

From: Keith.McGregor@CH2M.com
Sent: Tuesday, March 30, 2010 5:37 PM
To: Brenda Cabral; Barry Young; Madhav Patil
Cc: b.buchynsky@dgc-us.com; Jerry.Salamy@CH2M.com; Doug.Urry@CH2M.com
Subject: MEP: Mariposa Energy LLC's Response to the Proposed Mariposa Emission Limits

Ms. Cabral,

Mariposa Energy LLC has reviewed the proposed emission limits for MEP and has the following comments:

1.) Mariposa Energy LLC accepts the following proposed limits: 2.5 ppm NO_x @ 15% O₂ (1-hour averaging period), 2.0 ppm CO @ 15% O₂ (3-hour averaging period), 2.0 ppm VOC @ 15% O₂ (1-hour averaging period), and a maximum sulfur content of 1.0 gr/100 scf of natural gas and an average sulfur content of 0.25 grains/100 scf of natural gas.

2.) Mariposa Energy LLC respectfully requests a revision of the PM₁₀ BACT emission rate from 0.0041 lb/MMBTU to 0.0052 lb/MMBTU for the following reasons:

2.a.) It is our understanding that the 0.0041 lb/MMBTU value proposed for Marsh Landing was calculated based on an emission rate of 9.0 lb/hr PM₁₀ and a maximum heat rate of 2,202 MMBTU/hr. Based on this calculation approach, the proposed emission rate for MEP would be equivalent to 1.97 lb/hr (i.e., 0.0041 lb/MMBTU * 481 MMBTU/hr = 1.97 lb/hr) which is significantly lower than the current BACT emission level for similar LM6000 projects in the BAAQMD (see Table 10 of the Marsh Landing PDOC).

2.b.) As discussed on page 46 of the Marsh Landing PDOC, "...8 out of 42 source test results for GE LM6000 simple cycle turbines show PM emissions that would exceed the 0.0034 lb/MMBTU emission rate used in establishing the Russell City Energy Center permit limit (see Table 11). Such an emission rate would not be achievable for the simple-cycle Marsh Landing turbines, and the District has concluded that it is not achieved in practice for purposes of the PM BACT analysis." The LM6000 source test data provided in Table 11 of the Marsh Landing PDOC indicates that 7 out of 42 test would also exceed the 0.0041 lb/MMBTU emission limit. Therefore, Mariposa Energy LLC believes the same conclusion reached by the BAAQMD on the Marsh Landing PDOC should be applied to the MEP project and the BACT emission limit should remain 0.0052 lb/MMBTU, which corresponds to the current BACT level for similar LM6000 projects of 2.5 lb/hr.

2.c.) Mariposa Energy LLC agrees with the BAAQMD's conclusion that BACT for Marsh Landing should include the use of low-sulfur natural gas and good combustion practices and that the use of post-combustion particulate control would not be technologically feasible or cost effective. It is also Mariposa Energy LLC's understanding that the same BACT control measures are currently applied for LM6000 projects within

the BAAQMD. As shown in Table 11, the use of good combustion practices and low-sulfur natural gas are only able to consistently meet a BACT emission limit of 2.5 lb/hr for the GE LM6000 units. Therefore, Mariposa Energy LLC concludes that 2.5 lb/hr (or 0.0052 lb/MMBTU) represents the current BACT emission limit achieved in the BAAQMD and that no additional control is available to reduce the turbine emission levels from 2.5 lb/hr to 1.97 lb/hr.

In order to ensure timely issuance of the PDOC, Mariposa Energy LLC would like to request a conference call on Thursday morning to discuss the details of this correspondence with you, Barry Young, Madhav Patil, and Brian Bateman (if he is available). Please confirm if the District is available for a call on this date.

If you have any questions in the interim, please call me at (916) 286-0221, Jerry Salamy (CH2M HILL) at (916) 286-0270, or Bo Buchynsky (Mariposa Energy LLC) at (213) 473-0092.

Thank you,

Keith McGregor
Associate Project Manager
CH2MHILL
2485 Natomas Park Drive Suite 600
Sacramento, CA 95833
Direct: (916) 286-0221
Mobile: (916) 992-3365
Fax: (916) 614-3450

-----Original Message-----

From: Brenda Cabral [mailto:BCabral@baaqmd.gov]
Sent: Thursday, March 25, 2010 4:11 PM
To: McGregor, Keith/SAC
Cc: Barry Young; Madhav Patil
Subject: Proposed Mariposa Emission Limits

Mr. McGregor: I am sending you this email since Madhav had to be out this afternoon.

Per your discussion with Barry regarding the emissions limits, the District is proposing the limits in the attached spreadsheet for the Mariposa Energy Project. The proposed limits are based in part on comparisons to the Marsh Landing project, which is similar, and on a Siemens proposal for your project that has been received by the District by email. Siemens has promised the District a formal proposal this week. We will send it to you as soon as we have it. The Marsh Landing PDOC was signed on March 22nd and is being published. We have attached a copy for your reference.

Siemens has guaranteed the emission rates for simple cycle turbines with a high degree of unit turndown to 25 MW.

We will be out of the office tomorrow, but will be in next week if you'd like to discuss.

Brenda Cabral
Supervising Air Quality Engineer
BAAQMD
939 Ellis St.
San Francisco, CA 94109
Tel: (415) 749-4686
Fax: (415) 749-5030
bcabral@baaqmd.gov

<<Proposed BACT Limits for Mariposa.xls>> <<Marsh Landing Draft PDOC March
24_copy.zip>>