are intended to apply where a source simply combusts a larger amount of fuel in response to market conditions. Id. at 8 (citing 45 Fed. Reg. 52,704). Conversely, EPA explained, the increases planned by WEPCO were the type Congress intended to be subject to review, because they "are inextricably intertwined with the physical changes planned under the life extension project." Clay Memorandum at 8.

c. Increase in Emission Rate under NSPS.

EPA explained that pursuant to longstanding Agency

¹³WEPCO had been unable to identify any steam drum replacements at any of its other facilities, and EPA concluded that the examples of other "header" pressure component replacements submitted by WEPCO were not comparable in size, function, or importance to the drums at Port Washington. Clay Memorandum at 5-6.

policy, the emission rate before and after a physical or operational change is evaluated at each unit by comparing the hourly potential emissions under current maximum capacity to emissions at maximum capacity after the change. The Agency added that facility's original maximum design capacity, to the extent it differs from current actual capacity, is irrelevant to this calculation. Id. at 9-10. EPA also pointed out that the regulations allowed only the addition of pollution control equipment, and not the use of less-polluting fuels, to offset increases in emissions rates that would otherwise result from the change. Id. at 9. EPA concluded that WEPCO's renovations would cause emissions rate increases, but withheld a final determination because it was unclear whether WEPCO intended to add or enhance pollution controls at Port Washington in order to lawfully avoid NSPS. Id. at 11.

d. Significant Net Emissions Increase Under PSD.

EPA explained that under the PSD baseline regulations, whether the physical changes proposed under WEPCO's life extension project would result in a significant net emissions increase depended on a comparison in actual emissions before and after the change. Because the source had not yet begun operations following the renovations, actual emissions following the renovations were deemed to be WEPCO's "potential to emit." Id. at 7 (citing 40 C.F.R. § 52.21(b)(21)(iv)).

EPA then noted there apparently would be a significant net increase for PSD purposes because potential emissions after

restoring the Port Washington units to their original design capacity would greatly exceed representative actual emissions before the change. Clay Memorandum at 7. EPA declined, however, to make a final determination because WEPCO had not submitted adequate emissions data, and because it was unclear whether WEPCO would seek to "net out" of PSD review by agreeing to limit potential emissions to a level not significantly greater than representative actual emissions prior to the life extension project. Id. at 7-8.

2. The October 14, 1988 Letter from Lee M. Thomas.

Following issuance of the Clay Memorandum, EPA Administrator Lee M. Thomas met with senior WEPCO officials, and agreed to reconsider certain points in that memorandum. EPA also reviewed additional emissions data supplied by WEPCO. On October 14, 1988, Mr. Thomas issued final applicability determinations: if constructed as proposed, WEPCO's life extension project would be subject to NSPS and PSD requirements. Letter from Lee M. Thomas, EPA, to John Boston, WEPCO, at 1-2 (October 14, 1988), ("Thomas Letter") [J.A. 1]). Finding no basis for departing from the reasoning of the Clay Memorandum, the Administrator adopted EPA's prior conclusions by reference. Id.

The Administrator specifically reconsidered and reaffirmed Mr. Clay's findings that the proposed work is not routine. Id. at 3. Mr. Thomas also addressed a related "equity" question regarding EPA's treatment of other utility renovation

projects that had been raised in his meeting with WEPCO, but found no inconsistency with EPA's prior determinations. Id.¹⁴

The Thomas Letter enclosed figures on emissions increases over baseline. These calculations reflected EPA's conclusion that a baseline of annual emissions in 1983-1984 -- prior to discovery of the steam drum cracks -- was more representative of normal source operations for PSD purposes than the most recent two-year period. Id. at 5 and Enclosure A. EPA calculated NSPS emissions increases using WEPCO's actual operating data, finding that other submissions by WEPCO were inadequate to show that higher capacities could be achieved on an economically sustainable basis. Id. at 5 and Enclosure B. EPA left open the possibility, however, that WEPCO could demonstrate higher current maximum capacities for the five units. Id. at 5.

In conclusion, Mr. Thomas echoed the earlier statement by Mr. Clay that in adopting the NSPS and PSD programs, Congress intended to address the type of long-term capital investments in pollution-emitting facilities at issue in the Port Washington life extension project. Id. at 5; see also Clay Memorandum at 12.

3. The February 15, 1989 Supplemental Determination from Don R. Clay.

EPA continued to meet with WEPCO following issuance of

¹⁴In particular, the Administrator considered and rejected information regarding four steam drum replacements submitted by WEPCO, concluding they were too dissimilar to affect the Port Washington decisions. Id. at 3-4. The Administrator also reported that EPA had conducted an informal survey and found no instances of steam drum replacement at aged power plants, and no instances where the Agency had reviewed a major life extension project of any kind. Id. at 4.

the Thomas letter, and WEPCO conducted capacity tests and submitted other additional factual material regarding the Port Washington project. On February 15, 1989, Mr. Clay issued a revised final determination addressing the new information and other matters raised by WEPCO. That determination generally reaffirmed again EPA's earlier findings and conclusions. Letter from Don R. Clay, EPA, to John Boston, WEPCO (February 15, 1989) (hereafter cited as "Supplemental Determination") [J.A. 21].

EPA first addressed new information from WEPCO regarding capital expenditure calculations for NSPS purposes. However, EPA again concluded that WEPCO's prospective production rate increases would involve a capital expenditure. Id. at 1-5.

Next, EPA reiterated that air heater replacement on unit 1 should be viewed as part of the entire life extension project, and as such would be subject to NSPS and PSD. EPA pointed to WEPCO's own statement that the plate-type air heaters such as those at Port Washington units 1-4 do not lend themselves to replacement of individual elements, but must be replaced in whole, whereas the Ljungstrom basket-type elements at unit 5 and at WEPCO's other plants may be readily replaced. Supplemental Determination at 6 (citing Letter from John Boston, WEPCO, to Gary McCutchen, EPA (April 22, 1988) [J.A. 254, 288], Attachment entitled "List of Port Washington Projects" at 6)).

EPA also addressed capacity testing performed by WEPCO in hope of demonstrating that the actual capacities of the Port

Washington units were higher than those reflected in the operating data that formed the basis for the Thomas Letter. Based on the new data, EPA concluded that units 2 and 3 could be operated at their original design capacities on a sustainable basis. Consequently, EPA superseded in part its earlier determination and found that NSPS would not apply to those units following the life extension project. Supplemental Determination at 8.

Regarding units 1 and 4, WEPCO was able to operate those units at only 72% and 89% of their respective original design capacities. EPA found the tests adequate to confirm EPA's original determination that the life extension program would increase current capacity at units 1 and 4 and thereby trigger NSPS coverage. Id. However, EPA rejected the test data for purposes of establishing the specific NSPS baselines for units 1 - 4, because the tested capacities had been accompanied by several exceedances of applicable opacity and mass emission limits under the Wisconsin SIP. Id. at 8-9. Regarding unit 5, EPA found that by declining to conduct capacity tests, WEPCO had conceded that the unit is inoperable; hence, EPA reaffirmed that its NSPS baseline is zero. Id. at 9.

With respect to PSD, EPA determined that WEPCO's capacity tests were irrelevant in determining emissions increases. EPA explained that the testing could only determine current maximum hourly capacity and associated hourly emissions rates. In contrast, "actual emissions" for PSD purposes are total annual emissions, i.e., tons per year. Id. See also supra pp. 11-15

(discussing differences in emissions calculations for NSPS and PSD purposes). WEPCO's test results were also irrelevant for PSD purposes, EPA explained, because PSD baseline emissions are determined by representative, not current, actual emissions. Id. at 10.

Finally, EPA reiterated that WEPCO could not obtain offsetting emissions reductions for NSPS purposes by burning lower-sulfur coal after the renovation project. Id.

4. History of This Litigation

On November 28, 1988 WEPCO filed a petition for review of Lee M. Thomas', October 14, 1988 final applicability determination (No. 88-3264). On February 22, 1989, WEPCO filed a petition for review of a revised final determination issued by EPA on February 15, 1989 (No. 89-1339). Upon joint motion by the parties, the Court consolidated the cases by Order entered herein on April 4, 1989.

SUMMARY OF ARGUMENT

This case concerns EPA's determinations that the massive "life extension" project at WEPCO's Port Washington plant constitutes a "modification" under the NSPS and PSD provisions of the Clean Air Act. EPA's determinations are based on detailed factual findings and legal interpretations that are reasonable. In every respect, EPA's conclusions are squarely in keeping with the Act and the Agency's own regulations. Accordingly, EPA must be upheld.

In making applicability determinations under the NSPS and PSD provisions of the Clean Air Act, EPA is not required

either to anticipate all new developments in industrial planning or to revise its regulations to address such changes. Thus, although utility life extension programs are a new form of plant renewal, EPA reasonably found that the renovation work planned for Port Washington falls within the broad statutory and regulatory definition of "modification." That term encompasses any physical or operational change which increases emissions. Specifically, it does not exempt "like kind replacements" of major components. Nor does the Act relegate consideration of utility life extension programs to the NSPS "reconstruction" regulation, which addresses only substantial replacement of an existing facility without regard to emissions increases.. EPA's determinations are in keeping with the basic congressional intent in adopting the NSPS and PSD programs to focus pollution control efforts at an efficient and logical point: the making of substantial capital investments in new or modified pollution-generating facilities.

EPA reasonably found that WEPCO's unprecedented replacement of numerous major components at aged and deteriorated facilities for the purpose of restoring lost generating capacity and extending useful plant life by as much as 20 years is not "routine" within the meaning of the NSPS and PSD regulatory exclusion for routine maintenance, repair, and replacement. A contrary finding would have effectively defined all maintenance, repair, and replacement as routine, thereby allowing a narrow exemption to swallow the general rule.

The regulatory exclusions for emissions increases from increased production rates or hours of operations was meant to reach only those increases in response to fluctuations in the business cycle, not increases requiring capital expenditures and physical changes. Absent the extensive renovations at Port Washington, WEPCO's emissions increases would not have been physically possible, and would have had no sustainable economic basis. Thus, EPA reasonably interpreted its NSPS and PSD regulations as not excluding those increases.

EPA regulations require that emissions increases for NSPS purposes be determined on the basis of current actual capacity, and without regard to fuel switches. Thus, EPA acted reasonably in denying WEPCO's claim that the Agency should have looked only at increases over original design capacity.

Regarding emissions increases for PSD purposes, EPA's regulations require a comparison between representative actual emissions prior to the life extension project and potential emissions after the renovations. Neither the regulations nor the basic purposes of the PSD program allow EPA to rely on WEPCO's own projections of future actual emissions in the absence of federally enforceable restrictions holding WEPCO to its projected level of actual emissions.

At bottom, WEPCO's challenge is not to EPA's applicability determinations, but to the underlying NSPS and PSD regulations. However, those regulations could only be challenged in the D.C. Circuit within 60 days of their promulgation and are not

reviewable in this Court. If WEPCO or amici are aggrieved by EPA's reasonable interpretation of its own regulations, their remedy is to petition EPA to alter those rules.

STANDARD OF REVIEW

The standard of review of EPA determinations of NSPS and PSD applicability is specified in the Administrative Procedure Act, 5 U.S.C. § 706(2)(A), which provides that agency action may be set aside only if it is found to be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." This standard is a deferential one that presumes the validity of agency action. Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 415-16 (1971); New York v. EPA, 716 F.2d 440, 444 (7th Cir. 1983).

The Supreme Court has established a two-step procedure for judicial review of statutory construction by an administrative agency. "First, always, is the question whether Congress has directly spoken to the precise question at issue. If the intent of Congress is clear, that is the end of the matter" Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837, 842 (1984). If, however, "the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency's answer is based on a permissible construction of the statute." Id. at 843. "[A] court may not substitute its own construction of a statutory provision for a reasonable interpretation made by the administrator of an agency." Id. at 844.

Moreover, an agency's interpretation of its own regulations is entitled to special deference. "When the construction of an administrative regulation rather than a statute is in issue, deference is even more clearly in order," and must be upheld "'unless it is plainly erroneous or inconsistent with the regulation.'" Udall v. Tallman, 380 U.S. 1, 16-17 (1965) (citation omitted). Therefore, this Court should afford great deference to EPA's application of its own regulations, and uphold EPA's determinations unless they are plainly erroneous.

ARGUMENT

I. EPA PROPERLY CONCLUDED THAT THE RENOVATION WORK AT PORT WASHINGTON CONSTITUTES A MODIFICATION UNDER EPA'S EXISTING REGULATIONS

WEPCO's proposed renovations at Port Washington are squarely within the ambit of the NSPS and PSD "modification" regulations, which derive directly from the statutory definition of modification found in section 111(a)(4). The effect of including modified sources as well as newly-constructed sources under the new source requirements is to establish the current level of emissions as a baseline above which an existing source may not pollute without becoming subject to those requirements. As the D.C. Circuit has explained:

[T]he operator of an existing facility can make any alterations he wishes in facility without becoming subject to the NSPS as long as the level of emissions from facility does not increase. Thus, the level of emissions before alterations take place . . . effectively defines the standard that an altered facility must meet.

ASARCO, Inc. v. EPA, 578 F.2d 319, 328-29 (D.C. Cir. 1978)

(emphasis in original; footnote omitted) (challenge to amendments

to the general NSPS provisions including 40 C.F.R. §§ 60.14, 60.15 (1976)); see also Alabama Power, 636 F.2d at 401 (PSD applies only to those industrial changes which might increase pollution). Thus, the regulations define a modification as any physical or operational change, not specifically exempted, which increases emissions over baseline levels. The regulations do not exempt "life extension projects." Hence, such projects must be treated in the same manner as any other type of prospective physical or operational change. That is precisely what EPA did in this case.

A. EPA Properly Applied Its Existing Modification Regulations to the Facts of This Case.

In addressing WEPCO's life extension project, EPA conducted extensive fact finding, weighed the relevant factors, and issued comprehensive applicability determinations. The record reflects the lengthy, sophisticated, and high-level consideration given this matter, which far exceeded the norm for NSPS or PSD applicability determinations. EPA found that the extensive renovation work constituted physical or operational changes which are not within any exempted category. The Agency also explained that, far from being "routine," the changes at Port Washington are apparently unprecedented. EPA likewise found that the exclusion for increases in production rates and hours of operations would not apply, because those increases would not occur absent the renovation work. The Agency then determined that the renovations would result in an increase over baseline emissions for NSPS and PSD purposes, and hence would be subject

to new source requirements. In so doing, EPA rejected WEPCO's proffered methods for determining emissions increases as being contrary to law. See supra pp. 22-30.

Despite the plain language of the modification regulations, WEPCO argues EPA was wrong in even considering whether the Port Washington renovations constituted a modification under the facts presented in this case. In WEPCO's view, EPA must first conduct new rulemaking specifically addressing life extensions before asserting that NSPS or PSD apply to the Port Washington renovations. There is no basis in law for WEPCO's assertions.

EPA was under no obligation to conduct separate rulemaking, or accord other special treatment to physical or operational changes growing out of life extension programs in the electric utility industry, before applying its existing rules. EPA regulations and long-established Agency practice provide for case-by-case adjudicatory determinations of whether new source requirements apply to prospective alterations at existing facilities. E.g., 40 C.F.R. § 60.5; see also supra pp. 16-17 (discussion of EPA practice of issuing NSPS and PSD applicability determinations). Such determinations are properly reviewable in the court of appeals. Harrison v. PPG Industries, Inc., supra.

Moreover, as a practical matter, it is essential that EPA be able to respond to new factual circumstances as they arise. The Agency cannot anticipate every form that industrial development may take in promulgating rules "of general . . .

applicability and future effect," 5 U.S.C. § 551(4), nor does the law require EPA to do so. See International Brotherhood of Teamsters v. Daniel, 439 U.S. 551, 566 n.20 (1979) (courts' deference to agency interpretations includes willingness to accord flexibility to agency as it "encounters new and unforeseen problems over time"). So long as the current regulations may be reasonably interpreted as encompassing the proposed renovations at Port Washington, EPA's applicability determinations must be upheld. E.g., Udall v. Tallman, 380 U.S. 1, 16-17 (1965); Wisconsin Electric Power Co. v. OSHRC, 567 F.2d 735, 738 (7th Cir. 1977).

It is clear that regulatory agencies have authority to proceed by adjudication rather than rulemaking in appropriate circumstances. E.g., NLRB v. Wyman-Gordon Co., 394 U.S. 759 (1969).¹⁵ Absent an explicit statutory constraint, EPA has broad discretion to employ those procedures and methods it feels are best suited to discharging its numerous and varied duties. See, e.g., Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 543 (1978).

Nevertheless, WEPCO argues that EPA has impermissibly

¹⁵ An agency may need to act interstitially to address problems which an agency could not reasonably foresee or with which it lacks sufficient experience to warrant a new rule. SEC v. Chenery Corp., 332 U.S. 194, 202-03 (1947). Thus, even if EPA were announcing a new interpretation here, which it is not, it has authority to interpret its regulations as an incident of its adjudicatory function to decide the case before it. Clark-Cowlitz Joint Operating Agency v. FERC, 826 F.2d 1074, 1081 (D.C. Cir. 1987), cert. denied, 108 S. Ct. 1088 (1988) (citing, e.g., NLRB v. Wyman-Gordon Co., 394 U.S. at 765-66).

applied its rules retroactively, by effectively creating new regulatory requirements through adjudication and without explanation or opportunity to comment. Br. at 21-23. This is not so. As will be shown, EPA merely applied existing regulations to the facts of this case. WEPCO has failed to demonstrate that EPA departed from either the letter or intent of those regulations in issuing its applicability determinations. The fact that the subject of those determinations was a life extension project, a type of modification activity not previously encountered by EPA, is of no consequence.

B. WEPCO's Life Extension Project Involving "Like-Kind Replacement" Is Within the Definition of "Modification" Under EPA Regulations.

Neither the statutory definition in section 111(a)(4) nor EPA's regulations contain any restrictions on the type of physical or operational changes that may be deemed modifications. Nor can such a restriction fairly be read into the legislative or administrative history of the NSPS or PSD programs. WEPCO insists, however, that the life extension project at Port Washington is beyond the reach of the Clean Air Act's modification requirements. The company is mistaken.

WEPCO argues on one hand that "the term 'life extension' describes only what utilities and other industrial facilities have done for decades," because every time a plant component -- even a single leaky pipe -- is replaced in accordance with original plant design, the facility's life is extended. Br. at 28. On the other hand, WEPCO claims that when EPA adopted its

NSPS and PSD modification regulations the Agency did not specifically anticipate that utilities would seek to renew their facilities through life extension programs, and thus EPA must now conduct new rulemaking rather than apply its existing rules. Br. at 29. Both WEPCO's truism and its pinched reading of EPA's modification regulations are inaccurate.

EPA has nowhere asserted that NSPS or PSD applies to repair of a leaky pipe, which technically extends the life of a facility. As discussed infra, such routine repairs and replacements are beyond the reach of the CAA's modification provisions. WEPCO's straw man is not at issue here; the Port Washington project involves much more than leaky pipes.

It is true that EPA -- and industry -- did not foresee the type of life extension project at issue here at the time the NSPS and PSD modification regulations were adopted. See supra pp. 19-20. But, as noted previously, those regulations by their very terms encompass the specific renovations proposed at Port Washington. Moreover, as the prospect of life extension programs has loomed larger in recent years, the electric utility industry has acknowledged that there may be regulatory consequences. In particular, industry also understands that those consequences may include the need to comply with NSPS and PSD requirements. WEPCO's professed surprise at the prospect of coverage in this case is, in fact, no shock at all, but rather a natural consequence of industry's own well-considered choice.

In deciding what route to pursue in planning to meet

future electrical demand, utilities must assess the costs and benefits, including risks and uncertainties, associated with life extension versus those entailed by other available alternatives. Capital Costs of Life Extension at 5 [J.A. 189]; EPRI Journal, July/August 1987, at 24-26. [J.A. 170-172]. The utility industry understands that among the cost factors that must be considered is the possibility that a given life extension project may be subject to the NSPS and PSD provisions of the Clean Air Act, and may be required to install scrubbers or other pollution control technology as a result.¹⁶

WEPCO insists that the only provision addressing renewal or perpetuation of existing facilities through "like-kind replacement" of deteriorated components is the NSPS "reconstruction" regulation. Since that regulation does not apply here,

¹⁶In their respective guidelines for assessing life extension costs, both the Department of Energy and the industry's principal research group expressly state that a decision to proceed with a particular life extension project may subject the plant to new source requirements. See Capital Costs of Life Extension at 6 (NSPS apply to units when refurbishment makes them "modified"); EPRI Journal, July/August 1987, at 26-27 ("an extended-life plant could also be subject to NSPS if the emission rate of any pollutant covered by these standards increased by refurbishment"). The Department stated its belief that it is not clear what kind of refurbishment activities will make a plant subject to NSPS, Capital Costs of Life Extension at 6, while EPRI pointed out that coverage is "a risk that depends on regulatory interpretation," EPRI Journal, July/August 1987, at 27. EPRI also pointed out that "[w]hether life extension would remain economically attractive if refurbished plants had to comply with NSPS would depend on the specific cases." The research group further stated in this regard that even if compliance were required, it may still be more cost-effective than a new unit. Id. In part this is because new clean coal technologies may be able to satisfy new source requirements without resort to scrubbers. Id.

WEPCO argues, there are no Clean Air Act implications to WEPCO's life extension project. Br. at 29, 35. This argument is without merit. Just because there is no "reconstruction" of WEPCO's facilities, it does not follow that a modification will not occur. In fact, the record is clear that EPA's modification regulations encompass any physical or operational changes, including the like-kind replacements involved in the Port Washington renovations.¹⁷

In brief, the reconstruction rule deems that an existing facility becomes an affected facility subject to NSPS where capital costs of new components exceed 50% of the cost of a new facility despite the absence of an emissions increase. See 40 C.F.R. § 60.15. In sharp contrast, a "modification" to an existing facility is triggered by much smaller projects -- those involving any physical or operational change -- but only if there is an emissions increase. Nowhere did EPA suggest that the reconstruction provision was a substitute for or narrowing of the broad-ranging modification requirements. Rather, in proposing to add the reconstruction provision, EPA's intent was to also require the application of new source standards to a de facto re-creation of an existing facility where a modification would not occur because there is no emissions increase. See 39 Fed. Reg.

¹⁷EPA decided not to include a reconstruction provision in its 1980 PSD rules largely because, in light of the general PSD objective of protecting air quality, there was not a significant need for such a requirement. EPA instead relied on the modification regulation addressing improvements at existing facilities which would cause a significant net emissions increase. See 45 Fed. Reg. 52,703, col. 2.

36,948 (proposed rule).

In the preamble to the final modification and reconstruction regulations, EPA explicitly distinguished the two provisions. Reconstruction applies only where work at an existing facility is "substantially equivalent to totally replacing it at the end of its useful life." 40 Fed. Reg. 58,417, col. 3. The Agency left no doubt that the modification rule would apply where, as here, "like-kind replacements" did not substantially alter the character of the facility, but did result in emissions increases.¹⁸

For existing facilities which substantially retain their character as existing facilities, application of best adequately demonstrated control technology is appropriate when any physical or operational change is made which causes an increase in emissions to the atmosphere (this is modification). Thus, the criteria for "reconstruction" are independent from the criteria for modification.

40 Fed. Reg. 58,417.¹⁹

Despite the clear intent of EPA's General Provisions to subject all modifications to NSPS, WEPCO cites a background file

¹⁸It is clear from the technical literature that the utility industry is well aware that life extensions in particular may be subject to either the modification provisions of NSPS or the reconstruction provisions, depending on the facts of a given case. Capital Costs of Life Extension at 6; EPRI Journal, July/August 1987, at 26.

¹⁹WEPCO points out that EPA regulations place qualifications on application of NSPS to reconstructions despite their large scope, implying that applicability criteria for modifications of lesser scope should be less rigorous. Br. at 8 (citing 40 C.F.R. § 60.15(b)(1)). But this ignores the obvious and important fact that by definition, modifications involve emissions increases while reconstructions may not. Thus, EPA has a much greater interest in requiring advanced pollution controls on modifications despite their lesser scope.

document in the rulemaking for electric utility boilers for the proposition that "like-kind replacements" would not be considered "modifications." Br. at 29 (citing "Electric Utility Steam Generating Units: Background Information for Proposed Particulate Matter Emission Standards" at 5-4 [J.A. 201]). Read in context, however, it is evident that EPA merely asserted there, as it has here, that replacements do not trigger a modification if they do not increase emissions.²⁰

II. EPA'S FACTUAL FINDING THAT WEPCO'S \$80 MILLION LIFE EXTENSION PROJECT IS NOT ROUTINE IS CONSISTENT WITH THE CLEAN AIR ACT, EPA REGULATIONS, AND PRIOR DECISIONS

A. The Renovation Work Is Costly and Extensive, and Apparently Has Never Been Done by Any Other Utility.

In finding that the renovations at Port Washington would constitute a physical or operational change under NSPS and PSD, EPA first considered and rejected WEPCO's claim that such

²⁰Thus, the simple replacement of coal pulverizers or component parts would not, standing alone, trigger NSPS because it would not increase emissions. Conversely, replacement with a redesigned system may be a modification because it might change the characteristics of the pulverized coal, and hence, increase the particulate matter emissions. Id. at 5-4 to 5-5. Here, while WEPCO may be replacing steam drums, air heaters, and other components at units 1, 4 and 5 with new equipment of the same type, the crucial fact is that the existing components are deteriorated. Thus, there is no true "like-kind replacement" at those units. Instead, the new components will enable higher capacities and emissions, and hence, constitute modifications. Conversely, at units 2 and 3, where there is a "like-kind replacement" that does not result in an emissions increase, NSPS is not triggered. Moreover, as a general matter, it is not reasonable to conclude that an isolated statement in a background document could ever reflect an intent to exempt an entire category of modifications from the NSPS. When EPA sought to exempt classes of modifications from the electric utility standards, it did so explicitly. See 40 C.F.R. § 60.40a(c) and (d) (exemptions for certain fuel conversions).

work is within the regulatory exclusions for "routine maintenance, repair and replacement." EPA evinced no intent to depart from the common-sense meaning of "routine" when it adopted these exclusions. The Agency has applied the term in a straightforward and reasonable manner here, consistent with the general rule that, as exemptions from the statutory definition encompassing any physical or operational change, the exclusions for "routine" work must be narrowly construed.

EPA conducted an extensive factual inquiry into the circumstances of the Port Washington renovations. The Agency obtained a large quantity of information from WEPCO regarding the company's plans and how they compared to WEPCO and industry practice. Clay Memorandum at 5-6. EPA also reviewed its own files in search of analogous situations. Thomas letter at 3-4. At one point WEPCO asserted that the proposed work would normally occur only once or twice during a unit's expected life. Letter from Thomas J. Cassidy, supra, at 1. But WEPCO did not identify, and EPA did not find, even a single instance of renovation work at any electric utility generating station that approached the Port Washington life extension project in nature, scope or extent. In particular, as far as could be determined, replacement of steam drums and plate-type air heaters at an aged power plant had never before been undertaken at any utility in the United States. Thomas Letter at 3-4; Clay Memorandum at 3-4. EPA summarized the approach and outcome of its factual inquiry as follows:

In determining whether proposed work at an existing facility is "routine," EPA makes a case-by-case determination by weighing the nature, extent, purpose, frequency, and cost of the work, as well as other relevant factors, to arrive at a common-sense finding. In this case, all of these factors suggest that the work required under WEPCO's life extension project appears not to be "routine." The available information indicates that the work proposed at Port Washington is far from being a regular, customary, or standard undertaking for the purpose of maintaining the plant in its present condition.

Clay Memorandum at 3-4.

Despite this exhaustively considered and well-reasoned finding, WEPCO continues to insist that its life extension project is routine. The company asserts that an activity is "routine" for NSPS and PSD purposes if it is "customary" or a "regular" procedure. Br. at 42. WEPCO follows this premise with another: like-kind replacement of deteriorated equipment is customary and regular industry practice. Id. These premises lead WEPCO to the general conclusion that all replacements, including those at issue here, are customary and regular, and therefore routine. Id. Assuming, arguendo, that WEPCO's premises are true, its conclusion does not follow in logic or in fact.

While some replacement of deteriorated equipment may be customary and regular, and therefore routine, it does not follow that all replacements are either customary, regular, or routine. Based on an extensive record, EPA concluded that no steam drums or plate-type air heaters had ever been replaced at a U.S. utility. Significantly, WEPCO does not dispute this finding. Moreover, WEPCO itself, in applying for state approval of its life

extension project, specified that work items "falling into the category of repetitive maintenance that are normally performed during scheduled equipment outages . . . are not included in this application." Letter from Thomas J. Cassidy, supra, at 1 [J.A. 231]. EPA's finding that the work WEPCO did plan to undertake is neither regular, customary, nor "routine" is reasonable.

WEPCO claims that EPA's treatment of air heater replacement is arbitrary and capricious. Br. at 45-48. This accusation is groundless. The company would have EPA consider the cost of those replacements separately from the life extension project as a whole. Br. at 46. But as EPA explained, there is no basis for according separate treatment to one portion of this integrated project. Such piecemeal review would be contrary to reason and the intent of the Act's new source provisions. Supplemental Determination at 7-8. Rather, as explained above, EPA reasonably employs a totality of the circumstances test that considers all the relevant factors. See Clay Memorandum at 3.

As to air heaters, among the relevant factors is that the plate-type heaters on units 1-4 apparently have never been replaced at any other facility. In determining industry practice, it is not enough, as WEPCO asserts (Br. at 47) that all kinds of air heaters perform the same general function. WEPCO makes this specific point to illustrate its general position that like-kind replacement that does not alter plant design or emissions characteristics is per se routine. However, as EPA has shown, supra at 38-43, there is no regulatory exclusion for like-

kind replacements in general. It may be the case that a particular like-kind replacement is routine. Thus, in the context of WEPCO's life extension program, EPA has ruled that replacement of steam drums at an aged and deteriorated plant is not routine. However, replacement of a steam drum that failed during initial testing at a new facility probably would be viewed as routine if the alternative was to abandon that facility and the unamortized capital investment in new equipment. Clay Memorandum at 6 n.2.²¹

WEPCO cites several Agency memoranda as support for its position that restoring a plant to its original capacity does not trigger NSPS. Br. at 36-37 & n.101. WEPCO either selectively misreads the memoranda or the memoranda simply do not provide enough factual basis to support WEPCO's assertions that the Agency acted arbitrarily. For example, WEPCO cites a memorandum from Michael James to Jack Farmer concluding that the NSPS modification provision would not be triggered by a source reopening

²¹WEPCO cites EPA's statements that replacement of regenerator cyclones at a refinery after eight years, and replacement of coal pulverizers at an electric utility, are not modifications as contrary to the Agency's position in this case. Br. at 43 (citing Letter from Kenneth Eng, EPA Region II, to Dale Choate, Mobil Oil (September 7, 1988) [J.A. 132]), 45 (citing NSPS Background Document at 5-4 [J.A. 201]). Whether a particular project is routine requires a case-by-case weighing of all the relevant factors, Clay Memorandum at 3, and the record does not reflect what facts EPA relied on in concluding that replacement of cyclones in one case was routine. The record does show, however, that EPA never stated that replacement of coal pulverizers is routine. Rather, EPA was focusing on the lack of an emissions increase from such replacements. See supra p. 43 n.20. In any event, there is nothing in the record to support WEPCO's assertion that coal pulverizers are rarely replaced. Thus, it is just as reasonable to assume that it is customary for these individual items to wear out and be replaced.

after being closed for a period of time [J.A. 90]. That memorandum clearly states, however, that the modification provision would not be triggered because "neither the source's physical structure nor its method of operation is changed from its condition under previous operation." Thus, the facts in that case are entirely different from the present controversy, where significant physical changes would be made to the facility. EPA has always taken the position that reactivation of a source without other physical or operational changes does not trigger NSPS modification; where physical or operational changes do occur the Agency makes a fact specific determination of whether those changes are routine. See, e.g., Memorandum from E. Reich to W. Sawyer (1980) [J.A. 106]. In examining reactivations under PSD, EPA likewise inquires as to whether physical or operational changes are necessary to restart the facility. E.g., Supplemental PSD Applicability Determination, Cyprus Casa Grande Corp. (Nov. 6, 1987) [J.A. 121] (reactivation of source is subject to PSD due to extensive physical and operational changes necessary for restart). See also infra p. 55.

B. The Purpose of the Project Is to Restore Lost Capacity and Extend the Useful Life of the Port Washington Plant.

EPA found that the life extension project would not merely maintain the units in their present deteriorated state, but restore them to their original design capacity and substantially extend their useful physical and economic life. Thomas Letter at 3; Clay Memorandum at 4. WEPCO itself had conceded that total plant capability had declined by 40%, and that

extensive renovation was necessary to continue operations.

Letter from Thomas J. Cassidy, supra, at 1.

WEPCO later conducted capacity tests on units 1-4 which demonstrated that units 2 and 3 could be operated at maximum continuous operating capacity, i.e., operating design capacity. EPA accepted those test results and revised its determination by providing that NSPS would not apply to those units. Supplemental Determination at 8. However, those same test results showed that, at best, units 1 and 4 could only be operated at levels substantially below design capacity.²² Regarding unit 5, WEPCO declined to test or request to schedule a test, or otherwise resume operations at that unit, leaving EPA no reason to alter its conclusion that unit 5 could not be operated at all without, at a minimum, the (unprecedented) replacement of the steam drum as called for by WEPCO's consultant. Supplemental Determination at 9.

Despite these facts, WEPCO persists in characterizing its life extension project as enabling the plant to "operate normally." Br. at 42. In 1989, however, normal operations are well below design capacity, reflecting the hard fact of severe age-related deterioration of the plant. Annual plantwide

²²For Unit 1 and 4, the tests demonstrated current operating capacities 28% and 11%, respectively, below operating design capacity (i.e., projected post-renovation capacity). These tests, however, were not accepted by EPA because of violations of opacity limits. [J.A. 218,221]. Therefore, EPA found baseline capacity to be the actual demonstrated levels during the prior operating year, Supplemental Determination at 8, which were 31% and 30%, respectively, below operating design capacity, [J.A. 369, 371].

capacity utilization factors for the last several years had decreased from about 40% capacity in 1979 to less than 10% in 1987. After renovation, WEPCO's projections through 2000 were that annual capacity factors would steadily increase; [J.A. 316]. The true purpose of the project, as WEPCO advised the Public Service Commission, is to restore lost capacity and extend plant life. Letter from Thomas J. Cassidy, supra, at 1-2.

EPA's finding that WEPCO's life extension project is not "routine" is eminently reasonable.

C. WEPCO Would Have the "Routine" Exclusion Swallow the Rule.

WEPCO's interpretation of the "routine" exclusion in 40 C.F.R. §§ 60.14(e)(1) and 52.21(b)(2)(iii)(a) would have the exceptions swallow the rules. WEPCO ignores that the basic starting point is the definition of "modification" found in section 111(a)(4) of the Clean Air Act. That provision states that any physical change or change in the method of operation of a source which increases emissions can subject a source to the NSPS and PSD modification provisions. The regulatory exclusions found in 40 C.F.R. §§ 60.14(e) and 52.21(b)(2)(iii)(a) are exemptions to this general requirement. That WEPCO disagrees with the breadth of the exclusion does not render the Agency's determination invalid. EPA's construction of its own regulations is entitled to great deference. Udall v. Tallman, 380 U.S. at 16-17. Moreover, as construed by WEPCO, the routine exception would render large portions of the modification definition

meaningless. WEPCO asserts that any physical change which is a replacement of an existing component is by definition routine. It further contends that the Agency cannot consider the purpose, extent, cost or frequency of the renovation work; its impact on the useful life of the facility; or similar, obviously relevant factors. Br. at 42.

Perhaps the best way to highlight the absurdity of WEPCO's argument is to consider the analogy of a car. EPA's regulatory exception for routine maintenance, repair and replacement was meant to cover such things as an oil change, replacing a broken headlamp or worn-out tires, changing the sparkplugs, or other similar activities. Granted, each of these elements is essential to the operation of the vehicle and each by being repaired or replaced technically "extends" the life of the car. In most instances, however, it is not routine to replace major components such as the engine or the transmission, and it is certainly not routine to do so on an aged, deteriorated car. WEPCO's proposed renovations are analogous to the latter type of activity, but not the former. WEPCO's interpretation of the modification rule would eliminate the distinction between routine and nonroutine physical changes, with the former engulfing the latter. This would undermine an important purpose of the modification provision, and violate the precept that exemptions be narrowly construed. See Israeli-British Bank (London) Ltd. v. FDIC, 536 F.2d 509, 513 (2d Cir.), cert. denied, 429 U.S. 978 (1976).

III. EPA'S FACTUAL FINDINGS THAT WEPCO EXCEEDED NSPS AND PSD BASELINE EMISSIONS ARE REASONABLE AND IN ACCORDANCE WITH APPLICABLE REGULATIONS

- A. Where Emissions Increases Due to Increased Production Rate or Hours of Operation Are Attributable to Physical or Operational Changes, They Trigger NSPS and PSD Coverage.

WEPCO asserts that PSD does not apply to the Port Washington renovations because any emissions increases will be attributable to increases in rates of production or hours of operation which are excluded from the definition of "major modification." Br. at 61-64. This claim misreads the scope of the regulatory exclusion. EPA's interpretation of this exemption as limited to stand-alone increases in production or operations is in keeping with the purpose and intent of the exemption, and should be upheld.

In adopting NSPS and PSD regulatory exclusions for increases in production rates and hours of operation, EPA sought to afford sources ample freedom in responding to changes in market conditions. With respect to NSPS, where only hourly emissions rates are at issue, EPA gave sources broad leeway to increase production so long as it does not entail a capital expenditure for "long-term additions or betterments." See 39 Fed. Reg. 36,948, col. 1.²³

Regarding PSD, on their face the exclusions are limited

²³ Here, EPA found that the restoration of design capacity at units 1, 4, and 5 -- and corresponding increases in production rates and emissions rates -- would require a capital expenditure. Thomas letter at 1-5. WEPCO has not challenged EPA's finding, effectively conceding this point.

to federally enforceable emissions ceilings, and are not specifically tied to the existence of capital expenditures. However, the preamble to the 1980 PSD regulations is clear that, as in matters involving modification regulations generally, EPA was following the lead of its earlier NSPS regulations. See supra pp. 10-11. Thus, requiring PSD review for a mere increase in production or operation "would severely and unduly hamper the ability of any company to take advantage of favorable market conditions." 45 Fed. Reg. 52,704. In the very next sentence, however, EPA strongly implied that production and operational increases would be exempt only insofar as they were not linked to the new construction activity that is the linchpin of PSD coverage: "The emphasis of the relevant statutory provisions on 'construction' strongly supports EPA's interpretation of Congress' intent. See, e.g., section 165(a)." 45 Fed. Reg. 52,704. EPA then proceeded to address the air quality planning concerns of the PSD program by emphasizing that "any change in hours or rate of operation that would disturb a prior assessment of a source's environmental impact should have to undergo scrutiny." Id.

In the Clay Memorandum, EPA considered the regulatory exclusion in light of these underlying purposes and the facts of this case. EPA noted that WEPCO's planned production increases were not a temporary reaction to current market conditions, and thus interpreted the exclusion as not applicable here. Rather, EPA stated:

it is obvious that WEPCO's plans to increase production rate or hours of operation are inextricably intertwined

with the physical changes planned under the life extension project. Absent the extensive renovations proposed at Port Washington, WEPCO would have little market incentive to, and in part would be physically unable to, increase operations at these aged and deteriorated facilities which, absent the renovations, would likely be retired from service in the near future. Thus, WEPCO's plans call for precisely the type of "change in hours or rate of operation that would disturb a prior assessment of a source's environmental impact [and] should have to undergo [PSD review] scrutiny" (see 45 FR 52704). Conversely, accepting WEPCO's interpretation of the major modification regulations would serve to exclude from consideration all physical or operational changes except those which cause increased emissions per unit of production. Clearly, EPA never intended this result. It would allow, through substantial capital investment, significant expansion of the pollution-emitting capacity and longevity of major industrial facilities without PSD review of the impacts on air quality and opportunities for future economic growth.

Clay Memorandum at 8.

The environment bears the brunt of an increase in actual emissions from a source regardless of whether it comes from increased pollution per unit of production or from increased production. EPA can, and does, allow an exemption for simple increases in production rate or hours of operations, which are unconnected to physical or operational changes. But the regulatory exclusion does not allow significant expansion of the pollution emitting capacity or longevity of major industrial facilities without PSD review of impacts on air quality and opportunities for future economic growth. Clay Memorandum at 8. See Alabama Power Co. v. Costle, 636 F.2d 323, 400 (D.C. Cir. 1979). Such a reading would be contrary to the statutory intent to require a PSD permit "where industrial changes might increase pollution in an area." 636 F.2d at 401; see also CAA section

160(5).

WEPCO claims that EPA's interpretation of the regulatory exclusion is contrary to past practice. Br. at 63-64. But WEPCO distorts a 1987 applicability determination that in fact explicitly interpreted this very provision in precisely the same manner as EPA has in this case. Supplemental Applicability Determination, Cyprus Casa Grande Corp. (Nov. 6, 1987) [J.A. 121]. In that case, EPA held that reactivation of a source after a lengthy shutdown was not subject to the exclusion for increased production rate or hours of operation, because the reactivation could not be accomplished without extensive physical changes to rehabilitate the deteriorated physical plant. Id. at 4-7. Similarly, in this case, WEPCO's plans to expand production cannot be accomplished without extensive physical changes, and the lengthy life extension clearly will disturb Wisconsin's prior assessment of environmental impact, which assumed retirement of the Port Washington units in the near future.²⁴

²⁴WEPCO does cite one apparently inconsistent determination addressing the scope of the regulatory exclusion. Br. at 63-64 (citing [J.A. 110]). But this single isolated example does not create in WEPCO a right to another misapplication here. By its determination in Cyprus Casa Grande Corp., supra, EPA provided a reasoned interpretation that is consistent with the intent of the regulations and the statute. Consequently, although EPA has provided a detailed rationale for its interpretation here that is consistent with the interpretation in Cyprus Casa Grande, this case does not represent a departure from any established past practice. Hence, such an explanation was not even required. See NLRB v. Sunnyland Packing Co., 557 F.2d 1157, 1160-61 (5th Cir. 1977) (inconsistent contrary decision of NLRB does not entitle one to an explanation for the agency's decision to apply its regulations in accordance with its favored view in present case). The key point remains that EPA's action here is in keeping with its regulations.

- B. Original Design Capacity Is Not Relevant Under NSPS or PSD; Fuel Switching Is Not Relevant Under NSPS.
1. Achievable Capacity, Not Original Design Capacity, Is the Baseline For Determining Emissions Increase Under NSPS

WEPCO asserts that for purposes of determining baseline emissions under NSPS, EPA must use the original design capacity of the unit as "representative," not the current achievable capacity. Br. at 40. This assertion is incorrect.

NSPS applicability is determined as follows: compare maximum achievable capacity immediately before a proposed change to maximum achievable emissions after the change to establish whether there will be an emissions increase resulting from the change. 40 C.F.R. § 60.14(b). See supra p. 11. Where, as here, an increase in production rate is at issue, EPA explicitly rejected original design capacity in favor of current operating capacity as the baseline for gauging emissions increases:

The exemption of increases in production rate is no longer dependent upon the "operating design capacity." This term is not easily defined, and for certain industries the "design capacity" bears little relationship to the actual operating capacity of the facility.

39 Fed. Reg. 36,948 col. 1 (proposed rule). This case proves the rules' point precisely: the actual capacity of Port Washington units 1 and 4 has been significantly reduced, and in fact Unit 5 is unable to operate. See supra at p. 29.

EPA initially used the highest capacity demonstrated during the previous year for the purpose of determining whether an emissions increase would occur as a result of the proposed renovation work. Thomas Letter at 5. However, EPA left open

the opportunity for WEPCO to demonstrate that the units could achieve higher capacities. During November and December of 1988 WEPCO did demonstrate that Units 2 and 3 could operate now at original design capacity, and thus, the renovations would not increase current capacity or emissions. Accordingly, in the Supplemental Determination EPA found that the proposed renovation work at units 2 and 3 would not subject those units to NSPS coverage. Supplemental Determination at 8.²⁵ Thus, WEPCO is free to make substantial physical changes to Units 2 and 3 without triggering NSPS review, contrary to WEPCO's assertions that EPA's interpretation of the NSPS regulations effectively bars any like-kind replacements of equipment.

WEPCO cites several prior applicability determinations, contending they support its position that in the past EPA has always looked at maximum design capacity to determine whether emissions will increase. Br. at 39-40 (citing [J.A. 92, 93 and

²⁵WEPCO further argues that EPA's test protocol for determining actual capacity is invalid because it used the lowest 1 hour capacity achieved during a 50 hour test period. Br. at 49. This argument has no merit. Whether EPA used the highest, lowest, or some average of the 50 hour test has no bearing on the determination that NSPS applies. Even if the test results for Units 1 and 4 had been accepted, the highest hour during the test period demonstrated that Unit 1's capacity was 22% below projected post-renovation capacity (compared to 28% using the lowest hour) and that Unit 4's baseline capacity was 7% less than projected capacity (compared to 11% using the lowest hour). [J.A. 205]. In any event, the Administrator has the discretion to determine what constitutes the maximum production rate under representative operating conditions, see 40 C.F.R. § 60.14(b), and this test protocol was reasonably designed to achieve its purpose of determining the maximum operating capacity which could be achieved on a sustainable basis over a period of time.

119])). A careful examination of those determinations makes clear that nothing therein is inconsistent with EPA's position here that the baseline capacity for modification purposes is the maximum achievable capacity just prior to the proposed renovation. Those determinations speak of highest emission levels at achievable operating levels. [J.A. 92, 93, and 119]. See also [J.A. 130] (NSPS applicability based on current operating conditions). Here, as noted above, the applicability determinations likewise were based on the maximum physical capacity at which the plant could operate under normal conditions at the time. For Units 1 and 4 that was 31% and 30% percent below original design capacity, for units 2 and 3 it was the design capacity, and for Unit 5 it was zero because the unit could not operate.

2. Fuel Switching Is Not A Means Of Avoiding NSPS Applicability.

WEPCO also contends that EPA's determination that switching to a lower-sulfur fuel is not an appropriate means of avoiding NSPS applicability is contrary to law. Br. at 50. WEPCO misreads section 111's plain language.

EPA explained that the NSPS regulations bar the use of lower-sulfur fuel to avoid coverage. Clay Memorandum at 9 (citing 40 C.F.R. § 60.14(b)(2) and (e)(4)). In its Supplemental Determination EPA further explained why it rejected WEPCO's proposal to avoid NSPS coverage by accepting a permit condition requiring it to burn low sulfur fuel so as to prevent any actual emissions increase. EPA noted that section 111 as amended in

1977 reflected a basic congressional decision that fossil fuel-fired sources not rely on naturally low polluting fuels to comply with the NSPS. Supplemental Determination at 10. Thus, Congress added the percentage reduction requirement within the definition of standard of performance. See section 111(a)(1)(A)(ii); see also supra at p. 4. This core policy judgment is reflected in the legislative history of the 1977 Clean Air Act Amendments. For example, the Conference Report states:

The Senate concurs in the House provision with minor amendments. The agreement requires (1) that the standards of performance for fossil fuel-fired boilers be substantially upgraded to require the use of the best technological system of continuous emission reduction and to preclude use of untreated low sulfur coal alone as a means of compliance; . . . (3) that for fossil fuel-fired sources, the new source performance standards must be comprised of both a standard of performance for emissions and an enforceable requirement for a percentage reduction in pollution from untreated fuel.

H.R. Rep. No. 564, 95th Cong., 1st Sess. 130 (1977).

EPA came to the conclusion that because the will of Congress was so clear that lower-sulfur fuels alone will not suffice to comply with NSPS, "it would be inconsistent with the legislative intent for EPA to allow sources to avoid coverage of NSPS in the first instance in the manner suggested by WEPCO." Supplemental Determination at 11.²⁶

²⁶In response, WEPCO makes the curious assertion that EPA's interpretation is invalid because "Congress did not, however, make any similar change [requirement of percent reduction] in the 'modification' provision that apply to existing sources." Br. at 51-52 (footnote omitted). This statement reflects a basic misunderstanding about the relationship between new and modified sources under section 111. As defined in the statute, a "new" source subject to NSPS provisions is a source "the construction or modification of which" occurs after the proposal of a standard of performance for that source category. Section 111(a)(2) (continued...)

C. EPA's PSD Regulations Require that Emissions Increases Be Determined by Comparing Actual Emissions Before the Physical or Operational Change to Potential Emissions After the Change.

EPA regulations require calculation of "net emissions increase" for PSD purposes by comparing representative actual emissions before the physical or operational change and potential emissions after the change. See supra pp. 13-15. In this case, using sulfur dioxide as an example, representative actual emissions are 24,236 tons per year, while potential emissions following the renovations are 52,621 tons per year. Thomas Letter, Enclosure A. Despite the clear requirements of the regulations and the uncontested facts, the company suggests that emissions increases be calculated by comparing the representative past actual emissions with WEPCO's "projected representative, actual emissions that would occur after" the life extension project -- a maximum of 13,000 tons per year. Br. at 56 n.152. There is no basis in the regulations for such a comparison.

EPA has explained in detail the evolution of the current system for calculating emissions increases under PSD. See supra § 2(D). After the Alabama Power decision, EPA revised its PSD regulations by establishing an actual emissions baseline for modification and increment consumption purposes. However, it is

26 (...continued)
(emphasis added). Thus, the requirements of section 111 apply to both new and modified sources equally. Had Congress intended to exempt modified sources from such a key provision of the standard of performance, it would have done so.

logically impossible to determine actual emissions for a new or modified unit prior to its construction or modification. Hence, EPA regulations must assume that such units will emit at their maximum physical and legal limits. This is done by providing that for any emissions unit which has not begun normal operations as of the date of the modification, actual emissions "shall equal the potential to emit of the unit on that date." 40 C.F.R. § 52.21(b)(21)(iv). EPA explained that this assumption applied both to "new or modified units." See supra p. 15 (citing 45 Fed. Reg. 52,718, col. 3.).

The rigor that the actual-to-potential comparison might otherwise impose on the PSD system is relieved by the "netting" provisions of the regulations. Sources undergoing physical or operational changes routinely avoid PSD review by accepting federally enforceable restrictions which prevent significant emissions increases over pre-modification levels. See supra p. 15.

These basic features of the PSD system are well understood, if not liked, by the electric utility industry. Numerous industry groups sought judicial review of several facets of EPA's 1980 PSD regulations. Chemical Manufacturers Association v. EPA, No. 79-1113 (D.C. Cir.). Among the petitioners were several of the amici in this case, including Alabama Power Co., et al. These petitioners asserted that EPA's establishment of an actual emissions baseline is contrary to the CAA and that EPA should have instead determined emissions increases based on potential to emit, i.e., design capacity as limited by legal restrictions on

operations. Id., Brief for Industry Petitioners on Actual Emissions Definition of Net Increase, at 19, 28 (excerpt attached hereto as Appendix A). They further objected to the requirement for comparison of actual emissions before a physical or operational change with potential emissions after the addition of a new emissions unit or the "alteration" of an existing unit, and the need to obtain operational restrictions in order to avoid a net emissions increase. Id. at 29.²⁷ WEPCO cannot now deny the basic functioning of the PSD baseline regulations.²⁸

Moreover, WEPCO's proposed alternative -- to determine emissions increases based on the company's own projections of its future actual emissions -- is unworkable and clearly contrary to the regulations. An essential purpose of the PSD program is public review of decisions to increase pollution in a clean air area. CAA section 160(5). This purpose would be defeated if the polluter's own unenforceable estimates of its future activities were determinative of regulatory consequences. Instead, the rules provide that a company may avoid PSD review by embodying its projections of future emissions in an instrument enforceable

²⁷The parties in Chemical Manufacturers Association entered into a settlement agreement under which EPA agreed, inter alia, to propose, and take final action on, a potential emissions baseline for modifications. Id., Settlement Agreement, Exhibit B (Feb. 22, 1982). The case was stayed pending execution of the settlement agreement. To date, however, EPA has not proposed any regulatory changes pursuant to Exhibit B.

²⁸EPA has also explained in previous determinations that PSD applicability hinges on a comparison of actual emissions prior to any physical change with potential emissions afterward. E.g., [J.A. 130].

by EPA. See supra pp. 14-15. That is the path followed by innumerable sources since 1980, and the path EPA has repeatedly offered to WEPCO during the present controversy. Thomas Letter at 3, 5; Clay Memorandum at 8. Thus, if WEPCO is willing to stand by its projections that maximum post-modification emissions will be 13,000 tons per year of sulfur dioxide, there would be no PSD consequences. Indeed, WEPCO could accept an emissions cap almost twice as large as its projections without triggering PSD review.²⁹

D. WEPCO Has A Number of Options To "Net Out" of NSPS and PSD Coverage.

WEPCO and amici suggest that dire consequences will

²⁹The two allegedly contrary past determinations cited by WEPCO (Br. at 59-60) are in fact consistent with EPA's present position that 40 C.F.R. § 52.21(b)(21)(iv) governs the determination of PSD emissions increases in this case. In the first example, EPA correctly used historical actual emissions to establish the emissions baseline [Supplemental Record at S.1]. However, as to post-modification emissions, EPA properly asserted that increased capacity -- i.e., potential to emit -- after the modifications "must be considered for the purposes of PSD applicability" Id. at 3. The second example is simply inapposite, because PSD nonapplicability hinged upon the fact that the shutdown of a plant was intended to be temporary, and the apparent absence of a physical or operational change associated with its reactivation. Consequently, the source would not be subject to PSD so long as it did not increase emissions beyond those allowed prior to the shutdown [Supplemental Record at S.2]. Cf. Cyprus Casa Grande Corp., supra [J.A. 121] (reactivation involving extensive physical changes required comparison of representative actual emissions during shutdown with emissions upon start-up).

EPA opposed WEPCO's motion that the Court include these two determinations as part of the record, on grounds that they formed no part of the evidence before the Agency under Fed. R. App. P. 16(a). See Petitioner's Motion to Supplement the Record, filed February 24, 1989; Respondents' Response, filed March 17, 1989. The Court referred the matter to the merits panel by Order dated April 5, 1989.

attend EPA's interpretation of its PSD and NSPS regulations. WEPCO implies that the consequence of EPA's interpretation of the law is to force the company to install expensive scrubbers to meet the NSPS requirements and satisfy the BACT required under the PSD provisions if it wants to continue to operate its Port Washington facilities after the proposed renovations. However, there are a number of ways by which WEPCO could renovate its plant without installing scrubbers at all five units. See Thomas Letter at 3.5. For NSPS purposes, the emission rate must increase for a modification to occur. At Unit 1 for example, the increase in capacity over baseline is projected to be a 31% [J.A. 369, 371]. Thus, WEPCO could impose some physical control, such as a control device which achieves 31% reduction of emissions, which would have the effect of reducing emissions by more than the increase in capacity to emit. There would be no increase in emissions, yet the source would not have to meet the NSPS requirements (70% - 90% reductions depending on the type of coal fired) applicable to covered sources. Under PSD, WEPCO could readily take credit for federally enforceable limitations which reduce its potential to emit and thereby "net out" of PSD review by simply standing by its own projections of future emissions.

V. THE NSPS AND PSD REGULATIONS ARE NOT SUBJECT TO REVIEW IN THIS COURT

It is evident from the foregoing that, in large part, WEPCO's challenge is not to EPA's interpretation of its own regulations or its application of the law to the facts of this case.

Rather WEPCO attacks the very substance of those underlying regulations and the policies contained in the Clean Air Act. However, the NSPS and PSD regulations, as nationally applicable rules, were subject to review only in the District of Columbia Circuit within 60 days of their promulgation, CAA section 307(b)(1), and may not be challenged in a collateral proceeding in this Court. PEPCO v. EPA, 650 F.2d 509, 513 (4th Cir. 1981), cert. denied, 455 U.S. 1016 (1982). The remedy available to WEPCO and amici for redress of any grievance arising out of EPA's determinations is to petition EPA to revise its rules or seek legislative amendments. EPA's action in response to a rulemaking petition will be reviewable in the D.C. Circuit. E.g., Oljato Chapter of the Navajo Tribe v. Train, 515 F.2d 654, 661 (D.C. Cir. 1975). In the meantime, WEPCO must comply with present law.

CONCLUSION

For the foregoing reasons, the petitions for review should be denied.

Respectfully submitted,

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September 1989

APPENDIX A

APPENDIX A

IN THE
UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 79-1112
And Consolidated Cases

CHEMICAL MANUFACTURERS ASSOCIATION, et al.,

Petitioners,

v.

ENVIRONMENTAL PROTECTION AGENCY,

Respondent.

On Petition For Review Of Regulations Of The
Environmental Protection Agency

BRIEF FOR INDUSTRY PETITIONERS
ON ACTUAL EMISSIONS DEFINITION
OF NET INCREASE

[Counsel Listed on Inside Cover]

February 12, 1981

V. ARGUMENT

A. EPA's Definition of a Modification as a Net Increase in Actual Emissions is Contrary to the Clean Air Act and Will Create Significantly Impractical and Unreasonable Results

1. The definition of modification in Section 111 must be read in conjunction with Section 169 and other related portions of the Act which define the size of a source in terms of its potential to emit

The Agency claims authority to define modification as an increase in actual emissions by referring to Section 111(a)(4) of the Act,³⁴ which provides, in relevant part, that modifications are certain changes to major stationary sources which

"...increase the amount of any air pollutant emitted...."³⁵

Apparently the Agency has concluded that since Congress did not include the words "potential" or "allowable" in this definition, "actual" must be the word by which Congress intended to modify the phrase "amount of any air pollutant emitted." Also, the Agency indicates that it is following "the lead of" this court in adopting an actual emissions approach to the definition of modification, since the court deleted from Alabama Power II a reference

³⁴ 42 U.S.C. §7411(a)(4) (Supp. II 1978).

³⁵ Id.

that had been in Alabama Power I to modifications as being increases in potential emissions.³⁶ Both of these arguments should be rejected.

- a. The deletion of the word "potential" from the opinion of Alabama Power II does not control the issue here.

The differences between Alabama Power I and II do not, in fact, "lead" to any conclusion on the question of whether a modification is an increase in actual emissions or potential emissions for the simple reason that that issue was not before the court. The court was in fact determining whether the term increase implied a net increase.³⁷ In the preliminary opinion, the court ruled that it did, and then, adopting the Agency's own long-standing interpretation of the type of emissions to be increased, described modifications as net increases in potential emissions.³⁸ In the final opinion, this statement did not contain the word "potential",³⁹ but by deleting that word, the court did

³⁶ See 45 Fed. Reg. at 52700 (August 7, 1980) for an explanation of EPA's rationale.

³⁷ See generally Alabama Power II, supra, 13 ERC at 2043-45; Alabama Power I, supra, 606 F.2d at 1081-82.

³⁸ 606 F.2d at 1081.

³⁹ 13 ERC at 2043.

B. EPA's Actual Emissions Approach to Modifications Radically Increases the Complexity of the Permit Programs, Causes Unreasonable Results, and Contradicts Section 111 by Requiring NSR in Some Situations When a Source Actually Decreases Emissions

Using a source's capacity to emit as the metric for determining whether a modification has occurred creates a clear, efficient and workable system for implementing the NSR programs. Capacity to emit is a function of the design of a source, as limited by legal restrictions on its operations, and a source's potential or allowable emissions are thus easily and quickly ascertainable. Actual emissions, however, are a function not only of design capacity and any applicable legal restrictions, but also of the production rate at which the source operates. At any given point, a source with the capacity to emit 100 units of pollution may actually be emitting any amount between 0 and 100 units. Since no source operates constantly at any given rate, an average of its actual emissions will not only obscure substantial variations in those emissions but will also necessarily be well below what the source is actually emitting at peak loads.

By defining modifications as increases in actual emissions therefore, the Agency has seriously complicated the regulatory scheme, since the question of whether there is a net increase in actual emissions requires that variations in the source's hours

and rates of operation be taken into account. More important, the practical effects of this approach are to require permits from sources in situations where Congress clearly did not intend such permits to be required.

All of these problems are due to the fact that the question of whether a source's actual emissions will increase as a result of a change which has not yet occurred is simply impossible to answer, since it is impossible to know in advance what that source's actual emissions will be after an alteration is completed. Thus, to implement its approach, the Agency is forced to project future emissions based on historical data, and, since no historical data for the new unit are available, to assume that its actual emissions will equal its capacity to emit.

The problems with these inquiries are obvious. There is no assurance that actual emissions of the existing unit will not decrease as a result of, or coincidentally with, an alteration. However, in order to utilize the no net increase exception, the Agency requires the source to accept a legally enforceable permit condition which forbids it from increasing its actual emission rate. Thus, after an alteration meeting the no net increase exception, the actual emissions of the existing unit may well be lower than, and can in no event be higher than, its actual emissions prior to the alteration.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the Final Brief for the Respondents was served on September 5, 1989 by first-class mail, postage prepaid upon:

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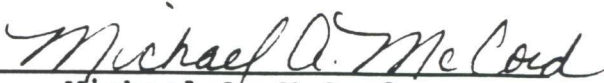
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