Systems Assessment and Facilities Siting Division

FILE: COLUSA 06-AFC-9
PROJECT TITLE: Colusa Generating Station

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<th>Telephone</th>
<th>CEC</th>
<th>Meeting Location:</th>
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<tr>
<td>NAME:</td>
<td>Will Walters, AQ Staff</td>
<td>DATE:</td>
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<tr>
<td>WITH:</td>
<td>Les Fife, Colusa County Air Pollution Control District Staff (CCAPCD)</td>
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<td>SUBJECT:</td>
<td>Need for Air Quality Determination of Compliance Clarification</td>
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COMMENTS:
In a conversation with the Colusa County Air Pollution Control District and the Energy Commission's air quality contractor, Will Walters, the attached conversation occurred for clarification on the air districts DOC issued by the CCAPCD district and the information referenced in the Final Staff Assessment document for the Colusa Generating Station. This request and response for information has been docketed as part of the evidentiary record.

Conversation with the CCAPCD:

Jack,

Les Fife, the District's permit contractor, indicated that the applicant had verbally committed to a low NOx burner without Flue Gas Recirculation (FGR) to meet the 15 ppm limit. However, USEPA has decided to require a reduction in the NOx limit to 9 ppm. Shaheerah Kelly, the USEPA permit engineer, has indicated that the applicant has agreed to this lower limit. The actual control technology to meet the USEPA limit is expected to be an ultra low NOx burner with or without flue gas recirculation; however, like the District permit the PSD permit will not specify the exact technology required. Ms. Kelly indicated that they were still reviewing the gas turbine emission limits and that she planned to let me know by next week if they plan on requiring any emission limits below those required in the DOC. I will forward that information when received. Ms. Kelly indicated that they plan to have the draft PSD permit out by the end of the month (February) if not sooner.

Mr. Fife also noted that he found a typographical error on Page 4.1-21 of the FSA regarding the BACT boiler limit. The boiler limit is noted there to be 15 ppm "@ 15% O2", which should be noted as "@3% O2". Elsewhere in the documented the BACT limit is stated correctly.

In summary, the exact control technology selection for the auxiliary boiler is still uncertain but it would be some combination of a low NOx burner with flue gas recirculation or more likely an ultra low NOx burner with or without flue gas recirculation, and the technology would not include Selective Catalytic Reduction for NOx and no Catalytic Oxidizer is proposed or required for CO emissions.

I'll keep you updated on the USEPA PSD permit and any emission limit revisions that they plan to propose in the draft PSD permit.

I suppose you or the Hearing Officer should determine if we want to handle conforming changes with the USEPA PSD Permit limits (revisions to specific conditions including the reduction of offset requirements) in an addendum to the AQ section prior to the decision or handle it later as an amendment from the project owner. Also, we should coordinate with CCAPCD to see if they plan to produce a revised DOC to conform with the PSD permit (I have asked Les that follow-up question). Will
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<tr>
<td>Dick Ratliff</td>
<td>Jack W. Caswell</td>
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<td>Raoul Renaud</td>
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<td>Dockets</td>
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We will help facilitate and schedule agency meetings if necessary

From: <WWalters@aspeneg.com>
To: "Jack Caswell" <jcasswell@energy.state.ca.us>
CC: "Keith Golden" <kgolden@energy.state.ca.us>
Date: 1/31/2008 11:55 AM
Subject: RE: Colusa Auxiliary Boiler Control Technology - Follow Up

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Will

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From: WWalters@aspeneg.com [mailto:WWalters@aspeneg.com]
Sent: Wednesday, January 30, 2008 12:54 PM
To: 'Jack Caswell'
Cc: 'Keith Golden'
Subject: Colusa Auxiliary Boiler Control Technology
Jack,

The BACT finding is memorialized in the District condition as an emission limit (15 ppm), no specific type of control technology is required to meet that limit. However, the FDOC does assume that the technology will be an "Ultra Low NOx Burner" on page 8 and later notes a "Low NOx Burner" on page 28. Staff did not have any information from the applicant regarding their final boiler control technology selection to meet the 15 ppm BACT level, as the applicant's original low NOx burner BACT proposal was quite a bit higher than the final required emission concentration, and the final BACT determination from the District occurred well after the data requests/response phase of the project. Staff has researched low NOx burner technology and has found that low NOx burners are quite capable of meeting this emission limit, but the exact type and manner of burner is not known and there is also a very small potential for flue gas recirculation (FGR) to be added to the boiler design. This is why staff did not commit to the exact control technology design in the FSA.

The boiler will be source tested for verification demonstration of the BACT limit (AQ-8) and Condition AQ-24 requires the following in the verification of that condition..."The project owner shall submit to the CPM and APCO for approval the auxiliary boiler selected manufacturer emissions data and specifications demonstrating compliance with this condition and condition AQ-17 at least 30 days prior to installation"...so staff did not require vendor specifications or guarantees be provided as part of the verification of Condition AQ-17.

I am in the process of contacting Les Fiere to see if he received any final boiler control design commitments from the applicant during the DOC process, and I'll forward his response when received.

I hope this clears things up. If a more specific technology description is desired for the PMPD, the FDOC might be used as a reference for "ultra low NOx burner", but as inferred above at this time I don't know if this is an assumption in the DOC or a true commitment from the applicant.

Will