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From: Maureen Barrett [mailto:maureen@aeroengineering.com]  
Sent: Friday, January 09, 2009 8:08 AM  
To: Weyman Lee  
Cc: info@environmentalcalifornia.org  
Subject: Comments on Russell Energy Center Proposed PSD Permit

Mr. Weyman Lee:

Thank you for directing me to the correct location for the reporting of the air quality impacts analysis for the Russell Energy Center. My comments derive from very recent experience, including expert testimony and membership on a state PM2.5 implementation workgroup, relating to the modeling and permitting of PM2.5 impacts from electrical generating facilities.

On the basis of the impacts presented in Table III of Appendix C of the "Statement of Basis for Draft Amended Prevention of Significant Deterioration Permit" of the Russell Energy Center, the general thrust of my previous comments stand. More specifically, Table III shows that the facility's daily and annual maximum predicted PM2.5 impact exceed the most health-protective of the respective US EPA's proposed significant impact levels. Note that although only PM10 emissions are presented, as you are aware, the ratio of PM2.5 to PM10 emissions in the flue gas is likely on the order of 80% or greater, and without an emission limit that specifies this ratio or an explicit PM2.5 emission limit, the PM10 maximum impacts results must be assumed to be equivalent to the PM2.5 maximum impacts.

However, there is no supportable rationale for allowing the PM10 compliance assessment to serve as a surrogate for a PM2.5 compliance assessment. The health-based ambient air standards for these two pollutant classes are unique, reflecting that the health effects of each pollutant class are also unique. It is likely that if California allows the current approach whereby PM10 compliance alone is allowed to satisfy PM2.5 compliance, that the state will allow a permitted emission rate that will cause or contribute to a violation of the state and federal PM2.5 ambient air quality standards.

Note also that Table III presents the highest sixth-hour daily concentration to assess against the SIL. This is an incorrect procedure, according to the NSR workshop manual, which in several areas makes it clear that for the purposes of assessment against significant impact levels, that the facility's highest impact should be used. Therefore, it is probable that this facility's maximum PM2.5 impact not only exceeds the most health-protective of the proposed SILs, but also exceeds every one of the proposed SILs, for PM2.5.

Once a facility's maximum impact exceeds the SIL, it must include interactive sources within its modeling analysis, to ensure that its impacts do not cause or contribute to an exceedance of the PM2.5 standard. Therefore, the facility's ambient air quality analysis is incomplete as it stands now, because the applicant has not evaluated whether or not the proposed project will cause or contribute to an exceedance of the PM2.5 ambient air quality standard. The current amended permit has ignored this requirement, and therefore does not satisfy California air quality

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regulations for issuance of a permit.

Thank you very much.

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