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STATE OF CALIFORNIA

State Energy Resources

Conservation and Development Commission

In the Matter of:	)	DOCKET: 09-AFC-03
	)	
Mariposa Energy Project	)	OPENING BRIEF OF SIERRA
	)	CLUB CALIFORNIA
_____	)	

Dated: March 25, 2011

_____

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Table of Contents

SUMMARY 3
REQUEST FOR OFFICIAL NOTICE 4
OPENING EVIDENTIARY BRIEF OF SIERRA CLUB 6
I. LAND USE 6
A. ECAP 6
B. GREENHOUSE GAS EMISSIONS 10
C. WILLIAMSON ACT 10
D. MITIGATION 11
II. ALTERNATIVES 11
A. LEGAL STANDARD 11
B. THE NO PROJECT ALTERNATIVE 12
1. Failure to Mention CEC-CPUC Loading Order in Considering Alternatives 13
2. Failure to Consider Generation Information Relevant to No-Project Alternative 14
3. Failure to Establish or Update "Need" for Project 15
4. Failure to Consider Demand Information Relevant to No-Project Alternative 15
5. Failure to Demonstrate “Criticality” for Integrating Renewables 17
6. Failure to Correctly Assess Peak Power Value of Solar PV Alternative 19
7. Failure to Adequately Assess Storage Alternatives 19
8. Failure to Consider MEP’s Unnecessary Costs to Ratepayers, Harmful Impact on Development of Renewable Alternatives 20
9. Failure to Assess Correctly Impact of Older Plants Retirements 21
10. Failure to Conform With PG&E’s Protocol 21

SUMMARY

The Sierra Club will brief only two issues: land use and alternatives, each of which require that the Mariposa Energy Project (MEP) application be denied.

The MEP is proposed to be sited in the Alameda County East County Area Plan (ECAP) in the Large Parcel Agricultural Zone. It is not large parcel agriculture and not an allowed use under the plan. The claim that it is a "public and quasi-public use" fails because it is not "public."

The Alternatives discussion in the Supplemental Staff Assessment (SSA) is legally inadequate. It does not discuss all the alternatives to the MEP. The two paragraph "No Project" discussion does not establish any "need" for the MEP and does not cover the environmental benefits of not building the MEP.

REQUEST FOR OFFICIAL NOTICE

Pursuant to California Code of Regulations, title 20, section 1213, the Sierra Club respectfully requests the Commission to take official notice of the following matters:

1. CPUC document, "Order Instituting Rulemaking to Integrate and Refine Procurement Policies and Consider Long-Term Procurement Plans". Rulemaking 10-05-006, dated 12/03/2010 set forth at http://docs.cpuc.ca.gov/EFILE/RULC/127542.htm. and its Attachments 1 and 2. These attachments are made a part of the document by reference on its page 48:

"6. Attachments

We direct the use of the attached Standardized Planning Assumptions documents, Attachment 1 - Standardized Planning Assumptions (Part 1) for System Resource Plans, Attachment 2 - Standardized Planning Assumptions (Part 2 - Renewables) for System Resource Plans."

This official order of the CPUC is actually a part of the current Long-Term Procurement Proceeding (LTPP). The primary purpose of the LTPP is specifically for the CPUC *t*o determine the need for new generation resources for the three investor-owned utilities (IOUs), including PG&E. The LTPPs also are the basis for authorizing IOU procurement of energy supplies from new power plants, including MEP. Thus, understanding the most up-to-date assessment of the need for power plants in the LTPP is of vital interest to this MEP proceeding.

Page 17 of Attachment 1 is a 10-year planning table providing forecasts for demand for electric power generation capacity in PG&E's service territory between 2010 and 2020. The table also shows current and expected future generation resources available to meet that demand. Most importantly in regard to the MEP, are lines 27 and 28 of this document, which shows procurement of approximately 12,000 to 14,000 megawatts of resources in excess of the forecast demand over the next decade, representing a surplus of 63% to 76% over forecast demand. This is dramatically higher than the required 15% to 17% reserve margin throughout the entire 10-year planning horizon.

Page 53 of Attachment 1 lists MEP as a "probable" as opposed to "known" addition to Forecast Predictions. If there is any requirement to be construed from this, the planning table requires the utilities not to consider MEP as a known addition.

The jurisdictional source of data contained in the tables (p. 17 and 53) goes beyond the current CPUC proceeding and includes the demand forecast of the California Energy Commission (CEC) which were officially adopted last year by the CEC as part of the most recent Integrated Energy Policy

Report (IEPR). The CEC commission adopts these forecasts through a formal proceeding with parties, including the IOUs, providing input. Furthermore, the CPUC in the Long-Term Procurement Proceeding has in the past, and continues in the current LTPP, to directly adopt the CEC demand forecast as the required framework for utilities to use. This is noted in the LTPP Scoping Decision:

"The assumptions underlying these tables are based upon numerous publicly available data sources, including the demand forecast, taken from the CEC, forecasts of demand-side programs, and forecasted retirements and additions." (2010 LTPP Scoping Decision, p. 10).

The document for which official notice is sought is evidence that bears on the likelihood that there has been inadequate consideration of the no-project alternative and its implications. In this context, it is excluding such evidence, not including it, that would be highly prejudicial and selectively skew the evidence to favor the applicant. This clear reality, as shown by this up-to-date CPUC planning table and by the embedded CEC demand forecast and CAISO resource tables, is highly salient and warrants due notice by the CEC in this proceeding.

2. Statewide Water Quality Control Policy On The Use Of Coastal And Estuarine Waters For Power Plant Cooling, State Water Resources Control Board Final Policy, 10/1/2010.
http://www.swrcb.ca.gov/water_issues/programs/npdes/docs/cwa316/policy100110.pdf
This is an official document of the State Water Resources Control Board, detailing its plan for retiring obsolete or inefficient once-through-cooling (OTC) fossil-fuel plants.

The Commission may take official notice of any generally accepted matter within its field of competence and of any fact that may be judicially noticed by the courts of this state. (20 CalCodeReg §1213.) The courts of this state may take judicial notice of the official acts of the legislative, executive and judicial departments of the United States and of any state of the United States. (EvidCode §452(c).)

OPENING EVIDENTIARY BRIEF OF SIERRA CLUB

I. LAND USE

A. ECAP

The role of the CEC in land use is clear; it must make a finding of a project's conformity with local local, regional, state, and federal standards, ordinances, or laws. (PubResCode §25523(d).) The East County Area Plan (ECAP) of the Alameda County General Plan is the applicable local zoning ordinance and thus there must be a finding MEP conforms to its requirements. The CEC is required by statute to make such a finding. (PubResCode §25523(d)(1).) There is no provision for deference to a county or local finding.

The ECAP contains land use designations that regulate land use densities, intensities, and permitted uses in the East County area, which includes the proposed location of the MEP. It was amended by a voter initiative, Measure D in 2000. The purposes of Measure D as set forth therein were to:

> "to preserve and enhance agriculture and agricultural lands, and to protect the natural qualities, the wildlife habitats, the watersheds and the beautiful open space of Alameda County from excessive, badly located and harmful development. The measure establishes a County Urban Growth Boundary which will focus urban-type development in and near existing cities where it will be efficiently served by public facilities, thereby avoiding high costs to taxpayers and users as well as to the environment. The ordinance is designed to remove the County government from urban development outside the Urban Growth Boundary. " (Schneider testimony, Ex 402, p. 2.)

The Large Parcel Agriculture designation in ECAP applies to the site of the Mariposa Energy Project (MEP) and was amended by Measure D. The Large Parcel Agriculture designation permits:

> "Agricultural uses, agricultural processing facilities (for example, wineries, olive presses), limited agricultural support service uses (for example, animal feed facilities, silos, stables, and feed
>
> stores), secondary residential units, visitor serving commercial facilities (by way of illustration, tasting rooms, fruit stands, bed and breakfast inns), recreational uses, public

and quasi-public uses, solid waste landfills and related waste management facilities, quarries, windfarms and related facilities, utility corridors, and similar uses compatible with agriculture. "

The applicant claims MEP is a "public and quasi-public use." Black's Law Dictionary defines "public" as "pertaining to a state, nation, or whole community." The proposed MEP is not a "public and quasi-public use." It would be a 200 MW power plant generating electricity by burning natural gas. It would be owned by a private corporation and would sell electricity to PG&E, a utility, which is owned by private shareholders. It would not be accessible to the public. Its only connection to the public would be that PG&E sells electricity to the public. If that were the definition of public use, any store selling food to the public or subdivision providing housing to the public would be a public use.

MEP is a private industrial use, and record shows that the drafters of Measure D meant to exclude such uses. Dick Schneider, one of the drafters of Measure D, provided that evidence as follows:

"The Alameda County electorate specifically deleted that provision of ECAP which previously allowed "other industrial uses appropriate for remote areas and determined to be compatible with agriculture." This is precisely the type of use now being proposed and which was prohibited by the voters of Alameda County. In revising the Large Parcel Agriculture designation to delete the above language, the drafters of Measure D were very deliberate. Many hours were spent during three meetings open to the public discussing this revision. At first the participants attempted to comprehensively list all uses that should be allowed outside the UGB. The list of potentially allowable uses ran to several pages. It did not include commercial electric power plants. Ultimately the drafters decided that such a listing was impractical; no matter how thorough, an important use might very well be overlooked and not listed. If that use were not listed, then Measure D could reasonably be interpreted as not permitting it. The drafters did not want to make such an error, so the amendment that was made was deliberately selected. We chose to retain the provision that permits "public and quasi-public uses" and to delete the provision permitting "other industrial uses appropriate for remote areas and [that could be] determined to be compatible with agriculture." Our goal was to provide reasonable latitude in permitting public facilities (schools, hospitals, recreational centers, etc.) that truly serve the needs of East County residents, but simultaneously to prevent those uses clearly not related to

agriculture, recreation, open space protection, natural resource use, or waste management. When adopting this revision to the Large Parcel Agriculture designation, the voters specifically intended to eliminate a category of use that conflicts with the overall purpose of Measure D to protect agriculture and open space land in eastern Alameda County." (Schneider testimony, Ex 402, pp. 4-5.)

ECAP Policy 54 further defines what uses may be approved in the Large Parcel Agriculture zone:

"The County shall approve only open space, park, recreational, agricultural, limited infrastructure, public facilities (e.g., limited infrastructure, hospitals, research facilities, landfill sites, jails, etc.) and other similar and compatible uses outside the Urban Growth Boundary."

MEP is not a " public facility." It is not at all similar to "hospitals, research facilities, landfill sites, jails, etc." There is evidence of what the Drafters of Measure D meant by public facilities. Mr. Schneider testified as follows:

"Well, public facilities, the drafters of Measure D meant those owned by the public and paid for by tax revenues or assessments. Infrastructure could be not public. It could be private to serve the needs of residents. And that would not be a public facility. But it could be private infrastructure needed to serve adequately the residents of the area. And the policy -- in Policy 13 has a definition of what infrastructure is. It has public facilities, community facilities, and structures and development necessary to the provision of public services and utilities. But that's embedded -- that definition is embedded in an express limitation on the scale needed to serve the development allowed by the initiative. " (Transcript 2/24/11, p. 344, ll. 10-23.)

Nor would MEP be "limited infrastructure". If limited to have any meaning, it must be minimal facilities to provide services to residents, not a peaker power plant that would serve the entire PG&E service area. Infrastructure is further defined in Policy 13 below.

The testimony about the intent of Measure D drafters is especially relevant when Alameda County officials and staff are claiming that MEP is allowed by ECAP. The intent of Measure D is better shown by those who drafted it rather than by Alameda County officials and staff. Measure D was drafted by citizens, not the county, and the Alameda County Board of Supervisors placed a competing measures on the ballot. (Schneider testimony, Ex 402, p. 2.) The motives of Alameda

County are further placed in question by the mitigation payments of over $1,000,000 they negotiated to receive as a condition for their failure to oppose MEP. (Alameda County Mitigation Agreement Letter, 6/2/2010, Ex 404.)

Policy 13 of ECAP further limits what public facilities and infrastructure are allowed in ECAP. Policy 13 is a limitation, not what is authorized. The words "shall not" are mandatory not discretionary.

> "The County shall not provide nor authorize public facilities or other infrastructure in excess of that needed for permissible development consistent with the Initiative. This policy shall not bar 1) new, expanded or replacement infrastructure necessary to create adequate service for the East County, 2) maintenance, repair or improvements of public facilities which do not increase capacity, and 3) infrastructure such as pipelines, canals, and power transmission lines which have no excessive growth-inducing effect on the East County area and have permit conditions to ensure that no service can be provided beyond that consistent with development allowed by the Initiative. "Infrastructure" shall include public facilities, community facilities, and all structures and development necessary to the provision of public services and utilities."

Even if MEP was a "public facility or infrastructure," it would not meet the limitations of Policy 13. It would provide "other infrastructure in excess of that needed for permissible development consistent with the Initiative." There is no evidence that MEP is needed for permissible development in ECAP. A peaker powerplant is not "infrastructure such as pipelines, canals, and power transmission lines which have no excessive growth-inducing effect on the East County area." There are no proposed "conditions to ensure that no service can be provided beyond that consistent with development allowed by the Initiative." MEP has not in any way been established to be " necessary to the provision of public services and utilities." Policy 13 makes it clear that a 200 MW peaker plant is not authorized under ECAP. In particular, there is no evidence that either County staff or CEC staff conducted a "needs analysis" to determine how much peak power is needed to serve "permissible development consistent with the initiative." In fact, staff's alternatives witness, Mr. Hoffman, directly testified: "I don't know if this project is needed. And I did not do a needs analysis of this project." (Transcript 3/7/2011, p. 246, ll. 6-8.) Absent such a analysis, the CEC cannot conclude the MEP is not excessive as required by ECAP Policy 13.

B. GREENHOUSE GAS EMISSIONS

In addition, the MEP would make it impossible for Alameda County to meet its greenhouse gas (GHG) reduction targets contained in the county's Climate Action Plan for Unincorporated Communities. In 2010, Alameda County prepared a Climate Action Plan (CAP) to comply with state mandates to reduce greenhouse gas emissions. The CAP was adopted by the Alameda County Planning Commission on November 15, 2010, and is now before the Board of Supervisors for action. The CAP is a policy document enabling Alameda County to meet State Laws AB 32 and SB 375, which require the county to reduce its GHG emissions to 1990 levels. This is a decrease of approximately 15% from the County's 2005 levels. Actions in the Alameda County CAP, if fully implemented, will enable the County's unincorporated areas to reduce their GHG emissions by 238,200 Metric Tons per year (MT/Yr) of Carbon Dioxide Equivalents, which is 15% below 2005 levels. However, operation of the MEP will release 440,533 MT/Yr of Carbon Dioxide Equivalents. (Mariposa Energy Project, Application for Certification, Table 5.1-19, Ex 1.) This level of emissions is nearly two times all the emission reductions the County hopes to achieve in its CAP, completely vitiating the County's ability to meet its requirements under State Law. (Schneider Testimony, Ex 901.)

Alameda County admitted that MEP would increase greenhouse gas emissions and entered into a mitigation agreement for the emissions. The agreement provides for payment by MEP's owners of over $1,000,000 in "community benefits", but the mitigation is unrelated to the increase in greenhouse gas emissions. (Alameda County Redevelopment Agency Letter, 6/2/2010, Ex 404.)

C. WILLIAMSON ACT

The parcel on which the MEP is proposed to be constructed is subject to the Williamson Act. The recorded Williamson Act Contract dated December 12, 1989 (Data Response Set 2A, Responses to CEC Staff , Ex 1) provides in relevant part:

> "2. RESTRICTIONS OF USE OF 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 or commercial purposes and compatible uses, which uses are set forth in Exhibit B attached hereto and incorporated herein by reference.

3. DESIGNATION OF ADDITIONAL COMPATABLE USES

"The Board of Supervisors of the County may, from time to time, during the term of this agreement or any renewal thereof, by resolution add to those uses set forth in Exhibit B other uses which are compatible with the agricultural uses within the preserve wherein the said property is located; provided however that said Board of Supervisors shall not eliminate, without the written consent of Owner, a compatible use during the term of this agreement or any extension thereof. The provisions of this agreement and any agreement supplementing the uses permitted in Exhibit B are not intended to limit or supercede the planning and zoning powers of the county.

EXHIBIT B

The use of the land described in Exhibit A will be restricted to the following 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."

There has been no evidence that the Alameda County Board of Supervisors has acted to amend the Williamson Act contract and the uses permitted under Clause 3 above; therefore, the MEP would be a violation of the recorded Williamson Act contract.

D. MITIGATION

The proposed MEP would remove 10 acres of grazing land from agricultural use. The proposed mitigation is reseeding the construction area and a permanent water supply. (SSA, Ex 301, p. 4.12-46.) There is no evidence of how this would mitigate for permanent loss of grazing acreage, nor is there any evidence that acre for acre mitigation for loss of agricultural land was considered.

II. ALTERNATIVES

A. LEGAL STANDARD

A legally adequate EIR "must produce information sufficient to permit a reasonable choice of alternatives so far as environmental aspects are concerned." (San Bernardino Valley Audubon Society, Inc. v. County of San Bernardino (1984) 155 Cal.App. 3d 738, 750-751 [202 Cal.Rptr. 423]; see also Citizens of Goleta Valley v. Board of Supervisors (1988) 197 Cal.App.3d 1167, 1178-1181 [243 Cal.Rptr. 339].) It must contain sufficient detail to help ensure the integrity of the process of

decisionmaking by precluding stubborn problems or serious criticism from being swept under the rug. (Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn. (1986) 42 Cal.3d 929, 935 [231 Cal.Rptr. 748, 727 P.2d 1029]; People v. County of Kern (1974) 39 Cal. App.3d 830, 841 [115 Cal.Rptr. 67].) It must reflect the analytic route the agency traveled from evidence to action. (Topanga Assn. for a Scenic Community v. County of Los Angeles (1974) 11 Cal.3d 506, 515 [113 Cal.Rptr. 836, 522 P.2d 12].) An EIR which does not produce adequate information regarding alternatives cannot achieve the dual purpose served by the EIR, which is to enable the reviewing agency to make an informed decision and to make the decisionmaker's reasoning accessible to the public, thereby protecting informed self-government. (Laurel Heights Improvement Assn. v. Regents of University of California, supra, 47 Cal.3d at p. 392.)" (Kings County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692 , 733, 270 Cal.Rptr. 650.)

The standard for a "no project" alternative in an environmental impact report is set forth by regulation:

> "If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the “no project” alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. " (14 CalCodeReg §15126.6(e)(3)(B).)

The SSA is the equivalent of an EIR (PubResCode §§21165, 25519(c)) and is held to the same standards.

B. THE NO PROJECT ALTERNATIVE

The Supplemental Staff Assessment (SSA) concedes that if the project is not built, the environmental impacts from the project will not occur. (SSA, Ex. 301, p. 6-18). It however fails to specify these environmental impacts which will not occur, especially the discharge of significant amounts of CO2 into the atmosphere, which will increase global warming. The discussion also entirely fails to mention the millions of dollars that will be saved by PG&E and its ratepayers by not constructing this unneeded facility. It also fails to describe the impacts from operation of the plant, including plume and emissions, that will not occur if the MEP is not built.

The SSA dismisses what benefits will allegedly be lost by not building the MEP with two cursory paragraphs:

"If the project is not built, the region will not benefit from the relatively efficient source of 200 MW of new generation that this facility would provide. This new generation would increase the supply of energy and potentially serve load demands in the Bay Area of Northern California. It is thus difficult to determine whether the "no project" alternative would have serious, long-term consequences on air quality and the cost or reliability of electricity in the region.

"If no new natural gas plants were constructed, reliance on older power plants may increase. These plants would consume more fuel and emit more air pollutants per kilowatt-hour generated than the proposed project. In the near term, the more likely result is that existing plants, many of which produce higher level of pollutants, would operate more than they do now. Thus, the "no project" alternative is not environmentally superior to the MEP project." (SSA, Ex. 301, p. 6-18.)

This discussion is insufficient, incomplete, misleading, defective and based on unsupported speculation. There is no particularized analysis of the proposed MEP to support important assertions. Without such analysis, the environmental analysis of the MEP is incomplete and inadequate. There are many omissions, including a failure to adequately discuss viable alternatives, deal directly with resource adequacy, or take into account or even mention key CPUC decisions, orders and forecasts that relate to resource adequacy. When these omissions and defects are properly considered as discussed below, the conclusion that the MEP is not needed and therefore that the "No Project Alternative" is environmentally superior is obvious. The CEC cannot approve the MEP.

The discussion below includes defects in the "Alternatives" section which affect the "No Project Alternative".

1. Failure to Mention CEC-CPUC Loading Order in Considering Alternatives

The basic guide for California's strategic energy decision-making is the "loading order" put forward by CPUC and CEC to define priorities and preferences among alternatives for how California's energy needs shall be met. (Energy Action Plans I and II, 2003 and 2005, and CEC, *2009 Integrated Energy Policy Report, Executive Summary,* p1, available at http://www.energy.ca.gov/2009publications/CEC-100-2009-003/CEC-100-2009-003-CMF.PDF) California's "loading order" calls for meeting new electricity needs, first, with energy efficiency and demand response; second, with new generation from renewable energy and distributed generation

resources; and third, with clean fossil-fueled generation and transmission infrastructure improvements. CEC commissioners have publicly underscored the importance of the "loading order" in gas-fired plant proceedings, for example, Julia Levin in 2009: "We do take this loading order very seriously. Given the importance of addressing climate change … we do want to see the loading order followed." (http://www.turlockjournal.com/news/article/690). Failure to discuss alternatives for MEP joined to this well-established official framework of priorities and preferences weakens any effect and credibility of SSA's assertions about alternatives and "need" for MEP. (Powers testimony, Exhibit 406, p 3.) In fact, Staff's witness on Alternatives, Mr. Hoffman, testified that he did not know what a loading order was and thus had not considered it. (Transcript 3/7/2011, p. 239, ll. 8-13.)

2. Failure to Consider Generation Information Relevant to No-Project Alternative

The SSA ignores the reality of spectacularly high actual reserve margins in PG&E territory that supports the no-project alternative. The SSA is faulty in asserting that "it is difficult to determine" the long-term consequences of a no-project alternative for reliability. (SSA, Ex. 301, p. 6-18). This ignores currently available, readily accessible, officially disseminated information that indicates a gross and growing actual surplus of generation in PG&E's service territory that assures reliability beyond any reasonable question, a margin so large that any uncertainties in the need for additional generation in PG&E territory in 2010-2020 can be readily absorbed. Reserve margins have lately been recorded at 38-44 percent, an excess of some 5,000 Megawatts (MW). (Powers testimony, Ex. 406, p. 4; Mainland testimony, Ex 900, p. 6). Required reserve margin is only 15-17 percent. This gross over-procurement is getting even larger. According to CPUC's latest order to utilities in its Long Term Procurement Proceeding (LTPP), PG&E's service territory is forecast to have a 69 percent reserve margin through 2020, an excess of some 12,000 MW. (CEC "Order Instituting Rulemaking to Integrate and Refine Procurement Policies and Consider Long-Term Procurement Plans". Rulemaking 10-05-006, dated 12/03/2010 set forth at http://docs.cpuc.ca.gov/EFILE/RULC/127542.htm. and its Attachments 1 and 2.) Therefore, prima facia, a no-project alternative can be assumed to have no adverse affect on reliability, given the superabundance of generation which was omitted from SSA consideration.

There has been no showing why the additional MW of MEP would be reasonable and necessary given this extraordinarily high reserve margin. Meanwhile, there are numerous alternatives for meeting grid reliability other than large natural gas plants, including rooftop solar, battery storage, demand reductions, renewably powered peaker plants, etc. that do not contribute to global warming (Mainland

testimony, Ex, 900, p. 5,) but which the SSA never thoroughly explored or objectively considered. The SSA omits consideration of CEC data showing no new natural gas facilities are currently needed in the Bay Area to integrate renewable energy. (Mainland testimony, Ex 900, p. 6.) The SSA omits mention of 2009 and 2010 CAISO summer preparedness assessments which also demonstrate that PG&E does not need any new MW. (Mainland testimony, Ex. 900, pp. 6-7.) Without any quantitative analysis pertinent to MEP, SSA's assertion that MEP will "potentially serve load demands in the Bay Area of Northern California" (SSA, Ex. 301, p. 6-18) could be used to justify an unlimited number of such projects if proposed in California, which would clearly be unjustified and irrational, and thus points to the inadequacy of SSA analysis.

3. Failure to Establish or Update "Need" for Project

The Alternatives discussion identifies the "need" for the project as based on PG&E's request for proposals dated April 1, 2008. (SSA, Ex. 301, p. 6-4.) Thus, the alleged need for the project was determined by PG&E on or before April 1, 2008, nearly three years ago. Even if there was a "need" three years ago, changes in demand since then as described in 2. above have vitiated any need for the project. The Alternatives discussion of any "need" for the MEP is thus based on outdated material that has been superseded by later demand data directly relevant to resource adequacy. In fact, staff's alternatives witness, Mr. Hoffman, directly testified: "I don't know if this project is needed. And I did not do a needs analysis of this project." (Transcript 3/7/2011, p. 246, ll. 6-8.) "Staff doesn't take a look at need." (Transcript 3/7/2011, p. 241, l. 25.)

4. Failure to Consider Demand Information Relevant to No-Project Alternative

There has been no SSA showing that demand growth would materially alter the gross surplus of generation in PG&E's service area. The SSA fails to take into account the impact of planned energy efficiency measures in considering a no-project alternative. There is in fact is no peak demand load growth in PG&E's service area for MEP to meet, and CEC's 2010 revised energy forecast indicated that in 2010, demand in PG&E's service area was far below 2006 levels and not anticipated even to climb back to 2006 levels within the subsequent five years. (Powers testimony, Ex. 406, p. 4.) Even though the CEC's forecast predicted lower demand, the demand would have been lower still if CEC had used more reliable, current population statistics; the use of outdated data significantly inflated predicted demand. (Mainland testimony, Ex. 900, pp. 6-7.) The implementation of the CPUC's 2008 energy efficiency goals alone eliminates the any need for MEP. (Powers testimony, Ex 406, p. 3.) The

demand growth forecast developed by PG&E for its long term plan, published in December, 2006, is thus demonstrably obsolete. SSA's alternatives analysis fails to examine energy efficiency measures and demand side management programs that are viable replacements for MEP. (Powers testimony, Ex 406, p. 2.)

In fact, the SSA states:

> "Even with this great variety of federal, state, and local demand side management programs, the state's electricity use is still increasing as a result of population growth and business expansion. Current demand side programs are not sufficient to satisfy future electricity needs, nor is it likely that even much more aggressive demand side programs could accomplish this at the economic and population growth rates of the last ten years." (SSA, Ex. 301, pp. 6-15-6-16.)

This statement is just not true based on the above described predictions of lower demand. Further, Mr Hoffman testified that he took the SSA Alternatives discussion about a "growing demand" straight from MEP's application and had no other knowledge. (Transcript 3/7/2011, pp. 240, l. 25-p.241, l. 11.)

5. Failure to Demonstrate "Criticality" for Integrating Renewables

Applicant and the SSA have not addressed or met California's policy requirements regarding new fossil-fuel generation. CPUC has stated that if the state is required to generate 33 percent of its energy from renewable resources by 2020, then all new procurement of new energy resources between now and 2020 must be entirely renewable energy "… except some new fossil for peaking capacity and to replace aging fossil plants critical to renewable integration". (CPUC *Renewable Portfolio Standard Quarterly Report*, October, 2008, p 10.) Following the above CPUC-noted qualification to this conclusion, CEC and Applicant must demonstrate that MEP is "critical" for integrating higher levels of renewable energy into the grid. They have not come close to meeting this exacting standard. A study conducted by the consulting firm 3E for the California Public Utilities Commission shows that in order to achieve these goals, electrical suppliers need to phase-out fossil fuel power plants and increase renewable energy generation. The applicant has not adequately explained why or how the proposed power plant will enable renewable generation. (Mainland testimony, Ex 900, p. 3.) Neither staff nor the Applicant has presented any analysis that PG&E needs more generation in PG&E's service area to back up intermittent renewables. They have not presented any thorough analysis of existing and expected

dispatchable and renewable generation and their proper location. Any such analysis would have to take into account, for example, the combination of new dispatchable gas-fired generating units near or within the Bay Area Load Pocket (some 1,559 MW) incuding Marsh Landing, Oakley GWF Peaker upgrade, and LECEF facilities). There is no consideration given to resources near MEP to integrate new, existing and planned renewables -- for example, 240 MW Mulqueeny Ranch Pumped Storage Project, 145 MW Tracy Peaker Plant, 1100 MW East Altamont Energy Center (the latter plant alone would produce two and one-half times the electrical energy needed for eastern Alameda County (http://www.energy.ca.gov/sitingcases/eastaltamont/documents/applicants_files/EAEC_AFC_files/EAEC_AFC_Vol02_8.10-pdf 10-4.) Staff and Applicant have failed to conduct the type of analysis (recommended by CEC's *Committee Guidance on Fulfilling California Environmental Quality Act Responsibilities for Greenhouse Gas Impacts in Power Plant Siting Applications,* March, 2009, CEC-700-2009-004, page 29**)** that compares the degree that different kinds of gas-fired power plants facilitate AB 32 goals, and whether (or the degree to which) project technology and location may make a proposed power plant more consistent with AB 32 goals. Nor has there been done, as recommended, a "systemic analysis of new generation and transmission line additions necessary for the PG&E Load Pocket, considering such issues as retirement of aging and once-through cooled plants and emission effset constraints. Staff and Applicant have failed to address or mention former MEP presiding CEC member Julia Levin's opening challenge to the Applicant in the MEP proceeding to produce hard evidence to justified claims about MEP's alleged need for renewables integration. (http://www.energy.ca.gov/sitingcases/mariposa/documents/2009-10-20_Informational_Hearing_Transcript_TN-2500.PDF, p. 57.) California Energy Commission data show no new natural gas facilities are currently needed in the Bay Area to integrate renewable energy. (Mainland testimony, Ex 900, p. 7). Given the huge overprocurement of generation capacity during the next decade, cited above, this is true even considering the eventual phase-out and retirement of several old OTC facilities. CPUC'S LTPP generation tables. **(**CEC "Order Instituting Rulemaking to Integrate and Refine Procurement Policies and Consider Long-Term Procurement Plans". Rulemaking 10-05-006, dated 12/03/2010 set forth at http://docs.cpuc.ca.gov/EFILE/RULC/127542.htm. and its Attachments 1 and 2., p. 17 of Attachment 1**)** document a huge projected surplus even after including retirement of 3,800 MW of OTC and 1,000 MW of other older power plants. And this over-supply will exist even though the tables count new renewables as only a small fraction of nameplate capacity. Even if more backup was needed for renewable energy, energy storage and upgrade, existing facilities

would arguably be logical alternatives to be analyzed and considered to meet this need. (Mainland testimony, Ex 900, pp. 7-8.) There is no demonstrated basis in evidence before the MEP proceeding for concluding that MEP will be needed to integrate renewable energy in the greater Bay Area Load Pocket.

Planning tables cited above show that out of 14,000 megawatts of new renewable capacity built in California over the next decade, only just over 5000 megawatts as "qualifying" renewable capacity. This means that even when the great majority of new renewable capacity is discounted by the tables as "unqualified", PG&E and other IOUs still are greatly over-procured.

This is directly relevant to judging the amount of "back-up" NG will be needed, an element in SSA's statement about a no-project alternative. The tables divide renewable capacity into two parts: the "qualified capacity" and the "unqualified capacity". The qualified capacity is considered by the planners as "reliable" and thus should require little to no "back up". The unqualified capacity is counted as zero, and thus effectively "disappears" from the planning table. Any capacity needs are already shown as coming from other, actually conventional, resources up to the full value, so any "backup" of that capacity would simply be backing up conventional resources, not renewables. (Note pp. 17, 18 & 19 which show the "Trajectory Scenario" for the three investor-owned utilities. Line 15 is Renewable Portfolio Standard (RPS) additions over the next 10 years with PG&E only 904 megawatts. Total additions of the 3 utilities inside California is 935 (PG&E) + 3819 (SCE) + 508 (SDG&E) = 5361 MW. Op cit., p. 33. Includes the "Trajectory Scenario" showing 14,173 megawatts of new renewable capacity by 2020 that is built within California.)

6. Failure to Correctly Assess Peak Power Value of Solar PV Alternative

The SSA fails to address the fact that 1,500 MW of solar PV will be added in PG&E territory during the next six years and nowhere acknowledges the peak reliability contribution of these solar PV resources. Peak reliability that PG&E will get from solar PV assess that will be built is five times greater than the nameplate capacity of MEP. (Powers testimony, Ex 406, p 6.) From 50 to 60 percent of this solar PV capacity will be available at the summer peak hour. (Powers testimony, Ex 406, pp. 5-6.) SSA and Applicants have ignored SGIP program data showing a peak reliability factor of about 60 percent for solar PV (above). The June, 2009 CEC decision in refusing an application for CVEUP natural gas power plant in Chula Vista found that distributed solar PV could potentially achieve the same objectives for comparable cost as gas-fired peaking generation. (Powers testimony, Ex 406, p. 7.)

SSA fails to mention or address this CEC conclusion and precedent, and Mr. Power's essential conclusion about the costs and practicality of PV were uncontroverted.

7. Failure to Adequately Assess Storage Alternatives

The SSA fails to mention or assess energy storage as an alternative to MEP and whether existing and planned storage capacity, during the life of MEP, could render it unnecessary and thus could adequately support assured reliability and renewables integration under a no-project alternative. There is failure to mention that significant energy storage projects are underway in conjunction with major wind and solar power projects. As an example of what needs to be taken into account, both Southern California Edison and PG&E are reportedly planning to build energy storage projects pursuant to state and federal funding. PG&E received funds for a 300-megawatt, compressed air energy storage project using salt formations near Bakersfield (on-line at http:..www.energy.ogov/news2009/documents2009/_Demo_ProjectList_11.24.09pdf). There is failure to mention that a CPUC storage proceeding is underway to implement previous storage legislation, and how this proceeding will stimulate more storage. Solar Reserve claims such storage facilities more than pay for themselves because they allow load shifting and sale of reliable power during peak demand times. There is failure to mention Solar Reserve's contract with PG&E in December, 2009 for a 150 MW facility near Blythe, California, which will include storage (on-line at http://www.solar-reservecom/pressReleases/Rice PPAPressRelease.pdf.) Moreover, there is no mention or evaluation of the Mulqueeny Ranch project (cited above) among alternatives. And there is no mention or assessment of the commonly acknowledged and well documented current 4000 MW of pump storage in California, some or most of which can be deployed to back up renewables with modifications that are arguably cheaper than new fossil fuel capacity. There is no mention of another commonly known 1,850 MW in prospect, mostly within a few hundred miles of the MEP location, that arguably could be used to integrate renewables (*IEPR Staff Workshop*, cited below, p 17.) There is failure to mention commonly acknowledged advantages of storage as cleaner, without pollution, operationally more rapidly responsive than natural gas-fired alternatives, dispatchable and a value-adder by soaking up cheap nighttime wind power and generating it back during daytime peak at higher prices. (For additional list of benefits, see CEC, *IEPR Staff Workshop, The Use of Large Scale Pumped Hydro: Energy Storage for Grid Reliability, Renewable Integration and Renewable Load shifting: Technologies to Support Renewable Integration, November 16, 2010, p. 2 ff.*) Helms Pump Storage in PG&E's current system

can provide service in generating mode of some 600 MW. (Mainland testimony, Ex. 900, p. 7-8.)

8. Failure to Consider MEP's Unnecessary Costs to Ratepayers, Harmful Impact on Development of Renewable Alternatives

In dismissing a no-project alternative, SSA and Applicant fail to adequately take into account or even address the costs to ratepayers of unneeded MEP peaker power and how those costs might deter more renewable sources required to meet state targets. Peaker plants like MEP constitute major costs for ratepayers because utilities must pay these power plant owners substantial fees whether they produce power or not. Every additional unnecessary fossil fuel peaker plant that is built adds to the costs of achieving California's renewable energy mandates. Even in the absence of renewable energy mandates, very unnecessary fossil fuel plant adds to ratepayer costs because costs are generally incurred by ratepayers even if plants do not run. The huge over-procurement of generation (indicated previously) will arguably drive up the cost of electricity on consumers' utility bills and deter the development of more desirably and preferable renewable projects because it is reasonable to assume there are limits on what ratepayers can be expected to tolerate. If there is to be much more electricity available than is needed, this will tend to eliminate any need to build more generation and will render more renewables superfluous, thus making added renewables infrastructure redundant, in effect "double procuring. Large fixed costs for unneeded natural gas peaker capacity will mean less financial room to build commercial rooftop solar and other distributed renewables. Since ratepayers are responsible for paying the costs of the superabundance of unnecessary gas plants, among them MEP, this will hamper the state's ability to justify added investments in other types of resources, including distributed generation of all types. That more fossil fuel plants can "crowd out" more renewables has been attested to. A CPUC LTPP decision reiterated that PG&E should not "crowd out preferred resources and/or systematically overprocure" and "AB 32 and SB 1368, California's climate change laws, provid[e that] … procurement must now consider carbon risk when filling net short positions with fossil resources, so as not to 'crowd out' preferred resources." (Mainland testimony, Ex 900, pp. 7-8.)

9. Failure to Assess Correctly Impact of Older Plants Retirements

SSA states that "If no new natural gas plants were constructed, reliance on older power plants may increase" with more pollution and less efficiency. (SSA, Ex 301, p. 6-18.) No evidence or analysis is provided to support this contention. In fact, given the huge surplus of generation, now available and

more projected (cited above), there would be little cause for more reliance on older plants, which in fact are being retired or retrofitted. SSA does not address implications of the state's (Water Board) policy (May 4, 2010) for retiring obsolete or inefficient once-through-cooling (OTC) fossil-fuel plants (http://www.swrcb.ca.gov/water_issues/programs/npdes/cwa316.shtml#policy). Nor does SSA consider evidence as to whether OTCs' capacity can be met, if phased properly, entirely by renewable power or whether older power plants could be expected to provide the type of "peaker" power that MEP is designed to provide.

10. Failure to Conform With PG&E's Protocol

In its Environmental Leadership Protocol, PG&E established a commitment to exceed environmental protection standards by mitigating the environmental impacts of their energy projects. (Mainland testimony, Ex 900, p. 3.) PG&E's current proposal will add another natural gas-fired power plant to Alameda County's already substantial burden of greenhouse gases, sulfur dioxide, and carbon monoxide in the Bay Area. The proposed power plant will emit substantial amounts of ozone, particulate matter, and other pollutants, which increase health risks. (SSA, Ex. 301, p. 4.1-21.)

DECLARATION OF SERVICE

I, Alan Carlton, declare that on March 30, 2011, I served and filed copies of the attached Mariposa Energy Project (MEP) (09-AFC-3) Opening Brief of Sierra Club California. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: **[http://www.energy.ca.gov/sitingcases/mariposa/index.html].**
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:
(C*heck all that Apply*)
For service to all other parties:
_ x_ sent electronically to all email addresses on the Proof of Service list;
___ by personal delivery or by depositing in the United States mail at Sacramento, California, with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."
AND
For filing with the Energy Commission:
x__ **sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (preferred method);**
OR
_____depositing in the mail an original and 12 paper copies, as follows:
CALIFORNIA ENERGY COMMISSION

Attn: Docket No. 09-AFC-3
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I declare under penalty of perjury that the foregoing is true and correct.

_____
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