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## STATE OF CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:
Application For Certification
For the Mariposa Energy Project

Docket No. 09-AFC-03

STAFF'S REPLY BRIEF

#### I. INTRODUCTION

At the conclusion of the evidentiary hearings on March 7, 2011, the Mariposa Energy Project (MEP) Application for Certification Committee (Committee) ordered the parties to file opening briefs no longer than 20 pages, and reply briefs a week later. The due dates were extended at the request of Intervenor Robert Sarvey. In addition, to the Applicant, Staff and Mr. Sarvey, the Sierra Club, Rajesh Dighe, Jass Singh, Rob Simpson, and Morgan Groover on behalf of the Mountain House Community Services District (MHCSD), all filed opening briefs. Staff objects that several of the parties failed to honor the page limit as ordered by the hearing officer at the March 7, 2011, Evidentiary Hearing. Although many issues are presented by the Intervenors, Staff's reply to the major issues presented in the opening briefs follows.

#### II. ANALYSIS

#### A. The MEP is in compliance with all Land Use Laws.

The Applicant, Staff and the County of Alameda all testified that the proposed MEP would be in compliance with all Land Use laws, ordinances, regulations, and standards (LORS.) As stated in the Land Use section of the Supplemental Staff Assessment, Staff's analysis shows the project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction with the inclusion of the proposed Conditions of Certification (LAND-1 through LAND-4). (Ex. 301, pp. 4.12-1.)

#### 1. The MEP is consistent with the East Alameda County Area Plan.

The Intervenors argue that the East Area County Plan (ECAP) does not allow natural gas-fired power plants to be built, but fail to provide substantial evidence to support their contention. Measure D, a voter approved initiative which modified ECAP, was passed in 2000. The purpose of Measure D was to essentially define urban growth around the cities. (RT 2/24/11, pp. 27-28.) MEP is proposed in the unincorporated portion of Alameda County covered by the ECAP.

California Code of Regulations, section 1744 (e) states that "comments and recommendations by an interested agency on matters within that agency's jurisdiction shall be given due deference by Commission staff." (Cal. Code Reg., tit. 20, §1744 (e).) On May 21, 2010, Alameda County sent a letter to the Energy Commission indicating that the proposed project would be consistent with ECAP. Subsequently, Staff also concluded that that the project would be consistent with the applicable policies in the ECAP. (Ex. 301, pp. 4.12-18 - 22.)

### a. County of Alameda testified that it determined MEP was consistent with ECAP.

On February 24, 2011, representatives from the County of Alameda testified for several hours regarding the MEP's compliance with ECAP. Albert Lopez, Planning Director for Alameda County, testified that the County had been working with the Applicant since 2008 to ensure that the project would be compatible with all LORS. (RT 2/24/11, p. 29.) In addition, he testified that, although the passage of Measure D in 2000 did place more restrictions on land use and development intensity, it does explicitly allow public infrastructure such as the current project.

The Intervenors raised the issue of whether the MEP should be considered a public facility and infrastructure. Mr. Lopez testified:

The County considers the Project a public facility because it would serve a key need of the public at large in order to provide adequate electrical services. It is also considered infrastructure under the definition provided in Policy 13 of ECAP, and will not have an excessive growth-inducing effect on the East County area, as it is not designed to support any quantity of new development in excess of what is permissible in the plan. As a peaker plant, this project does not seek to promote new

development, but is designed to serve existing power users within the regional network. (Committee's Ex. A; RT 2/24/11, pp. 30-31.)

Therefore, the County determined that the project would be compatible with all County LORS and should be approved by the Energy Commission. (RT 2/24/11, p. 33.)

### b. The Energy Commission found that two previous power plants were consistent with ECAP.

Two other projects, the East Altamont Energy Center and the Tesla Power Project, have come before Energy Commission in the past 10 years with nearly identical conditions, and in both cases the County made the same determination, and the Energy Commission approved both projects. As such, the County's application of its LORS to the Project is consistent with the County's prior practice. (Committee Ex. A.)

#### 2. MEP is a compatible use under the Williamson Act.

The parcel on which the Project will be located is currently under a Williamson Act contract. The property subject to the Williamson Act contract is considered non-prime, non-irrigated grazing land. In a letter, dated July 6, 2009, Brian Leahy of the State Department of Conservation agreed that the Project would be a "compatible use" under the Williamson Act, and would be designed so that the parcel remains in agricultural use. (RT 2/24/11, p. 32; Ex. 301, p. 4.12-12; Committee Ex. A.) Mr. Lopez testified that Mariposa has committed to reseeding the laydown areas and to the placement of permanent agricultural water sources on the parcel; therefore, the parcel will be able to support as many cattle on the remaining 146 acres after the project is built as are currently supported and is thus consistent with the Williamson Act. (RT 2/24/11, p. 32.) Based on the comments received from Alameda County and the Department of Conservation, and the conclusion that the project meets the three principles of compatibility defined in Government Code, section 51238.1(a), Staff concluded that MEP would be compatible with the Williamson Act. (Ex. 310, p. 4.12 - 13.)

#### B. Applicant and Staff appropriately analyzed Environmental Justice.

The Intervenors claim that Staff and the Applicant did not perform an adequate Environmental Justice analysis and, therefore, the project must not be approved. Staff disagrees.

The Natural Resources Agency, the umbrella agency over the California Energy Commission, describes environmental justice as follows:

The concept behind the term "environmental justice" is that all people – regardless of their race, color, nation or origin or income – are able to enjoy equally high levels of environmental protection. Environmental justice communities are commonly identified as those where residents are predominantly minorities or low-income; where residents have been excluded from the environmental policy setting or decision-making process; where they are subject to a disproportionate impact from one or more environmental hazards; and where residents experience disparate implementation of environmental regulations, requirements, practices and activities in their communities. Environmental justice efforts attempt to address the inequities of environmental protection in these communities. (*Environmental Justice in State Government*, OPR. October , 2003, Appendix)

At the Energy Commission, Staff uses a three prong screening approach to determine if there is a significant impact to an environmental justice community based on the Environmental Protection Agency 1998 Guidance and the Council on Environmental Quality. First, Staff identifies the area of potential impact. The area measured is a 6-miles radius around the proposed project site. Second, Staff determines if there is a significant low-income or minority population around the project site. Finally, Staff determines whether there might be a significant adverse impact on a low-income and/or minority population caused by the project. (RT 3/7/11, pp. 64-65, 78.) In addition, Staff conducts outreach to the population surrounding the proposed site. (RT 3/7/11, p. 65.)

### 1. Staff appropriately relied on 2000 US Census Data <u>and Mountain House Survey.</u>

The thrust of the Intervenors objections to Staff's analysis is that they claim that Staff solely relied on the 2000 US Census to determine that neither a minority nor low-income population exists within six miles from the proposed site, and that Mountain

House did not exist at the time. In fact, as discussed in workshops and testified to during the Evidentiary Hearings, since the 2010 US Census was not available at the time of Staff's analysis, Staff used the most reliable, comprehensive data found in the 2000 US Census, augmented with additional information from the Mountain House Community Service District's survey data and the American Communities Survey. (RT 3/7/11, pp. 64, 74.)

### 2. Substantial Evidence supports that MEP would not have a significant adverse impact.

Portions of the Staff Assessment (SA; Ex. 300) and the entire Supplemental Staff Assessment (SSA; Ex. 301) comprised Staff's written testimony in accordance with California Code of regulations, sections 1742 and 1742.5. In each section of the SA and SSA, Staff assessed the project's potential to cause direct, indirect, or cumulative impacts, and concluded that the project, with mitigation, either proposed by the Applicant and/or in the form of Conditions for Certification, would not cause a significant impact on the environment. (Ex. 300; pp. 4.3-1, 4.13-1, 5.2-1; Ex. 301, pp. 1-8, 4.1-1, 4.2-1, 4.4-1, 4.12-1, 4.6-1, 4.8-1, 4.12-1, 4.10-14.12-1, Appendix A.)

The testimony of the Applicant's witnesses fully supported Staff's conclusions. The other parties introduced argument, speculation, and unsubstantiated opinion, but none of the parties offered substantial evidence into the record that would support a contention that the project, with Staff's recommended mitigation, would cause a significant adverse impact on the environment or the surrounding population.

Yet, the Intervenors continue to argue, that despite the fact that there is no substantial evidence of a significant adverse impact to any population, there could be an impact to a minority community in Mountain House. (Dighe, p. 5.) The Intervenors argument is based only on emotion, but not on fact.

### 3. Staff conducted appropriate level of outreach the Mountain House Community.

Several of the Intervenors commented in their opening briefs that, in their opinion, Staff did not make appropriate efforts to include the Mountain House community in the process. This is clearly erroneous. The Mountain House Community

Services District (MHCSD) was notified of the project early on in the process and participated fully with two members representing MHCSD as Intervenors. Two community members, one of whom is a current MHCSD Board member, also intervened. Apparently, despite the assertions made by Mr. Dighe and Mr. Singh, their community was informed of the project.

### a. MHCSD was included on the initial agency list; and Proof of Service list thereafter.

In its opening brief, the Mountain House Community Services District (MHCSD) claims that Energy Commission Staff failed to comply with California Environmental Quality Act (CEQA) guidelines by not including them on an agency list or responding to any of their comments. (MHCSD, p. 5.) This is incorrect. MHCSD was included on the initial agency list. MHCSD was granted Intervenor status on December 7, 2009. Furthermore, a letter "Requesting Agency Comments on the Staff Assessment" was sent to MHCSD on November 10, 2010. Mr. Groover and/or Jim Lamb from MHCSD attended every meeting or workshop held prior to the evidentiary hearings, and the Prehearing Conference and all three days and nights of Evidentiary Hearings. On January 6, 2011, Mr. Groover sent a letter in response to comments on the Staff Assessment/Supplemental Staff Assessment. The letter included a letter from Tracy Fire/South County Fire Authority confirming that Alameda County has a mutual Aid Agreement with Tracy Rural Fire Protection District, and that MHCSD would "bear the impact, if any, for the delivery of emergency response to MEP." Although Mr. Groover did not request any response from Staff, during a subsequent workshop, Mr. Sarvey brought a representative from Tracy Rural Fire to discuss any potential impacts to fire safety services. This resulted in the Applicant offering a Condition of Certification that included a payment of \$70,000 to Tracy Rural Fire. Finally, in Mr. Groover's Prehearing Conference Statement he indicated that there were no topic areas that remained in dispute and required adjudication.

#### b. Mountain House is not a Responsible Agency under CEQA.

Mr. Groover further claims that MHCSD is a Responsible Agency under CEQA. (MHCSD, p. 5.) A "Responsible Agency" is defined as a "public agency which proposes

to carry out or approve a project, for which lead agency is preparing or has prepared an EIR..." The Responsible Agency is one that has "discretionary approval power over the project." (Cal. Code Regs., tit. 14, § 15381.) MHCSD is not providing any services to the MEP. It does not, and would not, have any jurisdiction over MEP, even if the Energy Commission did not have exclusive jurisdiction. MHCSD does not have authority to provide discretionary approval for the MEP; therefore, it is not a Responsible Agency.

### c. Staff and Public Adviser held meetings near Mountain House.

The Intervenors assert that many people in the Mountain House community were not aware of the proposed project. Mr. Singh claims that "none of the CEC staff members ever visited as part of workshop." (Singh, p. 14.) Contrary to this statement, Staff attended all workshops and hearings held in the area. With any project proposal, many people will remain unaware of the project despite the Applicant, Staff, and the Public Adviser's best outreach efforts. However in this case, at least 70 local residents provided public comment at the hearings.

The Public Adviser sent the October 1, 2009, Notice of the Informational Hearing and Site Visit out in both English and Spanish. On September 29, 2009, a paid advertisement with the same Notice was placed in the Tracy Press, also in both English and Spanish.

Craig Hoffman, Staff's Project Manager, testified that during the course of the MEP proceeding, at least 7 workshops, meetings or hearings took place near the Mountain House community. The Public Adviser held a meeting in the community on a Saturday. In addition, several more workshops were held in Sacramento, with phone or webex access available to those who could not attend in person. Furthermore, notices were sent regarding the Application for Certification, the Staff Assessment, and the Supplemental Staff Assessment. (RT 3/1/111, p. 67.)

### 4. CEQA does not include analysis of potential social or economic impacts not based on physical change.

The Intervenors raised the issue of the potential for the project to impact property values in their community. Both the Applicant and Staff provided witnesses at the March 7, 2011, Evidentiary Hearing to address property values. (RT 3/7/11, pp. 35, 68-69, 105-106.) Under CEQA, "an economic or social change by itself shall not be considered a significant effect on the environment." (Cal. Code Regs., tit. 14, § 15382.) Furthermore, "evidence of social or economic impacts which do not contribute to or not caused by physical impacts on the environment does not constitute substantial evidence." (Cal. Code Regs., tit. 14, § 15384.) None of the parties offered substantial evidence that any physical impacts to the environment would cause a social or economic impact to property values in Mountain House.

#### C. Energy Commission no longer conducts a need determination.

The Intervenors participating in the Mariposa AFC proceeding engaged in lengthy discussion about whether the project was needed, and whether Staff conducted a needs analysis. In the past, Staff conducted such an analysis; however, since the electricity industry was deregulated over a decade ago, Staff no longer performs such an analysis in accordance with Public Resources Code, § 25009. The pertinent portion of the statue is as follows:

... Before the California electricity industry was restructured, the regulated cost recovery framework for powerplants justified requiring the commission to determine the need for new generation, and site only powerplants for which need was established. Now that powerplant owners are at risk to recover their investments, it is no longer appropriate to make this determination. It is necessary that California both protect environmental quality and site new powerplants to ensure electricity reliability, improve the environmental performance of the current electricity industry and reduce consumer costs. The success of California's restructured electricity industry depends upon the willingness of private capital to invest in new powerplants. Therefore, it is necessary to modify the need for determination requirements of the state's powerplant siting and licensing process to reflect the economics of the restructured electricity industry and ensure the timely construction of new electricity generation capacity. (Pub. Resources Code §25009.)

Therefore, any further discussion of need is not relevant to this proceeding as the Energy Commission is no longer required or allowed by law to make a need determination.

#### D. Staff's Alternative's analysis was sufficient under CEQA.

Several of the Intervenors argue that Staff's analysis of alternatives was inadequate under CEQA. Section 15126.6(a) of the CEQA Guidelines states that the lead agency "shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Furthermore, the environmental analysis of alternatives "need not consider every conceivable alternative to a project" or alternatives which are infeasible. The section concludes by stating: "There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason." (Cal. Code Regs. tit. 14 §15126(a).)

The CEQA Guidelines require that: "The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects." (Cal. Code Regs. tit. 14 §15126.6(c).) In the Supplemental Staff Assessment, Staff described the basic objectives of the proposed project. (Ex. 301, pp. 6-4 - 5.) In addition, in each section of the SA and SSA, Staff concluded that with the recommended Conditions of Certification, the MEP was not likely to cause significant adverse impacts. (Ex. 300; Ex. 301.) In accordance with the CEQA Guidelines, Staff conducted a screening analysis of alternative sites to the proposed site. As stated in the SSA, Staff discovered that "potential sites that could meet staff's criteria are rare." (Ex. 301, p. 6-6.) After touring the area, Staff discovered that many of the available properties were in the Byron Airport FAA airspace protection surface, closer than the proposed site to Mountain House and other sensitive receptors, or further away from water supplies, natural gas facilities and transmission facilities. (Ex. 301, pp. 6-6 - 7.)

Two sites that met Staff's screening criteria were evaluated and compared in detail to the proposed site. (Ex. 301, pp. 6-7 - 11.) Staff determined that neither of the

alternative sites would substantially lessen one or more of the significant impacts of the proposed site, and the proposed site would be more advantageous because Staff determined the project would not likely cause any significant adverse impacts and there was a potential for greater biological impacts of the alternative sites. (Ex. 301, p, 6-1.)

In addition, Staff analyzed a range of alternative technologies, including conservation and demand side management, power generation alternatives, and fuel technology alternatives. (Ex. 301, pp. 6-15 -18.) Under CEQA, alternatives may be eliminated from detailed consideration if there is shown a: "(i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts." (Cal. Code Regs. tit. 14 §15126(c).) Staff agreed with the Applicant that certain technologies, such as solar, wind, geothermal, biomass, tidal and wave, are not feasible because they do not meet the project objective for quick-start peaking capacity.

Finally, Staff sufficiently analyzed the "no project" alternative in its Supplemental Staff Assessment. While selection of the "no project' alternative would render all potential project impacts moot, CEQA requires a discussion of the consequences if "disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project…" (Cal. Code Regs. tit. 14 §15126(e)(3)(B.) Staff testified that in the absence of MEP, Diamond Generating Corporation, or another developer would likely propose that other power plants be constructed along the PG&E transmission system to serve the demand that could be met with the MEP. If no new natural gas plants were constructed, reliance on older power plants may increase. Therefore, Staff concluded that the "no project" alternative was not superior to the proposed MEP. (Ex. 301, p. 6-18; RT 3/7/11, pp. 237, 244-245.)

Thus, in accordance with CEQA, Staff provided a thorough analysis of alternative sites, technologies and the "no project" alternative, concluding that none of the alternatives would be superior to the proposed MEP site.

### E. With proposed mitigation, MEP will not have a significant impact to Air Quality and is in compliance with all LORS.

In its Supplemental Staff Assessment and during Evidentiary Hearings, Staff testified that after a thorough analysis of the project's potential direct, indirect, and

cumulative impact on air quality, it concluded that MEP would likely conform with applicable LORS and would not result in significant air quality-related impacts. (Ex. 301, p. 4.1-1.)

#### 1. MEP complies with Federal NO<sub>2</sub> standard.

In his opening brief, Mr. Sarvey asserts that the MEP does not comply with the Federal 1 hour NO<sub>2</sub> standard. (Sarvey, p. 7.) Staff stated in the SSA that "cumulative sources would not create any new violation of the limiting standards, except for the federal 1-hour NO<sub>2</sub> standard, where modeling reveals concentrations that could result in a potential new violation adjacent to the proposed emergency-use-only sources at EAEC [East Altamont Energy Center]." (Ex. 301, pp. 4.1-38 - 39.) Staff further explained the difficulty in modeling routine testing of emergency-use-only sources in relation to the new Federal 1-hour NO<sub>2</sub> standard because the standard eliminates and does not consider some of the days with the highest concentration in any given multiyear period. EAEC emergency engines would not be allowed to be built or installed at their originally-approved levels, because of improvements in diesel engine emission control technologies. (Ex. 301, p. 4.1-37-39.) They are far off-site compared to MEP sources, and do not overlap with the effect of MEP. Staff determined that in the areas where the emergency-use-only sources caused impacts, the contribution caused by the proposed project would not be cumulatively considerable. (Ex. 301, p. 4.1-39.) The Applicant and Staff presented consistent results demonstrating that the MEP would be likely to comply with the new Federal 1-hour NO<sub>2</sub> standard, and Mr. Sarvey did not present any analysis of this issue.

### 2. Local air districts are required to place monitors in appropriate locations.

Mr. Sarvey makes the statement that "monitors are required near major roads...", without providing a citation. (Sarvey, p. 8.) The U.S. EPA requirements for NO<sub>2</sub> monitors apply to the local air districts that are responsible for determining compliance of ambient air with corresponding air quality standards, and these requirements do not

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<sup>&</sup>lt;sup>1</sup> Although Staff is addressing Mr. Sarvey's comments on its cumulative analysis, these issues appear to be moot. On March 23, 2011, Calpine Corporation sent a letter to the Energy Commission indicating that it wishes to terminate the certification of approval for the East Altamont Energy Center.

apply to project proponents seeking air permits. Therefore, MEP has no obligation to place an NO<sub>2</sub> monitor anywhere. After the new Federal 1-hour NO<sub>2</sub> standard became effective, it became the obligation of the Air Resources Board or local air districts to place monitors in appropriate locations in order to determine attainment designations some time before 2012. (Ex. 301, p. 4.1-14.)

#### 3. Staff's proposed mitigation is sufficient.

Mr. Sarvey claims that Staff's mitigation proposal falls short of its intended goal. (Sarvey, p. 8.) Staff responded to a similar question raised in the SSA. (Ex. 301, p. 4.1-43.) All four combustion turbine units together would be limited to no more than 16,900 hours annually or 4,225 hr/yr per unit (AQ-15b). Staff's mitigation is based on the "reasonably foreseeable" or expected operating schedule of 1,400 hours annually, (RT 2/24/11, pp. 385-386; Ex. 301, p. 4.1-21), rather than the maximum permitted. Staff determined the expected annual emissions based on its review of the historic operating schedules for peakers statewide. (RT 2/24/11, p. 386.) This approach is suitable for peakers, and is similar to that used for the previous Chula Vista (1/23/2009 CVEUP PMPD) and Orange Grove (4/8/2009 Final Commission Decision) cases where the Energy Commission found that similar peaker power plants are not likely to operate near the maximum allowable limit of hours of operation.

### 4. Staff identified feasible mitigation where needed to mitigate the Air Quality Impacts.

Staff identified feasible mitigation (**AQ-SC7**) where needed to mitigate the PM10, PM2.5, and SOx impacts, and Staff's expectation of reductions is a forecast derived from the very same data that Mr. Sarvey cites. Since the San Joaquin Valley Air Pollution Control District (SJVAPCD) would implement the SJVAPCD Mitigation Agreement, discretion is left to that agency to determine how the emission reductions would be achieved, and even in the scenario of a woodstove and fireplace program, which gives the lowest air quality benefits for the cost, Staff found sufficient reductions could be achieved. Mr. Sarvey finds that the fee might be used to achieve 4.68 tons per year of PM10 and SOx (Sarvey, p. 9) of reductions from wood stoves, which matches what the SJVAPCD expects to achieve in the winter PM10 nonattainment season with

part of the fee (as shown on Parts A-1 and A-2 of the Mitigation Agreement). This reflects only \$265,663 of the total \$644,503 fee (see Part A-2 of the Mitigation Agreement). Although SJVAPCD targeted only the winter PM10 nonattainment season, Staff sought to mitigate the annual (year-round) impact, and even if SJVAPCD pursues a woodstove and fireplace program, which gives the lowest air quality benefits for the cost, Staff found that the entire fee of \$644,503 would provide reductions to mitigate at least 11.03 tons per year, which represents more than a full year of MEP PM10, PM2.5, and SOx expected emissions. (Ex. 301, pp. 4.1-32, 4.1-42.) Since retrofitting 337 wood stoves, as Mr. Sarvey suggests, would only use a portion of the overall fee (as shown on Part A-2 of the Mitigation Agreement), Staff's analysis concluded that the remainder of the fee could readily be used by SJVAPCD to find additional reductions providing an even higher benefit for the cost and fully mitigating the project.

#### 5. Staff considered the full mitigation package in its analysis.

Staff considered the timing and the nature of the full mitigation package as part of its analysis. Most of the necessary reductions come from emission reduction credits that reflect permanent reductions from sources that are shutdown and will never emit again. The remainder of the reductions would come through the SJVAPCD Mitigation Agreement, which gives the SJVAPCD the discretion to create new reductions and accelerate retirement or retrofit of sources that would not otherwise be replaced. The SJVAPCD will rely on successful statewide programs like the Carl Moyer Program, which are well-established as a means of providing long-term improvements in air quality. (Ex. 301, p. 4.1-32.)

#### 6. MEP would not increase greenhouse gas emissions.

Mr. Sarvey claims that MEP has a higher heat rate than the system average and therefore, is likely to increase greenhouse gas (GHG) emissions. However, this false comparison to the system average heat rate is not the basis of staff's analysis nor the finding that the project would lead to a net reduction in GHG emissions across the electricity system. Staff's analysis properly balances heat rate along with a wide variety of services provided by the proposed project in its GHG analysis and compares the heat rate to existing projects that might provide some or all of the services. (Ex. 301, pp. 4.1-

82 and 4.1-88.) Mr. Sarvey's incorrectly compares the proposed MEP with an average power plant that is neither a flexible peaking power nor providing the service that MEP will. The heat rate of MEP is less than that of nearly every comparable facility in the Greater Bay Area where MEP would interconnect. (Ex. 301, pp. 4.1-82 **GHG Table 4**, 4.1-90.) Furthermore, staff pointed out in that as California moves to a high renewable/low-GHG electricity system, non-renewable generation will have to be reduced by as much as 36,000 GWhs per year resulting in a net electricity system GHG emissions decrease. (Ex. 301, p. 4.1-84, **GHG Table 5.**) Highly dispatchable simple cycle projects, like MEP, are the key to integrating renewables and firming the grid by operating when capacity and ancillary services are needed, while allowing the retirements or curtailments of those legacy fossil units Mr. Sarvey refers to. (Ex. 301, p. 4.1-89, **GHG Table 8.**) Staff concluded that:

The project would lead to a net reduction in GHG emissions across the electricity system that provides energy and capacity to California. Thus, staff believes that the project would result in a cumulative overall reduction in GHG emissions from the state's power plants, would not worsen current conditions, and would thus not result in impacts that are cumulatively significant. (Ex. 301, p. 4.1-91.)

### 7. Staff proposed mitigation of ammonia emissions to a less than significant level.

Staff considers the secondary PM formation from ammonia slip to be a significant impact that warrants mitigation (Ex. 301, p. 4.1-22), and that by limiting ammonia slip to the extent feasible, the impact can be mitigated to a less than significant level. For this simple-cycle power plant, MEP's commitment to achieve ammonia emissions of less than 5 ppmvd represents the lowest feasible level. (Ex. 301, p. 4.1-28 - 29.)

The Bay Area Air Quality District (BAAQMD) also responded to this comment during the Preliminary Determination of Compliance public comment period, and the BAAQMD found that: "Based on the analysis in SJVAPCD 2008 PM2.5 plan, additional ammonia emissions should not significantly influence PM2.5 levels in the San Joaquin Valley." (Ex. 302, BAAQMD Response to Comment III.3, pp. 11-12 & VII.1, pp. 27-28 of Appendix D.)

### 8. MEP complies with District Rule 2-2-301(b) and SIP Rule 2-2-206.2 for PM10.

Mr. Sarvey once again raised his concern that MEP does not comply with District Rule 2-2-301(b) or SIP Rule 2-2-206.2 for PM10. Staff responded in the SSA that Staff developed the mitigation on the conservatively high assumption that PM10 emissions would be 2.5 lb/hr. (Ex. 301, pp. 4.1-41-42.) The impact assessment prepared by Staff, and the mitigation proposed by Staff, each reflect this conservatively high emission rate.

BAAQMD also responded to this comment during the PDOC public comment period:

The District has concluded that imposing a numerical emissions limit, in addition to requiring BACT technologies, would not be warranted given that there are no add-on control devices that the facility can use to control PM emissions. In a facility using good combustion practice, PM emissions will be determined by the amount of sulfur in the fuel and the way that the combustion equipment functions, which are factors that are not within the control of the operator. (Ex. 302, BAAQMD Response to Comment VI.A.1, pp 19-20 of Appendix D.)

#### 9. Particulate matter is not subject to a health risk assessment.

Mr. Sarvey raises the point that Staff did not conduct a health risk assessment on particulate matter. Particulate matter, in the form of PM10 and PM2.5, is not a toxic air contaminant and therefore, not subject to health risk assessment. Staff shows the full picture of cumulative PM10 and PM2.5 impacts, including an explanation of the massive housing development and its anticipated emissions, and shows that it is not the cumulative sources, but rather the background conditions that exceed the ambient air quality standards. (Ex. 301, p. 4.1-36- 39, **AQ Table 21**.)

In his opening brief, Mr. Sarvey introduces a concern related to "increment consumption," which is a measure of how major projects may cumulatively contribute to "significant deterioration" under the federal Prevention of Significant Deterioration (PSD) program. Because the MEP project is a minor PSD source, it is not subject to the measure of "increment consumption". However, comparing Staff's results (**Air Quality Table 21**) to the "increments" in the federal PSD rule (9 µg /m³ for PM2.5 and 30 µg/m³ for PM10, 24-hr) demonstrates that MEP, with the other known cumulative stationary

sources would not exceed the increment levels. Mobile sources are addressed through regional air quality management plans (Ex. 301, p. 4.1-37.)

BAAQMD also responded to this comment during the PDOC public comment period, noting that: "...the Mariposa Energy project does not trigger PSD permit requirements and no increment consumption analysis is required." (Ex. 302, BAAQMD Response to Comment III.3, pp 11-12 & VII.1, pp 27-28 of Appendix D.)

#### 10. MEP will not impact local GHG inventories.

In his opening brief, Mr. Mainland asserts that MEP will "make it impossible for Alameda County to meet its greenhouse house gas reduction targets contained it the county's Climate Action Plan [CAP] for unincorporated communities" (Sierra Club, p. 10.) First, as Bruce Jensen from Alameda County testified, the CAP has been in development for two years and is still in draft form. It does not constitute a formal public policy for Alameda County. (RT 2/24/11, pp. 63-64.) Second, claiming that MEP might affect the local GHG inventory is incorrect because the local community planning inventory is an end-user/tail-pipe inventory. This means *no power plant* is within the limited inventory of the local Climate Action Plan. In other words, the addition of MEP would result in zero additional GHG in the local inventory because emissions from electrical power plants are excluded and instead allocated to the electricity end-user. The GHG inventory for any local community is built upon the end-use of electricity, and is not influenced by the power plants that happen to be inside the boundaries of the community.

### F. Staff concluded that with proposed mitigation, Traffic and Traffic impacts would be reduced to less than significant.

The Intervenors raised questions about traffic safety and aviation safety during the proceedings. Some of the concerns raised involved the cumulative impacts that might result from the East Altamont Energy Center. As noted earlier, EAEC has chosen to terminate its certification of approval. Therefore, any discussion of EAEC is no longer relevant.

#### 1. Staff provided an independent analysis of traffic study.

The applicant included a traffic study in the AFC, and Commission staff provided an independent analysis of this study in the Traffic and Transportation staff analysis. Commission staff found that with mitigation, there would be no significant impacts to traffic level of service in the project area. (Ex. 301, pp. 4.10-10 - 4.10-17; 4.10-19 - 4.10-20.)

#### 2. Impacts to Aviation would be less than significant.

The MEP would be located near the project site. Staff analyzed the potential impacts of MEP to aviation safety and determined that with the proposed Conditions of Certification, MEP would not create a significant adverse impact to aviation.

#### a. MEP is consistent with aviation LORS.

Staff reviewed transcripts of the Contra Costa County (CCC) Airport Land Use Commission (ALUC) hearings, as well as the CCC-ALUC's staff reports and decision. CEC staff considered this information in preparing the Traffic and Transportation analysis and concluded that there was no evidence that the project would cause significant impacts to aviation. CEC staff further concluded that the project is consistent with the policies of the Contra Costa County Airport Land Use Compatibility Plan. (Ex. 301, pp. 4.10-25; 4.10-35 - 4.10-41.)

Concerns were raised about the potential for plumes to exceed the height restrictions as laid out in the airport land use plan. However, height restrictions for Zone D only refer to physical structures, not plumes, and the MEP's physical structures meet all height regulations. (Ex. 301, p. 4.10-21.) Furthermore, The FAA does not currently have any regulations pertaining to plumes other than guidance for pilots to avoid them if possible. Therefore, the MEP's plume would not violate any FAA regulations.

#### b. TRANS-8 is sufficient to notify pilots of potential hazards.

CalPilots raised a concern that the Notice to Airmen (NOTAM) requirement of **TRANS-8** is not feasible as NOTAMS are for temporary, not permanent, hazards. While issuance of a NOTAM would be temporary, it would allow time for the chart and

navigational updates also required by TRANS-8. These updates would be permanent and would alert pilots to the location of the plant. (Ex. 301, pp. 4,10-53 -54.)

#### G. Staff thoroughly analyzed any impacts to Biological Resources.

Mr. Singh asserts that "applicant and Staff's analysis were clearly inadequate." (Singh, p. 23.) Yet, Mr. Singh provides no evidence to support that statement. He further states that "Applicant's relied upon conclusions that the MEP site would not impact the numerous identified endangered species which inhabit the site, can also only be deemed highly suspect. " (Singh, p. 22.)

The Supplemental Staff Assessment provides an extensive discussion of impacts to endangered species, as well as other special-status species, that could result from this project. (Ex. 301, pp. 4.2-26–4.2-46.) In both Staff's oral testimony (RT 3/7/11. p. 410) and written testimony (Ex. 301, 4.2-1, 4.2-31), Staff states that impacts from the proposed project on special-status species would be significant and that mitigation is required to reduce impacts below a level of significance. The proposed Conditions of Certification (Ex. 301, pp. 4.2-50 – 4.2 79) provide extensive avoidance, minimization, and mitigation for special-status species and their habitat.

Mr. Simpson asserts that Staff failed to properly analyze nitrogen deposition impact on the surrounding area. (Simpson, p. 7.) As Mr. Simpson correctly states, Staff did analyze the potential for nitrogen deposition and found that "nearest occurrence of nitrogen-limited habitat are serpentine outcrops along Bald Ridge in the Mount Diablo State Park approximately 20 miles west of the project site." (Ex. 301, p. 4.2-43.) Staff concluded that based on the distance and the prevailing wind direction, this habitat would not be impacted from the MEP operations. (Ex. 301, p. 4.2-43.) Mr. Simpson has raised questions, but has provided no evidence to support a contrary determination.

#### H. MEP will not result in a significant impact to Soils and Water Resources.

Mr. Sarvey's Brief makes a number of conclusions regarding water supply that are not supported by the record. After a thorough analysis of Soil and Water impacts, Staff concluded that MEP, with the proposed Conditions of Certification will not have a significant adverse impact to soil and water.

### 1. Staff concluded that MEP would not result in any significant water supply impacts.

MEP has proposed to implement a water conservation program that would fund local conservation efforts to offset the project's fresh water use on a 1:1 per acre-foot basis at a rate of up to \$1,000 per acre-foot. With the implementation of the Applicant's proposed water conservation program, the increase in water use within Byron-Bethany Irrigation District (BBID) would be net-zero. Staff concluded that the project would not result in any significant water supply impacts because the proposed project would not increase total water demand in the area. (Ex. 301, p. 4.12-24.)

#### 2. Staff proposed appropriate mitigation.

The final details of the Water Conservation Program will be developed and implemented post-certification as required in Condition of Certification **SOIL&WATER-4**. This approach to work out the final details of plans required for a proposed project is frequently utilized. The Condition of Certification requires that the program identify: A) conservation measures and water conservation rates, B) verification that the conservation measures have been implemented, C) costs for the conservation methods broken down in a per-acre-foot basis, and D) annual reporting on water use and conservation implementation. (Ex. 301, p. 4.12-27 – 29.)

In the Supplemental Staff Assessment, Staff provided several options that BBID is currently planning and implementing for water conservation including replacing open channels with modern pipe systems to reduce losses to evaporation and percolation and pump station upgrades to reduce spillage. In addition, by providing options to work with the local irrigation district or neighboring water supply districts, Staff has provided MEP with a number of viable options to include in the final Water Conservation Program to be reviewed and approved by the CPM as required in Condition of Certification **SOIL&WATER-4.** (Ex. 301, p. 4.12-27 – 29.)

#### 3. Staff adequately assessed the water supply.

BBID has indicated that they have sufficient water to supply MEP (Nov. 28, 2010 letter). Preliminary reporting to California Department of Water Resources indicates that BBID annual diversions from 2008 through 2010 averaged 24,136 acre-feet per

year including high use periods during the spring and summer and lower use periods over the winters. Based on the actual water use reported by BBID, BBID has sufficient entitlements to supply MEP while meeting previous commitments to Mountain House Community Services District and the Tracy Hills Project. (RT 3/7/11, pp. 451-454.)

#### III. CONCLUSION

As Staff testified in the Staff Assessment, Supplemental Staff Assessment, under lengthy cross-examination, and after considering the comments of the Intervenors and the public, Staff concludes that with the proposed Conditions of Certification, the MEP will not result in significant adverse impacts to the environment, adverse impacts to public health and safety, and will be in compliance with all LORS. Therefore, Staff continues to recommend that the Commission approve the MEP Application for Certification.

Dated: April 6, 2011 Respectfully submitted,

/s/ Kerry Willis

KERRY A. WILLIS Senior Staff Counsel



# 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 3/18/2011)

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#### **DECLARATION OF SERVICE**

I, Janet Preis, declare that on April 6, 2011, I served and filed copies of the attached Staff's Reply Brief dated April 6, 2011. The original document, filed with the Docket Unit, are 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]. 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)

(опсек ан так эрргу)	
	FOR SERVICE TO ALL OTHER PARTIES:
X	sent electronically to all email addresses on the Proof of Service list;
	by personal delivery;
X	by delivering on this date, for mailing with the United States Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses <b>NOT</b> marked "email preferred."
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<u>X</u>	sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below ( <i>preferred method</i> );
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
	e under penalty of perjury that the foregoing is true and correct, that I am employed in the county where this occurred, and that I am over the age of 18 years and not a party to the proceeding.

/s/ Janet Preis