

State of California
State Energy Resources Conservation and Development Commission

DOCKET
09-AFC-3
DATE _____
RECD. <u>Apr 28 2011</u>

In the Matter of:) Docket # 09-AFC-03
)
)
)
) Robert Sarvey's
Mariposa Energy Project) PMPD Comments

Introduction

This PMPD contains numerous factual and legal errors and ignores substantial evidence in the record that the proposed Mariposa Energy Project (MEP) will have significant impacts on the environment and does not comply with all applicable laws, ordinances, regulations, and standards (LORS). This Decision is based on a partial and inaccurate evaluation of the record established during this certification.

The entire proceeding has been not been conducted in compliance with the Warren Alquist Act and the Committee has abused its discretion with ex parte contacts that are clearly documented in the evidentiary record. The decision does not comply with State and Federal LORS for the conduct of an environmental justice analysis. The Committee has failed to independently evaluate the evidence and has ignored other evidence which demonstrates that the MEP does not comply with all LORS and does not comply with CEQA. The Committee allowed direct testimony by the Staff and applicants witnesses¹ but did not allow any of the Intervnors witnesses to provide direct testimony² in violation of their constitutional and procedural rights a clear abuse of discretion. .

The composition of the Committee with only one Commissioner itself, fails to satisfy the requirements of the California Code of Regulations Section 25211 of Title 20 which prescribes:

¹ RT 3-7-11 Pages 62-70,

² For example see:

19 MR. SARVEY: My understanding we weren't allowed
20 to do any direct, at least I was instructed at the other
21 hearings. RT 3-7-11 Page 159

11 MR. SIMPSON: Mr. Sarvey, can you summarize your
12 testimony for us?

13 MR. WHEATLAND: Objection.

14 HEARING OFFICER CELLI: Sustained. We've
15 received it. It's gotten in. RT 3-7-11 page 165

25211. The commission may appoint a committee of **not less than two members of the commission** to carry on investigations, inquiries, or hearings which the commission has power to undertake or to hold. **At least one member of the committee shall attend all public hearings or other proceedings held pursuant to Chapter 6** (commencing with Section 25500), and all public hearings in biennial report proceedings and rulemaking proceedings, except that, upon agreement of all parties to a proceeding who are present at the hearing or proceeding, the committee may authorize a hearing officer to continue to take evidence in the temporary absence of a commission member. Every order made by the committee pursuant to the inquiry, investigation, or hearing, when approved or confirmed by the commission and ordered filed in its office, shall be the order of the commission.

As the PMPD is signed by only one Commissioner and the Committee was comprised of only one Commissioner throughout the evidentiary hearing phase the composition of the Committee itself is a violation of Section 25211 of the PRC. The presiding and only member of the Committee has not conducted a site visit nor is it apparent that the presiding member has ever visited the site. In addition the Committee violated the ex-parte rules in a blatant ex-parte communication conducted during the March 7, 2011 evidentiary hearing.³ During the course of the hearing Intervenor Rob Simpson provided a motion to subpoena PG&E to testify to the condition of Line 002 which the MEP is proposed to interconnect. The presiding member and the hearing officer interrupted the March 7, 2011 hearing and met in the hallway with Scott Galati PG&E's attorney conducting an ex parte communication.⁴ Mr. Galati and the Committee tried to cover up the exparte communication by trying to explain that Mr. Galati was not a party.⁵ PG&E surely has an interest as it stands to receive 11.3% a year in revenue on the capital cost of

³ RT 3-7-11 Page 343

⁴ **§ 11430.10. Ex parte communication prohibition while pending**

(a) While the proceeding is pending there shall be no communication, direct or indirect, regarding any issue in the proceeding, to the presiding officer from an employee or representative of an agency that is a party or from an interested person outside the agency, without notice and opportunity for all parties to participate in the communication.

⁵ 24 MR. SIMPSON: May I have a point of order? Two

25 things, really. Was there ex parte communication between
1 the Commission and Mr. Galati?

2 HEARING OFFICER CELLI: He's not a party. So the
3 answer is no. Any other questions?

4 MR. SIMPSON: Yes. Has he been sworn?

5 HEARING OFFICER CELLI: No. He's not a witness. RT 3-7-11 Pages 343, 344

the project. PG&E owns and operates the natural gas line proposed to be connected to the MEP as is evident by Mr. Galati's appearance at the hearing.

Land Use

The MEP is not compatible with the Williamson Act

The PMPD correctly states that, *Compatible use is determined by the local agency as long as the agency determination is consistent with the Act's principles of compatibility.*⁶ But the PMPD is incorrect when it states that, *“Alameda County has not, to date, made a finding to exclude electrical facilities as a compatible use.”*⁷ Local rules (and the language contained in any specific contract at issue) play an important role in determining what is allowed under the local Williamson Act program. Alameda County in the existing land use contract has already determined that the MEP is not a compatible use on the MEP property. Exhibit Number 12, Appendix DR1-1⁸, contains a copy of the existing Williamson Act Contract that runs with the property. Page 3⁹ of the contract provides the restrictions on the use of the property, ***“During the term of this agreement, or any renewal thereof, the said property shall not be used for any purpose, other than agricultural uses for producing agricultural commodities for commercial purposes and compatible uses, which uses are set forth in Exhibit B attached hereto and incorporated by reference.”*** Exhibit “B” provides for two uses, ***“1) Grazing, breeding or training of horses or cattle 2) Co-generation/waste water distillation facility as described by Conditional Use Permit C-5653.”***¹⁰ The MEP is not a co-generation/ waste water distillation facility and it is not Grazing, breeding or training of horses or cattle hence the MEP is not compatible with the existing Williamson Act contract C-89-1195 as determined by the County. The PMPD attempts to deflect this fact by stating that, *“However, the contract itself is not a LORS, but an agreement between the landowner and the county. The Energy Commission is not a party to the contract, and has no role in the enforcement of the contract between the landowner and the county.”* The PMPD is admitting that in fact the MEP does conflict with the existing contract but

⁶ PMPD Land Use 9

⁷ PMPD Land Use Section Page 9

⁸ Land Conservation Contract C-89-1195 and Board of Supervisors Resolution R-89-947

⁹ Exhibit 12 Page 11 of 77

¹⁰ Exhibit 12 Page 19 of 77

attempts to exonerate the Commissions responsibilities to determine compatibility with the Williamson Act by stating that the contract is not a LORS. The Williamson Act Contract itself is evidence that the County has already determined the MEP is not a compatible use on the project site and the Commission cannot turn a blind eye to the incompatibility of the MEP on the project site which is the duty of the Commission to determine. The Commissions position has no merit and is an abuse of discretion.

But even if this position had any merit, and it does not, the PMPD ignores that the County's LORS do in fact preclude the siting of the MEP on Williamson Act Property.¹¹ The County's Agricultural Preserves Objectives, Uniform Rules and Procedures Section (C) (3) (g) provides the restrictions on the use of Williamson Act Property, "While under contract property may be used only for producing agricultural commodities for commercial purposes, and compatible uses as listed below." Section C (3) (g) (23) allows for the construction, alteration or maintenance of gas, electricity, water, communication, radio, television. or microwave transmitters and related facilities **as accessory to the other permitted uses.**¹² The MEP is not an accessory to other permitted uses and therefore is already deemed incompatible by the County.

The RPMPD must resolve this inconsistency or provide and override of the County's Agricultural Preserves Objectives, Uniform Rules and Procedures Section (C) (3) (g) (23). It is telling that the PMPD ignores this section of Alameda County's Agricultural Preserves Objective and Uniform Rules and Procedures because it is a clear LORS non compliance.

The MEP is incompatible with the Standards for Subdivision and Site Development Review for Agricultural Parcels¹³

The PMPD also ignores the MEP's noncompliance with **Standards for Subdivision and Site Development Review for Agricultural Parcels** as raised in my opening brief.¹⁴ The MEP as an agricultural parcel must conform to the ECAP's standards for subdivisions and site development review for agricultural parcels. One of the standards

¹¹ Intervenor Sarvey Opening Brief Page 6,7

¹² Alameda County's Agricultural Preserves Objectives Uniform Rules and Procedures.

http://www.acgov.org/cda/planning/landuseprojects/documents/Uniform_Rules-AgPres_051491.pdf Page 11,12

¹³ Exhibit 414 Page T-9

¹⁴ Intervenor Sarvey Opening Brief Page 7

listed in Table 5 is, “The subdivision shall include access to each parcel that is consistent with Alameda County Fire Department requirements, and shall be subject to reasonable response times for emergency services.”¹⁵ Alameda County Fire Code Chapter 5 Section 503.1.2.1 requires that, “*the maximum length of a single access road shall be no greater than 1,000 feet.*”¹⁶ According to the FSA and the AFC, “Access to the facility would be from Bruns Road, via a new 1,100-foot long road along the route of the existing unpaved access road that connects the Byron Power Cogeneration Plant to Bruns Road.” This would exceed the maximum length of the access road which is 1,000 feet.

Policy 246 of the ECAP requires that, “The County shall limit Development to very low densities in areas where police, fire, and emergency medical **response times** will average more than 15 minutes.” The evidence in the record demonstrates that “Station #8 in Livermore would provide first response to the facility. The response time to the facility would be approximately 30 minutes.”¹⁷ The MEP as a heavy industrial use should have a response time of 15 minutes from Alameda County to comply with Policy 246.

Another standard for subdivisions and site development review for agricultural parcels contained in ECAP Table 5 is, “*The subdivision shall be configured to avoid the significant loss of potential wildlife habitat or significant natural vegetation. Neither the subdivision of land nor on-going or proposed agricultural uses on such subdivided land shall interfere with the ability of any identified species of concern to use the site as habitat or as a corridor linking identified habitat areas.*”¹⁸ According to the evidence, “*Operationally the project will result in habitat fragmentation and cause a barrier to dispersal for terrestrial species such as California red-legged frog, California tiger salamander, and San Joaquin kit fox. Common and special-status species may enter the fenced facility in search for food or cover and thus may be killed from entrapment or vehicle mortality. A new 6-inch tall curb or similar barrier installed along the perimeter fence will discourage entry by California tiger salamander and the perimeter fence will be properly maintained to minimize the potential for access by other wildlife including*

¹⁵ Exhibit 414 Page T-11

¹⁶ [6.04.080](#) - Chapter 5—Fire Service Features, Section 503—Fire Apparatus Access Roads. Section 503.1.2.1 (Fire Apparatus Access Roads) is added to this Code to read: Section 503.1.2.1 (Fire Apparatus Access Roads) is added to this Code to read:

¹⁷ Exhibit 301 Page 4.14-2

¹⁸ Exhibit 414 Page T-11

*San Joaquin kit fox.*¹⁹ The project is not compatible and the RPMPD must address this non compliance.

The MEP is not a public utility

The PMPD reasons that the MEP is a public facility since the MEP through its power purchase agreement with Pacific Gas & Electric Company (PG&E) will sell electricity to a public utility for public consumption and benefit. The Commissions twisted logic fails because the MEP is not a public utility. PG&E is an investor owned utility not a public utility like the Northern California Power Authority. PG&E does not offer service to the public it only supplies its ratepayers who pay their bills on time. Evidence of this is conclusive as a public member of the Mountain House Community cannot purchase its electricity from PG&E it must purchase its electricity from Modest Irrigation District. The record is not clear on what a public facility is. The MEP is potentially a public facility, but if it doesn't have a power purchase agreement no one is sure it is a public facility. The applicant was asked at the evidentiary hearing, *"In this particular instance, you're stating that the MEP is a public facility because it has its power purchase agreement. What happens when this purchase power agreement is no longer in effect?"* The applicant replied, *"I don't know."*²⁰ Staff doesn't know if the MEP is a public facility without a power purchase agreement either. Staff was asked, *"When PG&E's contract expires in ten years, would this still be considered a public facility?"* Staff replied, *"I can't answer that question."*²¹ The RPMPD must answer the question if the MEP is a public facility is the MEP no longer compatible with county LORS in ten years when the contract expires. Must the applicant dismantle **the** project if it no longer has a contract?

According 42 USCS § 5122, "Public facility" means the following facilities owned by a State or local government: (A) Any flood control, navigation, irrigation, reclamation, public power, sewage treatment and collection, water supply and distribution, watershed development, or airport facility. (B) Any non-Federal-aid street, road, or highway. (C)

¹⁹ Exhibit 4 page 31

²⁰ RT 2-24-11 Page 115

²¹ RT 2-24-11 Page 243

Any other public building, structure, or system, including those used for educational, recreational, or cultural purposes. (D) Any park.

Pursuant to 16 USCS § 1453 (15), [Title 16. Conservation; Chapter 33. Coastal Zone Management] the term public facilities and public services means “facilities or services which are financed, in whole or in part, by any state or political subdivision thereof. The MEP meets none of these legal definitions.

The MEP Does not Qualify for a Conditional Use Permit as it is not a Public Need.

The PMPD states that, “*the project would meet all finding requirements required by Alameda County for issuance of a conditional use permit.*”²² But the PMPD fails to address the key finding for a conditional use permit is that the MEP must be a public need. Title 17 of the Alameda County Ordinance Code Section 17.54.130 identifies the four findings necessary for approval of a conditional use. The first finding is that the MEP must be required for the public need. Staff justifies its finding on the need for the MEP based on the “*April 1, 2008, PG&E request for offers to procure 800-1200 MW of new resources.*”²³ Unchallenged testimony in the record demonstrates that the MEP is not needed for the public.²⁴ The 2008 PG&E LTRFO was authorized by the CPUC in D.07-12-052 which adopted PG&E’s 2006 long term procurement plan. Under its adopted LTPP, the CPUC authorized PG&E to procure 800-1200 MW plus an additional 312 MW to replace the failed Eastshore and Bullard Projects for a total of 1,112- 1,512 MW. Subsequently in A. 09-09-021 the CPUC decided that PG&E’s procurement authority should be limited to 1138- 1188 MW which was 324 MW less than the amount authorized for PG&E’s 2008 LTRFO eliminating and need for the MEP.^{25 26} The decision to limit PG&E’s procurement to that level was based on the CEC’s 2009 IEPR forecast of peak demand.^{27 28} The CEC Staff’s most recent demand report the “Revised

²² PMPD Land Use Section Page 16

²³ Exhibit 301 Page 4.12-25

²⁴ Exhibit 408 Alternatives Testimony of Robert Sarvey, Exhibit 406 Testimony of Bill Powers

²⁵ PG&E’s procurement to the bottom of the range established in D.07-12-052, we determine that PG&E should procure between 950 - 1000 MW of new generation resources. D. 10-07-045 Page 33 http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/121605.pdf

²⁶ Exhibit 410 Page 5

²⁷ D. 10-07-045 Page 52 Finding of FACT Number 11 and 12. [“11. No party in this proceeding disputes that the CEC’s 2009 IEPR forecast of peak demand for the PG&E planning area in 2015 is less than in the 2007 CEC forecast relied upon in D.07-12-052. 12. Given reporting eri”²⁷ Exhibit 1 Page 5.16-15, Exhibit 414 Page T-11 and Exhibit 4 page 31

²⁸ Exhibit 410 Page 6

Short Term Peak Demand Forecast for 2011-2012” predicts that PG&E’s peak demand in its service territory is 912 MW less than the forecast from the 2009 IEPR.²⁹

According to the CAL-ISO 2010 summer assessment PG&E currently enjoys a 38.5 % Planning Reserve margin in its service territory.^{30 31} This 38.5 % Planning reserve margin does not include an additional 2,919 MW of approved projects some of which are currently under construction.³² There currently is no need for the Mariposa Project and recent analyses conducted by the CEC demonstrate that the MEP is not needed now or any time in the near future.³³ Staff has not performed its own assessment of whether the MEP is required for the public need.³⁴ Staff’s reliance on PG&E’s 2008 Long Term Request for Offers is misplaced and uninformed as the basis for the 2008 LTPP was the 2007 CEC Demand forecast which is no longer representative.³⁵

Staff also basis its conclusion that the MEP is a public need on unsupported statements by Alameda County. Staff’s testimony states that it relied on a *“May 2010 letter, the county said, —even with growth constraints built into the ECAP, [Alameda County] will require significant electrical energy especially at times of peak demand.”*³⁶ When asked if the county had provided a assessment for the public need staff’s witness replied, *“NO”*.³⁷ The County in the evidentiary hearing admitted that, *“Well, the need for power isn’t established -- it’s not a function of the county.”*³⁸ When asked if the county had done an assessment that the MEP is needed for the public the county answered, *“Well, we’re not required to do an analysis on whether or not the facility in terms of the original network of the electrical delivery services.”*³⁹

The MEP is not a public need as the record reflects and the staff cannot make the findings necessary for issuance of a conditional use permit. Hence without overriding

²⁹ Exhibit 406 Pages ,3 and Garcia-Cerrutti, Miguel, Tom Gorin, Chris Kavalec, Lynn Marshall. 2010. *Revised Short-Term (2010-2012) Peak Demand Forecast* Draft Staff Report. California Energy Commission, Electricity Supply Analysis Division. Publication Number: CEC-200-2010-011-SD <http://www.energy.ca.gov/2010publications/CEC-200-2010-011/CEC-200-2010-011-SD.PDF> Page 14

³⁰ CAL-ISO 2010 Summer Loads and Resources Operations Preparedness Assessment May 10, 2010 Page 4 <http://www.caiso.com/2793/2793ae4d395f2.pdf>

³¹ Exhibit 408 Page 4

³² Oakley, Mairposa, Colusa, Russell City, GWF Tracy Combined Cycle, Los Esteros Upgrade

³³ Exhibit 408 Page 4

³⁴ RT 2-24-11 Page 167 Lines 20,21

³⁵ Exhibit 301 Page 4,12-25

³⁶ Exhibit 301 Page 4.1-25, RT 2-24-11 page 167. 168

³⁷ RT 2-24-11 Page 182 Lines 3-8

³⁸ RT 2-24-11 Page 68 Lines 18,19

³⁹ RT 2-24-11 Page 89.90

considerations the AFC for the MEP must be denied. All these issue were covered in my opening brief⁴⁰ and the RPMPD must address them.

Traffic and Transportation

The PMPD proposes Condition of Certification **TRANS-8 to,** *” provide a means to advise pilots of the potential hazard to flight associated with the project generated exhaust plumes and the need to avoid overflight of the facility below 1,500 feet AGL. Applicant will initiate requests for the issuance of a Notice to Airmen (NOTAM); amendment of the Airport/Facility Directory; revision of the San Francisco Sectional Chart; and addition of a new remark to the Automated Surface Observing System (ASOS). With these mitigations, impacts to aviation would be less than significant.”* As the record reflects TRANS-8 does not provide the mitigation required by CEQA. The applicant may request a NOTAM but that does not mean than a NOTAM will be issued. TRANZ-8 provides that, *“A final decision from the jurisdictional agency denying the request, as a result of the appeal process, shall release the project owner from any additional action related to that request and shall be deemed compliance with that portion of this condition of certification.no alternate mitagion should a NOTAM not be issued.”* **As the PMPD states that NOTAM required by TRANZ-8 would mitigate the impacts to aviation safety but if the NOTAM is not issued then there will be a significant impact to aviation the PMPD does not address this.**

Test Flights

The PMPD states that, *“Applicant’s expert witness described the effects of flying through the plume experienced during the numerous test flights as “very similar to driving down a smooth highway at 60 mph and running over a one-by-two piece of wood.” (2/25/11 RT 155:3-5.) The tests also involved flight through the plume at an offset, so that only one wing was directly under the plume.”* A cursory review of the applicants test flight information shows that the applicant never flew within 500 feet of

⁴⁰ Intervenor Sarvey Opening Brief Page

the plume. Testimony by Staff's expert William Walters explains that unless you're flying directly over the plume the plume will have no effect:

5 MR. SARVEY: So if I was to fly, say, 500 feet
6 horizontally away from the stack, would that plume
7 velocity and height be much different?

8 MR. WALTERS: Well, if you're not flying directly
9 over the stack, the only way you're going to see the
10 velocity from that stack is if there is a significant
11 amount of wind that's blowing the plume to that direction.
12 And any significant amount of wind is going to knock down
13 the vertical velocity very quickly.

RT 3-7-11 Page 286

The applicants witness failed to provide those details and the PMPD's reliance on that testimony is misplaced. If as the applicants witness testified that flying 500 feet away from the plume was like going over a 1X8 piece of wood at 60 miles an hour it must be tremendously turbulent flying directly over the plume. In this respect the applicant failed to meet the burden of proof that the MEP plume is not a significant hazard. As such the RPMPD must deny the project.

Environmental Justice

The Staff and applicants Environmental Justice analysis relies on the outdated 2000 Census which does not even include the Mountain House community which has a population of around 10,000 people. All staff or the applicant had to do is contact the States Department of Finance Demographics Unit to obtain the factual information. The RPMPD must contain current demographic data to meet the requirements of a true environmental justice analysis and comply with State and Federal LORS. As detailed in my reply brief a document the committee appears to never have read, the State Lands Commission under the guidance of OPR has developed a framework for environmental justice that represents what the State of California considers a proper environmental justice analysis for its departments. The analysis should include:

1. Identifying relevant populations that might be adversely affected by Commission programs or by projects submitted by outside parties for its consideration.

We know that the Staff and applicant failed to procure current information on the project areas demographics.

2. Seeking out community groups and leaders to encourage communication and collaboration with the Commission and its staff.

The Staff and applicant failed to contact any of the minority leaders much less encourage their collaboration with the commission and its staff.

3. Distributing public information as broadly as possible and in multiple languages, as needed, to encourage participation in the Commission's public processes.

The intervenors repeatedly requested information in different languages and asked for interpreter but were denied by this Committee.

4. Incorporating consultations with affected community groups and leaders while preparing environmental analyses of projects submitted to the Commission for its consideration.

Even though the intervenors attempted to supply demographic information and input about the community they were ignored by Staff and Applicant.

5. Ensuring that public documents and notices relating to human health or environmental issues are concise, understandable, and readily accessible to the public, in multiple languages, as needed.

The intervenors requested that the documents be provided in other languages and the committee refused.

6. Holding public meetings, public hearings, and public workshops at times and in locations that encourage meaningful public involvement by members of the affected communities.

All public meetings were held at the BBID headquarters and no meetings were held in the Mountain House Community. The BBID headquarter were not accessible by public transportation and had very lousy sound system so even English speaking people had a hard time understanding the proceedings. The socioeconomics hearing was held in Sacramento without any public notice that public comment would be taken at the hearing.

7. Educating present and future generations in all walks of life about public access to lands and resources managed by the Commission.\

Not applicable

8. Ensuring that a range of reasonable alternatives is identified when siting facilities that may adversely affect relevant populations and identifying, for the Commission's consideration, those that would minimize or eliminate environmental impacts affecting such populations.

The alternative sites represented tow parcels adjacent to the proposed MEP site and no other brownfiled sites or sites outside of Alameda County's ECAP area or agricultural districts were considered.

9. Working in conjunction with federal, state, regional, and local agencies to ensure consideration of disproportionate impacts on relevant populations, by instant or cumulative environmental pollution or degradation.

The Staff and applicants analysis never identified a minority population and never examined the pockets of minorities and the impacts of the MEPO on those areas.

10. Fostering research and data collection to better define cumulative sources of pollution, exposures, risks, and impacts.

The Staff and applicant did not examine the minority population for existing health problems or examine current exposures in San Joaquin County that were provided in Exhibit 412 which showed that development in the project area will lead to an increment consumption of 140 ug/m³ for the 24 hour PM standarda and 30 ug/m³ for the annual standard.

11. Providing appropriate training on environmental justice issues to staff and the Commission so that recognition and consideration of such issues are incorporated into its daily activities.

CEC Staff's idea of an environmental justice analysis is examining 11 year old census data and concluding there is no minority population. The staff never looks to see if there are existing healths conditions, impacts to minority pockets, or provide outreach in foreign languages.⁴¹

As a State Agency the CEC is required to evaluate Environmental Justice Issues in accordance with State law and Federal law. The record reflects a proper environmental justice analysis has not been conducted.

Air Quality

The MEP does not Comply with the Federal 1 Hour NO₂ Standard

⁴¹ California Lands Commission Environmental Justice Policy
http://www.slc.ca.gov/policy_statements/Env_Justice/Environmental%20Justice%20Policy%20Final%20Web.pdf

Staff's testimony concludes that the direct impacts of NO₂, in conjunction with worst-case background conditions, would not create a new violation of the California 1-hour or annual NO₂ ambient air quality standard.⁴² Staff's conclusion has no basis since staff did not use EPA or SJVAPCD approved methods to determine if in fact the MEP would violate the new federal 1 hour standard. As Staff's testimony admits "*Relevant NO₂ modeling guidelines include options from SJVAPCD in draft guidelines for use of AERMOD and OLM, dated 8/19/2010. Energy Commission staff and MEP modeling differs from these draft guidelines and regulatory recommendations for major sources because MEP uses three years of locally-available meteorological data where major source modeling requires five years (nearest station: Stockton) and because MEP uses the 3-year average of the eighth highest concentration rather than the form of the standard which is the 98th percentile of the annual distribution of daily highest 1-hour concentrations. Energy Commission staff may revise this assessment if U.S. EPA releases a prevailing recommendation, suitable for federal non-major sources, as part the Guideline on Air Quality Models in Appendix W of Title 40, Code of Federal Regulations (CFR) Part 51.*"⁴³

Staff and applicant's NO₂ analysis also fails to satisfy the USEPA's requirements for the placement of NO₂ monitors, which states: *In urban areas, monitors are required near major roads as well as in other locations where maximum concentrations are expected.* Major roadways are defined as those with at least 250,000 annual average daily traffic and monitors for this exposure condition must be located within 50 meters of the monitoring station. The use of the Tracy and Patterson pass monitoring data does not satisfy this requirement as they are both rural locations. The applicant has not met the burden of proof that the MEP will not violate the new Federal NO₂ standard.

Operation Impacts and Mitigation

The CEC Staff on Page 4.1-28 of the Supplemental Staff Assessment concludes, "*that particulate matter emissions from routine operation would cause a significant impact because they will contribute to existing violations of PM₁₀ and PM_{2.5} ambient air*

⁴² Exhibit 301 Page 4-1.24

⁴³ Exhibit 301 Page 4.1-23

*quality standards. Mitigation should be provided for emissions of PM10, PM2.5, SOx, NOx, and VOC to reduce PM10, PM2.5, and ozone impacts”.*⁴⁴

Staff’s mitigation proposal falls short of its intended goal of mitigating all of the criteria and precursor emissions. First Staff’s mitigation proposal fails because it mitigates only a portion of the projects potential emissions. Staff’s analysis assumes that the project is allowed to operate for 4,225 hours a year.⁴⁵ CEC Staff proposes to mitigate the projects emissions based on only 1,400 hours of operation. This is pure speculation on Staff’s part and it is reasonably foreseeable that the project could operate up to 4,250 hours a year since its air permit allows it to. Staff confirmed at the hearing that its conditions of Certification do not provide mitigation if the project actually does run over 1, 400 hours.⁴⁶ This is despite the fact that staff has concluded that, “ *Significant secondary impacts would also occur for PM10, PM2.5, and ozone because operational emissions of particulate matter precursors including SOx and ozone precursors (NOx and VOC) would contribute to existing violations of these standards.*”⁴⁷

CEC Staff relies on a donation of \$644,503 by the applicant to the SJVAPCD in a mitigation agreement to mitigate the projects PM-10/2.5 and SOx emissions. Staff expects at least 11.03 tons of PM-10 reductions to be achievable through the SJVAPCD using the fee but has provided no analysis to demonstrate that level of reductions.⁴⁸ The SJVAPCD the agency that will implement the emission reduction programs assumes that the mitigation fee will retrofit 337 wood stoves and achieve 4.68 tons per year of PM-10 and SO₂ which is less than 50% of what the staff projects that the Air Quality Mitigation Agreement will achieve.⁴⁹ The projects permitted PM-10/2.5 emissions are 18.5 tpy.

The Commission may rely on the SJVAPCD to report on how much mitigation has been attained, but it is the Commission’s ultimate responsibility to ensure that all the required mitigation is provided. Staff’s testimony provides no yardstick or mechanism by

⁴⁴ SSA 4.1-28

⁴⁵ SSA 4-1.19 “Each CTG firing up to 4,000 hours at full turbine capacity with air inlet chiller operation and 300 startup and shutdown events per turbine (MEP 2009a) or 4,225 hours per turbine annually”

⁴⁶ 7 MR. SARVEY: What happens if the project operates 8 more than 1,400 hours since it's permitted for 4,250 9 hours? Does staff have a condition to deal with that 10 issue?

11 MR. LAYTON: We do not.

2-24-11 Page 388

⁴⁷ SSA Exhibit 301 4.1-28

⁴⁸ SSA Exhibit 301 Page

⁴⁹ Exhibit 9 Attachment RSDR1-1 SJVAPCD Agreement Pages A-2, A-3

which the CPM or anyone else can calculate whether sufficient offsets are provided by the AQMA. The mitigation plan must be formulated before the project is approved and must contain objective criteria to measure its effectiveness to comply with CEQA.

There are several issues with staff's unstructured approach. Staff does not know what projects will be implemented by the SJVAPCD to achieve the particulate matter reductions.⁵⁰ Emission reductions could occur through various programs but the life of the emission reductions may not match the thirty year life of the MEP. Staff has not addressed this issue. When asked about the useful life of the programs in the Carl Moyer Program staff replied that, "*Some of them can be very long and some of them can be very short. Some of the ag engines have been in operation for 50, 60 years.*"⁵¹ CARB reports that the maximum project life for agricultural use engine projects is 7 to 10 years.⁵² Most of the other Carl Moyer programs have maximum lives of three to ten years.⁵³ The problem with this mitigation proposal is that the average life of the mitigation programs is three to ten years and the life of the MEP is 30-40 years. For example if the useful life of a mitigation program is five years will the mitigation be proposed six times in five year intervals to match the 30 year life of the MEP. The details are not given and the public and the Committee do not have a logical basis to conclude that the mitigation will be provided with out some structure for implementation. This underscores the problem with not having an approved mitigation plan in place for the intervenors, the public and the committee to review. This violates CEQA's mandate for informed participation.

Staff proposes in AQSC-7 that, "If insufficient emission reductions would result from the use of the fee, then the project owner shall expand the scope of the Settlement Agreement and fee or surrender sufficient PM10 and/or SOx ERCs from the northern region of the San Joaquin Valley Air Pollution Control District in the amount corresponding with the shortfall." But staff provides no mechanism to compute the success of the emission reduction programs utilized by the SJVAPCD so the CPM and compliance staff will not know how many reductions have occurred and how much additional mitigation is needed.

⁵⁰ RT 2-24-11 Pages 396, 397

⁵¹ RT 2-24-11 Pages 396

⁵² http://www.arb.ca.gov/msprog/moyer/guidelines/cmp_guidelines_part1_2.pdf

⁵³ http://www.arb.ca.gov/msprog/moyer/guidelines/2005_Carl_Moyer_Guidelines_Part4.pdf

Greenhouse Gas Analysis

Staff's Greenhouse Gas analysis is inadequate as it fails to consider feasible alternatives to lowering statewide greenhouse gas emissions from the MEP. Staff's testimony is that, "*The proposed MEP would have a net worst-case heat rate of approximately 10,187 Btu/kWh.*"⁵⁴ This is higher than the average system-wide heat rate for California which in 2002 was about 9,750 BTU/kWh.⁵⁵ This heat rate is higher than the advanced versions of the LM-6000 which are capable of lower heat rates than the proposed LM-6000PC.^{56 57} The 10,187 Btu/kWh is much higher than advanced simple cycle units which are capable of heat rates below 8700 Btu/kWh.⁵⁸ These are factors which must be considered in any meaningful Greenhouse Gas Analysis. Feasible alternatives to the projects design which lower the states greenhouse gas emissions must be analyzed and considered.

Staff's analysis focuses on speculation by hypothesizing that the MEP will displace older less efficient generation but provides no comparable unit that the MEP could feasibly replace. The majority of facilities that staff considers in its analysis are once through cooling units which are already slated for retirement.⁵⁹ The remaining units have equivalent or better heat rates than the proposed MEP with the exception the Pittsburg Power Plant which produced only 216 GWH in 2009 according to staff's testimony.⁶⁰ When all the facts are holistically considered the MEP is likely to increase Greenhouse Gas emissions since it has a higher heat rate than the system average and a higher heat rate than most of the projects that have been recently approved at the CPUC.⁶¹

Staff's Greenhouse Gas analysis also justifies the MEP's siting because it can integrate intermittent renewable energy resources. The record does not contain an analysis of whether the MEP is needed to integrate renewable energy in the Bay Area Load Pocket. The original presiding member of the MEP unambiguously stated that this

⁵⁴ SSA Page 4.1-81

⁵⁵ http://www.energy.ca.gov/sitingcases/russellcity_amendment/amendment_two/2010-06-28_Letter_and_Staff_Analysis.pdf page 4

⁵⁶ COMPARATIVE COSTS OF CALIFORNIA CENTRAL STATION ELECTRICITY GENERATION Page C-16 "The conventional simple cycle values are recommended for both the single turbine (49.9 MW) and two turbine (100 MW) cases and are based on NXGen LM6000 gas turbine efficiencies that are higher than most of the existing LM6000-powered plants/"

⁵⁷ Exhibit 302 FDOC **TABLE 1. COMPARISON OF GE LM6000 SPRINT WATER-INJECTED AND DLE COMBUSTION TECHNOLOGIES** Page 8

⁵⁸ COMPARATIVE COSTS OF CALIFORNIA CENTRAL STATION ELECTRICITY GENERATION Page C-16

⁵⁹ Exhibit 403 Page 6

⁶⁰ SSA Page 4.1-80

⁶¹ Exhibit 403 Page 7

type of analysis must be included in the record evidence. As Commissioner Levin stated, *“And while we absolutely want to better integrate renewables we would like to see evidence if that's what's going on. And so that would be helpful. So that's why I'd like to know more concretely, it doesn't need to be tonight, but if you can put evidence in the record, specifically are there contracts, PPAs already with PG&E from new renewables that require integration into the system and require a natural gas peaking plant to better integrate them into the system because I don't think that's currently the situation at Altamont. It may be elsewhere but that would be very helpful information to put in the record. And we are very excited to see more renewables come on line. Please don't get me wrong. **We hear this now in a lot of power plants siting cases. That the need for the plant is based on integration of renewables.** And while we absolutely want to better integrate renewables we would like to see evidence if that's what's going on. And so that would be helpful.”*⁶²

In terms of the renewable integration capabilities of the MEP a thorough analysis of existing and expected dispatchable and renewable generation and their proper location would be necessary to conclude that in fact the MEP will be needed to integrate renewable energy within the greater Bay Area Load Pocket.⁶³ With the approval of three new dispatchable gas fired generating units within the Bay Area Load Pocket including the 719 MW Marsh Landing Generating Station, the 586 MW fast start Oakley Project, the upgrade of the LECEF facility for another 109 MW of new generation, it is clear that additional dispatchable generation is not needed in this area. The combination of newly approved facilities represents 1,414 MW of new dispatchable generation all within the Bay Area Load Pocket.⁶⁴ This does not include the Russell City Project another 600 plus MW which is reportedly commencing construction.

In the immediate area near the MEP there are several resources that are reasonably foreseeable that make the MEP unneeded. A few miles away from the MEP the

⁶² http://www.energy.ca.gov/sitingcases/mariposa/documents/2009-10-20_Informational_Hearing_Transcript_TN-2500.PDF Page 57,58

⁶³ **IMPACT OF ASSEMBLY BILL 32 SCOPING PLAN ELECTRICITY RESOURCE GOALS ON NEW NATURAL GAS-FIRED GENERATION CEC 2009** http://www.energy.ca.gov/refi/documents/phase2A/comments/Joan_Taylor_Ca-Nevada_Desert_Energy_Committee_Attachment.PDF “Once combined heat and power targets and once through cooling retirements were made only a few new natural gas fired plants had to be added to meet local capacity and reliability needs. Those were in the Sacramento Utility District, Turlock Irrigation District, and Imperial Valley Control Areas which have no once through cooling units and limited large hosts for combined heat and power units.”

⁶⁴ Exhibit 403 Page 7

Mulqueeny Ranch Pumped storage Project is being developed.⁶⁵ This pumped storage project will utilize off peak wind power and recycled water from the City of Tracy to produce 280 MW of stored dispatchable renewable energy connected to the Tesla Substation. Unlike the MEP this project is high in the loading order and a desirable project for integrating renewable energy with 280 MW of dispatchable power without Greenhouse Gas emissions. As this Committee knows The Tracy Peaker Plant is being converted to combined cycle providing an additional 145 MW with duct firing capability connected to the Tesla Substation. According to Staff's testimony the Tracy Peaker ran an average of 76 hours a year for the last five years.⁶⁶ Another project proposed within two miles of the MEP is the East Altamont Energy Center an 1100 MW combined cycle Project with 254 MW of duct firing.⁶⁷ The maximum annual generation possible from the facility is estimated to be between 7,125 and 7,655 gigawatt hours (GWh) per year.⁶⁸ The project can produce two and half times the electrical energy needed for Eastern Alameda County and much more power than is permissible under Policy 13 of the ECAP.⁶⁹

This type of analysis was recommended in the Committee Guidance on Fulfilling California Environmental Quality Act Responsibilities for Greenhouse Gas Impacts in Power Plant Siting applications.⁷⁰ In a situation such as this where reserve margins in PG&E's service territory are over 35% and the CPUC has allowed 555 MW of over procurement in the LTPP with almost all of the generation in the Bay Area Load Pocket, this analysis is critical to preventing the overbuilding of fossil fuel resources to the detriment of preferred resources.^{71,72}

⁶⁵ Exhibit 411

http://www.energy.ca.gov/sitingcases/mariposa/documents/applicant/afc/MEP%20Volume%202/MEP_Appendix%205.6A_Load%20and%20Resource%20Balance.pdf

⁶⁶ RT 2-24-11 Page 387, 388

⁶⁷ http://www.energy.ca.gov/sitingcases/eastaltamont/documents/applicants_files/EAEC_AFC_files/EAEC_AFC_Vol01.pdf Page 2-9

⁶⁸ http://www.energy.ca.gov/sitingcases/eastaltamont/documents/applicants_files/EAEC_AFC_files/EAEC_AFC_Vol02_8.10-.pdf 10-4

⁶⁹ 7,125 GWH /2868 = 2.48

http://www.energy.ca.gov/sitingcases/mariposa/documents/applicant/afc/MEP%20Volume%202/MEP_Appendix%205.6A_Load%20and%20Resource%20Balance.pdf Page 2

Committee Guidance on fulfilling California Environmental Quality Act Responsibilities for Greenhouse Gas Impacts In Power Plant Siting Applications Page 29

⁷¹ There is simply too high a risk, in the turmoil of rapid change, that a project without a utility contract would not run enough (and earn enough) to justify the considerable capital investment, particularly as the electric generation system transforms to greater reliance on renewables." Committee Guidance on fulfilling California Environmental Quality Act Responsibilities for Greenhouse Gas Impacts In Power Plant Siting Applications Page 22

Committee Guidance on fulfilling California Environmental Quality Act Responsibilities for Greenhouse Gas Impacts In Power Plant Siting Applications Page 22

⁷² Exhibit 403 page 8

The MEP's Ammonia Emissions are not Mitigated

Ammonia is a known precursor emission for secondary particulate matter formation. The BAAQMD's testimony states that the District's Draft PM2.5 report concludes that ammonia emissions contribute more strongly to PM2.5 formation than other types of precursor emissions, including NOx in the BAAQMD.⁷³ Staff does not even bother to quantify the secondary particulate formation must less mitigate the ammonia emissions. Staff must provide mitigation for the secondary particulate formation from the ammonia emissions since by their own testimony, "all precursor emissions must be mitigated to avoid contributing to existing violations of PM10 and PM2.5 ambient air quality standards." The projects potential 33 tons per year of ammonia will create more secondary particulate than the projects NOx and SOx emissions which staff concludes must be mitigated to prevent a significant impact. The evidence in the record is that ammonia is the most significant precursor emission for the formation secondary PM-10/2.5 but no mitigation is provided for this significant impact.

The MEP Does not Utilize BACT For Particulate Matter Emissions

The Air District and CEC staff have not provided an hourly emission limit for particulate matter which would be required to comply with BAAQMD Rule 2-2-301 (b) or BAAQMD SIP Rule 2-2-206.2. 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.

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.⁷⁴ Of those seven facilities analyzed only one facility has measured PM-10 emissions over 2.3

⁷³ Exhibit 302, Appendix D, page 27

⁷⁴ Exhibit 302 page 56

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 is the Gilroy Energy Center which has never exceeded 2 lbs/hr. An emission limit between 2.0 and 2.2 pounds per hour should be considered BACT since these limits have been achieved in practice at similar facilities.⁷⁵

The Los Esteros Critical Energy Facility was licensed by the CEC in 2002. The BAAQMD propose a 2.5 pounds per hour PM-10 limit as BACT and that limit was adopted as BACT in the final Commission Decision on the LECEF.⁷⁶ In 2006 the FDOC for the San Francisco Electrical Reliability Project's proposed a 2.5 pound per hour PM-10 per turbine limit as BACT and the Commission adopted that BACT level in its final decision.⁷⁷

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 turbines.⁷⁸ 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-6000.⁷⁹ The Marsh Landing simple cycle facility was just permitted with a 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 2.2 pounds per hour or less for PM-10 and support a lower BACT limit for PM-10.⁸⁰

The air district defends its lack of an hourly or daily limit on particulate matter emissions by stating that, "The district has concluded that imposing a numeral emissions limit in addition to requiring BACT technologies would not be warranted given that there

⁷⁵ Exhibit 302 and Exhibit 403 page 4,5

⁷⁶ Commission Final Decision Los Esteros Critical Energy Facility http://www.energy.ca.gov/sitingcases/losesteros/documents/2002-07-02_LOSESTEROS_FINAL.PDF Page 137 Condition AQ-19

⁷⁷ <http://www.energy.ca.gov/2006publications/CEC-800-2006-007/CEC-800-2006-007-CMF.PDF> Page 127

⁷⁸ <http://www.energy.ca.gov/2009publications/CEC-700-2009-012/CEC-700-2009-012-REV1.PDF> Page 4.1-12

⁷⁹ <http://www.energy.ca.gov/2009publications/CEC-700-2009-013/CEC-700-2009-013-REV1.PDF> Page 4.1-21

⁸⁰ Exhibit 403 Page 6

are no add on control devices that the facility can use to control PM emissions."⁸¹ The districts witness at the evidentiary hearing confirmed the districts position, "*There is no way to lower particulate other than the technology. And therefore a numerical limit doesn't*" make any sense."⁸² **That is right after the district witness testified that with the use of dry low NOx combustors the turbines would emit .14 pounds per hour less per hour of particulate matter emissions.** For four turbines this would lower the projects emission by .56 pounds per hour.⁸³

At the evidentiary hearing it was clear that CEC staff was unaware that there was no hourly or daily limit on PM-10/2.5 emissions.⁸⁴ Staff testified that they modeled the PM-10/2.5 concentration based on a three pounds per hour per turbine emission limit.⁸⁵ The record reflects staff's witness is wrong and that Staff's air quality impact assessment was performed with a PM-10/2.5 emission rate of 2.5 pounds per hour.⁸⁶ Even with a 2.5 pound per hour emission rate the PM-2.5 impact was 3 µg/m³ which is 8% of the federal 24 hour standard.⁸⁷ Without an hourly or daily emission limit for PM-10/2.5 emissions the air quality impact from the MEP's PM-10/2.5 emissions can not be properly assessed.

The nearest monitoring station is at 793 Rincon Road in Livermore. The 24 hour national design value in 2009 was 34 µg/m³.⁸⁸ The Federal 24 hour PM 2.5 standard is 35 µg/m³. The 3 µg/m³ impact from the MEP in combination with the background 24 hour design value for the Livermore station would cause a violation of the Federal standard in the project area. That is why it essential to establish an hourly and daily emission limit for PM-10 /2.5 emissions.

As the record reflects the applicant proposed a 2.5 pound per hour limit for PM-10/2.5 for the LECEF.⁸⁹ BACT for particulate matter emissions for a LM-6000 turbine has been 2.5 pounds per hour since 2002.⁹⁰ The LECEF has met that BACT limit since

⁸¹ Exhibit 302 Page 19

⁸² RT 2-24-11 Page

⁸³ RT 2-24-11 Page 380

⁸⁴ MR. LAYTON: I believe there are some conditions in the -- excuse us for a second. Offhand, I cannot find that we have placed a limit on PM2.5. RT 2-24-11 Page 391

⁸⁵ MR. SARVEY: Okay. "I asked you earlier did staff evaluate the project's PM2.5 concentrations based on a 2.5pound per hour limit? MR. LAYTON: I believe the modeling was done on three." RT 2-24-11 Page 390

⁸⁶ Exhibit 301 Page 4.1-20

⁸⁷ Exhibit 301 Page 4.1-27

⁸⁸ <http://www.arb.ca.gov/adam/trends/trendsdisplay.php>

⁸⁹ "Didn't the applicant themselves propose a 2.5 pound per hour PM10 limit as BACT for these turbines? MS. CABRAL: Yes."RT 2-24-11 Page 380

⁹⁰ <http://www.energy.ca.gov/2009publications/CEC-700-2009-012/CEC-700-2009-012-REV1.PDF> Page 4.1-12

2002 so the limit is achieved in practice.⁹¹ The project as proposed with no hourly or daily emission limits for PM-10/2.5 does not comply with BACT.

There is no Health Risk Assessment for Particulate Matter.

At the evidentiary hearings the BAAQMD's witness confirmed that no health risk assessment had been performed for the project particulate matter impacts. The district was asked, ***“MR. SARVEY: Exhibit 302, Appendix D, page 12 the district states the air district does not have the appropriate tools to include fine particular matter in its formal health risk assessment. When do you expect the district will have that ability? The district replied, “MS. CABRAL: The State agency called OEHHA needs to give us a procedure or information to determine how to use fine particular in a risk assessment. So we would depend on OEHHA before we could do that.”***⁹²

Staff also testified that they had done no health risk assessment for the projects particulate matter emissions. *“We typically do not address the (inaudible) of criteria pollutants in our public health ⁹³analysis. That is done in our air quality analysis.”*

As discussed above staff's air quality witness didn't know whether there was a particulate matter emission limit for the MEP.⁹⁴ Staff's air quality witness assumed that the projects PM-10/2.5 air quality impacts had been analyzed with a three pound per hour emission limit when actually staff's air quality impact analysis assumed a 2.5 pound per hour limit.⁹⁵ In fact there is no hourly or daily emission limit for PM-10/2.5 to assess the projects 24 hour PM-10/2.5 impacts. As discussed above an assessment of the local impact of particulate matter emissions demonstrates a violation of the health based Federal 24 Hour PM 2.5 ambient air quality standard. Staff, Applicant and the air district ignored these facts and no health risk assessment has been performed to determine if there is a significant impact to the minority and general population in the project area. The applicant has not met the burden of proof that the project's particulate matter emissions will not be a significant impact to the health of residents near the project area. As the

⁹¹ Exhibit 302 Page 56

⁹² RT 2-24-11 Page 328

⁹³ RT 2-24-11 Page 376

⁹⁴ MR. LAYTON: I believe there are some conditions in the -- excuse us for a second. Offhand, I cannot find that we have placed a limit on PM2.5. RT 2-24-11 Page 391

⁹⁵ MR. SARVEY: Okay. "I asked you earlier did staff evaluate the project's PM2.5 concentrations based on a 2.5pound per hour limit?" MR. LAYTON: I believe the modeling was done on three." RT 2-24-11 Page 390

⁹⁵ Exhibit 301 Page 4.1-20

evidence in the record shows the project area already has significant particulate matter concentrations and the maximum modeled 24-hour average PM10 increment consumption was 140 µg/m³, and annual average PM10 increment consumption was 30 µg/m³ for another recently approved project near the MEP.⁹⁶

Alternatives

An EIR is required to consider a range of potentially feasible alternatives to a project, or to the location of a project, that would feasibly attain most of the project's basic objectives while avoiding or substantially lessening any of the project's significant environmental impacts. (*Save Round Valley Alliance v. County of Inyo* (2007) 157 Cal.App.4th 1437, 1456.) The discussion of alternatives must be sufficiently detailed to foster informed decision-making and public participation, not simply vague and conclusory. (*Id.* pp. 1456, 1460.) The same requirements apply to an environmental document, like an FSA, prepared as part of a certified regulatory program. (See *Sierra Club v. Bd. of Forestry, supra*, 7 Cal.4th at pp. 1228-29.) Alternatives must be analyzed in such a document even if measures intended to mitigate a project's significant impacts also are proposed. (*Friends of the Old Trees v. Dept. of Forestry & Fire Protection* (1997) 52 Cal.App.4th 1383, 1393-94.) The PMPD ignores the inadequate selection of site alternatives and fails to address the issue.

The applicant proposed only two alternative sites which were adjacent to the MEP parcel. The Gomes parcel (Alternative 2) is located immediately northeast of the Lee Parcel, across Kelso Road.⁹⁷ The Costanza parcel (Alternative 1) is located immediately west of the Lee Parcel, on the western side of Bruns Road.⁹⁸ Staff's testimony is that, "they would all have roughly the same impact."⁹⁹

Staff failed to consider any alternative sites or any other sites besides the two sites provided by the applicant. Staff failed to consider brownfield sites or any sites that were

⁹⁶ Exhibit 412 - PSD Increment Consumption Status Report April 16, 2008 BAAQMD Page 4 "The maximum modeled 24-hour average PM10 increment consumption and Exhibit 403 Page 3 is 140 µg/m³, and annual average PM10 increment consumption is 30 µg/m³. Although these values exceed the allowed Class II increments for PM10, the location of the exceedance is in SJAPCD, which is non-attainment for PM10."

⁹⁷ Exhibit 301 Page 6-7

⁹⁸ Exhibit 301 Page 6-7

⁹⁹ RT 3-7-11 Page 201

not in Alameda County's Agricultural Zoning district. The Applicant has not met its duty to analyze a reasonable range of alternative sites. The applicant has limited his analysis to the two sites discussed above primarily based upon the project and site objectives which is impermissibly narrow. An alternative sites analysis that complies with CEQA and the CEC CEQA-equivalent process must include a reasonable range of alternatives. The Applicant's analysis fails to meet this standard. The record reflects that the Costanza property alternative site number 1 is not encumbered by a Williamson Act contract.¹⁰⁰ Due to the projects numerous conflicts with the Williamson Act and the Williamson Act Contract on the MEP Site, documented above, the Constaza Site alternative site number 1 is the environmentally superior site.

The PMPD also ignores the advantages of the alternative NOX control technology. Instead the PMPD focuses only on the 66% reduction in water use that would be achieved by the use of dry low NOx combustors. While the elimination of a potential 130 AFY of water should be enough for this Committee to require the use of dry low NOx Combustors the use of dry low NOx combustors provides significant other advantages.

One other advantage of the dry low NOx combustor technology is the reduction in particulate matter emissions associated with the control of NOx with demineralized water as the applicant is proposing. Use of the dry low NOx combustors would reduce particulate matter emissions by .14 pound per hour per turbine which represents about 6 % of the projects total annual particulate emissions.¹⁰¹ Another benefit from the use of dry low NOx combustors is turbine efficiency is higher and the associated Greenhouse Gas Emission would be lower.¹⁰² If the PMPD wants to reject the technology it needs to explain why reduction of Greenhouse Gases and particulate matter are not important considerations.

Applicant and staff failed to consider other fuel alternatives as they limited their alternatives analysis to natural gas fired generation only.¹⁰³ The applicant's testimony states that, "Technologies based on fuels other than natural gas were eliminated from

¹⁰⁰ Exhibit 301 Page 6-11

¹⁰¹ Annual Particulate mater limit: 2.2 pounds per hour/ .14= 6%

¹⁰² RT 2-24-11 Page 379,380

¹⁰³ . SARVEY: In your analysis, did you consider the Mulqueeney ranch pump storage unit? MR. HOFFMAN: No. RT 307-11 Page 225

consideration because they do not meet the project objective of providing operationally flexible, dispatchable, quick start, and reliable power. Staff analysis similarly eliminated other technologies other than natural gas based on the applicant's project objectives.¹⁰⁴ This is an example of a too-narrow project objective artificially limiting the range of potential alternatives. Requiring the use of natural gas as a project objective eliminates consideration of alternative fuel sources. The discussion of alternatives must be sufficiently detailed to foster informed decision-making and public participation, not simply vague and conclusory. *Save Round Valley Alliance v. County of Inyo* (2007) 157 Cal.App.4th pp. 1456, 1460.)

Just like the FSA analysis the PMPD fails to address alternative technologies that are viable alternatives to the MEP. Projects like The Mulquenny Ranch Pumped Storage project can provide 280 MW of dispatchable energy.¹⁰⁵ The Mulquenny Ranch Pumped Storage Project filed an application for review at the FERC on October 1, 2010.¹⁰⁶ Even the applicant considers it reasonably foreseeable as it was included in its load and resource balance calculation as part of the Beck Study.¹⁰⁷

The PMPD dismisses solar technology without ever considering that battery storage and solar can provide a viable option to the MEP as the evidence in the record establishes.¹⁰⁸

The PMPD also ignores energy efficiency as a viable option to the MEP and that the no project alternative is the superior alternative. The PMPD lists two reasons why. First, economic impacts to rate payers is not an environmental impact for purposes of "no project" analysis under CEQA. This is a complete failure of the Commission to provide leadership and guidance and save the ratepayer millions of dollars on an unneeded project. This is a prime example of why electricity rates in the US are some of the highest in the nation. As explained in the socioeconomics testimony of Robert Sarvey¹⁰⁹, "the GWF Peaker Plant produced approximately 21,200 MW in 2009 according to the Supplemental Staff Assessment."¹¹⁰ According to the CAL-ISO contract the project

¹⁰⁴ Exhibit 4 page 112

¹⁰⁵ Exhibit 411 Page 13

¹⁰⁶ Exhibit 411 Page 1

¹⁰⁷ Exhibit 1 Appendix 5.6 A Page 3

¹⁰⁸ Exhibit 406 Testimony of Bill Powers

¹⁰⁹ Exhibit 400 Page 4

¹¹⁰ SSA Page 4.1-82

developer receives 180.85 dollars a k/w year as a capacity payment.¹¹¹ The capacity payment alone not including the start up and variable overhead payments is approximately \$29,659,400. That would equate to almost \$1,400 a MW for the 2009 GWF Peaker Production without considering the variable \$4.25 a megawatt charge for overhead and maintenance expenses provided in the contract.

The costs incurred per megawatt by the ratepayers for the Tracy Peaker Plant output is not unusual. For the Mariposa Project Energy Commission staff conducted an analysis of operating hours of peaking facilities including smaller peaking facilities utilizing data from 2001 to 2008 and found that in the average year, the average peaking unit operated about 300 hours.¹¹² This underutilization of natural gas fired generation is very costly to the ratepayers especially seniors and low income ratepayers.”

Secondly the PMPD **dismisses the no project alternative by stating that**, “ the inherently changing nature of demand forecasts prevent us from making a finding that some other peaker in the region will never be built in place of the MEP. There is no evidence or argument in the record suggesting that the project site would not or could not be developed in the absence of the MEP Project.” That statement is speculative and completely ignores the testimony above about the underutilized Tracy Peaker Plant that connects to the Tesla Substation. It also ignores the over procurement of fossil fuel resources that is currently happening in this State that is thoroughly documented in Exhibits 406 and 408. If we cannot depend on the CED 2009 and the Energy Commissions latest 2011-2012 demand report then what do we use as a benchmark. The PMPD fails to comply with **§ 1741. (a)** which defines the general purpose of the Commissions AFC proceedings. “The purpose of an application proceeding is to ensure that any sites and related facilities certified provide a reliable supply of electrical energy **at a level consistent with the need for such energy, and in a manner consistent with public health and safety, promotion of the general welfare**, and protection of environmental quality.” The PMPD fails that purpose.

¹¹¹ http://www.cers.water.ca.gov/pdf_files/power_contracts/gwf/051101_gwf_final_ppa.pdf Table 2.

¹¹² SSA Page 4.1-21