

Russell City Energy Center - Public Comment.txt

From: Mike Toth
Sent: Wednesday, August 19, 2009 6:05 PM
To: Weyman Lee
Subject: Russell City Energy Center - Public Comment

Dear Mr. Lee,

This public comment and request for clarification is in response to the "Additional Statement of Basis for the Proposed Permit" document for the Russell City Energy Center, published on 8/3/2009.

It has been repeatedly brought to the attention of the BAAQMD that the public is extremely concerned about the absence of permit conditions that limit the frequency (number per year) of startups and shutdowns of the facility, coupled with the absence of any permit conditions that require that Toxic Air Contaminant or Hazardous air pollutant emissions be quantified, much less limited for these startup and shutdown events.

Stated more simply, the proposed permit allows the RCEC to start up and shut down at least twice per day and release an unquantified amount of toxic air contaminants during each startup and shutdown event.

It is acknowledged that other proposed permit conditions generally and indirectly provide some unquantified limitations to toxic emissions (i.e. CO output limits, which are generally related to TACs), however the BAAQMD, CEC and RCEC have clearly and publicly resisted and rejected limitations on startup frequency (i.e. number of startups per year), or any requirements to directly quantify the levels of TAC or HAP emissions during such events, without sufficient explanation.

It is apparent from the record and from public statements that the RCEC seeks the flexibility to start up and shut down this facility as often as it deems necessary, without limitation, and estimated at twice per day for the purpose of criteria pollutant analysis. It can be safely inferred from this that the *RCEC wishes to operate as a peak-demand or spot-demand facility*, in contrast with its public statements that the plant is designed for base-load operation, and strenuous opposition to any characterization otherwise.

The BAAQMD conveys this concern without challenge, but fails to either directly address the impact on air quality (specifically toxic emissions risk) of a different operating mode or to restrict the plant to base-load operation by limiting the frequency of startups and shutdowns, even though it is apparent from the public record that the CEC and the BAAQMD have conducted the permitting process based on base-load operation assumptions. The CEC states this assumption prominently in its approval decision.

It should be apparent to any participant or informed observer in this process that if the RCEC operates in a manner involving frequent startups and shutdowns, the TAC emissions estimates computed from base-load assumptions of combustion and pollution control system efficiencies are not particularly relevant, and any analysis based on them may be misleading, and may significantly underestimate the health risk of this facility. Since the difference in TAC emission rates between startup conditions and baseload emissions may be a large multiple, as opposed to small percentage, the refusal of the BAAQMD to address this issue risks real public health consequences.

In addition to the technical issues specific to the RCEC permit, the refusal of the BAAQMD to address the issue of TAC/HAP emissions during startups and shutdowns (when such startups and shutdowns may, in fact, cause the bulk of such emissions) creates a perception among the public that the BAAQMD is facilitating a regulatory loophole to allow base-load facilities to re-purpose to spot-load or peaking facilities without considering the resulting impact on health of the surrounding population.

To correct this perception, and to avoid creating a precedent that would embolden

future facilities to exploit this perceived regulatory loophole and needlessly endanger the public health for their own convenience, it behooves the BAAQMD to clarify its position on the regulation of TAC/HAP emissions under operational conditions that are "other than anticipated" (i.e. frequent startups and shutdowns) especially when it becomes apparent that such conditions may be the norm.

To better address this issue, better inform the public, and hopefully come to a satisfactory resolution, I very much hope that you can provide specific and detailed answers to the following questions:

1. Is the BAAQMD required to perform an analysis of TAC/HAP emissions when permitting power generation facilities?

2. Will the TAC/HAP emissions during startup and shutdown conditions be quantified as a condition of this permit?

2a. If yes, will a health risk analysis be performed based on this quantification.

2b. If no, what alternative regulatory mechanisms or agencies have the jurisdiction to quantify the public health impact of this plant when it is operating on an intermittent basis with frequent startups and shutdowns.

3. Compared to a base-load operational profile, can you provide a general, rough estimate as to the maximum hourly and daily TAC emissions in an operational profile for gas turbines that involves frequent startups, expressed as a percentage? i.e. 100% means that startups have the same TAC emission rates as base-load steady-state operation, 1000% means that startups have 10x the emission rates of base-load steady-state operation, etc.

4. If the BAAQMD becomes aware that a permit applicant is likely to use a facility in a manner not previously anticipated during the permitting process by taking advantage of weak or incomplete permit conditions, where such operation may result in the unquantified release of toxics subject to regulation, what are the BAAQMD's obligations in this scenario?

To be specific, I believe that the RCEC has strongly suggested (if not stated as outright fact under penalty of perjury) and allowed the applicable regulatory agencies as well as the public to believe that this facility would operate in a base-load profile (with infrequent startups and shutdowns), but has aggressively sought to escape limits on the number of startups and shutdowns and has refused to provide further information on its intentions. This contradictory information should be sufficient to alert the BAAQMD that the falsehood of RCEC's assertion that this is a "base-load facility", and that the permit conditions and data completeness requirements should be expanded to consider an intermittent operation profile.

5. Why should the BAAQMD issue a permit when RCEC refuses to quantify the maximum number of startups and shutdowns, or the TAC/HAP emission rates associated with the startups and shutdowns, now that the BAAQMD is aware that the RCEC may not be operating as a base-load facility, and that such startups and shutdowns may be much more frequent than would be anticipated at a base-load facility. Wouldn't such a material omission mean that there is inadequate data to issue the permit?

6. Mr. Lee, in your capacity as a professional engineer, do you have enough information to determine the impact of frequent startups and shutdowns on the health of nearby workers and residents? Can you provide this information to the public, or clearly inform us if you do not have adequate information to make this determination?

The public is entitled to your direct opinion on this, as well as the opinions of others at the BAAQMD who may disagree with you. What is critically important here is that the BAAQMD break their silence on this issue, as the secrecy surrounding the startups and shutdowns issue is becoming embarrassingly obvious to the public at this point and reflects poorly on your organization.

7. What is preventing the BAAQMD from imposing a restriction on the number of startups and shutdowns? RCEC may refuse to agree to this restriction, but if they insist that they are a base-load facility, doesn't the BAAQMD have the authority to restrict the permit to this operational profile?

8. Is the BAAQMD participating in a plan to allow for the conversion of base-load facilities to spot-load facilities while avoiding a requirement for a permit re-issuance, in the face of changing demand profiles that do not require currently overbuilt base-load capacity? Such a plan would obviously be beneficial to facilities who wish to avoid costly compliance with new regulations or face obsolescence due to non feasibility of achieving BACT. If such a plan is in process, please provide information as to the agencies involved and how the public health interest can be represented.

Sincerely,

Mike Toth