Testimony of Lisa Rector
on the U. S. Environmental Protection Agency's Supplemental Notice
of Proposed Rulemaking for Prevention of Significant Deterioration,
and Nonattainment New Source Review:
Emissions Increases for Electric Generating Units
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Good Morning. My name is Lisa Rector and I am speaking here today on behalf of the Northeast States for Coordinated Air Use Management (NESCAUM), an association of state air quality agencies in Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont. My comments today focus on EPA's April 25, 2007 proposal of options to change the New Source Review (NSR) emissions increase test for physical or operational changes at existing electric generation units (EGUs).

EGUs are among the most significant sources of air pollution in the Northeast. Nearly every source apportionment study reviewed by EPA identified secondary sulfate originating from coal combustion by EGUs as the largest or one of the largest contributors to fine particle mass in the Northeast. In addition, coal combustion is also the single largest source of selenium (Se) and other heavy metal trace elements. Nationwide, power plants account for more than one-quarter of the emissions of nitrogen oxides (NO_X), amounting to over six million tons annually. Therefore, it is critical that any rule change affecting these operations does not create the potential for additional emissions.

NESCAUM previously submitted comments in February 2006 opposing the original proposal. This Supplemental proposal contains nothing that would cause the NESCAUM states to change our previous positions. As stated in our comments on the original proposal, NESCAUM believes that the proposed rule change is deeply flawed, containing provision that are (1) contrary to the congressional intent of the NSR program, (2) severely limit state abilities to attain and maintain EPA's National Ambient Air Quality

Standards (NAAQS), and (3) will achieve none of the emissions reductions that have been realized by the current NSR program based on an annual emission test. Specifically we believe that adoption of any of the proposed options will result in:

- Increased emissions from the nation's oldest and dirtiest power plants. If EPA's proposed rule is finalized, power plants will not be required to comply with NSR because they will rarely, if ever, increase their maximum hourly emissions. However, if capacity increases are made, the likely result is increased annual emissions. Under the rule, when old plants make renovations, their emissions will increase, units will be operated—without pollution controls—for longer hours, and annual actual emissions will increase. EPA's proposal, therefore, nullifies Congressional intent to provide an end-point for "grandfathering" and, in effect, exempts power plants from NSR indefinitely. EGUs that make modifications will be allowed to bypass NSR for their lifetimes if the proposed rule is promulgated. Furthermore, these emission increases will create increased local impacts from these units. NSR has been and must continue to be the primary lever to address emissions from these sources; moving to an hourly test will eliminate this lever.

- Regulations, such as CAIR and BART, cannot replace the NSR program because they address neither local impacts nor the complete suite of NSR pollutants. The proposed rule fails to consider the importance of these provisions.

- This new approach gives an economic advantage to existing, more polluting, less efficient units. We are concerned that this prevents newer more efficient equipment from coming on line. Contrary to EPA's assertion, there is no mechanism for encouraging emissions reductions from units that modify. Rather, under EPA's proposal, a facility has an incentive to maintain its maximum achievable hourly emission rate while increasing utilization. This can lead to greater actual annual emissions at existing locations without benefit of BACT/LAER review and public comment.

The NESCAUM states also believe that EPA's analysis of the impacts of the proposed rule change, as outlined in its technical analysis, is flawed. Under a congressional directive, a National Research Council (NRC) committee was formed to estimate the effects of EPA's 2002 and 2003 proposed NSR revisions. The NRC committee found that EPA's analysis relied too heavily on the IPM model in assessing the impacts of its proposed NSR changes. The NRC panel found that because NSR is aimed at facility-specific changes, IPM is not an appropriate model to support proposed NSR revisions. The NRC committee specifically concluded that:[1]

- [C]urrent versions of IPM, or similar industry-sector models, cannot be used as the sole basis for estimating the effects of the NSR rule changes on electricity-generating-facility emissions. Like all current power-sector models, there is substantial uncertainty in the estimates from IPM even for assessing broad patterns. For example, the model assumes essentially perfect foresight on the part of facility decision makers, an unrealistic premise. At best, IPM is a tool for estimating national, or perhaps regional, patterns of emissions, which are important to public health but can overlook significant local variations in effects on a smaller geographic scale. Because uncertainties are greater at smaller scales than on the national level, conclusions that can be drawn from current modeling are limited.

- The [IPM] model is not sufficiently detailed to look at the effects of the rule change on local or even regional emissions. The aggregation of actual plants into model plants, the inability of IPM to represent plant-specific costs of life extension or maintenance, and the fact that NSR compliance activity may not follow the cost-minimizing algorithm adopted here are three of the key reasons, among many, why the model cannot be expected to predict how the rule changes might affect emissions or air quality in a particular locale.

[1] "New Source Review for Stationary Sources of Air Pollution," Committee on Changes in New Source Review Program for Stationary Sources of Air Pollution, National Research Council (The National Academies Press, Washington, DC) 2006.

- Although IPM and similar models have been used in regulatory impact analyses in the past, this has generally been in the context of large-scale national emissions reductions, in which some of the above concerns would be relatively less significant. In settings in which a primary end point could be a redistribution rather than a large reduction of emissions, understanding the precise location of emissions would be critical for determining whether net public health benefits would be positive or negative, and this is beyond the scope of IPM or related models.

As this goes to the core of how IPM applies to large-scale rather than local scale decision making, the reasoning holds equally well to other proposed NSR revisions. The NRC committee explicitly recommended in its final report that models like IPM "should be refined to account better for the influence of NSR and related regulations on *plant-level* decision making" (emphasis added). The Committee recognized that this is no small task and that "sequential refinements" might be able to capture the factors that influence decisions an individual plant owner makes regarding retrofitting or maintenance activities.

Such refinements to IPM are indeed daunting and perhaps impossible because IPM, by its very design, finds optimum solutions for costs and emissions under a dispatched system (e.g., across the eastern US) through a cap and trade system for SO_2 and NO_X emissions. This is at odds with NSR decisions as plant owners make their decisions at the local level under local emissions scenarios (and, through air pollution modeling, by taking into account local public health effects). This means that IPM is simply not the acceptable tool to look at the effects of various locally-specific NSR scenarios in the future, nor help in understanding the precise location of emission changes that are critical for assessing health benefits.

In addition, EPA used an outdated version of IPM to conduct the analysis, utilizing IPM version 2.1.9 rather than IPM version 3.0. EPA's own analysis indicated that version 3.0 will result in higher emissions in the Northeast for both SO_2 and NO_X. This is due in large part to the higher costs associated with natural gas and other fossil fuels, which in

turn results in higher use of coal. EPA's analysis indicates that version 2.1.9 underestimates fuel costs by 46 to 63 percent. Therefore, even if IPM was an appropriate model to use to conduct the analysis, EPA should have used version 3.0.

NESCAUM states also have additional issues with the IPM inputs for both the national and county analysis. EPA has not made access to these inputs easily available. Our member states attempted to gain a deeper understanding of the assumptions and inputs used to develop the IPM model runs by accessing the websites and docket information cited in the technical support document (TSD) for the proposed rule. Identifying the appropriate documentation has not been feasible due to a large number of erroneous links in the TSD. On June 26, 2007, I was notified by Janet McDonald that this was due to changes in the website after finalizing the TSD and that these issues would not be fixed until June 29, allowing only four working days for the public to access and analyze these data inputs. The inability to access these critical documents seriously undermines the publics' ability to thoroughly analyze and comment on the underlying assumptions used to conduct the analysis for the TSD. We therefore have requested that EPA extend the comment deadline to allow for a complete analysis of the data. Without sufficient time to review the unavailable material, we question whether EPA has provided adequate notice and opportunity for comment on this rulemaking.

NESCAUM has worked over many years to support more effective application of NSR and other vital Clean Air Act programs in the interests of public health and environmental protection. In the process we have identified – and communicated to EPA – a number of improvements that could strengthen and streamline the NSR program, making it both easier to enforce and less burdensome to regulated industry. Unfortunately, EPA's proposed change to the applicability test on modifications for electric generating units goes in precisely the wrong direction. The proposed rule will make it easier for many of the nation's largest polluters to extend the life of old sources without installing modern pollution controls.

Given the issues cited above, EPA's current proposal is profoundly misguided and contrary to the air quality and public health interests of citizens in the Northeast and throughout the country. The consequences for states are likely to include greater difficulty in meeting attainment goals and rate of progress targets. Because that cannot be EPA's interest or intent, we hope the Agency will seriously re-examine its proposal in light of these and other comments. We urge EPA to maintain the current annual emission test.

This concludes our comments today. Thank you.