



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION



August 8, 2007

Stephen L. Johnson
U.S. Environmental Protection Agency
EPA West (Air Docket), Mail Code: 6102T
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Attention: Docket ID No. EPA-HQ-OAR-2005-0163
SUBMITTED TO THE DOCKET ELECTRONICALLY VIA WWW.REGULATIONS.GOV

Re: Comments on the Supplemental Notice of Proposed Rulemaking for Prevention of Significant Deterioration and Nonattainment New Source Review: Emission Increases for Electric Generating Units, 72 FR 26202 (May 8, 2007)

Dear Mr. Johnson:

The State of Connecticut is submitting these comments on the "Supplemental Notice of Proposed Rulemaking for Prevention of Significant Deterioration and Nonattainment New Source Review: Emission Increases for Electric Generating Units," which was published in the Federal Register on May 8, 2007. Our comments on the original proposal related to this rulemaking [70 FR 61081, October 20, 2005] are already contained in the docket (Document ID EPA-HQ-OAR-2005-0163-0158) and continue to be relevant.

In this supplemental notice for the proposed rulemaking, EPA requests comment on two options for determining new source review (NSR) applicability for modified electric generating units (EGUs). Option 1 is a four-step process whereby a modification occurs if there is: (1) a physical change or a change in the method of operation; (2) an increase in hourly emissions; (3) a significant annual increase; (4) a significant net emissions increase at the facility. Option 2 eliminates steps (3) and (4) of Option 1. These two options each contain six sub-alternatives derived from the various methods of determining the "maximum achieved" or "maximum achievable" hourly increase in emissions using combinations of statistical and non-statistical approaches to evaluate an EGU's hourly emissions with respect to either heat input or heat output. EPA has stated its preference for Option 1, and allows that certain sub-alternatives may coexist in the final rule under either option. EPA has requested comment on all aspects of the proposed rule including the specific pollutants and geographic extent to which the rule should apply. Our comments follow.

Safety, Reliability and Efficiency

EPA has proposed this rule to provide a "uniform emissions test nationally" that also "promotes the safety, reliability, and efficiency of EGUs." EPA has not provided a reasonable basis for concluding that the proposed rule will meet any of these goals.

The analysis conducted in support of this rule is based on the assumption that only a geographically limited set of coal-fired EGUs would increase efficiency or reliability as a result

of the rule. Further, EPA dismissed from the full analysis, as being too small compared to national annual emissions, several of the regulated pollutants emitted from EGUs. Thus EPA does not begin with a rule that could plausibly be applied as a uniform national emissions test. It is recommended that EPA propose a single NSR applicability rule that can justifiably be applied to all sources and all regulated air pollutants. Otherwise, EPA needlessly complicates the NSR process.

EPA does not show how either the proposed or existing NSR applicability rules help or hinder EGU safety, reliability or efficiency. EPA makes no correlation of safety with either the existing or proposed rule. In fact, there does not seem to be an issue of safety that needs to be addressed. Comments submitted by the Edison Electric Institute before the US Department of Labor on January 11, 2006 state that “[T]here is simply no record evidence that under current [labor] standards, employees in the electric utility industry are exposed to a significant risk of harm.” EPA did not provide, nor could we find, any evidence or statistics indicating a correlation between NSR and safety.

EPA assumes that the proposed rule will increase the reliability of electric generating units. EPA offers no data to support their assumption. Nor could we find any indication that the existing NSR program is a significant hindrance to the reliability of existing units. In fact, of the ninety one major disturbance events recorded by the Energy Information Administration (EIA) for 2006, sixty eight were caused by severe weather or natural events while only three disturbances were attributed to equipment failures (EIA: <http://www.eia.doe.gov/cneaf/electricity/epm/tableb2.html>). These three equipment failures resulted in a loss of 800 megawatts. This is trivial with respect to the total capacity of over one million megawatts from the over 16,000 generators in the United States.

EPA establishes no relationship between efficiency and either the existing applicability test or any variant of proposed test. EPA does not establish that the proposed rule is more likely to encourage greater modernization of facilities than the existing rule, or that such modernization will lead to greater efficiency.

Utility owners have existing obligations and incentives to provide for safety, reliability and efficiency of their facilities. EPA does not explain how its rule will impact these factors; it simply assumes that it will have a positive effect. EPA believes its proposed rule will promote the safety, reliability and efficiency of EGUs in a manner that will not have a “detrimental impact” on local air quality. EPA should seek to achieve its goals through a higher standard than simply the avoidance of a detrimental impact. Furthermore, as explained below, EPA has made a poor assessment of the effects and impact of the proposed rule.

Calculation Method

The proposed statistical method is used inappropriately, and needlessly increases the complexity of the rule. EPA proposes to sample the highest ten percent of hourly emissions data from any of five years of an EGU’s continuous emissions monitoring data. It would then apply a confidence interval about this sample to determine a theoretical maximum. Such a process will produce a

theoretical emission rate in excess of any which has been actually achieved. As the original data already contains the realized maximum emission rate, the entire process is unnecessary. If EPA goes forward with the proposed rule and uses a statistical method for calculating a maximum hourly emission rate, it should clarify that the same statistical method shall be applied when determining the post change emission rate "actually achieved."

EPA has attempted to evaluate the proposed rule options and the various sub-alternatives using the Integrated Planning Model (IPM) and the assumption that the rule options will increase the availability or efficiency of electric generating units. EPA's IPM scenarios assume broad-based increases of two and four percent in availability and efficiency. Based on these assumptions, EPA predicts county level annual emissions increases/decreases out to the year 2020. The results show no overall emissions benefit. No relationship is established between options and various sub-alternatives to the rule and the assumed increases in reliability and efficiency. Therefore, there is no information to evaluate the individual aspects of the proposal.

In its analysis, EPA seems to attribute emissions benefits to the proposed rule that result from trading programs already in place. There is also no clear comparison of effects of proposed rule with the existing rule. These results should be clearly distinguished if EPA expects to fully evaluate the proposed rule.

If the proposed rule is to change the availability or efficiency of existing EGUs, it is unlikely that it would do so in the broad-based manner in which EPA assumes for its IPM analysis. It is more realistic to assume that more drastic improvements in availability or efficiency would occur at fewer and older EGUs. Under the proposed rule, rebuilding an older EGU becomes more financially favorable because the rebuild can be conducted without the cost of installing and operating the best available air pollution control equipment that would be required under NSR. Thus the rule tends to economically favor the rebuilding of older units over new construction. Due to this economic advantage, the rebuilt older units are then more likely to displace operation of the better-controlled existing units. Therefore, if EPA analyzed this more realistic scenario, it would find that more adverse air quality results from the proposed rule.

Hours of Operation

Under the proposed rule an increase in the hours of operation would not trigger a modification. Under the current rule however, an increase in the hours of operation can represent a change in the method of operation that increases annual emissions which therefore becomes a modification subject to NSR. EPA dismisses this difference by assuming that increases in the hours of operation would not trigger a modification at most EGUs under the current rule. EPA justifies this assumption with the statement that "[I]nformation from the RBLC confirms that most EGUs are already permitted to run 8760 hours annually." [72 FR 26208] EPA should be well aware that the RBLC is not a representative inventory of sources. It is rather a sampling of sources representing some of the better-controlled facilities in the nation. The data in the RBLC necessarily skew toward units that are permitted to operate 8760 hours annually. This is due to the fact that a regulator is more likely to justify, where cost is a factor, as it is with RACT and BACT, more stringent control equipment for a facility that is permitted to operate at its full

capacity. EPA can, and should, rely on better data than the RBLC database to draw conclusions about existing EGUs permitted hours of operation.

Even if most EGUs can operate all year long, EPA should not trivialize the effect of its proposal on those units which do not. For example, under the proposed rule, peaking units which typically operate for a small portion of the year, would no longer face regulatory constraint from increasing operating hours and annual emissions. A peaking unit may currently operate with high hourly emission rates because it is less cost effective for the regulatory authority to require air pollution control equipment. Under the proposed rule an inefficient and uncontrolled peaking unit could change its method of operation to become a base-loaded unit without benefit of the best available control equipment that would be required under NSR. This EGU could then displace from dispatch a newer and cleaner unit. This results in decreased system efficiency.

Emissions

The proposal creates the incentive to maintain the EGU's existing emissions level so that future changes can be conducted with the greatest flexibility. Therefore, a unit which was to upgrade under the proposal would have an increased financial incentive to opt for the control equipment, or lack thereof, which most nearly aligns emissions to the current levels while increasing the capacity of the unit. While this may represent an emission reduction on a per megawatt produced basis, it does not maximize the reduction as NSR would.

EPA need not rely on the inadequate IPM analysis. Since 1999 the EPA and the Department of Justice have reached settlements with twelve coal-fired power plants resulting in emissions reductions of more than one million tons of air pollutants annually. These emissions reductions resulted because EPA prevailed in its assertion that these plants conducted major modifications that extended the lives of these facilities without including the best available control technology that would have been required under NSR. Under EPA's proposal, such emissions reductions would not have occurred. The results of these court cases offer a real life evaluation of the effect of its proposed rule against the existing rule.

Even if we were to accept that the IPM analysis is an accurate portrayal of the proposal, EPA's technical support document (EPA-457/R-07-001, pages 3-17 and 3-18) for the rule shows increases in both nitrogen oxide and sulfur dioxide emissions of hundreds of tons per year in at least one Connecticut county. This occurs without a corresponding decrease in the State. Such emissions are not trivial and would impede Connecticut's efforts to comply with the national ambient air quality standards for ozone and fine particulates.

Conclusion

As structured, EPA's preferred Option 1 simply creates greater opportunity for an EGU to become exempt from NSR than either Option 2 or the current applicability test. We could support a modified Option 1 such that a modification occurs if there is: (1) a change in operation which causes (2) an increase in hourly emissions **or** (3) a significant annual increase. By looking at both the long-term and short-term emissions increases, one fully captures the actual increases in emissions and can appropriately evaluate those increases against the long and short-term

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national ambient air quality standards. EPA's preferred method does not allow for evaluation of a change at an EGU that increases emissions such that they might impact either a long or short-term ambient air quality standard.

If EPA goes forward with this rule as proposed, EPA should revise the proposed language for paragraph 51.167(a) to state that implementation plan revisions are not necessary for States and Tribes that retain their currently approved programs. The currently approved programs are more stringent than the proposed rule. To require the regulatory authorities to go through any sort of implementation plan revision or equivalency demonstration is not productive.

Connecticut cannot support this proposed rule as written. We would support Option 1 with the changes outlined above. If you have any questions, please contact Gary Rose, Director of Engineering and Enforcement, at (860) 424-4152.

Sincerely,



Anne R. Gobin
Chief, Bureau of Air Management

ARG:KJW