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09-AFC-3

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Mr. Craig Hoffman
Project Manager
California Energy Commission
1516 Ninth Street, MS 15
Sacramento, CA 95814-5512

Subject: Mariposa Energy Project (09-AFC-03)
Robert Sarvey Data Response Set 2, Responses to Robert Sarvey
Data Requests 9 through 37 and 39 through 44, Dated March 15, 2010

Dear Mr. Hoffman:

Attached please find one hard copy and one electronic copy on CD-ROM of the Mariposa Energy Project's Robert Sarvey Data Response Set 2. This Data Response Set was prepared in response to Mr. Robert Sarvey's Data Requests 9 through 37 and 39 through 44 for the Application of Certification for the Mariposa Energy Project (MEP) (09-AFC-03) dated March 15, 2010.

If you have any questions about this matter, please contact me at (916) 286-0348.

Sincerely,

CH2M HILL

Doug Urry
AFC Project Manager

Attachment

cc: B. Buchynsky, Mariposa Energy, LLC.

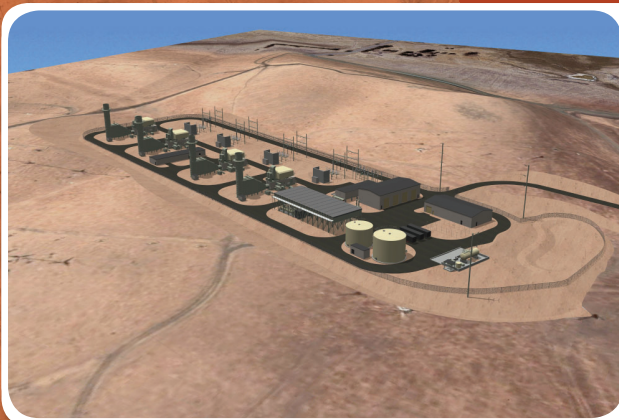
APPLICATION FOR CERTIFICATION

ROBERT SARVEY DATA RESPONSES, SET 2
(RESPONSE TO DATA REQUESTS 9 TO 37 AND 39 TO 44, DATED MARCH 15, 2010)



SUBMITTED TO THE
California Energy Commission

FOR THE
Mariposa Energy Project
(09-AFC-03)



SUBMITTED BY



Mariposa Energy, LLC

TECHNICAL ASSISTANCE BY



CH2MHILL

MAY 2010

Mariposa Energy Project

(09-AFC-03)

Robert Sarvey Data Responses, Set 2

(Response to Data Requests 9 to 37 and 39 to 44)

March 15, 2010

Submitted to
California Energy Commission

Submitted by
Mariposa Energy, LLC

With Assistance from

CH2MHILL
2485 Natomas Park Drive
Suite 600
Sacramento, CA 95833

May 2010

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Introduction

Attached are Mariposa Energy's responses to Mr. Robert Sarvey's Data Request Set 2 (numbers 9 through 37 and 39 through 44) regarding the Mariposa Energy Project (MEP) (09-AFC-03) Application for Certification (AFC). Data Request Set 2 was submitted after the deadline for submitting data requests in this proceeding, without a showing of good cause for the delay. Nevertheless, the Applicant has attempted to respond to those questions that are relevant to the decision the California Energy Commission (CEC) must make on this application and where the information is reasonably available to the Applicant.

The Applicant filed limited objections to Robert Sarvey's Data Request Set 2 on April 30, 2010, indicating objections to five questions. The Applicant stated that it will respond to the requests in Set 2 except for five requests that are not relevant or for which information is not reasonably available: Requests 10, 11, 42, 43, and an un-numbered request between requests 13 and 14. In this document, the Applicant has provided a response to each of the Requests set forth in Robert Sarvey's Data Request Set 2, including the five questions to which we previously objected. The Applicant believes that these responses satisfy Mr. Sarvey's requests. However, if Mr. Sarvey desires to pursue his motion to compel a response to these five questions, the Applicant is available to meet and confer with Mr. Sarvey.

The responses are grouped by individual discipline or topic area. Within each discipline area, the responses are presented in the same order as Mr. Sarvey presented them and are keyed to the Data Request numbers (9 through 37 and 39 through 44). New or revised graphics or tables are numbered in reference to the Data Request number. For example, the first table used in response to Mr. Robert Sarvey's Data Request 36 would be numbered Table RSDR36-1. The first figure used in response to Mr. Robert Sarvey's Data Request 42 would be Figure RSDR42-1, and so on.

Additional tables, figures, or documents submitted in response to a data request (supporting data, stand-alone documents such as plans, folding graphics, etc.) are found at the end of each discipline-specific section and are not sequentially page-numbered consistently with the remainder of the document, though they may have their own internal page numbering system.

Executive Summary (9–11)

Background

Page 1.1 of the AFC states: The existing, unrelated 6.5-MW Byron Power Cogen Plant occupies 2 acres of the 158-acre parcel northeast of MEP. The remainder of the parcel is non-irrigated grazing land. There was a prior wind turbine development on the project site and [sic] the southern portion of the parcel. Minor debris from that wind development remains on site.

Data Requests

RSDR9. Please describe the cleanup plan for the minor debris from the prior windmill site.

Response:

The minor debris that has been left from the previous construction and operation of a wind energy facility will be removed and disposed of at an appropriate landfill or disposal facility. The debris is mostly shallow foundations, direct buried grounding wires and other small items that will be removed during the initial clearing and grubbing of the MEP site and laydown area.

Background

The AFC states that, “Mariposa Energy has already been working with Alameda County; additional coordination with the County is expected to occur during the CEC licensing process.

Data Requests

RSDR10. Please provide all correspondence with Alameda County that has occurred to date and continue to provide all documents, emails and record of conversations between Mariposa Energy and Alameda County until the proceeding is closed.

Response:

This request is nearly identical to RSDR-4. Previous correspondence with Alameda County pertaining to the Williamson Act was forwarded as a response to RSDR-4. While providing copies of correspondence, the Applicant also objected to the more sweeping blanket requests of RSDR-4. This objection was filed on February 18, 2010. Mr. Sarvey did not petition to compel a further response to RSDR-4; therefore no further response to RSDR-4 or RSDR-10 is required.

Background

AFC page 1.1 states MEP's primary objective is to provide dispatchable, operationally flexible, and efficient generation to meet PG&E's need for new energy sources and to satisfy the terms of Mariposa Energy's power purchase agreement with PG&E. AFC page 1.1

Data Requests

RSDR11. Please provide Mariposa's Power Purchase agreement with PG&E. If appropriate provide the agreement under protective cover and provide a non disclosure agreement. Please identify which parties that are market participants and are not allowed to view the agreement.

Response:

The specific terms of the Power Purchase Agreement (PPA) between MEP and PG&E are not relevant to any decision the CEC must make on this Application for Certification. The PPA has already been approved by the California Public Utilities Commission (CPUC) as meeting the requirements of their previous decisions and the PG&E Request for Offers as indicated in Decision 09-10-017. Mr. Sarvey participated in the CPUC proceeding that approved the PPA (Decision 09-10-017). Therefore, he has already had an opportunity to request access to the PPA in the relevant proceeding, subject to the appropriate nondisclosure agreement. In addition, the terms of the PPA are highly confidential and cannot be disclosed to third parties absent strict conditions of non-disclosure.

Air Quality (12-31)

Background

Table 5.1-19 of the AFC estimates that green house gas emissions from the combustion of natural gas will be 440,553 metric tons per year for the Mariposa Project. Appendix 5.1B estimates annual natural gas use of 8,278,360 MMBtu/yr as the basis for the expected greenhouse gas emissions.

Data Requests

RSDR12. To more fully understand the projects impacts to the environment please provide the estimated greenhouse gas emissions from the extraction, processing and transportation, of 8,278,360 MMBtu/yr of natural gas per year.

Response:

The estimated greenhouse gas emissions from the extraction, processing, and transportation, of natural gas per year is not relevant to any decision the CEC must make in this proceeding. The Applicant has not prepared such an estimate, has no data upon which to make such an analysis since the gas may come from anywhere on the PG&E system, and is not aware of any methodology approved by the CEC for undertaking such an analysis.

RSDR13. Please provide an estimate of other criteria pollutant emissions of NO_x, PM₁₀, PM 2.5, VOC's, and SO₂ from the extraction, processing and transportation of 8,278,360 MMBtu/yr of natural gas to the MEP.

Response:

An estimate of other criteria pollutant emissions is not relevant to any decision the CEC must make on this Application. The Applicant has not prepared such an estimate, has no data upon which to make such an analysis since the gas may come from anywhere on the PG&E system, and is not aware of any methodology approved by the CEC for undertaking such an analysis.

Background

AFC Page 5.2-2 states that: "The existing cogeneration plant will not be decommissioned or otherwise modified as part of MEP. 5.2-2," Attachment RSDR2-1 provided by the applicant in response to Robert Sarvey's Data Request 2 provides the operating permit of the Byron Cogen plant including operating parameters and emission limits. Please provide the annual, daily, and hourly maximum emissions for all criteria pollutants. Please provide an air quality analysis utilizing the emission limits and operating profile provided in the permit supplied in RSDR2-1 to provide information on the air quality impacts from the Mariposa and the Byron Cogen projects operating simultaneously since they are located within a few thousand feet of each other.

The attachment RSDR2-1 provides the following inputs:

Plant 10437, Byron Power Company Condition 3785 Sources S-1, S-2, S-3, S-4 and S-5

1. Hours of operation of each Waukesha 7042 GSI Engine (Sources S-1, S-2, S-3, S-4, and S-5) shall not exceed 24 hours per day. Basis: cum. Increase
2. Each of the five Waukesha 7042 GSI Engines (Sources S-1, S-2, S-3, S-4, and S-5) shall not exceed 8760 hours per year. Basis: cum increase
3. The five Waukesha 7042 GSI Engines (Sources S-1, S-2, S-3, S-4, and S-5) shall be fired on pipeline quality natural gas only. Basis: BACT
4. Total combined natural gas consumption of the five Waukesha 7042 GSI Engines (Sources S-1, S-2, S-3, S-4, and S-5) shall not exceed 1,740,000 cubic feet per day or 635,000,000 cubic feet per year.

Response to Background Requests:

As discussed in response RSDR-2, a public records request was submitted to the Bay Area Air Quality Control District (BAAQMD) requesting the original permit application materials and the annual hours of operation. The BAAQMD responded that the only information available was the operating permit, which only contained the emission limits and permitted hours of operation. In the most recent SEC Form 10-K filing, the owners of the facility state, *"The Norcals suspended their operations beginning the fourth quarter of 2008 as the estimated incremental cost of production exceeded the estimated revenues from electricity sales. In 2009, due to continued projected operating losses, the Managing Shareholder decided to permanently shut down the operations of the Norcals and is currently in negotiations to sell the Byron and San Joaquin projects. These negotiations are still ongoing and the Managing Shareholder cannot predict when or whether a sale will be consummated or the terms of such a sale."*¹ Based on statements in the owner's SEC filings, the owner of the Byron Cogen has shut down operations in 2009.

Since Byron Cogen is not owned by the Applicant or any affiliate of the Applicant, the Applicant has no information regarding the measured emissions from this facility or if the facility will continue to operate in the future. Any additional requests regarding the operation of this facility should be directed to the BAAQMD or the owner of the Byron Cogen facility.

Data Requests

RSDR14. Please provide a copy of the "The Negative Declaration, Resolution No. Z-6824, issued by Alameda County on October 4, 1989 for this project," listed in the projects air permit.

Response:

A copy of the County Resolution approving the Byron Cogen Project is included as Attachment RSDR14-1. The Applicant does not have a copy of the Negative Declaration. The Applicant is not affiliated with the Byron Cogen facility. Byron Cogen is a third-party entity owned by Ridgewood Electric Power Trust III. Mr. Sarvey should direct this request

¹ Reference: United States Securities Exchange Commission (SEC). 2010. Form 10-K for the Annual Report for Calendar Year 2009.

for the Negative Declaration to the owner of that facility or to the agency that issued the Negative Declaration.

Background

AFC page 2-9 states that: “The emissions of each CTG are stabilized at permitted levels within 30 minutes of startup.”

Data Requests

RSDR15. Please provide the projected emission rates for each criteria pollutant in 5 minute increments, from startup to each CTG is stabilized at permitted levels.

Response:

Based on the startup emission curve provided by GE, the LM6000 has the ability to reach full power within 10 minutes of initiating a start-up sequence, with first fire occurring at minute 2 of the startup sequence. It is anticipated that additional time will be required for the selective catalytic reduction (SCR) and oxidation catalyst to reach optimum performance temperature and function at permitted levels. Mariposa Energy estimates the SCR control system will be fully functional 14 minutes after the turbine reaches full load, and it is expected the oxidation catalyst efficiency will increase linearly from full load to 20 minutes after full load is achieved. As a result, the startup emission rates for NO_x, CO, and VOC would be approximately 14.2, 14.1, and 1.1 pounds per event (lb/event), respectively. The incremental NO_x, CO, and VOC emission profiles for a startup event are presented in Table RSDR15-1. The GE LM6000 startup curve is included as Attachment RSDR15-1. As the GE LM6000 start up curve includes NO_x, CO, and VOC emission estimates for the 10 minute start up period, Mariposa Energy used these estimated emissions in its assessment.

The PM_{10/2.5} and SO_x emissions rates are correlated to the turbine operating load and associated fuel consumption rate. Therefore, the emission rates for PM_{10/2.5} and SO_x during a startup would not be greater than the maximum emission rate associated with the turbine operating at full load. The PM_{10/2.5} and SO_x emission profiles presented in Table RSDR15-1 are estimated assuming maximum PM_{10/2.5} and SO_x emission rates of 2.5 lb/hour and 0.91 lb/hr, respectively.

TABLE RSDR15-1
Criteria Pollutant Emissions During a Turbine Startup Event

| Minutes | NO _x (lb) | CO (lb) | VOC (lb) | SO _x (lb) | PM10/2.5 (lb) |
|------------------|----------------------|---------|----------|----------------------|---------------|
| 0-10 | 3.50 | 3.00 | 0.058 | 0.152 | 0.42 |
| 11-15 | 3.66 | 2.78 | 0.27 | 0.076 | 0.21 |
| 16-20 | 3.66 | 2.78 | 0.27 | 0.076 | 0.21 |
| 21-25 | 3.00 | 2.78 | 0.27 | 0.076 | 0.21 |
| 26-30 | 0.37 | 2.78 | 0.27 | 0.076 | 0.21 |
| Total (lb/event) | 14.2 | 14.1 | 1.1 | 0.46 | 1.25 |

Background

Mariposa Energy executed a mitigation agreement with the San Joaquin Valley Air Pollution Control District on December 17, 2009.

Data Requests

RSDR16. Please provide information on how the public including the Mountain House Community Services District, Residents of Mountain House, CEC intervenors and the CEC staff were informed and included in this process.

Response:

The following entities were informed during presentations or discussions that the Applicant intended to provide air emissions mitigations in both the jurisdictional BAAQMD and the non-jurisdictional San Joaquin Valley Air Pollution Control District (SJVAPCD).

| Entity | Forum | Date |
|----------------------------------|--|-------------------|
| MHCSD Staff | Project Introduction Meeting | April 9, 2009 |
| CEC Staff | Pre-Application Meeting | April 14, 2009 |
| SJVAPCD Staff | Project Presentation & Discussion | April 30, 2009 |
| CEC & Public | Discussed in the AFC | June 18, 2009 |
| CEC Intervenor Mr. Robert Sarvey | Meeting and Discussion of Project | June 18, 2009 |
| MHCSD | Pre-Board Meeting Preparation | July 01, 2009 |
| MHCSD Community | Board of Directors Presentation | July 08, 2009 |
| CEC & Public | Presentation at the Site Visit and Informational Hearing | October 01, 2009 |
| SJVAPCD & Public | Mitigation Agreement Listed on Agenda | December 3, 2009 |
| CEC & Public | Data Response Workshop | December 15, 2009 |
| SJVAPCD & Public | Mitigation Agreement Approved by Board | December 17, 2009 |

RSDR17. Please indicate if the applicant notified the public or the CEC of the Governing Board meeting on December 17, 2009 where the air quality mitigation agreement with the SJVUAPCD was approved.

Response:

All parties listed above were informed of discussions between the Applicant and the SJVAPCD regarding a potential mitigation agreement. The December 17, 2009, Board meeting was specifically discussed with CEC Staff and participating public during the December 15, 2009, Data Response Workshop.

It is not the Applicant's duty to inform the public of the meetings of the SJVAPCD, a public agency. However, the SJVAPCD's consideration of this agreement was publicly noticed in the agenda that was noticed and published on SJVAPCD's website two weeks prior to the December 17 meeting. The agreement was discussed and approved in a public meeting where all members of the public had an opportunity to be heard.

RSDR18. If the public was not included please explain why.

Response:

Please see our responses to RSDR16 and RSDR17. The public was informed of the agreement. The mitigation agreement was discussed and approved by the SJVAPCD in a meeting that was publicly noticed and was open to the public to participate in these processes.

Background

The mitigation agreement provides for the MEP to give \$644,000 to the SJVUAPCD. The mitigation agreement proposes to utilize the Carl Moyer Program to offset emissions of NOx and VOC's. The normal useful life of projects in the Carl Moyer Program are [sic] from 3 to 10 years. The Mariposa Project is expected to operate for 30 years or more.

Data Requests

RSDR19. Please explain how the projects emissions will be mitigated in San Joaquin Valley after the useful life of the projects selected in the Carl Moyer or any another emission reduction program expire.

Response:

The mitigation agreement does not require the use of the Carl Moyer Program to offset emissions of NOx and VOCs. As noted on Page 2, Item 3 of the mitigation agreement, *"the final mitigation measures to be implemented will be selected by the District, can include the District's Burn Cleaner woodstove retrofit and fire replacement program, the Carl Moyer Program, heavy duty engine retrofit/replacement program, agricultural engine replacement program, and/or similar programs approved by the District."* Therefore, while the cost basis for mitigating NOx and VOC emissions were based on the Carl Moyer Program, the SJVAPCD will make the final decision regarding the most cost-effective program available for mitigating NOx and VOC emissions.

RSDR20. Please provide calculations of and a schedule of emission reductions from the various programs proposed by the SJVUAPCD and MEP. Please provide the total emissions that will be mitigated for the life of the project in tons per year and total emission reduction in tons over the life of the project.

Response:

As noted in RSDR19, Mariposa Energy has agreed to pay the Air Quality Mitigation Fee to the SJVAPCD within 30 days after physical delivery of the first combustion turbine generator to the Project site. Therefore, the funding will be provided to the SJVAPCD months in advance of the first fire for each combustion turbine. The purpose of this timing is to allow the SJVAPCD to comply with the requirement "to use the Air Quality Mitigation Fee exclusively to establish specific programs that create contemporaneous air quality benefits" (emphasis added).² The intent of this clause, combined with the timing of the mitigation fee payment allows the SJVAPCD to implement the mitigation measures prior to the commencement of MEP operation.

² Clause 1, page 2 of the Mitigation Agreement.

A summary of the mitigation proposed by Mariposa Energy is presented in Table RSDR20-1. The total mitigation includes both the BAAQMD and SJVAPCD mitigation proposed for the project. As presented in Table RSDR20-1, the total mitigation proposed for NO_x and VOC emissions is more than 5 times the expected emissions for both pollutants and more than 1.5 times the permitted emissions. The total mitigation proposed for PM_{10/2.5} and SO₂ conservatively assumes all expected emissions would occur during the winter PM₁₀ months. Therefore, Mariposa Energy believes the potential impacts associated with MEP will be adequately mitigated through the implementation of the proposed BAAQMD and SJVAPCD mitigation efforts.

TABLE RSDR20-1
MEP Proposed Mitigation Summary Table

| | Expected Emissions^a (tons/year) | Permitted Emissions^b (tons/year) | BAAQMD Mitigation^c (tons/year) | SJVAPCD Mitigation^d (tons/year) | Total Mitigation (tons/year) |
|----------------------|---|--|--|---|---|
| NO _x | 12.2 | 45.6 | 52.4 | 17.0 | 69.4 |
| VOC | 2.0 | 10.3 | 10.3 | 5.55 | 15.9 |
| SO ₂ | 0.5 | 3.1 | 0 | 0.6 | 0.6 |
| PM _{10/2.5} | 3.4 | 21.1 | 0 | 4.2 | 4.2 |

^a The expected NO_x and VOC are based on 600 hours of operation and 200 start-up and shutdowns per turbine per year and an emission limit of 2.5 ppm NO_x and 2.0 ppm VOC. The SO₂ and PM_{10/2.5} expected emissions are based on 600 hours of operation and 100 start-up and shutdowns per turbine during the winter PM₁₀ season and an emission limit of 0.25 and 0.66 grains of sulfur/100 dscf of natural gas (annual and hourly, respectively), and 2.5 lb/hr PM₁₀.

^b Permitted emissions are based on:

- 1) 4,000 hours of operation and 300 startups and shutdowns per turbine per year,
- 2) emissions associated with a 30 minute startup and 15 minute shutdown, as submitted to the BAAQMD on January 28, 2010,
- 3) and permit limits of: 2.5 ppm NO_x, 2.0 ppm VOC, 0.25 and 0.66 grains of sulfur/100 dscf of natural gas (annual and hourly, respectively), and 2.5 lb/hr PM₁₀.

^c Required mitigation per BAAQMD Regulation 2, Rule 3.

^d The SJVACPD mitigation is based on the signed SJVAPCD mitigation agreement (i.e., the original startup and shutdown assumptions in the AFC and emission limits of 2.5 ppm NO_x, 2.0 ppm VOC, 0.25 and 0.66 grains of sulfur/100 dscf of natural gas (annual and hourly, respectively) and 3.0 lb/hr PM₁₀).

Background

A recent mitigation agreement between the SJVUAPCD and the Tracy Combined Cycle Power Project³ utilized a cost factor of \$51,373 per ton of NO_x reduced for a total of \$319,292. The mitigation agreement offset 12,430 pounds of NO_x from the project.

Data Request

RSDR21. Please explain how the MEP can offset 17 tons per year of NO_x from the project at a cost of \$285,600.

Response:

The letter from the SJVAPCD to the CEC on May 12, 2009 regarding the "CEC Docket No. 08-AFC-7, GWF Tracy Combined Cycle Power Plant Air Quality Mitigation Settlement

³ http://www.energy.ca.gov/sitingcases/tracyexpansion/documents/applicant/2009-04-22_RESPONSE%20TO_PDOC_TN-51290.PDF

Agreement with the Valley Air District,⁴ states “*this project (GWF Tracy) will comply with all District rules, including its offsetting provisions, and so complies with CEQA for its operational emissions. We believe this mitigation agreement to be **additional to any CEQA obligation** (emphasis added) that the facility may face, and should be considered, instead, to be **a community benefit that was voluntarily offered** (emphasis added) by GWF.*” The Mariposa Energy Project will also comply with all jurisdictional district (i.e., the BAAQMD) rules, including the NO_x offsetting provision of 1.15 to 1.0 ton, and would also meet the CEQA requirement for its operational emissions. As noted on Page 1, Paragraph 8 of the Mariposa Energy, LLC, agreement, “*while under no obligation to do so, Mariposa desires to cooperate with the District to address the District’s concerns and assist the District by entering in to this agreement to provide additional air quality benefits.*” Therefore, because Mariposa Energy is not required to match the community benefit provided for the GWF Tracy project and was not involved in discussions related to the GWF Tracy agreement, Mariposa Energy, LLC, based its community benefit on the cost effectiveness threshold per ton of NO_x reduced identified in the Carl Moyer Program. This approach is consistent with other licensing cases evaluated by CEC staff.

Background

The mitigation agreement between the SJVUAPCD and the MEP contains the following language, With respect to any other applicant for an energy license before the CEC as the date of this agreement which is similarly situated near the Northern region, the district agrees not to enter into an air quality mitigation agreement based on a methodology which utilizes a lower calculation value (expressed in dollars per ton) than the value set forth in Part A -2 of this attachment A to this agreement, without offering such an arrangement to Mariposa.

Data Request

RSDR22. Please explain how this clause may impact the funding for the agreement.

Response:

This clause would only impact the funding under the Mitigation Agreement to the extent that the SJVAPCD established a program that was mitigating NO_x, VOC or SO_x/PM for a lower cost per ton than what is in PART A-2. If no such program is ever established then funding would proceed as determined in the Mitigation Agreement.

RSDR23. Please explain how this clause may impact “the Districts ability to maintain its air quality goals,” which is stated in Whereas clause number 4.

Response:

This clause would have no impact on “the Districts ability to maintain its air quality goals” since it would still provide for the mitigation of the same amount of emissions only at possibly a lower cost per ton based on new technologies or methods that are not currently available.

⁴ http://www.energy.ca.gov/sitingcases/tracyexpansion/documents/others/2009-05-12_Valley_Air_District_Re_Air_Quality_Mitigation_Settlement_Agreement_TN-51638.PDF

RSDR24. Please explain how the CEC staff can evaluate the effectiveness of the agreement in their analysis of the project with the presence of this clause.

Response:

The effectiveness of the Mitigation Agreement with the SJVAPCD is based on the tons of pollutants that are to be addressed and not necessarily the dollars expended. The effectiveness of the overall mitigation is based on both the tons of pollutants addressed in the mitigation provided in the BAAQMD as well as the tons of pollutants addressed with the SJVAPCD Mitigation Agreement. Any further questions regarding the Staff’s evaluation should be directed to the Staff.

Background

The mitigation agreement between The Tracy Combined Cycle Power Project and the SJVUAPCD includes credit to GWF Energy for a local air quality mitigation agreement between the City of Tracy and GWF.

| Tracy Peaker - 2003-2004 Environmental Benefits | | NOx Reduc - lbs/yr | NOx Reduc 10 yr life | PM Reduc |
|--|---------------------|-----------------------|-------------------------|------------|
| Lawn Mower Replacement Program | 575 electric mowers | 36 | | NA |
| Offroad HD Equip Diesel Particulate | 2 frontend loaders | 2774 | 27,740 lbs | 911 lbs/yr |
| Particulate Reduction | 31 school buses | 1160 | | NA |
| CNV Vehicle Replacements | 3 - 84 pass bus | 487 | 4740 lbs | NA |
| | 1 - 1/2 ton Pickup | 13 | | NA |
| | 1/ 3/4 ton Van | 13 | | NA |
| | | 4483 | | |

Data Request

RSDR25. Please describe the environmental benefits agreement that MEP plans to execute with the Mountain House Community Services District and/or the City of Tracy.

Response:

Because the Applicant has executed an environmental benefits agreement with the SJVAPCD, whose jurisdiction includes MHCSD and the City of Tracy, the Applicant has no plans to execute an environmental benefits agreement with either of those entities.

Background

The Mitigation agreement between the SJVUAPCD includes the following language:
 5. Cooperation. The parties agree to cooperate with each other with respect to any requests or actions related to their agreement from the CEC, the Environmental Protection Agency, the California Air Resources Board, and/ or any intervenors in the project and do or cause all things necessary, proper or advisable, to help consummate and make effective the transaction contemplated by this agreement, including but not limited to providing written and oral testimony in furtherance of this Agreement, as part of the CEC licensing process. The parties agree to seek a condition of in the CEC license for the project which incorporates the terms of the agreement.

Data Request

RSDR26. Please explain the meaning of the clause, “The parties agree to cooperate with each other with respect to any requests or actions related to their agreement from the CEC, the Environmental Protection Agency, the California Air Resources Board, and/or any intervenors in the project.”

Response:

This clause simply states that the SJVAPCD and the Applicant will work together to respond to any requests for information or actions that need to be taken to effectuate the agreement. Should requests or actions arise that require the other party’s assistance, then that party will assist in responding to the requests or completing the necessary actions.

RSDR27. Please explain why this clause is in the document.

Response:

A “cooperation clause” is a standard or boilerplate clause in many contracts. It merely confirms the mutual intent of the parties to work together to effectuate an agreement.

RSDR28. Please explain what would be considered, “proper or advisable, to help consummate and make effective the transaction contemplated by this agreement.”

Response:

“Proper or advisable” would be all appropriate activities that may be needed to effectuate the agreement. Such activities could include responding to questions from the CEC or other agencies regarding the agreement.

RSDR29. Please explain how the following cooperation agreement clause would impact any testimony that the SJVUAPCD would provide in this proceeding.

Response:

The cooperation clause would have no impact on any testimony the SJVAPCD would provide in this proceeding.

Background

The mitigation agreement between MEP and SJVUAPCD states that, “The parties agree to seek a condition in the CEC license for the project which incorporates the terms of the agreement.”

Data Requests

RSDR30. Would this proposed condition include CEC oversight by the CPM of the use of these funds in the agreement?

Response:

The answer to this question will be determined by the CEC. The Applicant expects that the Staff Assessment will articulate to the CEC whether the Staff recommends CPM oversight of the use of these funds.

RSDR31. Would this proposed condition include a quantification of the air quality benefits of the mitigation agreement and review by the CPM?

Response:

The air quality benefits have already been quantified in the agreement with the SJVAPCD. Regarding the degree of CPM review, please see the response to RSDR30.

Attachment RSDR14-1
Alameda County Resolution Z-6824

RESOLUTION NO. Z-6824 OF
THE ZONING ADMINISTRATOR OF ALAMEDA COUNTY
ADOPTED AT THE HEARING OF OCTOBER 4, 1989, CONCERNING C-5653

WHEREAS ALTAMONT COGENERATION has filed for CONDITIONAL USE PERMIT, C-5653, to allow a cogeneration facility that burns natural gas to generate electricity and disposes brine waste from oil and gas wells in an "A" (Agricultural) District, located at 14801 Kelso Road, south side at the intersection of Bruns Road, Livermore, Assessor's No. 99B-7050-1-7.

WHEREAS the Zoning Administrator did hold a public hearing on said application at the hour of 1:30 p.m. on the 20th day of September and on the 4th day of October, 1989, in the Alameda County Public Works Building, Auditorium, 399 Elmhurst Street, Hayward, California; and

WHEREAS it satisfactorily appears from affidavits on file that proper notice of said public hearing was given in all respects as required by law; and

WHEREAS based upon an Initial Study it has been determined that an Environmental Impact Report will not be required and a Negative Declaration has been adopted; and

WHEREAS a Pre-Hearing Analysis was submitted recommending the application be conditionally approved; and

WHEREAS a representative for the application appeared at said public hearing and presented testimony in support of the application; and

WHEREAS neighbors attended the public hearing and offered testimony concerning the application; and

WHEREAS the Zoning Administrator did hear and consider all said reports, recommendations and testimony as hereinabove set forth; Now Therefore

BE IT RESOLVED that the Zoning Administrator finds that:

- (a) The use is required by the public need as the proposed use provides an efficient use of fossil fuels in generating electricity, provides an environmentally attractive method of natural gas waste product disposal, and produces a useful industrial byproduct from waste materials.
- (b) The use will be properly related to other land uses and transportation and service facilities in the vicinity as the proposal will be located on the same site as a wind generation facility. All required infrastructure and services are available to service the proposed cogeneration facility; there are alternatives for water usage.
- (c) The use, if permitted, under all the circumstances and conditions of this particular case, will not materially affect adversely the health or safety of persons residing or working in the vicinity, or be materially detrimental to the public welfare or injurious to property or improvements in the neighborhood as the proposed cogeneration facility shall operate under recommended conditions of approval which address all known potential impacts.

- (d) The use will not be contrary to the specific intent clauses or performance standards established for the District in which it is to be considered as the Planning Commission has determined that the proposed cogeneration plant is a Conditional Use in the "A" (Agricultural) District. Recommended conditions of approval will insure conformance to established intent clauses and performance standards.

BE IT FURTHER RESOLVED that the Zoning Administrator does hereby conditionally approve said application as shown by materials labelled Exhibit "A" on file with the Alameda County Planning Department, subject to the following conditions:

- ✓ 1. The development shall be in substantial conformance with the plan as submitted. Zoning Approval shall be required prior to issuance of a Building Permit.
- ✓ 2. All necessary permits shall be obtained from the Bay Area Air Quality Management District prior to issuance of a building permit.
- ✓ 3. All necessary permits shall be obtained from the Building Inspection Department.
- ✓ 4. An encroachment permit shall be obtained from the Public Works Department for any connection to the County Road.
- ✓ 5. On site road improvements, drainage, and spill containment facilities shall be subject to Public Works Department review and approval prior to installation.
6. The disposal of all waste materials shall be in conformance with the requirements of the Alameda County Health Services Agency.
7. All necessary fire protection facilities shall be provided as required by the County Fire Chief.
- ✓ 8. All requirements of the California Regional Water Quality Control Board shall be met.
9. Brine water deliveries shall be only during daylight hours, Monday thru Friday.
- ✓ 10. Generators shall be equipped with state-of-the-art residential noise suppression systems. Maximum noise level at the property line shall be 50 dBA.

23 Jan 90 w/ Hal Davies

(proceed with review letter to be faxed by 1-23-90)
fax rev'd 1-24-90

NOT RECD.
(CORRECTIONS 1-1)

G. M. P. only
Person w/
6 01-89146
(OK per Larry Branta)
1-23-90

OK

11-22-89 letter
in CAP FILE

- will send letter from Walker-Pierce Industries
(fax on 1-24-90) (Capt supports)

✓ (11.) Prior the issuance of Building Permit, the use shall be determined to be compatible with the limitations of the Agricultural Preserve contract. *Adopted by BS
12-12-89*

12. Operator shall advise and monitor that all service trucks deliver via Bruns Road.

Pursuant to Section 8-60.7 of the Alameda County Zoning Ordinance said Conditional Use Permit shall be implemented within a term of three (3) years of its issuance or it shall be of no force or effect.

Said Conditional Use Permit shall terminate October 4, 1992, and shall remain revocable for cause in accordance with Section 8-90.3 of the Alameda County Zoning Ordinance.

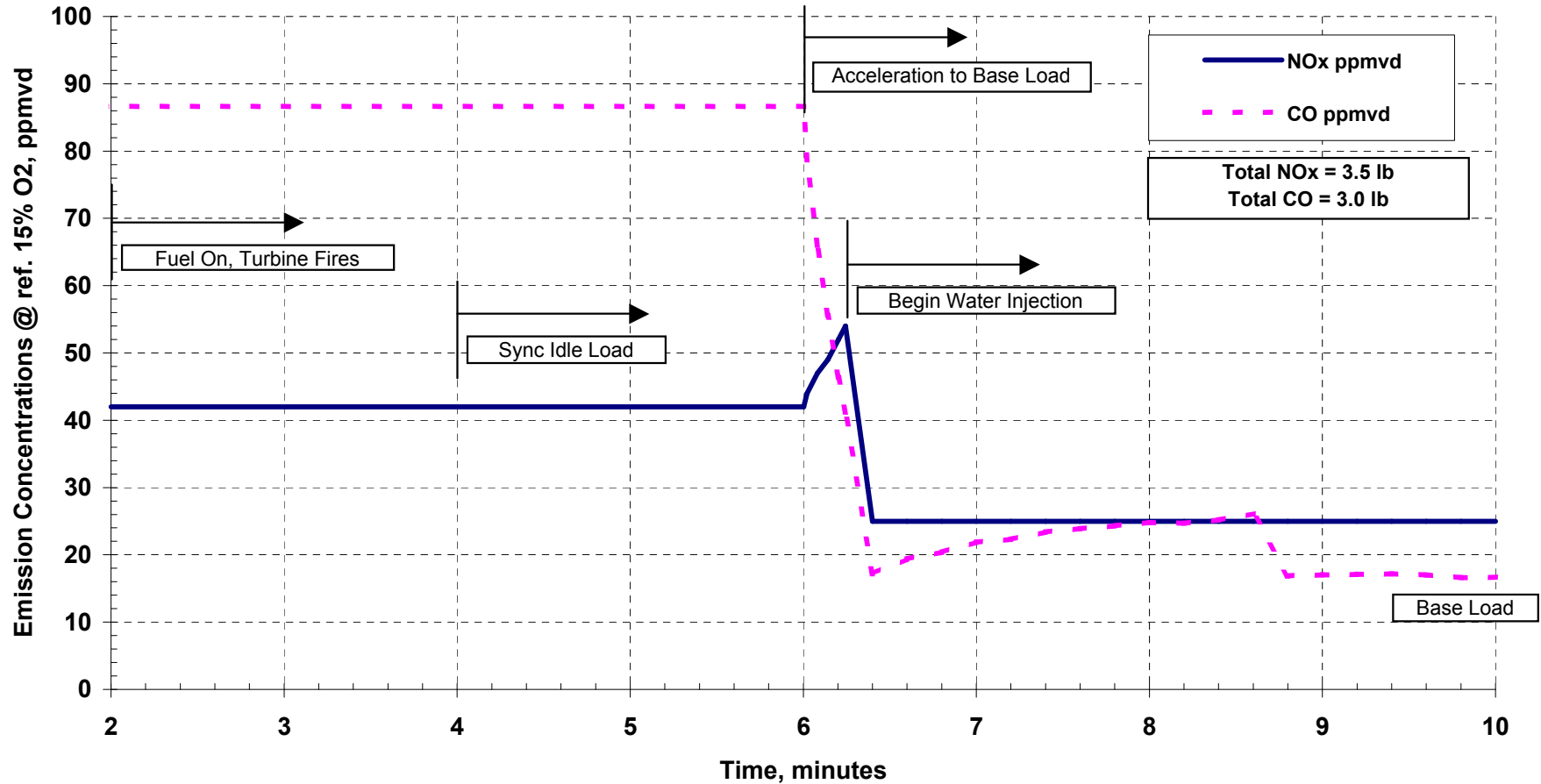
STEPHEN P. RICHARDS - ZONING ADMINISTRATOR
ALAMEDA COUNTY PLANNING DEPARTMENT

1892z1/3

Attachment RSDR15-1
LM6000 PC Sprint Startup Curve



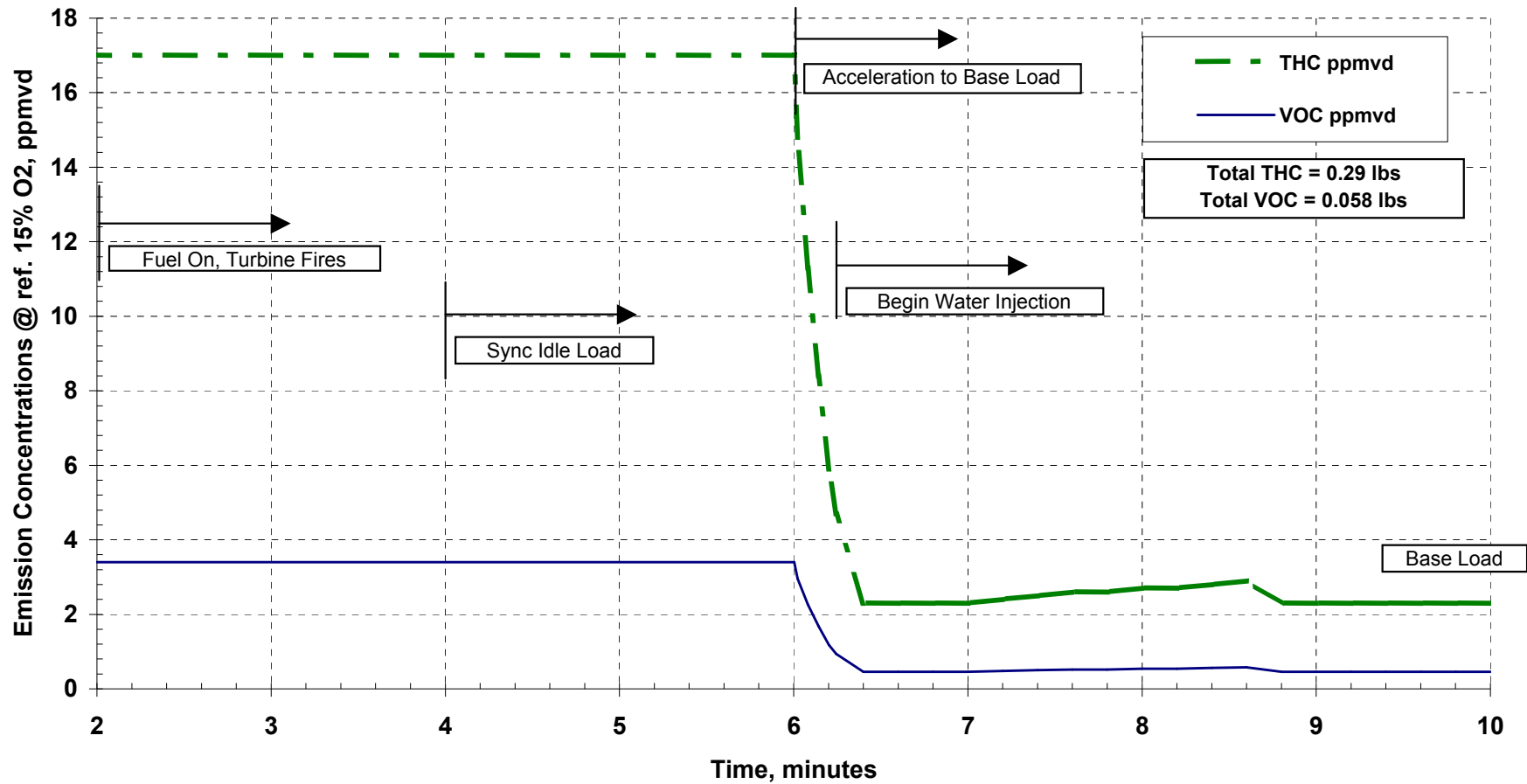
Estimated NOx and CO Concentrations during 10-Minute Startup at ISO Conditions - LM6000PC SPRINT
- NOT FOR GUARANTEE



Acceleration to base load is based on 10 minute startup, Simple Cycle Operation, 59.0°F, RH of 60.0% at 0.0ft. MSL, Fuel: Gas Fuel #10-1, 19000 Btu/lb,LHV, Water NOx control to 25ppmvd. Water Injection starts at ~3000kW. BDAX 290ERT 60Hz, 13.8kV, 0.9PF (14839). **NOT FOR GUARANTEE**



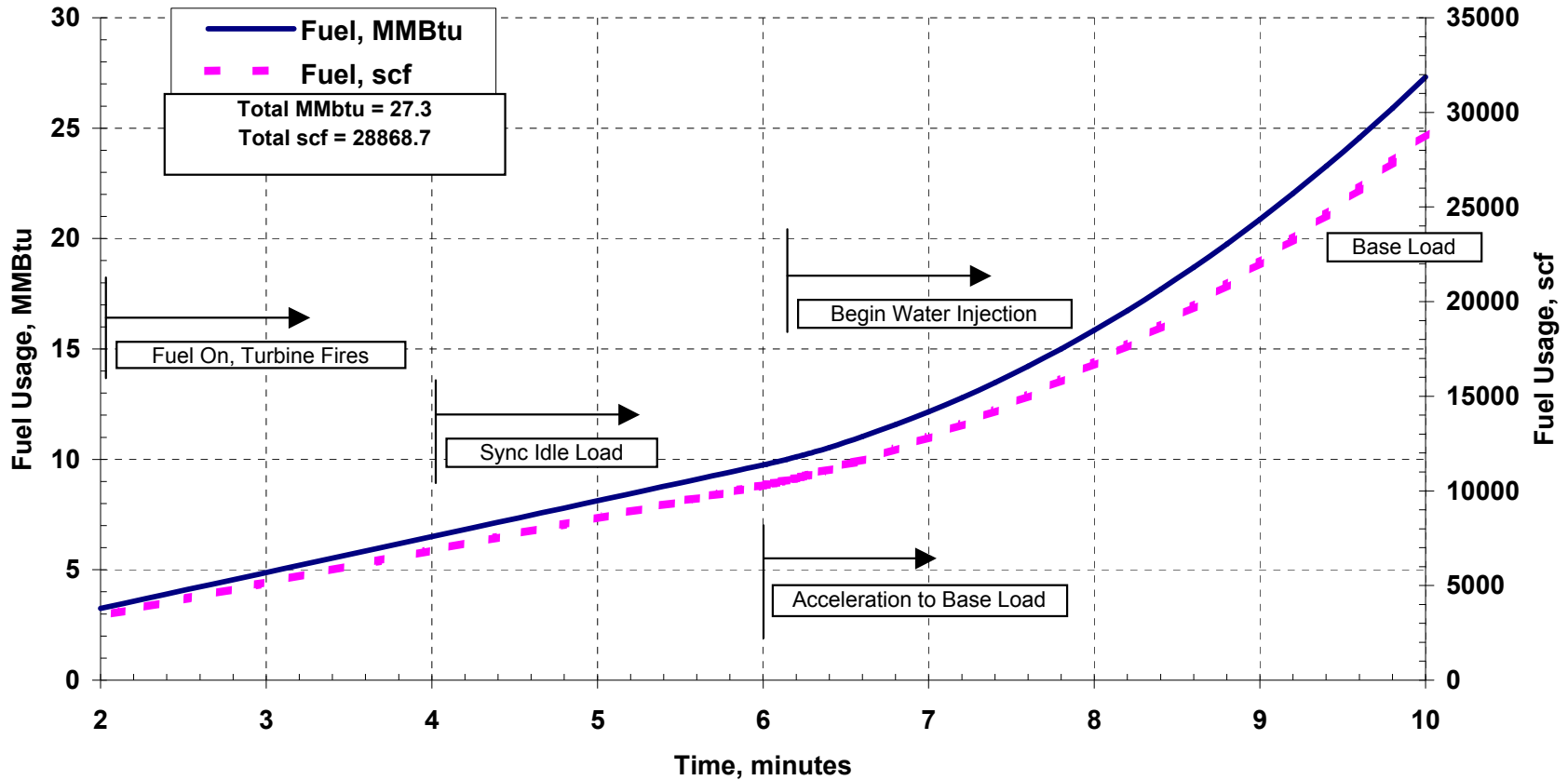
Estimated THC and VOC Concentrations during 10-Minute Startup at ISO Conditions - LM6000PC
SPRINT - NOT FOR GUARANTEE



Acceleration to base load is based on 10 minute startup, Simple Cycle Operation, 59.0°F, RH of 60.0% at 0.0ft. MSL, Fuel: Gas Fuel #10-1, 19000 Btu/lb,LHV, Water NOx control to 25ppmvd. Water Injection starts at ~3000kW. BDAX 290ERT 60Hz, 13.8kV, 0.9PF (14839). **NOT FOR GUARANTEE**



Total Predicted Fuel Usage During 10 minute Startup at ISO Conditions - LM6000 PC SPRINT w/ FIGV at 5 Degrees - NOT FOR GUARANTEE



Acceleration to base load is based on 10 minute startup, Simple Cycle Operation, 59.0°F, RH of 60.0% with 5.0 inH₂O, 10.0 inH₂O at 0.0ft. MSL, Fuel: Gas Fuel #10-1, 19000 Btu/lb,LHV, Water NO_x control to 25ppmvd. Water Injection starts at ~3000kW. BDAX 290ERT 60Hz, 13.8kV, 0.9PF (14839). NOT FOR GUARANTEE

Worker Safety and Fire Protection (32–37)

Background

AFC page 5.5-15 states: MEP is in the Alameda County Fire Department (ACFD) jurisdiction. Station 8 in Livermore is the primary responding station for the MEP vicinity, with an approximate response time to an emergency at the project site of 30 minutes.

Data Requests

RSDR32. Please provide the projected route of the response.

Response:

ACFD Station 8 is located at 1617 College Avenue in Livermore, approximately 19 miles from MEP by road. ACFD Station 20, located at 7000 East Avenue in Livermore, is approximately 16 miles from MEP. Although Station 8 is identified as the primary responding station, either may be called upon to respond (refer to Page 5.10-12 of the MEP AFC). The expected response route from Station 8 would be via P Street and 1st Street to Interstate 580 (I-580) eastbound. From I-580, MEP would be accessed via W. Grant Line Road, Mountain House Road, Kelso Road, and finally Bruns Road. The route from Station 20 would likely use S. Vasco Road to access I-580, thereafter following the same route.

Alternate routes may include Altamont Pass Road, Patterson Pass Road, and Tesla Road from the south (Linney, 2010).⁵

RSDR33. Please provide any information on traffic conditions which could delay that response and the expected delay.

Response:

Based on inquiries with ACFD during preparation of the AFC and again during the preparation of this data response (Linney, 2010), the response times from Station 20 and Station 8 are approximately 25 minutes and 30 minutes, respectively. I-580 experiences congestion during morning and evening peak commute times, as indicated in Table RSDR33-1.

The ACFD response time delays would most likely occur during recurring peak periods on I-580, where most of the congestion occurs in this area. To estimate potential delays, travel times during peak traffic conditions were first calculated based on the observed speeds during peak hours reported in the *Alameda County Congestion Management Agency 2008 LOS Monitoring Study, Appendix A* (ACCMA, 2008),⁶ and then compared to travel times in uncongested conditions. Observed speeds for the applicable segments between Livermore and W. Grant Line Road during the AM peak period ranged from 40.3 to 52.0 miles per

⁵ Linney, Gary/Alameda County Fire Department Station 20 Battalion Chief. 2010. Personal communication with Stephanie Moore/CH2M HILL. May 3.

⁶ Alameda County Congestion Management Agency (ACCMA). 2008. Level of Service Monitoring on the Congestion Management Program Roadway Network. September.

hour; PM peak period speeds ranged from 31.4 to 44.0 miles per hour. To estimate delay time, driving time at these speeds was compared to free-flow movement at 75 miles per hour.

From Stations 8 and 20, traffic conditions on eastbound I-580 typically result in 3 minutes delay during the AM peak period and 5 minutes delay during the PM peak period. The findings have been summarized in Table RSDR33-1. The typical delays provided are estimates during typical peak traffic conditions; delays could increase in the case of significant accidents or other irregular incidents on the freeway.

TABLE RSDR33-1
Traffic Conditions and Delays on Freeways

| Day of the Week | AM Peak Condition Estimated Delay | PM Peak Condition Estimated Delay | Travel Speeds* |
|---|--------------------------------------|--------------------------------------|--|
| From Station 8 (1617 College Avenue, Livermore, CA) Uses I-580 between 1st St and W. Grant Line Rd | | | |
| Monday thru Friday | 3.2 minutes | 5.0 minutes | Eastbound (AM peak) 1st St. – Greenville: 52.0 mph Greenville – N. Flynn: 40.3 mph N. Flynn – Grant Line: 47.1 mph Eastbound (PM peak) 1st St. – Greenville: 37.7 mph Greenville – N. Flynn: 31.4 mph N. Flynn – Grant Line: 44.0 mph |
| From Station 20 (7000 East Avenue, Livermore, CA) Use I-580 between Vasco Rd and W. Grant Line Rd | | | |
| Monday thru Friday | 3.0 minutes | 4.6 minutes | Eastbound (AM peak) 1st St. – Greenville: 52.0 mph Greenville – N. Flynn: 40.3 mph N. Flynn – Grant Line: 47.1 mph Eastbound (PM peak) 1st St. – Greenville: 37.7 mph Greenville – N. Flynn: 31.4 mph N. Flynn – Grant Line: 44.0 mph |

*Source: Alameda County Congestion Management Agency. 2008. LOS Monitoring Study, Appendix A.

Background

AFC page 5.5-15 states: MEP is also near Tracy Fire Department stations, and as such may be served by those stations under a mutual aid agreement between the two jurisdictions. Additional information regarding firefighting assistance and support is provided in Section 5.10, Socioeconomics.

Data Requests

RSDR34. Please provide the expected response time from the nearest Tracy Fire Department Station.

Response:

As indicated on page 5.10-12 of the AFC, the nearest Tracy Fire Department (TFD) station is Station 98, located approximately 4.2 miles via road from the MEP site at 911 Tradition Street, within the community of Mountain House. Based on inquiries with TFD during the preparation of the AFC, the response time from Station 98 is approximately 12 minutes.

RSDR35. Please provide the mutual aid agreement between ACFD and the Tracy Fire Department.

Response:

Based on discussions with TFD about the Mutual Aid Agreement during preparation of the AFC, TFD would support emergency response activities in eastern Alameda County if requested by ACFD, and if resources were available. The Applicant has obtained a copy of the ACFD Automatic and Mutual Aid Agreement with TFD, and it is provided as Attachment RSDR35-1.

Background

AFC page 5.10-12 states: ACFD's mutual aid agreement with TFD also includes assistance with hazmat incidents. The nearest TFD station with hazmat capabilities is Station 98. The firefighters at this station are all trained for hazmat response. Station 98 has all necessary hazmat equipment with the exception of the hazmat van, which is located at Station 96 (Garcia, 2009). The response time from Station 98 is 12 minutes. Station 96 is located at 301 West Grant Line Road and is 8.9 miles from the MEP site. Response time from Station 96 is 19 minutes (Hanlon, 2009).

Data Requests

RSDR36. Please provide an assessment of Tracy Rural fire Departments Haz Mat equipment and capabilities.

Response:

The Tracy Rural Fire Department merged with the Tracy City Fire Department in 1999, forming the South County Fire Authority (SFCA), also referred to as Tracy Fire Department (TFD). Jurisdictions currently covered under the SFCA include the City of Tracy, Tracy Rural Fire Protection District, and Mountain House Community Services District (SCFA, 2007)⁷. All SCFA personnel are trained to the First Responder Operational (FRO) level in accordance with federal hazardous waste regulatory standards (29 CFR 1910.120). Initial response to a hazardous material incident in SCFA jurisdiction would include one fire company with 2 to 3 firefighters. FRO response actions are typically defensive in nature, and typically do not involve controlling measures inside of hazardous "exclusion" areas associated with a hazardous materials release. In addition to FRO capabilities, SCFA has three firefighters per shift who are trained and available to provide Hazardous Materials Technician level response, which could include offensive control measures within a hazardous materials release exclusion zone. In the event of a large hazardous materials release requiring entry into an exclusion zone, additional Hazardous Material Technician

⁷ South County Fire Authority. 2007. Standards of Response Coverage.

level responders from other jurisdictions would be required to supplement SCFA on-duty personnel (SCFA, 2007).

Based on inquiries with TFD during the preparation of the AFC and again during preparation of this response (Rodriguez, 2010),⁸ a hazardous materials response vehicle is maintained at Station 96, at 3010 West Grant Line Road. Additional information regarding TFD hazardous materials response equipment has been requested; as of the submittal date no response has been received. Any additional information obtained will be filed in a subsequent submittal.

RSDR37. Please describe any cumulative impacts to the Tracy Rural Fire Department from the approval of natural gas fired power plants in the Tracy/ Mountain House Area. (East Altamont Energy Center, Tesla Power Project, Tracy Peaker plant, Mariposa Energy Project)

Response:

Natural-gas-fired power plants are not known to place significant demands on local emergency responders. Mariposa Energy's parent company, Diamond Generating Corporation, owns and operates two natural-gas-fired, simple-cycle facilities in southern California similar in nature to MEP: Larkspur Energy Facility and Indigo Generation Facility. To the Applicant's knowledge, the local fire departments have not been called upon to respond to either of these facilities since they became operational in 2001.

A previous CEC Staff analysis of offsite emergency response support for power plants (Greenberg and Greenberg, 2003)⁹, concluded that the frequency of offsite fire department response was minimal; modern natural gas power plants are designed with fixed fire protection systems and employees are trained in emergency response procedures. This analysis included a survey of six California city fire departments, four power plant owners, the U.S. Occupational Safety and Health Administration (OSHA), the California Occupational Safety and Health Administration (Cal-OSHA), the National Fire Protection Association (NFPA), the Federal Bureau of Labor Statistics, the National Response Center (NRC), the California Office of Emergency Services (OES), and the office of the State of California Fire Marshall. Based on these inquiries, the study indicates that the demand for offsite emergency response to natural gas power plants does not place a significant burden on local fire departments.

Based on the Applicant's experience owning and operating power plants and the results of the CEC Staff analysis on this subject, the Applicant does not expect a significant cumulative increase in demands on either Alameda County or Tracy Fire Departments due to the approval of MEP, GWF Tracy Plant, and East Altamont Energy Center (should that facility ultimately be constructed). The Tesla Power Project no longer has a CEC license and is therefore no longer considered a permitted project for cumulative impacts analysis.

⁸ Rodriguez, Gina/Tracy Fire Department Administrative Assistant. 2010. Personal communication with Stephanie Moore/CH2M Hill. May 5.

⁹ Greenberg, Alvin, and Shon Greenberg. 2003. Off-Site Emergency Response to Power Plants in California, Draft. August 20.

**Attachment RSDR35-1
ACFD and TFD Automatic and
Mutual Aid Agreement**

ALAMEDA COUNTY FIRE DEPARTMENT



| | | |
|--|--------------------------|-------------------|
| Subject: Automatic and Mutual Aid with Tracy Fire Department | | POLICY NO. 37.008 |
| Approved By: William J. McCammon, Fire Chief | | Page 1 of 2 |
| Reviewing Authority: Deputy Chief, Operations | Effective Date: 07/15/05 | Revised Date: |

Operations Volume

PURPOSE: To provide an automatic and mutual aid response from the Alameda County Fire Department and the Tracy Fire Department (TFD) within a prescribed area.

RESPONSIBILITY: It is the responsibility of all Alameda County Fire Department personnel to be familiar with this policy.

POLICY: It is the policy of this Department to follow the procedures set forth relating to Automatic and Mutual Aid with TFD.

PROCEDURE:

- I. This agreement is for automatic and/or mutual aid request for response to actual or reported fire, rescue and medical emergencies, hazardous materials and/or the coverage of fire stations.
- II. ACFD will initially send Station No. 8 units unless they are unavailable, in which case the next due unit will respond. TFD will commit a two-person engine company located at Tracy Fire Station No. 95, 7700 West Linne Road. Additional resources may be requested from either organization depending on the type and location of the incident.
- III. The automatic aid response area is Highway 580 from Tracy westbound/eastbound to North Flynn Road for reported incidents on the freeway. All other incidents will be considered mutual aid requests.
- IV. TFD will always send units on the freeway incidents but may not be dispatched to wildland or other incidents in the Altamont Pass areas. ACFD responding units may request mutual aid from TFD through dispatch based on the incident location.

- V. The first arriving Chief Officer will assume incident command of an emergency until a Chief Officer from the jurisdiction in which the emergency occurs arrives, at which time and if applicable, the Incident Command responsibility shall shift to the Chief Officer from the jurisdiction in which the emergency occurs. The assisting fire department units shall work under the direction of the Incident Commander or other authorized persons directing the emergency operations for the party requesting assistance.

Cross References:

Alternatives (39–42)

Background

The alternatives section provides no discussion of renewable technologies. Page 1-9 of the AFC states: As discussed further in Section 2.0, the expected annual operation is 600 hours per year with 200 startup and shutdown events. According to the AFC page 5.10-18: The MEP initial total capital cost is estimated to be between \$230 million and \$245 million.

Data Requests

RSDR39. If the MEP operates only 600 hours per year at the expected capacity factor how many megawatts would the project produce?

Response:

The project can produce from a nominal 25 megawatts to 200 megawatts depending on the dispatch from PG&E or from the California Independent System Operator.

RSDR40. What would be the capital cost per megawatt at the 600 hours per year expected operation?

Response:

The capital cost per megawatt is estimated to be between \$1,150,000 and \$1,225,000 per megawatt.

RSDR41. What would be the expected variable cost and fuel costs per megawatt at the 600 hours per year operation level assuming the current price of natural gas?

Response:

The estimated variable and fuel costs of the Project are not relevant to any decision the CEC must make on this Application. In addition, the variable and fuel costs are highly confidential.

RSDR42. Please compare the cost of the Mariposa Project per megawatt hour produced with its projected 600 hour operating profile to other renewable technologies like the PG&E wind storage project, or rooftop solar, battery storage projects or other renewable technologies.

Response:

MEP not only provides energy to PG&E, it also provides capacity with characteristics such as spinning reserve and ramp-up/ramp-down. These services, along with its highly flexible, dispatchable, and quick start capabilities, as well as high reliability and availability, provide value to PG&E beyond the energy produced from MEP.

There are no commercially available renewable technologies that provide dispatchable and operationally flexible generation with high reliability and availability. Roof-top solar, wind,

solar-thermal are all intermediate generating technologies that change with changes in the resource, wind and sunlight. PG&E is investing in a wind storage project and in battery storage projects; however, these are not yet available with commercially enforceable performance standards for availability, reliability, and efficiency.

Water Resources (43–44)

Background

AFC page 5.10-21 states: MEP operation will not make significant adverse demands on local water, sanitary sewer, electricity, or natural gas because adequate supply and capacity currently exist. The allocation of water for farmers from the Delta-Mendota Canal who are a part of the Byron-Bethany Irrigation District was zero for 2009.¹⁰

Data Requests

RSDR43. Please provide an assessment of the impact to farmers who rely on BBID water from the diversion of 187- 27511 acre feet a year for the Mariposa Power Project.

Response:

The Byron-Bethany Irrigation District's (BBID) Central Valley Project (CVP) water service contract with the Bureau of Reclamation, which is conveyed by the Delta-Mendota Canal referenced above, is not relevant to MEP as it is not the proposed source of water supply. Rather, the proposed source of MEP's water will be BBID's pre-1914 water supply, which will be diverted from BBID's Canal 45 as described in Section 5.15.2.1.1 of the AFC. Canal 45 originates at BBID's Pump Station 1-S, which diverts water from the State Water Project Banks Pumping Plant Intake Channel. BBID's pre-1914 water diverted at this location does not serve farmers that rely on CVP deliveries from the Delta-Mendota Canal.

A portion of BBID's water supply is based on pre-1914 water rights that were established by the Byron-Bethany Irrigation Company. In 1921, BBID acquired the Company's irrigation facilities and water rights. BBID asserts claims under this pre-1914 water right for reasonable and beneficial use of 60,000 acre-feet. In exchange for operational certainty, BBID has agreed to limit their annual diversion from the Delta to 50,000 acre-feet through agreement with the California Department of Water Resources. It should be noted that this portion of BBID's water supply is not affected by hydrologic year conditions. BBID has never experienced a reduction in supply due to a hydrologic condition. As stated in its will-serve letter dated June 30, 2008, BBID will provide up to 275 acre-feet of its pre-1914 water supply to MEP; however, the current estimate of maximum annual water demand by MEP is 187 acre-feet as described in the AFC, Section 5.15.2.1.1.

The remaining portion of BBID's water supply is the CVP water conveyed by the Delta-Mendota Canal for use only within BBID's CVP Service Area (formerly known as Plain View Water District). The recent CVP supply reductions referenced above by the intervener is not relevant to the water supply assessment for MEP or farmers who depend on BBID's

¹⁰ [http://www.tracypress.com/pages/full_story?page_label=home&id=2261553-](http://www.tracypress.com/pages/full_story?page_label=home&id=2261553-Water+in+short+supply&articleWater%20in%20short%20supply%20=&widget=push&instance=home_news_bullets&open=&)

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¹¹ http://www.energy.ca.gov/sitingcases/mariposa/documents/applicant/afc/MEP%20Volume%202/MEP_Appendix%20D_BBI D%20Will%20Serve%20Letter.pdf

pre-1914 water supply. Furthermore, the conveyance system for BBID's pre-1914 water supply cannot currently convey water directly to BBID's CVP Service Area.

In January 2010, BBID completed a comprehensive evaluation of its current and future (year 2030) demand for its pre-1914 water. The analysis included agricultural demands, and municipal and industrial (M&I) demands.

BBID currently encompasses approximately 30,000 acres. Within this area, approximately 10,500 acres (not including the CVP Service Area acres) are irrigable with BBID water supplies. The current agricultural demands for BBID in average years are expected to reach a peak annual demand of 27,621 acre-feet in average conditions and 30,659 acre-feet in dry year conditions. The current M&I demand is about 3,750 acre-feet under average year conditions and 3,400 acre-feet in dry year conditions.

Given the pre-1914 annual supply of 50,000 acre-feet compared to agricultural and M&I demand under average conditions (31,371 acre-feet) and dry year conditions (34,059 acre-feet), delivering 187 acre-feet to MEP will have no water supply impact on farmers who rely on BBID's pre-1914 water.

RSDR44. Please provide a cumulative assessment of the impact to agricultural uses of the water that BBID diverts and plans to divert to power projects. Please include the East Altamont Energy Center, the Tracy Peaker plant and the Mariposa Energy Center.

Response:

As noted in the response to RSDR43, BBID recently completed a comprehensive evaluation of its future (year 2030) demand for its pre-1914 water. The evaluation of future conditions includes projected water demands of MEP and the East Altamont Energy Center (EAEC) because its source of water will be BBID's pre-1914 water supply. The evaluation did not include the Tracy Peaker Plant because the source of water for the Tracy Peaker Plant is the BBID's CVP supply.

The future projected agricultural demands for BBID in average years are expected to reach a peak annual demand of 24,436 acre-feet in average conditions and 27,124 acre-feet in dry year conditions. Due to recent urbanization and other factors, the amount of agricultural lands in production is generally declining. The future M&I demand, which includes additional supply commitments for municipal areas and supply commitments for EAEC and MEP, totals about 23,441 acre-feet under average year conditions and 24,120 acre-feet in dry year conditions.

In the future, the supply available to BBID is expected to increase by 5,930 acre-feet due to municipal recycling. Given the total supply of 55,930 acre-feet compared to projected agricultural and M&I demand under average conditions (47,877 acre-feet) and dry year conditions (51,244 acre-feet), delivering 187 acre-feet to MEP will have no water supply impact on agricultural water users of BBID's pre-1914 water.



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV

APPLICATION FOR CERTIFICATION
FOR THE **MARIPOSA ENERGY PROJECT**
(MEP)

Docket No. 09-AFC-3

PROOF OF SERVICE
(Revised 2/8/2010)

APPLICANT

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DECLARATION OF SERVICE

I, Stephanie Moore, declare that on May 12, 2010, I served and filed copies of the attached MEP Robert Sarvey Data Responses, Set 2. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at:

[\[http://www.energy.ca.gov/sitingcases/mariposa/index.html\]](http://www.energy.ca.gov/sitingcases/mariposa/index.html).

The document has been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(Check all that Apply)

For service to all other parties:

sent electronically to all email addresses on the Proof of Service list;

by personal delivery or by depositing in the United States mail at Sacramento, California, with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

AND

For filing with the Energy Commission:

sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (preferred method);

OR

depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION

Attn: Docket No. 09-AFC-3
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct.



Stephanie Moore