

208, 102 L. Ed. 2d 493, 109 S. Ct. 468 (1988). The CAA contains no such expressed grant of authority, and we do not intend by our actions today to create retroactive applicability for today's rule. 42 U.S.C. 7401 *et seq.* Today's rule applies only to conduct that occurs after the rule's effective date.

None of today's rule revisions apply to any changes that are the subject of existing enforcement actions that the Agency has brought and none constitute a defense thereto. Furthermore, prior applicability determinations on major modifications that result in control requirements in an NSR permit that currently applies to a source remain valid and enforceable as to that source.

As noted above, today we are changing the scope of the RMRR exclusion from the major NSR program by taking final action on the ERP. If you subsequently undertake an activity that does not meet the applicable provisions of these new alternatives and do not obtain a preconstruction permit if you are required to do so, you will be subject to any applicable enforcement provisions (including the possibility of citizens' suits) under the applicable sections of the CAA. Sanctions for violations of these provisions may include monetary penalties of up to \$27,500 per day of violation, as well as the possibility of injunctive relief, which may include the requirement to install air pollution controls.

J. Quantitative Analysis

At proposal, we presented a quantitative analysis of the possible emissions consequences of the range of different approaches to the RMRR exclusion to evaluate if our policy conclusions are correct. Our analysis was conducted using the Integrated Planning Model (IPM). This analysis was done for electric utilities because we have a powerful model to perform such an analysis that we do not have for other industries. We stated that the results for electric utilities accurately reflect the trends we would see in other industries.

The IPM analyses of different scenarios showed that the breadth of the RMRR exclusion would have no practical impact on, let alone be the controlling factor in determining, the emissions reductions that will be achieved in the future under the major NSR program. The analyses showed that emissions of SO₂ are essentially the same under all scenarios, but that under today's rule these emission levels will be met in a more economically efficient manner than the base case. This stands to reason because nationwide emissions of SO₂ from the power sector are capped

by the title IV Acid Rain Program. For NO_x, these analyses showed modest relative decreases in some cases and modest relative increases in other cases. These predicted changes represent only a fraction of nationwide NO_x emissions from the power sector, which hover around 4.3 million tons per year (tpy). At this time, we do not have adequate information to predict with confidence which modeled scenario is most likely to occur. What these analyses indicate, however, is that regardless of which scenario is closest to what comes to pass, today's rule will not have a significant impact, up or down, on emissions from the power sector. However, we expect the rule to result in significant improvements in safety, reliability, and other relevant operational parameters.

The DOE also presented further analysis of the possible emissions consequences of the range of different approaches to the RMRR exclusion. Using the National Energy Modeling System (NEMS), a variety of changes in energy efficiency and availability were evaluated, as well as the effect on emissions resulting from these regulatory revisions. This analysis concluded that efficiency improvements resulting from increased maintenance, repair and replacement are expected to decrease emissions, whereas availability improvements are expected to increase emissions. In the cases represented in this analysis, the emissions reductions from assumed reductions in heat rates tended to dominate the corresponding effects of the assumed availability increases.

A number of commenters said that the underlying assumptions EPA used in the IPM analysis were flawed and resulted in erroneous conclusions regarding the emission reduction potential of the proposed RMRR rules. Several commenters stated that EPA's IPM analysis incorrectly assumes that no major modifications at any older units would ever trigger the requirement to add new pollution controls. In addition, according to commenters, EPA also erroneously assumed that this lack of major maintenance, repair and replacement will have very little impact on the performance of those power plants, when in reality their emissions would increase significantly. The commenters cited a Clean Air Task Force analysis for power plants, which estimates that EPA's rule revisions will result in at least 7 million more tons of SO₂ and 2.4 million more tons of NO_x annually. Some commenters also questioned the appropriateness of using EPA's analysis for the electric

generating sector to draw conclusions about non-utilities.

One commenter said the IPM and DOE NEMS analyses correctly demonstrate that EPA's RMRR proposal will have no appreciable impact on emissions from the power sector. According to the commenter, this conclusion is consistent with EPA's findings in a 1989 report, "1989 EPA Base Case Forecasts," which demonstrated that continuing to allow utilities to undertake activities including ongoing annual operating and maintenance activities and a major refurbishment when the unit reached 30 years of operating life would have no appreciable impact on emissions from the power sector, just as EPA's and DOE's recent analysis confirmed.

One commenter said the proposal lacks any reference to the gains accomplished by major NSR, the ongoing enforcement actions, settlements reached as a result of those actions, or the potential gains from the investigations now pending. The commenter argued that EPA's reliance on improvements in productive capacity as the measure of success fails to consider that productive capacity must be balanced with the interests of health and welfare. The commenter also noted that a critical part of EPA's burden is to consider all the relevant factors leading to its conclusion that the exclusions are necessary and appropriate and that at the very least this includes an assessment of the expected effects on emissions, which in turn will determine the public health benefits and costs of the proposed rule. Although data on emission reductions achieved under the existing program are available, we have stated that we cannot precisely quantify the effects the proposed rule will have on emissions. Some commenters stated that before promulgating a final rule, EPA should provide such a quantitative assessment of the rule.

We disagree with the commenters who believe that emissions would be significantly higher for electric utilities than are estimated under the IPM model runs. These commenters' arguments rely on the assumption that EPA's base case is invalid because, if major NSR rules were left unchanged, eventually all coal-fired utilities would either apply BACT or deteriorate so badly that they would have to shut down. We do not believe this assumption is accurate. As we have explained, our experience suggests that under the current NSR program, managers of coal-fired electric generating facilities have available to them a number of actions they can take to avoid triggering major NSR, and in many instances they will take one of