From:

Donna Stone

To:

Edward Merrihew

CC:

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Date:

9/2/2009 5:28 PM

Subject:

OTAY MESA ENERGY CENTER'S EMISSIONS LIMITATIONS

Dear Ed,

99-AFC-5C

DATE

SEP 02 2009

RECD.

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As we discussed on Thursday, August 27, the owners of the Otay Mesa Energy Center Project (project) petitioned the Commission to allow for the installation of an auxiliary boiler, which was approved in January 2004. Since that time, the project owners opted to not install the auxiliary boiler. This would not be an issue if the project were able to meet the emissions limitations placed on it by our conditions of certification (COCs), or this project change had been brought to our and the San Diego Air Pollution Control District's (SDAPCD's) attention well before the Otay Mesa project's commercial start date currently scheduled for October 1, 2009. In addition to the Commission staff's serious concern that the operational project may not be able to comply with emission limitations contained in the COCs, there may be an issue regarding compliance with SDAPCD rules. It is our understanding that the project owners, Otay Mesa Energy Center, LLC (OMEC) have concerns that the project may not be able to meet the emission limitations required under SDAPCD Rules 69.3.1, and 69.3 without the auxiliary boiler, and has petitioned the SDCAPCD Hearing Board for yearlong variance to these rules.

On August 13, 2009, the project obtained an Emergency Variance to SDAPCD Rule 50, which will end on September 16, 2009. The project appears to also be unable to meet the Rule 69.3 NOx requirement that it be able to achieve 42 ppm or less within 2 hours of start-up. An Interim Variance was approved by the district on August 27, granting temporary relief from this rule, but it will expire on September 27, 2009. OMEC has also requested a yearlong variance to Rules 69.3 and 69.3.1, which deals with startup emissions. This will be heard by the Board on September 24, 2009.

I understand that you are working with the manufacturer of the project's air cooled condensers to bring the condenser vacuum down to specified levels in ½ hour, as guaranteed, from the 2 hours currently experienced. I also understand that OMEC has made arrangements for General Electric to install the OpFlex software on the combustion turbines to improve turndown, shorten start-up times and reduce emissions and fuel use. If these two adjustments are timely and enable the project to meet the current Energy Commission Conditions of Certification, then you will be permitted to proceed to commercial operation and will not need to file for an amendment at this time. A project change may be required later. However, if those adjustments are not sufficient to have the project in compliance with its COCs, the project would be considered out of compliance. The commercial operation date would be triggered by the project becoming compliant with all applicable COCs, even if you receive variances from the air district. If the project cannot comply with the Conditions of Certification as written, a Petition to Amend must be filed to justify any proposed changes to those conditions.

In order for the Commission staff to better understand the project's potential non-compliance issues, please describe the decisions that led to potential non-compliance, and possible paths forward to compliance and commercial operation, and provide responses by September 16, 2009.

- 1. When did OMEC decide that an auxiliary boiler was not needed for operation of the project? Please specify the approximate date and provide any cost savings, and technical analysis that led OMEC to believe that the project could operate in full compliance with the COCs without the proposed and approved auxiliary boiler.
- 2. Was a Request for Bid issued for the auxiliary boiler?
- (a) If so, was a bid accepted?
- (b) If so, when was the bid cancelled?
- 3. When did OMEC decide that OpFlex software was needed for operation of the project? Please specify the approximate date and provide any cost estimates, and technical analysis that led OMEC to believe that the project could operate in full compliance with OpFlex but without the proposed and approved auxiliary boiler.
- 4. Has the OpFlex software been purchased?
- (a) Are there performance specifications or bid specifications available for the district and Energy Commission to review?
- 5. Who is installing the OpFlex software at the project?
- (a) When will the OpFlex software package be installed and when will testing be completed?
- (b) Who is conducting the testing and performance evaluation?
- 6. When did OMEC discover that the time to condenser vacuum level was not being met?
- 7. Who has OMEC contacted at the ACC vendor regarding this non-conformance with performance quarantees?
- 8. What are the ACC vender and OMEC proposing to do to bring the ACC into compliance with performance guarantee?
- (a) What is the schedule for completion and testing of the possible corrections to the ACC vacuum problems?

- (b) What options are available if the proposed corrections do not bring the time down to ½ hour?
- (c) Are there any lessons from shakedown and operation of the Sutter Power Plant's (i.e., a 500 megawatt combined cycle power plant in Sutter County, CA) ACC that can or should have been applied to Otay Mesa ACC?
- 9. Is successful installation of the OpFlex and ACC correction adequate to assure emissions compliance or are source tests needed to evaluate compliance?
- (a) If so, when are the source tests scheduled?

Your team will need to respond to this email and the questions no later than September 16, 2009 or earlier if at all possible. We look forward to resolving these potential non-compliance issues as quickly and efficiently as possible. Please remember, this project is not authorized to go to commercial operation until the issues described above have been resolved to the Commission's satisfaction. Finally, you should be aware that division management has significant concerns regarding allowing any increase in emissions to address a problem that appears to have been created by Otay Mesa Energy Center's disregard of the consequences of non-compliance with air emission limitations.

Thank You,

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