# Appendix C

# Mariposa Energy Project Public Comments

# Comments Received on Mariposa Energy Project in Alphabetical Order

From: Michael Anburaj <michaelanburaj@yahoo.com>

Sent: Monday, August 30, 2010 12:26 PM

To: Brenda Cabral

Subject: Mariposa Power Plant Public Hearing request

Hi Brenda,

Reference: Mariposa Power Plant- Preliminary Determination of Compliance http://www.energy.ca.gov/sitingcases/mariposa/documents/others/2010-08-18\_Preliminary\_Determination\_of\_Compliance.pdf

I am a resident of Mountain House community since 2004 which is 2.5 miles close to the proposed Mariposa power plant site.

I would like to request a public hearing in Mountain House for the BAAQMD Permit.

Thanking you

Regards, -Michael.

From: Robert Anderson < randerson 110@gmail.com>Sent: Tuesday, September 07, 2010 11:38 PM

To: Brenda Cabral

Subject: public hearing request and cumulative impacts analysis request for the

Mariposa project

Follow Up Flag: Follow up Flag Status: Flagged

Ms. Cabral,

Reference: Mariposa Power Plant- Preliminary Determination of Compliance http://www.energy.ca.gov/sitingcases/mariposa/documents/others/2010-08-18\_Preliminary\_Determination\_of\_Compliance.pdf

I am a resident of the Mountain House community which is directly downwind from the Mariposa power plant site and also the East Altamont Energy site which is permitted for a 1,100 MW facility but not yet operating.

First, I would like to request a public hearing in Mountain House for the BAAQMD Permit.

Secondly, I do not see a cumulative impacts analysis for the permitted but not yet operating East Altamont Energy Center facility. Is there a cumulative impacts analysis, and if so, where can I find it?

Regards,

Robert Anderson

From: Aaron Basilius <aaron\_basilius@yahoo.com>

Sent: Sunday, August 29, 2010 9:42 PM

To: Brenda Cabral

Subject: Mariposa Power Plant -- Request for Public Hearing in Mountain House

Ms. Cabral,

I reside at 622 W. Sombra Way in Mountain House, CA, which is immediately east of the proposed site for the Mariposa power

plant. By this e-mail I hereby request a public hearing in Mountain House in connection with the potential issuance of a permit for the

Mariposa facility by the Bay Area Air Quality Management District. Please let me know if I can be of assistance or provide additional

information in furtherance of my request.

Thank you, Aaron Basilius

P. Aaron Basilius, Esq. Cell: 650.862.3361 (Admitted in California and Illinois)

From: Melanie Butler <ps2714@yahoo.com>
Sent: Wednesday, September 15, 2010 11:11 AM

To: Brenda Cabral

Subject: Mariposa Power Plant- Preliminary Determination of Compliance

Hi Brenda,

Reference: Mariposa Power Plant- Preliminary Determination of Compliance http://www.energy.ca.gov/sitingcases/mariposa/documents/others/2010-08-18\_Preliminary\_Determination\_of\_Compliance.pdf

I am a resident of Mountain House community which is 2.5 miles close to the propose Mariposa power plant site.

I would like to request a public hearing in Mountain House for the BAAQMD Permit.

Sincerely,

Melanie and Scott Butler

### STATE OF CALIFORNIA -THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, Govel7lor

## CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET SACRAMENTO , CA 95814-5512

September 28, 2010

Ms. Brenda Cabral Supervising Air Quality Engineer Bay Area Air Quality Management District 939 Ellis Street San Francisco, CA 94109

Dear Ms. Cabral:

Mariposa Energy Project (09-AFC-3) PRELIMINARY DETERMINATION OF COMPLIANCE, Application 20737

Energy Commission staff appreciates the opportunity to provide written public comments on the Preliminary Determination of Compliance (PDOC) issued by the District on August 18, 2010 for the Mariposa Energy Project (MEP) in eastern Alameda County.

Energy Commission staff, pursuant to both the Warren-Alquist Act and the California Environmental Quality Act (CEQA), must determine whether the facility is likely to conform with applicable laws, ordinances, regulations, and standards, and whether mitigation measures can be developed to lessen potential impacts to a level of insignificance. These determinations may be difficult without additional information from the Bay Area Air Quality Management District (BAAQMD or District) in support of the Final Determination of Compliance.

Potential Operation in Combustor Tuning Mode

We have concerns about the PDOC allowing "Gas Turbine Combustor Tuning Mode." The 2009 Application for Certification (AFC) for MEP does not propose any tuning mode operation except during initial commissioning. The PDOC identifies tuning as a mode that may recur after the initial commissioning period, and provides exclusions for hours spent in tuning mode. For a tuning mode after one-time initial commissioning, neither MEP nor the BAAQMD PDOC has indicated the potential emission rates or how often tuning could occur.

It is not clear what level of emissions should be expected or if any emission limits would apply during a tuning mode. Tuning mode air quality impacts were not disclosed in MEP's March 16, 2010 letter to the BAAQMD regarding dispersion modeling for the new short-term federal standard for nitrogen dioxide (N02). Without more information on tuning, Energy Commission staff will be unable to fully analyze project impacts.

At a minimum, we recommend the analysis be modified to show the expected maximum emission rates during tuning and to clarify that the emissions limits in Conditions 19 and

20 would apply to all modes of operation, including tuning. However, BAAQMD may simply want to consider removing the definition given for tuning (PDOC p. 84) and the exclusion in Condition 15a.

# **Potential Typographical Errors**

We recommend the BAAQMD investigate the following discrepancies in reported emission rates:

Condition 18: The maximum hourly emissions of 18.5 pounds per hour (lb/hr) nitrogen oxides (NOx) are not consistent with those (21.276 lb/hr) shown on PDOC p. 60.

Condition 20: The limit of 45.6 tons per year (tpy) for NOx does not match the total facility emission (of 45.958 tpy and 45.67 tpy) shown in the discussion of offsets on PDOC p. 67 and Table 35.

Condition 20: The limit of 5.9 tpy for precursor organic compounds (POC) does not match the maximum facility emissions (of 5.7 tpy) shown in PDOC Table 14.

We appreciate the District working with Energy Commission staff on this licensing case. If you have any questions regarding our comments, please contact Gerald Bemis at (916) 654-4960. We look forward to discussing our comments in further detail with you.

MATTHEW S LAYTON
Supervising Mechanical Engineer

cc: Docket (09-AFC-3) Proof of

To: Brenda Cabral Subject: oppose mariposa > Hi Brenda, Reference: Mariposa Power Plant- Preliminary Determination of > >Compliance >http://www.energy.ca.gov/sitingcases/mariposa/documents/others/2010-08->18\_Preliminary\_Determination\_of\_Compliance.pdf > I am a resident of Mountain House community which is 2.5 miles close > to the propose Mariposa power plant site. > I would like to request a public hearing in Mountain House for the > BAAQMD Permit. > Thanking you > Regards > Hui Chen

From: Hari Krishna Dara <haridara@gmail.com> Wednesday, August 25, 2010 5:27 PM Sent:

From: hui chen <hui chen chen@yahoo.com> Tuesday, August 31, 2010 10:31 AM

Sent:

To: Brenda Cabral

jbyron@energy.state.ca.us; rweisenm@energy.state.ca.us; Cc: docket@energy.state.ca.us; choffman@energy.state.ca.us;

publicadviser@energy.state.ca.us; dighe.rajesh@gmail.com

Subject: Mariposa power plant public hearing

Hello Brenda,

I live in Mountain House, CA which is less than 3 miles from the proposed site of Mariposa Power plant and so would like request a public hearing at Mountain House for the BAAQMD permit.

Thank you, Hari

From: Rajesh Dighe <dighe.rajesh@gmail.com>
Sent: Tuesday, August 24, 2010 10:48 AM

To: Brenda Cabral

Subject: Mariposa Power Plant Project (near Mountain House) - CEC application 09-

AFC-03

Hi Brenda,

Reference: Mariposa Power Plant- Preliminary Determination of Compliance http://www.energy.ca.gov/sitingcases/mariposa/documents/others/2010-08-18\_Preliminary\_Determination\_of\_Compliance.pdf

I am a resident of Mountain House community which is 2.5 miles close to the propose Mariposa power plant site.

I would like to request a public hearing in Mountain House for the BAAQMD Permit.

I am also one of the intervener to Maripose application 09-AFC-03 filed at CEC.

Thanking you

Regards

Rajesh Dighe

415 533 4289

From: Rajesh Dighe <dighe.rajesh@gmail.com> Sent: Friday, September 10, 2010 2:58 PM

To: Brenda Cabral

Subject: Re: Mariposa Power Plant Project (near Mountain House) - CEC application

09-AFC-03

Hi Brenda

Good afternoon.

I was wondering if BAAQMD has made any decision around having a public hearing here in Mountain House for the Mariposa Energy project BAAQMD permit?

I know lot of people here in Mountain House have shown interest for having such a hearing here in Mountain House.

Also I have some questions around the Air pollution dispersion model for this project and how far geographically the effects of the pollutants are estimated by the applicant. Who should I email or talk to inside BAAQMD around this subject?

Thanking you Regards

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On Tue, Aug 24, 2010 at 3:03 PM, Brenda Cabral <BCabral@baaqmd.gov> wrote:
> Thank you for your interest in commenting on the Preliminary Determination of Compliance (PDOC)
for the Mariposa Energy Project.
> In the case that the District decides to hold a public meeting, the District will notify you of the time,
date, and place via the email that you have provided.
> If you have any other questions or comments, please call me at (415) 749-4686, email me at
bcabral@baaqmd.gov, or write to me at the address below.
> Sincerely,
> 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
> -----Original Message-----
> From: Rajesh Dighe [mailto:dighe.rajesh@gmail.com]
> Sent: Tuesday, August 24, 2010 10:48 AM
> To: Brenda Cabral
> Subject: Mariposa Power Plant Project (near Mountain House) - CEC
> application 09-AFC-03
>
> Hi Brenda,
      Reference: Mariposa Power Plant- Preliminary Determination of
> Compliance
> http://www.energy.ca.gov/sitingcases/mariposa/documents/others/2010-08
> -18_Preliminary_Determination_of_Compliance.pdf
> I am a resident of Mountain House community which is 2.5 miles close
> to the propose Mariposa power plant site.
> I would like to request a public hearing in Mountain House for the
> BAAOMD Permit.
> I am also one of the intervener to Maripose application 09-AFC-03 filed at CEC.
> Thanking you
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> Regards > > Rajesh Dighe > > 415 533 4289

>

From: Badri Ghimire <badri\_ghimire@yahoo.com>

Sent: Sunday, August 29, 2010 12:18 PM

To: Brenda Cabral

Subject: Mariposa Power Plant

Hi Brenda,

Reference: Mariposa Power Plant- Preliminary Determination of Compliance

I am a resident of Mountain House community which is 2.5 miles close to the propose Mariposa power plant site. I would like to request a public hearing in Mountain House for the BAAQMD Permit. I am concerned about the Air Pollution the plant is going to cause and I completely oppose the Mariposa Power Plant Project Near Mountain House.

Thanking you

Regards

Badri Ghimire

From: Katherine Havener <kchavener@att.net> Sent: Monday, August 30, 2010 2:00 PM

To: Brenda Cabral

Cc: byron@energy.state.ca.us; rweisenm@energy.state.ca.us;

docket@energy.state.ca.us; choffman@energy.state.ca.us; publicadviser@energy.state.ca.us; dighe.rajesh@gmail.com Subject: Request for Public Hearing in Mountain House for BAAQMD Permit

(CEC Mariposa Power Plant Application Docket: 09-AFC-03)

Dear Ms. Cabral and Honorable Energy Commissioners:

I am a Mountain House, California homeowner, and am writing in reference to the proposed Mariposa power plant site. I have great concerns about a power plant being built a mere 2.5 miles from our community, and the toxic and negative effects it will have on my children and our environment.

Accordingly, I would like to request a public hearing in Mountain House for the BAAQMD Permit.

Thank you very much,

## Katherine Havener

From: mhulsoor@comcast.net

Sent: Sunday, August 29, 2010 11:52 AM

To: Brenda Cabral

Subject: Mariposa Energy Project

Dear Ms. Cabral,

I am writing you to express my strong opposition to the installation of the Mariposa Energy Project. It amazes me that anyone would even consider the idea of a project that would further degrade the air quality of this portion of the San Joaquin Valley. Even now, all it takes is a short period of triple-digit temperatures (which is common in this area in the summertime) and our air quality is officially labelled "Unhealthy". What does one do when the air we breathe is not healthy? We breathe unhealthy air.

I have lived in Stockton for 10 years, and in that time, I have noticed that when federal deadlines for improving the air quality of this area have loomed, those in charge have had a simple solution: they applied to the federal government (the Bush administration) for extensions of time, and these extensions were granted. That had been the extent of their activity on behalf of the air-breathing citizens of this area. Naturally, the air quality has worsened as the population grew, and we now exceed federal pollution standards.

Now, an additional source of air pollution is proposed. Somehow, this is supposed to be "offset" by the plan to decrease emissions from a factory in Santa Clara! Add to this the idea that a payment from the plant's developer, Mariposa Energy LLC, of \$644,503 will somehow "make up for the impact" of the additional air pollution, and you have the measure of just how inept and ineffective the SJ Valley Air Pollution Control District really is. It boggles the mind of this air-breathing citizen.

Thank you for the opportunity to express my thoughts on this vital issue.

Sincerely, Marilyn F. Hulsoor

209-462-8618

>From: Sivanantham kandan <paramsiva@yahoo.com> Sent: Wednesday, September 01, 2010 6:23 AM

To: Brenda Cabral

Subject: Mariposa Power Plant- Preliminary Determination of Compliance

Hi Brenda,

Reference: Mariposa Power Plant- Preliminary Determination of Compliance

I am a resident of Mountain House community which is 2.5 miles close to the propose Mariposa power plant site.

I would like to request a public hearing in Mountain House for the BAAOMD Permit.

I am concerned about the Air Pollution the plant is going to cause and I completely oppose the Mariposa Power Plant Project Near Mountain House.

Thanking you

Regards Siva

>

From: Atul Khanna < AKKhanna@yahoo.com>
Sent: Wednesday, September 01, 2010 11:09 AM

To: Brenda Cabral

Subject: Reference: Mariposa Power Plant- Preliminary Determination of

Compliance

I am a resident of Mountain House community which is 2.5 miles close

> to the propose Mariposa power plant site.

>

- > I would like to request a public hearing in Mountain House for the
- > BAAQMD Permit.
- > I am concerned about the Air Pollution the plant is going to cause
- > and I completely oppose the Mariposa Power Plant Project Near Mountain House.

>

> Thank you

>

> Regards

Atul Khanna, MD akkhanna@yahoo.com

From: Amit Kothari <akothari11@yahoo.com> Sent: Tuesday, August 31, 2010 10:26 PM

To: Brenda Cabral

Subject: Mariposa Power Plant- Preliminary Determination of Compliance

Hi Brenda,

Reference: Mariposa Power Plant- Preliminary Determination of Compliance

I am a resident of Mountain House community which is 2.5 miles close to the propose Mariposa power plant site.

I would like to request a public hearing in Mountain House for the BAAQMD Permit. I am concerned about the Air Pollution the plant is going to cause and I completely oppose the Mariposa Power Plant Project Near Mountain House.

Thanking you

# Regards

### Amit Kothari

From: Amy Krista <amykrista@sbcglobal.net>
Sent: Friday, September 03, 2010 7:45 PM

To: Brenda Cabral

Subject: No to the Mariposa Energy Project Power plant in Alameda County

Dear Ms. Cabral,

Please do not allow the proposed Mariposa Energy power plant to be built in Alameda County. The air in Tracy is already grossly polluted and we do not need more noxious fumes spilled into our city and surrounding areas. I had never suffered asthma or lung problems before moving to Tracy. Now the last year has left me on oxygen and suffering. My move from the Bay Area to the polluted San Joaquin County with horrid air quality has been the cause.

Again I implore you please do not approve the Mariposa Energy Power Plant.

Thank you,

Amy Krista CMV Service

phone: 209-640-9011 fax: 209-834-1707

Sep. 23-2010

Hi Brenda,

Reference: Mariposa Power Plant- Preliminary Determination of Compliance

http://www.energy.ca.gov/sitingcases/mariposa/documents/others/2010-08-18\_Preliminary\_Determination\_of\_Compliance.pdf

I am a resident of Mountain House community which is 2.5 miles close to the propose Mariposa power plant site.

I would like to request a public hearing in Mountain House for the BAAQMD Permit.

Thanking you

Regards,

ChingChuan Flora Li 323 Ashlee Ave.

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From: hui chen <hui_chen_chen@yahoo.com>
Sent: Tuesday, August 31, 2010 12:46 PM
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To: Brenda Cabral

Subject: request public hearing in ountain house for BAAQMD

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> Hi Brenda,
Reference: Mariposa Power Plant- Preliminary Determination of Compliance
http://www.energy.ca.gov/sitingcases/mariposa/documents/others/2010-08
-18_Preliminary_Determination_of_Compliance.pdf
I am a resident of Mountain House community which is 2.5 miles close
to the propose Mariposa power plant site.
I would like to request a public hearing in Mountain House for the
BAAQMD Permit.
Thanking you
Regards
Jack Li
Jack Li
```

From: hui chen <hui\_chen\_chen@yahoo.com> Sent: Tuesday, August 31, 2010 12:48 PM

To: Brenda Cabral

Subject: request for public hearing in mountain house for BAAQMD

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:
> Hi Brenda,
>
Reference: Mariposa Power Plant- Preliminary Determination of Compliance
>
http://www.energy.ca.gov/sitingcases/mariposa/documents/others/2010-08
> -18_Preliminary_Determination_of_Compliance.pdf
>
I am a resident of Mountain House community which is 2.5 miles close
> to the propose Mariposa power plant site.
>
I would like to request a public hearing in Mountain House for the
> BAAQMD Permit.
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> Thanking you
> Regards
>Jerry Li
From: hui chen <hui_chen_chen@yahoo.com>
Sent:
       Tuesday, August 31, 2010 12:43 PM
To:
        Brenda Cabral
Subject: public hearing in mouontain house for BAAQMD
> Hi Brenda,
>
>
     Reference: Mariposa Power Plant- Preliminary Determination of Compliance
> http://www.energy.ca.gov/sitingcases/mariposa/documents/others/2010-08
> -18_Preliminary_Determination_of_Compliance.pdf
> I am a resident of Mountain House community which is 2.5 miles close
> to the propose Mariposa power plant site.
> I would like to request a public hearing in Mountain House for the
> BAAQMD Permit.
> Thanking you
> Regards
>Wentao Li
>
From: hui chen <hui_chen_chen@yahoo.com>
       Tuesday, August 31, 2010 12:53 PM
Sent:
        Brenda Cabral
To:
Subject: request public hearing in mountain house for BAAQMD
> Hi Brenda,
>
>
     Reference: Mariposa Power Plant- Preliminary Determination of Compliance
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> http://www.energy.ca.gov/sitingcases/mariposa/documents/others/2010-08

```
> -18_Preliminary_Determination_of_Compliance.pdf
>
> I am a resident of Mountain House community which is 2.5 miles close
> to the propose Mariposa power plant site.
>
> I would like to request a public hearing in Mountain House for the
> BAAQMD Permit.
>
> Thanking you
>
> Regards
>
> Peter Liou
>
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Sent: Tuesday, September 07, 2010 9:32 PM

To: Brenda Cabral

Subject: Mariposa Power Plant- Preliminary Determination of Compliance

Hi Brenda,

Reference: Mariposa Power Plant- Preliminary Determination of Compliance

I am a resident of Mountain House community which is 2.5 miles close to the propose Mariposa power plant site.

I would like to request a public hearing in Mountain House for the BAAQMD Permit. I am concerned about the Air Pollution the plant is going to cause and I completely oppose the Mariposa Power Plant Project Near Mountain House.

Thanks and Regards Rajeev Ponnayyan

(-: Believe yourself and others will believe you :-)

From: Jerry.Salamy@CH2M.com

Sent: Monday, September 27, 2010 4:31 PM

To: Brenda Cabral

Cc: b.buchynsky@dgc-us.com; g.normoyle@dgc-us.com; p.zagrecki@dgc-us.com;

Doug.Urry@CH2M.com; Keith.McGregor@CH2M.com; Madhav Patil

Subject: Mariposa Energy's Comments on the Mariposa Energy Project Preliminary

**Determination of Compliance** 

Attachments: MEP PDOC Comment Letter - 09-27-10.pdf

Brenda,

Attached are Mariposa Energy LLC's comments on the Mariposa Energy Project Preliminary Determination of Compliance for your consideration.

# Thanks,

Jerry Salamy Principal Project Manager CH2M HILL/Sacramento Phone 916-286-0207 Fax 916-614-3407 Cell Phone 916-769-8919



September 27, 2010

Ms. Brenda Cabral Supervising Air Quality Engineer Bay Area Air Quality Management District 939 Ellis Street San Francisco CA 94109

Subject: Mariposa Energy LLC's Comments on the Mariposa Energy Project Preliminary Determination of Compliance - Application 20737

Ms. Brenda Cabral:

Mariposa Energy LLC (Mariposa Energy) appreciates the Bay Area Air Quality Management District's (District) efforts to prepare the Preliminary Determination of Compliance (PDOC) for the Mariposa Energy Project (MEP) and appreciates the opportunity to provide these clarifying comments. Our comments focus primarily on the permit conditions presented in Section 9 of the PDOC. Additionally we have provided general comments to assist the District in preparing the Final Determination of Compliance. Any proposed changes have been provided in an underline/strike-through format for your convenience.

### **General Comments**

Section 1, Page 1, 3<sup>rd</sup> Paragraph, 2<sup>nd</sup> Sentence – Please correct the statement regarding the facility's electrical production "..., providing a power output from a low of 25 MW to a high of a nominal 200 MW (194 MW net at 59 F)." These values are referenced on Page 2-2 in Volume 1 of the AFC. These corrections should also be made in Sections 3.2 of the PDOC.

Section 1, Page 1,  $3^{rd}$  Paragraph,  $5^{th}$  Sentence – The turbines have a net rated generation rate of 48.5 MW and a nominal rated generation rate of 50 MW. Please correct the references to turbine production in Sections 3.6, 9 and 10 of the PDOC to reflect the nominal generation rate of 50 MW.

Section 1, Page 1, 4<sup>th</sup> Paragraph, 3<sup>rd</sup> and 4<sup>th</sup> Sentences – Please make the following edits to the statement regarding ownership: "The Mariposa Energy Project will be constructed, owned, and operated by Mariposa Energy LLC, which is owned by Diamond Generating Corporation, a wholly owned subsidiary of Mitsubishi Corporation." These corrections should also be made in Section 3.2 of the PDOC.

Section 3.1, Page 3, 1<sup>st</sup> Paragraph, 4<sup>th</sup> Sentence – The MEP will be dispatched by Pacific Gas and Electric Company, not the California Independent System Operator. Suggest the following text "The Pacific Gas and Electric Company (PG&E), through dispatch orders from the California Independent System Operator (CAISO), would be responsible for dispatching the plant to meet electrical demand."



Ms. Brenda Cabral September 27, 2010 Page 2 of 5

Section 3.1, Page 4,  $1^{\rm st}$  Paragraph,  $2^{\rm nd}$  Sentence – The MEP natural gas pipeline should be corrected to 580 feet in length.

Section 3.2, Page 4, 4th Paragraph, 4th Sentence – This sentence states that the hydrocarbon emissions rates are higher for the DLE models over all temperature considered, please remove the phrase "hydrocarbon and" from this sentence as it is not consistent with data presented in Table 1. This change should also be reflected in the text on last paragraph of page 33 of the PDOC.

Section 3.4, Page 11,  $6^{th}$  Paragraph,  $4^{th}$  Sentence – Suggest the following clarification edit "Since each turbine will be limited to 4,000 hours of steady-state operation per year, this plant is not considered a base-loaded plant under the definitions of California Code of Regulations, Title 20, sections 2900, et seq."

Section 4.3.3, Page 17, 1st Paragraph, 2nd Sentence – Mariposa Energy will not be conducting more than one phase of commissioning for each of the turbines. Therefore, Mariposa Energy suggests the following change to the text "Because Mariposa Energy will only conduct one phase of commissioning per turbine per day, the following commissioning emission estimates for each turbine are based on the maximum daily emissions from 4 hours of gas turbine testing at 10% load, 8 hours of Pre-Catalyst Initial tuning at 100% load or 8 hours of Post-Catalyst tuning at 100% load."

Section 4.1.3, Page 17, Table 5 – Based on the previous comment, Mariposa Energy suggests the following revisions to the values in Table 5. These revisions should also be incorporated in Tables 32.

Air Pollutant	Proposed Commissioning for One G	g Period Emissions Limits as Turbine
	1b/hr	lb/day
NO2	51	408
CO	45	360
POC		36
PM10		20
SO2		10.8

Section 4.1.3, Page 17, Table 6 – The emission rates (lb/hr) for SOx should be revised to reflect 1.0 grain of sulfur per 100 dry standard cubic feet of natural gas to be consistent with the assumptions used for the steady state operations. This revision should also be incorporated in Tables 7, 33, 34, and Appendix A.

Section 4.1.4, Page 21, Tables 8 and 9 – These tables present the California Air Resources Board (ARB) certified engine emission rates for the fire pump engine but do not reflect the engine manufacturer's lower emission rates (Document 2 of the May 26, 2010 email materials on your



Ms. Brenda Cabral September 27, 2010 Page 3 of 5

website). Furthermore, the project will be mandated to use ARB compliant ultra low sulfur diesel fuel (i.e., 15 ppm sulfur). Therefore, Mariposa Energy proposes the use of the engine manufacturer's emission factors for 15 ppm sulfur diesel fuel.

Section 5.5, Page 50,  $1^{\rm st}$  Paragraph,  $2^{\rm nd}$  Sentence – The reference to a PM<sub>10</sub> emission rate on a lb/MMBtu basis appears inappropriate as the District concludes on page 55 that "Since the combustion process by itself creates a very small amount of PM<sub>10</sub> emissions, ...". Mariposa Energy requests all references to the PM<sub>10</sub> emission rate of 0.0052 lb/MMBtu be removed from this page and pages 52, 53, 55, and Appendix A.

Section 6.5, Page 68, 2<sup>nd</sup> Paragraph, 1<sup>st</sup> Sentence - Diamond Generating Corporation is in possession of the valid emission reduction credits to offset the emission increases from the permitted sources for the Mariposa Energy Project. Please update the text and Tables 35 and 36, accordingly.

Appendix B – Although Mariposa Energy believes that the analysis conducted by the District accurately characterizes the potential health risk associated with the MEP, the health risk screening analysis indicates that actual meteorological data was not available. For clarification, the meteorological data used to prepare the air dispersion modeling results in the Application for Certification (AFC) were submitted with a copy of the MEP permit application to the District on June 16, 2009.

### Comments on Permit Conditions (Section 9)

Page 84, Definition of Commissioning Activity – This definition includes references to heat recovery steam generators and a steam turbine. Please remove these references as MEP does not include this equipment.

Page 86, Condition 9 – The first sentence of the condition indicates the emission limits are for each turbine but the emission limits presented below the text represent the facility limits. Please revise the commissioning emission rates in this condition to reflect the limits for each turbine in Table 5 (see general comment above).

Page 87, Condition 10 – The first sentence of this condition refers to a "startup" when discussing the timing requirements for source testing after the initiation of the commissioning period. Mariposa Energy requests the replacement of "Within 90 days after startup,..." with "Within 90 days of initiation of the Commissioning Period,..." as the term Commissioning Period is defined in the permit. This suggested change should also be made in Conditions 25, 26, 28, and 30.

Page 87, Condition 15a – This condition specifies an annual operational limit of 4,000 hours for each turbine. The discussion on page 74 states "A permit condition limiting operation of any single turbine for more than 5,200 hours/any consecutive 12 months has been added to part 15b of Condition. Although 15b appears to have been omitted from the PDOC, Mariposa Energy requests the following changes to Condition 15a to incorporate the language on page 74:



Ms. Brenda Cabral September 27, 2010 Page 4 of 5

15a. The owner operator shall not operate any turbine S-1, S-2, S-3, or S-4 such that the hours of operation for any of the four units exceeds 4,2255,200 hours per year <u>or a combined 16,000 for all four units</u> (excluding operations necessary for maintenance, tuning, testing, startup and shutdown). (Basis: Offsets, Cumulative Increase)

Page 88, Condition 17(g) – Mariposa Energy suggests revising the sulfur dioxide emission rate from 1.347 pounds per hour to 1.35 pounds per hour consistent with Table 2 of the PDOC.

Page 88, Condition 18 - The maximum hourly carbon monoxide (CO) and precursor organic Page 88, Condition 18 – The maximum hourly carbon monoxide (CO) and precursor organic compound (POC) emission rates and the shutdown CO and POC emission rates do not reflect the lower operational BACT emission levels of 2 parts per million by volume at 15 percent oxygen (ppmvdc) CO and 1 ppmvdc POC required in the PDOC. Mariposa Energy proposes the revised Table 40 below. These changes should also be reflected in Appendix A, Tables 3, 4, 12, 14, 28, 29, 30, 31, and the discussion of 40 CFR 64, Compliance Assurance Monitoring (CAM)

	TABLE 40.	STARTUP AND SHUTDOWN	
Pollutant	Maximum Emissions Per Startup (lb/startup)	Maximum Emissions During Hour with Startup and/or Shutdown(lb/hr)	Maximum Emissions Per Shutdown (lb/shutdown)
NOx (as NO2)	14.2	18.5	3.2
CO	14.1	17.318.1	2.72.9
POC (as CH4)	1.1	1.41.7	0.120.2

Page 90, Condition 19 – Mariposa Energy proposes the following revisions to the daily emission rates in Condition 19 to maintain consistency with the comments on Condition 18 above. These changes should also be reflected in Appendix A and Table 12.

- 19. The owner/operator shall not allow total combined emissions from the Gas Turbines (S-The owner/operator shall not allow total combined emissions from the Gas Turbines 1, S-2, S-3, and S-4), including emissions generated during gas turbine start-ups, and shutdowns to exceed the following limits during any calendar day:

  (a) 10981129.7 pounds of NOx (as NO2) per day (Basis: Cumulative Increase)
  (b) 9341171.5 pounds of CO per day (Basis: Cumulative Increase)
  (c) 95.1120.82 pounds of POC (as CH4) per day (Basis: Cumulative Increase)
  (d) 240241.44 pounds of PM10 per day (Basis: Cumulative Increase)
  (e) 130478.26 pounds of SO2 per day (Basis: Cumulative Increase)

Page 90, Condition 20 – Mariposa Energy proposes the following revisions to the annual emission rates in Condition 20 to maintain consistency with the comments on Condition 18 above. These changes should also be reflected in Appendix A and Table 14.

20. The owner/operator shall not allow cumulative combined emissions from the Gas Turbines (S-1, S-2, S-3, and S-4), including emissions generated during gas turbine start-

Ms. Brenda Cabral September 27, 2010 Page 5 of 5

ups, shutdowns, and malfunctions to exceed the following limits during any consecutive type, statutowns, and manufactions to exceed the following limits during a twelve-month period:

(a) 45.6 tons of NOx (as NO2) per year (Basis: Offsets)

(b) 27.229.98 tons of CO per year (Basis: Cumulative Increase)

(c) 5.65.90 tons of POC (as CH4) per year (Basis: Cumulative Increase)

(d) 21.213 tons of PM10 per year (Basis: Cumulative Increase)

- (e) 2.987 tons of SO2 per year (Basis: Cumulative Increase)

Page 90, Condition 21 – The formaldehyde emissions presented in Condition 21 do not appear to be based on a California Air Toxic Emission Factors (CATEF) presented on page 117 of the PDOC. Please provide a reference to the formaldehyde emission factor was used.

Page 95, Diesel Fire Pump Condition 1 – Mariposa Energy requested a 4 hour per year operating limit for the fire pump in the AFC based on actual operating experience at other company-owned plants. Please revise the operating hour limit to 4 hours.

Page 96, Diesel Fire Pump Condition 4(e) – The MEP only has one diesel engine so the reference to each engine is inappropriate. Please replace the word "each" with "the" and "engines" with "engine".

If you have any questions regarding our comments, please contact either me or Mr. Jerry Salamy at 916-286-0207.

Sincerely,

Mariposa Energy LLC

1/1/2-

Gary B. Normoyle Director Engineering & Construction

Craig Hoffman/CEC cc: Doug Urry/CH2M HILL Jerry Salamy/CH2M HILL Keith McGregor/CH2M HILL

From: Sarveybob@aol.com Sent: Monday, September 27, 2010 5:10 PM

Brenda Cabral; Jack Broadbent; Alexander Crockett To:

Cc: Sarveybob@aol.com

Subject: Comments on the PDOC for the Mariposa Energy Center Attachments: Mariposa PDOC Comments First Draft.doc

Attached are Robert Sarvey's comments on the PDOC for the Mariposa Energy Center.

Robert Sarvey

501 W. Grantline Rd.

Tracy, CA 95376

(209) 835-7162

sarveybob@aol.com

COMMENTS ON THE PDOC MARIPOSA ENERGY CENTER APPLICATION 20737

Dear Ms. Cabral,

Thank you for the opportunity to comment on the Preliminary Determination of Compliance for the Mariposa Energy Center, Application Number 20737. In accordance

with Regulation 2, Rule 2, Section 405 I request a public hearing on the project to receive verbal comment from the public preferably in the Mountain House Community where the impacts of this project will be felt. The most difficult aspect of this permit is its location on the edge of the San Joaquin Valley. The majority of the projects emissions impact the San Joaquin Valley. The San Joaquin Valley is a much dirtier airshed than the BAAQMD partly due to the emissions from BAAQMD sources. Here in the Valley we have much stricter standards and Valley residents are facing millions of dollars in extra vehicle registration fees and other taxes as penalties for not achieving clean air standards.<sup>1</sup>

The PDOC as proposed also fails to comply with BACT requirements for NOx and PM-10. The proposed PDOC also violates other federal, state, and local air quality standards and plans and the non conformance must be addressed in the FDOC.

**Power Plant Permitting Process and Opportunities for Public Participation** 

<sup>&</sup>lt;sup>1</sup> http://valleyair.org/recent news/News Clippings/2010/In%20the%20News%2008-26-10.pdf

Page 3 of the PDOC states that, "The California Energy Commission (CEC) is the primary permitting authority for new power plants in California. The California Legislature has granted the Energy Commission exclusive licensing authority for all thermal power plants in California of 50 megawatts or more. (See Warren-Alquist State Energy Resources Conservation and Development Act, Cal. Public Resources Code §§ 25000 et seq.) This licensing authority supersedes all other local and state permitting authority."

The BAAMD has the authority over all air quality laws ordinances regulations and standards. The CEC's licensing authority does not supersede the BAAQMD Rules and Regulations. § 1752.3. of the Warren Alquist Act prescribes that the presiding members proposed decision: "shall include findings and conclusions on conformity with all applicable air quality laws, including required conditions, based upon the determination of compliance submitted by the local air pollution control district. (b) If the determination of compliance concludes that the facility will comply with all applicable air quality requirements, the commission shall include in its certification any and all feasible conditions necessary to ensure compliance. If the determination of compliance concludes that the proposed facility will not comply with all applicable air quality requirements, the commission shall direct its staff to meet and consult with the agency concerned to attempt to correct or eliminate the noncompliance. (c) If the noncompliance cannot be corrected or eliminated, the commission shall determine whether the facility is required for the public convenience and necessity and whether there are not more prudent and feasible means of achieving such public convenience and necessity. In such cases, the commission shall require compliance with all provisions and schedules required by the Clean Air Act and compliance with all applicable air quality requirements which in the judgment of the commission, can be met."

Despite this presumption of authority by the CEC the CEC does not have **any** jurisdiction over the ability of the air district to enforce all provisions and schedules required by the Clean Air Act since the Districts authority for licensing and review of power plant operations is delegated to it by the EPA through the Federal NSR and Title V Provisions and the SIP approved by the EPA. If the CEC were to attempt to exercise its authority over any provision or schedule required by the Clean Air Act or the Districts Title V Programs it would violate federal regulations and lead to the removal of the Districts authority for NSR, SIP and Title V programs including sanctions against the district and the State.

California law also supports the authority of the district to prevent construction and operation of a non complying source. Health and Safety Code § 41513 provides that "any violation of any provision of this part, or of any order rule or regulation of the state board or of any district may be enjoined in a civil action." Other provisions for injunctive relief are found at Health and Safety Code §§ 42453, 42454. State law authorizes the air district under Health and Safety §§ 42450, 42451 to issue an order for abatement that enforces the requirements of the permit program. The district may also bring a proceeding before the district's hearing board to revoke a permit that the district has issued if the permit holder is violating any district rule under health and safety code § 42307.

Finally Health and Safety Code Section 42302.1 states, "a person who participated in a permitting action may request the Hearing Board of the district to hold a public hearing to determine whether the permit was properly issued." The FDOC, should one be issued, must clarify this statutory scheme as to do otherwise misleads the public. The CEC's authority over air quality matters is subject to the jurisdiction of the air districts.

# Mariposa Energy Project: A Simple-Cycle Power Plant

Page 3 of the PDOC states, "The simple-cycle design is especially well suited for power plants operating to meet peak demand because the turbines can be started up very quickly when required by demand. With combined-cycle turbines, startups take longer because the heat recovery boilers and steam turbines take additional time to come up to operating temperature. Simple-cycle turbines are also well suited to peaking applications because such plants, by their nature, are not called upon to run for extended periods of time. This is an important consideration because simple-cycle turbines are inherently less efficient than combined-cycle turbines, which recover some of the heat from the turbine exhaust that would otherwise be wasted. Since such plants are operated for a relatively small number of hours per year, this energy penalty – which translates into additional fuel used to generate the same amount of power – is not as much of a concern."

While this statement may have been true several years ago the new modern combined cycle projects have start times that are similar to "simple cycle peaker plants." The district is well acquainted with

these new designs as they are permitting several new combined cycle fast start facilities such as the Willow Pass Generating Station with its proposed Flex Plant 10 units.<sup>2</sup>

Based on vendor information, startup (i.e., the period from initial firing to compliance with emission limits) of the 275 MW FP10 units proposed for Willow Pass is expected to occur within 12 minutes.<sup>3</sup> In comparison the units proposed for the Mariposa Project have a 10 minute startup time and will not meet emission limits for as long as 30 minutes.

The advent of these faster starting combined cycle turbines has permitting implications. Because "simple-cycle turbines are inherently less efficient than combined-cycle turbines," they emit much higher GHG emissions per megawatt and also have much higher criteria air pollutant emissions per megawatt and consume much more natural gas per megawatt. It is no longer necessary to sacrifice efficiency for shorter start up times. The FDOC needs to address these factors in the permitting analysis.

# **Project Location**

The project is located on the border of the BAAQMD and the San Joaquin Valley Air Pollution Control District. The projects emissions flow directly into the San Joaquin Valley which is a dirtier air shed that has more stringent standards than the BAAQMD. According to page 24 of the PDOC the project will emit directly into the San Joaquin Valley the following amounts of criteria pollutants:

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<sup>&</sup>lt;sup>2</sup> http://www.energy.ca.gov/sitingcases/willowpass/documents/intervenors/2008-08-

<sup>21</sup>\_LETTER\_FROM\_BAAQMD\_REAGARDING\_PRELIMINARY\_REVIEW\_OF\_DETERMINATION\_OF\_CO MPLIANCE\_TN-47183.PDF

<sup>&</sup>lt;sup>3</sup>http://www.energy.ca.gov/sitingcases/willowpass/documents/applicant/afc/Volume\_01/7.1%20Air%20Quality.pdf page 7.1-9 Willow Pass AFC <a href="http://www.energy.siemens.com/co/pool/hq/energy-topics/pdfs/en/combined-cycle-power-plants/PowerGen2007PaperFinal.pdf">http://www.energy.siemens.com/co/pool/hq/energy-topics/pdfs/en/combined-cycle-power-plants/PowerGen2007PaperFinal.pdf</a> Page 15

TABLE 14. MAXIMUM ANNUAL STEADY ST.	ATE CRITERIA A	AIR POLLUTAN	EMISSIONS FO	R THE FACILIT	Y INCLUDING
	STARTUP	AND SHUTDOW	N		
	NO <sub>2</sub>	CO	POC	$PM_{10}$	SO <sub>2</sub> <sup>e</sup>
	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)
One Gas Turbine	8.8	4.28	1.22	5	0.68
Four Gas Turbines	35.2	17.12	4.88	20	2.72
Diesel Engine Fire Pump <sup>f</sup>	0.3	0.1	0.02	0.02	0.0
Startup	8.5	8.5	0.66	0.75 <sup>a</sup>	0.102°
Shutdown	1.92	1.74	0.12	0.375 <sup>b</sup>	0.051 <sup>d</sup>
Total subject to District	46.0	27.5	5.7	21.1	2.9
Regulations					

The projects offsets consist of one ERC for 52.52 tons of NOx from Santa Clara issued in 1993. In the Tesla Proceeding the CEC determined that 70 % of the emissions from sources in Antioch and Pittsburg impact the San Joaquin Valley and 22% of emissions from sources on the other side of the Altamont Pass including Santa Clara impact the San Joaquin Valley. <sup>4</sup> The CEC in cooperation with CARB concluded that a reduction of emissions east of the Altamont Pass including Santa Clara would provide a 22% reduction in the San Joaquin Valley. The value of the 52.52 tpy emission reduction credit from Santa Clara by that formula would be 11.55 tpy of NOx reductions in the San Joaquin Valley. This leaves a potential 34.4 tpy of NOx, 27.5 tpy of CO, 5.7 tpy of POC, 21.1 tpy of PM-10, and 2.9 tpy of Sox, and 28.4 tpy of ammonia emissions unmitigated in the San Joaquin Valley since the Mariposa Project emits directly into the Valley.

If the project were in the San Joaquin Valley rather than just emitting into it, emission offsets would also be required for PM-10 pursuant to Rule 2201 Section 4.5.3.<sup>5</sup>

In addition to these more stringent offset requirements the SJVUAPCD also has more stringent requirements for offsets based on the location of the offsets in relation to the source. Rule 4.8.3 provides that the standard distance offset ratio for ERC's located more than 15 miles form the source would be 1.5 to 1.6

<sup>&</sup>lt;sup>4</sup> Commission Decision Tesla Project Page 158 http://www.energy.ca.gov/sitingcases/tesla/documents/2004-06-22 FINAL.PDF

<sup>&</sup>lt;sup>5</sup> http://valleyair.org/rules/currntrules/Rule2201 June 10 2010.pdf Table 4-1

<sup>&</sup>lt;sup>6</sup> http://valleyair.org/rules/currntrules/Rule2201 June 10 2010.pdf Table 4-2

The proposed mitigation in the form 52.52 tons of NOx ERC's from Santa Clara issued in 1993 simply does not mitigate the projects impacts in San Joaquin Valley which creates a public nuisance to a considerable number of residents in the San Joaquin Valley in violation of Regulation 1, Section 301 Public Nuisance and the California Health and Safety Code.

This project in combination with several other projects that are being permitted or are already approved are further degrading air quality in the San Joaquin Valley. The BAAQMD has recently approved or is considering approval of the following emission sources.

ıal Emissio	ns			
NO2	VOC	PM 2.5	СО	SO2
72.0	14.2	31.6	138.9	4.96
98.8	30.0	76.3	98.8	12.6
77.1	28.5	39.4	142.78	10.5
247.9	83.6	147.3	380.48	28.06
173.5	58.5	103.1	266.33	3 19.64
48.6	11.1	25.8	69.5	3.2
222.1	69.6	128.9	335.83	22.84
	NO2 72.0 98.8 77.1 247.9 173.5 48.6	72.0 14.2 98.8 30.0 77.1 28.5 247.9 83.6 173.5 58.5 48.6 11.1	NO2 VOC PM 2.5 72.0 14.2 31.6 98.8 30.0 76.3 77.1 28.5 39.4 247.9 83.6 147.3 173.5 58.5 103.1 48.6 11.1 25.8	NO2 VOC PM 2.5 CO 72.0 14.2 31.6 138.9 98.8 30.0 76.3 98.8 77.1 28.5 39.4 142.78 247.9 83.6 147.3 380.48 173.5 58.5 103.1 266.33 48.6 11.1 25.8 69.5

As the district knows from its increment consumption analysis for the Tesla Project, the project area has a maximum modeled 24-hour average PM10 increment consumption of 140  $\mu$ g/m<sub>3</sub>, and annual average PM10 increment consumption of 30  $\mu$ g/m<sub>3</sub>.

The ARB originally established transport mitigation requirements in 1990 which are contained in Title 17, California Code of Regulations, Sections 70600 and 70601. These regulations were amended in 1993

<sup>&</sup>lt;sup>7</sup> PSD Increment Consumption Status Report April 16, 2008 Page 4

and more recently in 2003. The Board adopted amendments on May 22, 2003, which were approved by the Office of Administrative Law on December 4, 2003, and became effective on January 3, 2004. These amendments added two new requirements for upwind districts. These amendments require upwind districts to (1) consult with their downwind neighbors and adopt "all feasible measures" for ozone precursors<sup>8</sup> and (2) amend their "no net increase" thresholds for permitting so that they are equivalent to those of their downwind neighbors no later than December 31, 2004. The amendments clarify that upwind districts are required to comply with the mitigation requirements, even if they attain the State ozone standard in their own district, unless the mitigation measures are not needed in the downwind district.

The impact of these newly permitted facilities are in addition to the East Altamont Energy Center and the dormant Tesla Power Project now owned by PG&E.

Best Available Control Technology (BACT)

District Regulation 2-2-301 requires that the Mariposa Energy Project use the Best Available Control Technology to control NOx, CO, POC, PM10, and SOx emissions from sources that will have the potential to emit over 10 pounds per highest day of each of those pollutants. Pursuant to Regulation 2-2-206, BACT is defined as the more stringent of:

- (a) "The most effective control device or technique which has been successfully utilized for the type of equipment comprising such a source; or
- (b) The most stringent emission limitation achieved by an emission control device or technique for the type of equipment comprising such a source: or
- (c) Any emission control device or technique determined to be technologically feasible and cost effective by the APCO, or

<sup>8</sup> First, is a new requirement that upwind districts adopt all feasible measures for the ozone-forming pollutants, independent of the upwind district's attainment status.

<sup>&</sup>lt;sup>9</sup> A new requirement intended to equalize permitting programs in upwind and downwind areas. The ARB staff is proposed and the ARB passed into law that "no net increase" thresholds for new source review permitting programs in upwind areas must be as stringent as those in downwind districts.

(d) The most effective emission control limitation for the type of equipment comprising such a source which the EPA states, prior to or during the public comment period, is contained in an approved implementation plan of any state, unless the applicant demonstrates to the satisfaction of the APCO that such limitations are not achievable. Under no circumstances shall the emission control required be less stringent than the emission control required by any applicable provision of federal, state or District laws, rules or regulations."

The districts policy actually applies a different standard in its analysis in the PDOC. The District in its BACT analysis determines its emission limits for BACT by examining the most recent worst performing facility and then uses the worst performing facilities highest emissions as BACT, to as the district states, "provide a reasonable margin of compliance." Put another way instead of looking to the best performing facilities with the lowest emission rate as District rule 2-2-06 (b) requires the district utilizes the worst performing facilities emissions performance as BACT. The district's burden in determining BACT for this project is to assume that the Mariposa Project would in fact perform comparably to the best performing similar facility, unless there was something to suggest otherwise.

The purpose of the BACT analysis as described by District regulation 2-2-05 (b) is to examine like kind facilities and their emissions and determine which facility is performing the best and examine the work practices and technological improvements employed at the facility and make a BACT determination based on the best performing facility.

The district approach is just the opposite. The district looks at the highest emission rate from all the facilities in the analysis and chooses the highest emission rate as BACT without ever analyzing how and if the facility undergoing review can achieve the lowest achievable emission rate demonstrated by the other facilities. Each facility has different equipment and work practices and this is precisely the analysis the district must perform to determine BACT. Instead of choosing BACT based on the best performing facility analyzing the equipment and combustion practices this PDOC chooses BACT based on the emissions performance of the worst facilities worst performance. A perfect example is the districts approach to setting its BACT limit for PM-10.

Best Available Control Technology for Particulate Matter (PM) for Turbines

The district in its analysis of BACT for PM-10 looked at emissions performance data for seven recently permitted simple cycle facilities that utilize the LM6000 turbine. Of those seven facilities analyzed only one facility has measured PM-10 emissions over 2.3 pounds per hour which was the Goosehaven Facility. The next highest PM-10 emission rate was from the Los Esteros Facility which had a 2.266 lb/hr emission rate back in 2005. Five of the seven facilities have never exceeded 2.2 pounds per hour for PM-10. The best performing facility the Gilroy energy Center has never exceeded 2 lbs/hr. The district instead of looking to the BEST performing facilities and their work practices and technology the district looked to the worst performing facility the Goosehaven facility to establish a BACT limit of 2.5 pound per hour. An emission limit between 2.0 and 2.3 pounds per hour should be considered BACT since these limits have been achieved in practice at similar facilities.

The district in table 25 of the PDOC also completes a review of "RECENT BACT PM-10 PERMIT LIMITS FOR LARGE SIMPLE-CYCLE GAS TURBINES" The districts review omits three recent PM-10 BACT determinations for large simple cycle turbines that have been recently licensed by the CEC and support a lower PM-10 BACT emission rate for the Mariposa Project. The first determination is for the Hanford facility. The projects simple cycle PM-10 emission rate is 2.2 pounds per hour utilizing the LM 6000 turbine. The Henrietta Project has just been licensed with a 2.2 lb/hr PM-10 emission limit for simple cycle operation also with the LM-6000. The Marsh Landing simple cycle facility was just permitted with PM-10 rate of 0.0041 lb/MMBTU or just 1.97 lbs/hr. The three most recent BACT determinations for simple cycle turbines have been 2 pounds per hour or less for PM-10 and support a lower BACT limit for PM-10.

The district clearly needs to establish a lower emission limit for PM-10 to comply with the BACT requirements of District Regulation 2-2-301. The Majority of the LM-6000 turbines examined by the district have achieved in practice a PM-10 emission rate of 2.2 lbs/hr or less which would qualify as BACT under District Regulation 2-2-301(b). "The most stringent emission limitation achieved by an emission control device or technique."

<sup>10</sup> PDOC page 54

<sup>&</sup>lt;sup>11</sup> http://www.energy.ca.gov/2009publications/CEC-700-2009-012/CEC-700-2009-012-REV1.PDF Page 4.1-12

<sup>&</sup>lt;sup>12</sup> http://www.energy.ca.gov/2009publications/CEC-700-2009-013/CEC-700-2009-013-REV1.PDF Page 4.1-21

### 5.2 Best Available Control Technology for Oxides of Nitrogen (NOx) for Turbines

The District examined technologies that may be effective to control NOx emissions in two general areas: combustion controls that will minimize the amount of NOx created during combustion; and post-combustion controls that can remove NOx from the exhaust stream after combustion has occurred.

### **Combustion Controls**

Water-injection and dry low-NOx combustion are both technically feasible simple-cycle combustion turbine control technologies that are available to control NOx emissions from the Mariposa project. Water injection is capable of reducing NOx concentrations to 25 ppm while DLE systems are capable of reducing NOx concentrations to 15 ppm. Clearly the DLE system is BACT for combustion controls since it is capable of a 40% reduction in NOx concentrations over water injection prior to application of the SCR post combustion control technology.

The Draft PDOC states on page 24, "Overall, all three of the LM6000-based gas turbines could meet the project contractual requirements of dispatchable and high degree of unit turndown. However, the LM6000PD and LM6000PF gas turbines do not meet the project objective of being capable of generating 184 MW (net electrical output of all 4 combustion turbines including parasitic loads) during peak July conditions. Furthermore, the limited hours of operating data available for the LM6000PF turbine increases the risk the turbine may not be available "on demand" which would lead to the imposition of penalties per the PPA. Therefore, the LM6000PC turbine was selected by Mariposa Energy for MEP in order to meet the electrical output and reliability requirements outlined in the Mariposa Energy PPA with PG&E.<sup>13</sup>

Overall, all three of the LM6000-based gas turbines would have met the project contractual requirements of dispatchable and high degree of unit turndown. However, the LM6000PD

<sup>13</sup> http://www.baaqmd.gov/~/media/Files/Engineering/Public%20Notices/2010/20737/Application%20Correspondence%20and%20Support ing%20Documents/044-email%205-26-2010%20CH2M%20to%20Patil%20Attached%20Doc 27.ashx Draft PDOC Page 24

First the applicants PPA with PG&E is irrelevant to the BACT analysis. Secondly the PPA is confidential and is not available to BAAQMD or members of the public who wish to comment on this permit application. BAAQMD and the public have no way to confirm the applicant's claims about the PPA's, "required output" and "the imposition of any penalties that the applicant would incur." In any case those issues are of no concern in determining which combustion control technology is BACT for this project.

In the BACT analysis the district has ignored several other distinct advantages of the LM-6000 PF turbine with DLE and other new DLE systems introduced by GE which should be examined in the BACT analysis for combustion controls.

According to the GE website the LM 6000 PF turbine features high efficiency, superior fuel gas consumption and fuel flexibility, coupled with lower emissions and water usage in both the 50 Hz and 60 Hz segments. The LM 6000-PF has a superior heat rate and "avoids 15,000 metric tons of CO<sub>2</sub> emissions over the course of a 3,000-hour peaking season while producing the same electricity output, which is equivalent to the annual CO<sub>2</sub> emissions of more than 2,800 cars on U.S. roads. The LM 6000 PF can reduce natural gas consumption by more than 264,000 MMBtu, equivalent to the amount of natural gas consumed annually by more than 3,700 U.S. households, which can yield an annual fuel cost savings of \$1.58 million at \$6 per MMBtu. The LM 6000 PF can reduce NO<sub>x</sub> emissions by 815,000 pounds, which is equivalent to the annual NO<sub>x</sub> emissions of 21,000 cars on U.S. roads, when operating at 15 ppm NO<sub>x</sub> instead of 25 ppm NO<sub>x</sub> like the LM6000 PC. Most importantly the LM 6000 PF can, by incorporating DLE technology, can eliminate the use of water while lowering emissions of NO<sub>x</sub> to 15 ppm and CO to 25 ppm, unlike the typical 60 Hz, simple-cycle turbine in this range, which uses water as a diluent. This can avoid annual water consumption of 9.9 million gallons, and can yield \$100,000 per year in operational savings and eliminate the need to purchase a water treatment system<sup>14</sup>

and LM6000PF gas turbines do not meet the project objective of being capable of generating

184 MWs during peak July conditions. MARIPOSA ENERGY PROJECT BEST AVAILABLE CONTROL TECHNOLOGY REVIEW Page 4

http://www.gepower.com/prod\_serv/products/gas\_turbines\_cc/en/downloads/GEH12985H.pdf

<sup>14</sup> http://www.gepower.com/prod\_serv/product

The combustion controls BACT analysis must identify the superior performance of the LM 6000 PF and other new variants recently developed by GE such as the GE LM6000 Nexgen. The BACT analysis must consider the collateral impacts of the additional water use and the superior NOx reduction capability of the dry low NOx products. The impacts of the treatment, transportation, and consumption of the additional water must be considered and quantified in the BACT analysis. The lower heat rate offered by other variations of the GE LM-6000 turbine must be investigated as the lower heat rate will save millions of dollars of ratepayer money and reduce greenhouse gas and criteria pollutant emissions per megawatt.

The analysis in the PDOC reports slightly higher CO emissions from the DLE systems. "The District prioritizes NOx reductions over carbon monoxide, however, because the Bay Area is not in compliance with applicable ozone standards, but does comply with carbon monoxide standards. The District therefore requires applicants to minimize NOx emissions to the greatest extent feasible, and then to optimize CO and POC emissions for that level of NOx control. This is a trade-off that must be kept in mind when selecting appropriate emissions control technologies for these pollutants."15

# **Post-Combustion Controls**

The applicant has proposed and the district has selected the use of Selective Catalytic Reduction (SCR) as BACT for the simple-cycle gas turbines. SCR is capable of over 90 percent NOx removal. Therefore, when combined with water or steam injection, NOx emissions levels of 2.5 ppmvd at 15 percent O2 when firing natural gas are achievable. This technology is considered feasible for MEP. 16

In doing so the District recognizes that the use of SCR results in collateral impacts because of ammonia slip from the SCR system. The district lists three impacts from the use of ammonia in SCR systems: secondary particulate formation, health risks, and ammonia transportation and storage dangers.

<sup>&</sup>lt;sup>15</sup> PDOC PAGE 32

<sup>&</sup>lt;sup>16</sup>http://www.baaqmd.gov/~/media/Files/Engineering/Public%20Notices/2010/20737/Application%20Correspondence%20and%20Supporting %20Documents/020-email%205-26-2010%20CH2M%20to%20Patil%20Attached%20Doc 3.ashx Page 8

The district ignores one very large collateral impact from ammonia slip which is nitrogen deposition. Nitrogen deposition is the input of nitrogen oxide (NOx) and ammonia (NH3) derived pollutants from the atmosphere to the biosphere. Mechanisms by which nitrogen deposition can lead to impacts on sensitive species include direct toxicity, changes in species composition among native plants, and enhancement of invasive species. The project area is home to many endangered species including the red legged frog and tiger salamander among others. <sup>17</sup> The ammonia emissions from power plants are a larger contributor to nitrogen deposition than the projects NOx emissions. The PDOC fails to analyze or discuss this collateral impact entirely.

With respect to secondary particulate formation the district relies on a modeling report to conclude that there would be no significant impact from secondary particulate formation from the projects ammonia emissions <sup>18</sup> The BAAQMD Draft PM 2.5 study concluded, "Reducing ammonia emissions by 20 percent (around 15 tons/day) was the most effective of the precursor emissions reductions. Secondary PM2.5 levels were typically reduced 0-4 percent, depending on location, with an average around 2 percent. Reducing NOx and VOC emissions by 20 percent (around 250 tons/day total) was relatively ineffective. Reducing sulfur containing PM precursor emissions by 20 percent (around 16 tons/day) typically had a small impact on Bay Area PM2.5."<sup>19</sup> The districts own modeling report has preliminarily concluded that reductions in other PM-2.5 precursors would be ineffective in reducing particulate matter formation and that only reductions in ammonia emissions have the potential to reduce particulate formation.<sup>20</sup> Despite the contrary conclusions of the study the district concludes that ammonia slip would not form significant secondary particulate in the BAAQMD.

The study and the districts conclusions regarding secondary particulate formation in the BAAQMD are not particularly relevant since the emissions from the Mariposa Project will primarily impact the San Joaquin Valley not the BAAQMD. The districts efforts in this regard are misplaced and an additional analysis of secondary particulate matter formation in the San Joaquin Valley is necessary to conclude that the impacts would not be significant enough to eliminate SCR as a post combustion control.

BAAQMD did not perform an air quality analysis for Mariposa Project to examine the potential formation of secondary PM from the 28 tons per year of ammonia slip, but instead relied on a drat

<sup>17</sup> http://www.energy.ca.gov/sitingcases/mariposa/documents/others/2010-04-

<sup>20</sup> DOD Letter to US Fish+Wildlife Services Re Consultation. TN-56408.pdf

<sup>&</sup>lt;sup>18</sup> Draft PM2.5 Modeling Report

<sup>&</sup>lt;sup>19</sup> Draft PM2.5 Modeling Report Page

study that concludes that ammonia slip is the only precursor emission that contributes to significant secondary formation of particulate. The limited nature of the draft analysis did not confirm a direct "causation" for nitrate PM formation and did not include an investigation on trends for ammonia and fine particulate formation in the ambient air in the project area or San Joaquin Valley. The potential increase in secondary PM from the ammonia slip could violate Health and Safety Code section 42301(a) by preventing or interfering with the attainment of the State's PM10 and/or PM2.5 standards for both the BAAQMD and the SJVAPCD.

A second potential environmental impact that may result from the use of SCR involves ammonia transportation and storage. The proposed facility will utilize aqueous ammonia for SCR ammonia injection, which will be transported to the facility and stored onsite in tanks. The transportation and storage of ammonia presents a risk of an ammonia release in the event of a major accident.

The project, if allowed to use SCR, can eliminate the impact from transportation accidents by utilizing a technology called NOxOUT ULTRA®. There are dozens of systems in service, one in Southern California at UC Irvine. Most of the UC campuses have decided not to risk bringing ammonia tankers through campus or having to offload or store ammonia. NOxOUT ULTRA is being specified for new units at UCSD, University of Texas and Harvard. The NOxOUT ULTRA system requires a tank for the urea. Urea has no vapor pressure and no smell. If it spills, the evaporated water will leave behind a pile of crystal salts. There are no hazards to labeling or training required for the operator and absolutely no risk to adjacent facilities or neighbors. In an emergency, there is very little, if any, ammonia exposure. Other than the seven seconds between the chamber and the AIG, the only exposure is the harmless urea.

# Determination of BACT emissions limit for NOx for Simple-Cycle Gas Turbines

The District is also proposing to establish a BACT emissions limit in the permit of 2.5 ppm (averaged over one hour) utilizing SCR and pre combustion water control for NOx. SCR is capable of over 90 percent NOx removal. Therefore, when combined with water or steam injection which reduces NOx

concentrations to 25 ppm before the SCR , NOx emissions levels of 2.5 ppmvd at 15 percent O2 when firing natural gas are achievable. This technology is considered feasible for MEP.<sup>21</sup>

By employing the DLE system which reduces NOx concentrations to 15 ppm the project should be able to achieve a 1.5- 2.3 ppm NOx emissions limit with the 90% control efficiency of the SCR.<sup>22</sup> The BACT emission limit should be set at 1.5- 2.3 PPM utilizing DLE and SCR. That would represent the proper BACT limit for this project.

The proposed Riverside Energy Center has just been permitted with a 2.3 PPMVD for NOx emissions.<sup>23</sup> The project consists of two General Electric LM6000 PC SPRINT NxGen combustion turbine generators with Emission Control Modules (ECMs) equipped with inlet air chiller coils, exhaust ducting, flue gas treatment system, emission monitoring system, a common chiller package with cooling tower, and gas compressor equipment.

Start up and shut down NOx emissions

The DLE system lowers NOx concentrations to 15 ppm. The lower concentration will lower NOx emissions form start up and shut down and the district should analyze what concentrations are achievable and require that limit as BACT.

http://www.baaqmd.gov/~/media/Files/Engineering/Public%20Notices/2010/20737/Application%20Correspondence%20and%20Supporting%20Documents/020-email%205-26-2010%20CH2M%20to%20Patil%20Attached%20Doc 3.ashx Page 8

<sup>&</sup>lt;sup>22</sup> DLE reduces NOx concentration to 15PPM x .9 SCR 90% control efficieny = 13.5 PPM in NOx reduction for a 1.5 PPM Nox emission limit.

<sup>&</sup>lt;sup>23</sup> Final Initial Study of the Riverside Energy Resource Center Power Plant Project (08-SPPE-1), Staff Report, publication # CEC-700-2008-010-SF. Posted: December 22, 2008. (PDF file, 302 pages, **7.2 megabytes**) Page 3-34

## Compliance with the new Federal NO2 standard

The PDOC does not contain a demonstration of compliance with the new Federal NO<sub>2</sub> standard. Maximum NO<sub>2</sub> hourly emissions for the project are 21.276 pounds per hour.<sup>24</sup>

The applicant has provided an analysis which purportedly demonstrates compliance with the new NO<sub>2</sub> standard when the maximum hourly NO<sub>2</sub> emissions are 18.5 lbs per hour for each turbine. This analysis conflicts with the analysis presented in the AFC which predicts a maximum modeled concentration of 130  $\mu$ g/m<sub>3</sub> from normal operation combined with a background of 105  $\mu$ g/m<sub>3</sub> which does not meet the new Federal NO<sub>2</sub> standard.

The PDOC also does not contain a demonstration of compliance with the NO<sub>2</sub> standard during commissioning when emissions from a single turbine could be as high as 51 Pounds per Hour. The AFC filed by the applicant predicts a one hour NO<sub>2</sub> turbine commissioning impact of 216  $\mu$ g/m³ and a background of 105  $\mu$ g/m³ which shatters the new Federal 1 hour NO<sub>2</sub> standard. The district should consider a limitation on the number of turbines that can be operated simultaneously in commissioning mode.

Health Risk Assessment

<sup>24</sup> DDOC Dago 60 in order to pr

<sup>&</sup>lt;sup>24</sup> PDOC Page 60 in order to protect hourly air quality standards, the District is also proposing an additional hourly limit for operating hours during which startups occur. This limit is based on a reasonable need for the facility to start up twice in a one-hour period, which is not unforeseeable given the facility's operation as a peaker facility. The District is basing this proposed limit on two startups with a typical emissions profile as summarized in Table 27, using the following scenario: The first startup will last 10 minutes, followed by an 8 minute shutdown. The turbine would start up again for a total of 24 minutes, and the remainder of the hour (18 minutes) will be at steady-state BACT levels. These maximum hourly emissions with two startups are summarized in Table 29 below.

 $<sup>\</sup>frac{25}{http://www.baaqmd.gov/\sim/media/Files/Engineering/Public\%20Notices/2010/20737/Application\%20Correspondence\%20and\%20Supporting\%20Documents/049-email\%207-8-2010\%20CH2M\%20to\%20Cabral.ashx$ 

<sup>&</sup>lt;sup>26</sup> PDOC Page 64

<sup>&</sup>lt;sup>27</sup> AFC Page 5.1-28 Table 5.1-25

Please describe how the health impacts from particulate matter emissions are calculated and represented in the health risk assessment. Since the district is not in compliance with the Federal 1 hour PM 2.5 standards this discussion should be included in the health risk assessment.

From: Linda <br/> sbrdielovr@sbcglobal.net><br/> Sent: Sunday, September 26, 2010 1:41 AM

To: Brenda Cabral

Subject: Proposed Mariposa Energy Project Attachments: Mariposa Energy Plant NO.docx

Dear Ms Cabral:

I fear my comments on the proposed Mariposa Energy Project are more of a collection of research that I have pulled from the internet over the past several days than a cohesive argument.

However, I want to express that I am firmly AGAINST the building of this power plant in Eastern Alameda County.

My rambling thoughts, along with references when I remembered to quote sources, are attached as a Word file.

I am extremely concerned that Alameda County would consider building this plant so close to a new town community (Mountain House), a town that was barely in existence 5 years ago, and a town that is in another county's jurisdiction (San Joaquin). I feel, as do my neighbors, that Alameda County is building it here, away from their own cities, because Alameda County residents are saying NIMBY ("not in my back yard"). The benefits of the plant will not be felt or utilized here, but rather benefit those back over the Altamont Hills to the west. If you were to come spend a day in Mountain House, you would notice the wind patterns (thus the windmills on the Altamont) and know that anything blown into the sky 2 miles away will end up here, no matter what other research says. Spend any windy night here, where the wind comes up about 5pm and doesn't stop till 9am the next morning, if then, and you will understand. The wind has blown out our gas bbq more times than I can count, and that is taking precautionary measures so it doesn't blow out. Garbage on the night before pickup days ends up all over the neighborhood as the wind first blows the lid open on the toter and then blows any loose garbage or recycling out of the toter and down the street. And once the toters are emptied, it is like a dancing parade of garbage cans up and down the streets, as they move on their own from home to home, until the owners come home scratching their heads and trying to figure out which can on the block (or around the corner) is really theirs! The wind just swirls here, and comes from different directions, sometimes on a daily basis. Statistics will not show you this. Someone living here in this town can show you this.

As I have spent way too much time researching this, and getting upset over this matter this week, I leave you to decipher my rambling thoughts.

to decipner my rambling thoughts.		
G' 1		
Sincerely,		

Linda Selvidge

My children attend a school in the town of Mountain House within three miles of the plant. There is another school exactly two miles from the plant and one more planned that is just over two miles from the plant. I am concerned about my children's health and breathing polluted air (air which is already noncompliant with state and Federal standards). How are you going to inform us of a leak, my children's school, everyone within the vicinity of any health hazards from problems at plant? How do you mitigate health issues for asthmatics and others with breathing problems? I already have a daughter with exercise-induced asthma, who running a mile out of doors for physical education. She is the 2<sup>nd</sup> slowest in her class due to the excrutiating pain she has experienced during these outdoor runs. I know these chemicals/fumes cause cancer and I don't want my children, ages 6 and 12, exposed to such risks. There are already a large number of those with cancers who have been exposed to these chemicals in one way or another. Our children are more important than any need for a power plant. I would hope you would try to avoid an unnecessary plant. We moved from Alameda County in the East Bay to a family community three years ago that had no power plant other than green energy windmills! Everything else being equal, we would not have purchased our home in Mountain House in February of 2007 if we knew that a peaker plant would be built shortly thereafter.

I believe the land for the Mariposa Energy Plant was purchased BEFORE the town of Mountain House came into existence, although the land may have changed hands from the original owner in the interim. The fact that a town does exist here now, as opposed to rural farmland, in such close proximity to the proposed power plant, should make a significant impact on the decision of the BAAQMD.

'Our job is to protect the American public where they live, work and play – and that certainly includes protecting schoolchildren where they learn.' US EPA Administrator Lisa P. Jackson

The emissions may occur locally, but their impacts are global and their impacts are cumulative.

As part of a new air toxics monitoring initiative, EPA, state and local air pollution control agencies will monitor the outdoor air around schools for pollutants known as toxic air pollutants, or air toxics. The Clean Air Act includes a list of 187 of these pollutants. Air toxics are of potential concern because exposure to high levels of these pollutants over many decades could result in long-term health effects. http://www.epa.gov/air/sat/

The air children breathe impacts their health. People exposed to toxic air pollutants at sufficient concentrations and durations may have an increased chance of health problems including damage to the immune system, and neurological, developmental, respiratory and other health problems including cancer. In some cases, children may be more vulnerable to these health effects than adults because:

- their bodies are still developing; and
- their behavior can expose them to more chemicals.

Particulate matter," also known as particle pollution or PM, is a complex mixture of extremely small particles and liquid droplets. Particle pollution is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles.

The size of particles is directly linked to their potential for causing health problems. EPA is concerned about particles that are 10 micrometers in diameter or smaller because those are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects. EPA groups particle pollution into two categories:

- "Inhalable coarse particles," such as those found near roadways and dusty industries, are larger than 2.5 micrometers and smaller than 10 micrometers in diameter.
- "Fine particles," such as those found in smoke and haze, are 2.5 micrometers in diameter and smaller. These particles can be directly emitted from sources such as forest fires, or they can form when gases emitted from <u>power plants</u>, industries and automobiles react in the air. <a href="http://www.epa.gov/air/particles/">http://www.epa.gov/air/particles/</a>

Health studies have shown a significant association between exposure to fine particles and premature mortality. Other important effects include aggravation of respiratory and cardiovascular disease (as indicated by increased hospital admissions, emergency room visits, absences from school or work, and restricted activity days), lung disease, decreased lung function, asthma attacks, and certain cardiovascular problems such as heart attacks and cardiac arrhythmia. Individuals particularly sensitive to fine particle exposure include older adults, people with heart and lung disease, and children. <a href="http://www.epa.gov/ttn/naags/pm/pm25">http://www.epa.gov/ttn/naags/pm/pm25</a> index.html

The EPA promulgated a revised NAAQS for  $PM_{2.5}$  on October 17, 2006 (71 Federal Register 61144). The effective date for the new standard was December 18, 2006. The EPA retained the annual  $PM_{2.5}$  standard of 15  $\mu$ g/m³ and revised the 24-hour  $PM_{2.5}$  standard, changing it from 65  $\mu$ g/m³ to 35  $\mu$ g/m³. The 24-hour  $PM_{2.5}$  standard was revised based on a number of health studies showing that short-term exposure to  $PM_{2.5}$  is associated with increased mortality and a range of serious health effects, including aggravation of lung disease, asthma attacks, and heart problems. This memo describes the designation process for the revised 24-hour  $PM_{2.5}$  standard. It outlines the next step in developing and implementing emission control programs for attaining and maintaining this standard – a standard that addresses an important public health problem.

http://www.epa.gov/ttn/naaqs/pm/docs/june 2007 guidance for area designations for 2006 24-hour pm2.5.pdf

Air in the San Joaquin Valley has been defined as "Severe", placing an air pollutting business in an already polluted county an area appears irresponsible. On 1-7-02 Channel 13 News (10pm) report San Joaquin coutny/valley as the worst pollution in the nation, specifically worse that Los Angeles, Calif.

Although the proposed Mariposa Plant is on Alameda County land, it is officially in the air space of the San Joaquin Valley Air Pollution Control District.

The Valley's meteorology,

topography and economy differ significantly from those in other jurisdictions. Although it is valuable to review and evaluate efforts of other agencies, we must consistently look for solutions that fully consider the Valley's unique needs. http://www.valleyair.org/General\_info/pubdocs/AnnualReport2009-web.pdf

he District has the responsibility for issuing or denying permits, registrations and plan approvals for more than 30,000 non-mobile sources of air contaminants, and for tracking and assessing impacts of these facilities' annual pollutant emissions.

Authorities to Construct and Permits to Operate: Air permits are required in

the San Joaquin Valley for very small stationary sources of air pollution. In fact, most facilities that emit air contaminants, from gas stations and body shops to refineries and power plants, must obtain permits from the District before constructing or operating. The permitting process involves two steps.

The first step requires the applicant to apply for and receive an Authority to Construct (ATC) permit. This process can be fairly lengthy, but it provides an important opportunity for the project proponent, the District, and interested public to provide input and to assess a project's compliance with federal, state, and local air requirements prior to beginning construction. The requirements that must be met to obtain a permit in the Valley are among the strictest in the nation, requiring the best available air pollution control equipment and mitigation of emissions increases.

The second step, issuing the Permit to Operate, occurs after the applicant has properly installed the equipment allowed by the Authority to Construct. . <a href="http://www.valleyair.org/General\_info/pubdocs/AnnualReport2009-web.pdf">http://www.valleyair.org/General\_info/pubdocs/AnnualReport2009-web.pdf</a>

It is my opinion that, by building in Alameda County, the Mariposa Energy Project is trying to side-step the requirements of the San Joaquin Valley Air Quality District.

The Mountain House Master Plan follows state guidelines for Specific Plans, though it is called the Master Plan to distinguish it from Specific Plans for smaller areas within the Mountain House community. The Mountain House community is a "new town" development, currently with 2 neighborhoods fully constructed and two currently under construction, which is located approximately less than two miles east of the project site. The Mountain House Master Plan implements the amendment to the San Joaquin County 2010 General Plan which added the Mountain House community to the General Plan. The Master Plan presents plans for land use, infrastructure, environmental resources, public service provisions, objectives, policies, and implementation measures (San Joaquin County, 2000).

We recognize the difficult situation of overlapping jurisdictions faced by San Joaquin County, the Town of Mountain House and the City of Tracy as opposed to the County of Alameda who owns the land. While Alameda County's zoning currently covers the Mariposa site, the Sphere of Influence and corresponding Specific Plans are relevant to those in San Joaquin county as the plant is closer to their businesses and residences than to those in Alameda County.

Noise abatement is another concern. In noisy urban/industrial environments, other utility staff has traditionally utilized the lowest hourly L<sub>90</sub> as a basis of measurement. In a quiet rural environment, such as that surrounding this proposed peaker plant, this is not necessarily the most reliable measure. Under certain circumstances, it is common in the noise industry to average noise descriptors over some relevant period of time. For example, where traffic noise defines the background noise regime, it is common to average the L<sub>90</sub> measurements over some period of time, typically the nighttime hours.<sup>2</sup> Given the extremely quiet background noise levels encountered at the site, it is appropriate to average the L<sub>90</sub> levels over a representative period such as eight hours. Where the nighttime hours present the quietest time of day, then averaging over the nighttime would be appropriate. I expect our community represents an extremely quiet noise regime.

At the Tracy Peaker Plant, which is fairly local, the largest short-term (1-hour) ground level concentration of PM is located 2.2 miles to the southwest. Assuming geographic similarities, that would put the Mariposa Energy Plant 1 hour ground level concentration right at the level of three of our local Lammersville Unified School District schools.

San Joaquin County requires: New sources of air pollution, and modifications of existing sources must comply with District Rule 2201 (New and Modified Source Review), also known as New Source Review or NSR. This rule is a component of Regulation II of our District Rulebook. The NSR rule provides the mechanism for the District to issue permits to new and expanding businesses without interfering with efforts to meet the state and federal health-based air quality standards. NSR contains a couple of main requirements – BACT and Offsets.

Best Available Control Technology

The best available air pollution control technology (BACT) is required for new and modifying units that result in certain calculated emissions increases. BACT is, at a minimum, the most stringent control technique or limitation that has been achieved in practice for the same class of source. However, if there is a more effective control that is both technologically feasible and cost effective, or that is contained in an approved implementation plan, the more effective control technique must be used.

**Emissions Offsets** 

Emissions Offsets are emissions reductions that are provided to "offset" emissions increases from new or modifying sources of air pollution. District Rule 2201 requires offsets for increases in allowed emissions above certain trigger levels.

Offsets, when required, may be provided by onsite or offsite emissions reductions and must be real, surplus, quantifiable, enforceable, and permanent. Offsets may be obtained by purchasing emissions reduction credits from another party. Procedures for banking and use of emission reduction credits are described in Rule 2301 (Emission Reduction Credit Banking) in Regulation II of the District Rulebook. A list of names and addresses of owners of emission reduction credit certificates is available from any of the regional District offices for a nominal fee, or may be downloaded free from our ERC Certificate Holders page.

Other Requirements

For larger projects, or for those with a potentially significant health impact, New Source Review also requires public noticing of preliminary decisions and/or analysis of alternate sites or processes.

As the proposed plant resides on Alameda County land, but the air will be blown into San Joaquin County, the peaker plant needs to acknowledge and abide by the governing air pollution guidelines of San Joaquin County.

Overall, we need more GREEN means of power, like solar and wind, and not another natural gas-fired power plant! I would whole heartedly support a solar or wind farm!

Linda Selvidge 481 W Callado Ct, Mountain House CA 95391 (209) 835-5664 or (510) 851-5043 birdielovr@sbcglobal.net

From: Gyanesh Sharma <gyanesh@yahoo.com> Monday, August 30, 2010 11:38 AM Sent:

Brenda Cabral To:

Subject: Public hearing for Mariposa power plant

Hi Brenda.

Reference: Mariposa Power Plant- Preliminary Determination of Compliance http://www.energy.ca.gov/sitingcases/mariposa/documents/others/2010-08-18\_Preliminary\_Determination\_of\_Compliance.pdf

I am a resident of Mountain House community which is 2.5 miles close to the propose Mariposa power plant site.

I would like to request a public hearing in Mountain House for the **BAAQMD** Permit.

Thanking you

Regards Gyanesh

"There will be plenty of time to sleep when you are dead, life is for living. So wake up and perform"

From: Jass Singh < jass.singh2000@gmail.com> Sent: Sunday, September 26, 2010 12:30 PM

Brenda Cabral

Subject: Request for Public hearing in Mountain House

## Hi Brenda,

>

Reference: Mariposa Power Plant- Preliminary Determination of Compliance > http://www.energy.ca.gov/sitingcases/mariposa/documents/others/2010-08-18\_Preliminary\_Determination\_of\_Compliance.pdf

- > I am a resident of Mountain House community which is 2.5 miles close
- > to the propose Mariposa power plant site.

> I would like to request a public hearing in Mountain House for the

> BAAQMD Permit.

> Thanking you

> Regards,

From: Andy So <andy.kso@gmail.com>
Sent: Monday, August 30, 2010 10:39 AM

To: Brenda Cabral

Subject: Mariposa Power Plant

To:

Hi Brenda,

Reference: Mariposa Power Plant- Preliminary Determination of Compliance http://www.energy.ca.gov/sitingcases/mariposa/documents/others/2010-08-

18\_Preliminary\_Determination\_of\_Compliance.pdf

I am a resident of Mountain House community which is 2.5 miles close to the propose Mariposa power plant site.

I would like to request a public hearing in Mountain House for the BAAQMD Permit.

Regards Andy K. So

From: Tina Thao <mstinathao@yahoo.com> Sent: Sunday, August 29, 2010 9:23 PM

To: Brenda Cabral

Cc: jbyron@energy.state.ca.us; rweisenm@energy.state.ca.us;

docket@energy.state.ca.us; choffman@energy.state.ca.us;

publicadviser@energy.state.ca.us

Subject: Reference: Mariposa Power Plant- Preliminary Determination of

Compliance

Attachments: 2010-08-18\_Preliminary\_Determination\_of\_Compliance.pdf

Brenda Cabral, Supervising Air Quality Engineer, Bay Area Air Quality Management District, 939 Ellis Street, San Francisco, CA 94109

Hi Brenda.

Reference: Mariposa Power Plant- Preliminary Determination of Compliance http://www.energy.ca.gov/sitingcases/mariposa/documents/others/2010-08-18\_Preliminary\_Determination\_of\_Compliance.pdf

I am a resident of Mountain House community which is 2.5 miles close to the propose Mariposa

power plant site.

I would like to request a public hearing in Mountain House for the BAAQMD Permit.

Thanking you.

Regards, Ms. Tina Thao

From: Alleane Tiffany-Mouloua <atmouloua@yahoo.com>

Sent: Wednesday, September 01, 2010 10:57 AM

To: Brenda Cabral

Subject: Mariposa Power Plant - Preliminary Determination of Compliance

I am a resident of the community of Mountain House which is 2.5 miles away from the proposed Mariposa powerplant site. I am requesting a public hearing in Mountain House for the BAAQMD permit.

Regards,

Alleane Tiffany-Mouloua 329 W. Saint Francis Ave Mountain House, CA 95391

From: Smita Unnikrishnan <smita.dighe@gmail.com>

Sent: Wednesday, August 25, 2010 5:44 PM

To: Brenda Cabral

Cc: jbyron@energy.state.ca.us; rweisenm@energy.state.ca.us;

docket@energy.state.ca.us; choffman@energy.state.ca.us;

publicadviser@energy.state.ca.us

Subject: Request for Public hearing in Mountain House for BAAQMD permit

(Mariposa Power Plant Project - 09-AFC-03)

Hi,

I am a resident of Mountain House community. I have 2 kids aged 8 & 4. I have serious concerns with regards to the proximity of this plant to where we live and our schools.

Our community was one of the biggest foreclosure epicenter in the country. You have no idea how much stress this has caused to all of us in this community (stress is an under statement). This is our home and I would not want anything that will harm the health and well being of this community. I am speaking in simple terms and I know this power plant will seriously affect the growth of this community.

I hereby request for a public hearing in Mountain House for a BAAQMD permit.

From: Reno Ursal <reno.ursal@gmail.com>
Sent: Wednesday, September 08, 2010 9:20 AM

To: Brenda Cabral

Subject: Mariposa Power Plant - Preliminary Determination of Compliance

Hi Brenda,

I am a resident of Mountain House community which is 2.5 miles close to the propose Mariposa power plant site. I am concerned about the environmental impact this proposed plan will have on the children and families of Mountain House.

I would like to request a public hearing in Mountain House for the BAAQMD Permit.

Thank you...

Reards,

## RENO URSAL

From: Ryan Uyehara <r.uyehara@sbcglobal.net> Sent: Tuesday, August 24, 2010 10:32 AM

To: Brenda Cabral

Subject: Public Hearing for BAAQMD Permit

Importance: High

Hi Brenda,

I would like to request a public hearing in Mountain House for the BAAQMD Permit. I would like to add that I'm against any project that would add to not decrease pollution levels as well as expose our families to power plant pollutants!

Thanks and best regards,

Ryan Uyehara 209-830-7995

From: David Walker <dave@glaeken.com>
Sent: Wednesday, September 08, 2010 7:21 PM

To: Brenda Cabral

Subject: Mariposa Power Plant- Preliminary Determination of Compliance

Dear Ms. Cabral,

I am a resident of Mountain House community which is located within 2.5 miles of the proposed Mariposa Power Plant site.

I would like to request a public hearing in Mountain House for the BAAQMD Permit.

Thank you, David Walker 150 N Hancock Park Drive Mountain House, CA 95391

Unlimited Disk, Data Transfer, PHP/MySQL Domain Hosting http://www.doteasy.com

From: Rowena Walker <rowena@glaeken.com> Sent: Wednesday, September 08, 2010 7:25 PM

To: Brenda Cabral

Subject: Mariposa Power Plant- Preliminary Determination of Compliance

Dear Ms. Cabral,

I am a resident of the Mountain House community, located within 2.5 miles of the proposed Mariposa Power Plant site.

I would like to request a public hearing in Mountain House for the BAAQMD Permit. Thank you.

Rowena Walker 150 N. Hancock Park Drive Mountain House, CA 95391

Unlimited Disk, Data Transfer, PHP/MySQL Domain Hosting http://www.doteasy.com