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CALIFORNIA ENERGY COMMISSION
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SACRAMENTO, CA 95814-5512
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DATE: July 10, 2015

TO: Interested Parties

FROM: Joseph Douglas, Compliance Project Manager

SUBJECT: **MARIPOSA ENERGY PROJECT (09-AFC-3C)**
Staff Response to Robert Sarvey's Comments

On June 19, 2015, Robert Sarvey submitted comments on the California Energy Commission (Energy Commission) Staff Analysis of the Mariposa Energy Project (MEP) petition to amend, dated March 11, 2015, to allow MEP to install supplemental, temporary water supply tanks for use during drought conditions.

Energy Commission Staff Responses to Mr. Sarvey's comments are provided below and demonstrate that Staff's Analysis of the MEP petition has addressed the potential for significant environmental impacts and has recommended appropriate conditions to ensure that the installation of the temporary water supply tanks will be conducted in compliance with applicable laws, ordinances, regulations and standards (LORS) and will not cause significant impacts. Staff will recommend that the Energy Commission approve the temporary water tanks when it is considered by the Energy Commission at the July 30, 2015 Business Meeting.

This response has been mailed to the Commission's list of interested parties and property owners adjacent to the facility site. It has also been e-mailed to the facility listserv. The listserv is an automated Energy Commission e-mail system by which information about this facility is e-mailed to parties who have subscribed. To subscribe, go to the Energy Commission's webpage for this facility, scroll down the right side of the project webpage to the box labeled "Subscribe," and provide the requested contact information (http://www.energy.ca.gov/sitingcases/mariposa/).

If you have questions about this response to comments, please contact Joseph Douglas, Compliance Project Manager, at (916) 653-4677, or by fax to (916) 654-3882, or via e-mail to joseph.douglas@energy.ca.gov.

Mail List 7358
Mariposa Listserv

MARIPOSA ENERGYPROJECT
(09-AFC-3C)
PETITION TO MODIFY
Staff's Response to Comments

INTRODUCTION

On March 11, 2015, Mariposa Energy, LLC filed a petition with the California Energy Commission (Energy Commission) requesting to modify the Mariposa Energy Project (MEP). MEP is a 200-megawatt (MW) simple-cycle generating facility consisting of four General Electric Energy LM6000 PC-SPRINT natural gas-fired combustion turbine generators and associated equipment. The project was certified by the Energy Commission on May 18, 2011, and began commercial operation on October 1, 2012. The project is located in northeastern Alameda County, California.

The modifications proposed in the petition would allow MEP to install supplemental, temporary water supply tanks for use during a possible water curtailment. The proposed modifications will not increase the amount of water used by the MEP to levels above that analyzed in the Final Decision.

Energy Commission staff reviewed the petition and assessed the impacts of this proposal on environmental quality and on public health and safety. Staff published its Notice of Determination on June 5, 2015, for a 14-day public comment period. http://docketpublic.energy.ca.gov/PublicDocuments/09-AFC-03C/TN204912_20150605T093351_Mariposa_Energy_Project_Notice_of_Determination.pdf

On June 19, 2015, Robert Sarvey sent a letter to the Energy Commission with comments about items he thought needed more investigation. http://docketpublic.energy.ca.gov/PublicDocuments/09-AFC-03C/TN205098_20150619T155831_Commnets_on_Staff_Mariposa_Ammendment_analysis_and_request_for.pdf

Staff's responses to Mr. Sarvey's comments are provided below. Energy Commission staff's responses to these comments demonstrate that the Staff Analysis has addressed the potential for significant environmental impacts and has recommended appropriate conditions to ensure that the installation of the temporary water tanks will be conducted in compliance with applicable laws, ordinances, regulations and standards (LORS) and will not cause significant impacts. Staff will recommend that the Energy Commission approve the petition to install the temporary water tanks when it is considered by the Energy Commission at the July 30, 2015 Business Meeting.

ENERGY COMMISSION STAFF RESPONSES TO MR. SARVEY'S COMMENTS

1. Water Supply

Mr. Sarvey's Comment: The California Energy Commission Decision (Decision) concluded that Byron Bethany Irrigation District (BBID) was capable of meeting the project's water supply needs under drought condition without impacting residents of Mountain House and local farming operations, despite evidence to the contrary provided by Intervenor Sarvey.

***Staff's Response*:** The Decision stated that the MEP would voluntarily fund a program designed to conserve a volume of raw water equal to the maximum volume of process water that would be consumed annually by MEP. Since MEP operations began in October 2012, MEP has used approximately 38 acre feet (AF) of water at an average annual rate of about 16.9 AF per year (AF/y). Mitigation in the Decision is designed to conserve 187 AF/y, the maximum volume of water MEP is permitted to use. The mitigation was accomplished by concrete lining BBID Canal 45 and was completed by September 2012. Given that MEP has been in operation for at least two and a quarter years, MEP has conserved approximately 420.75 AF, far more than MEP has used to generate electricity. MEP operation has not resulted in a net increase in BBID consumption of raw water. Therefore, staff believes that the MEP water use has had no significant impact on BBID water supply. In fact, the water conservation measure has made more water available for use by farmers and the Mountain House Community than otherwise would have been available without the MEP.

In addition, the purpose of the proposed project modification is to provide MEP flexibility in the timing when MEP takes the water purchased from BBID. This modification is not changing the volume of water used by MEP or the supply source. No changes to Soil and Water Resources Conditions of Certification in the MEP license are required.

2. Water Rights

Mr. Sarvey's Comment: Because BBID's water rights have been curtailed and BBID cannot meet MEP's water supply requirement, the assumptions in the Energy Commission Decision are no longer valid.

***Staff's Response*:** BBID water rights are curtailed for a limited period of time. MEP proposes to install above ground storage tanks to house MEP purchased water during times when BBID water rights are not curtailed. This is a temporary installation that will allow the project owner to better manage their supply during the extreme drought affecting all of California. A change in a Soil and Water Resources Condition of Certification in the MEP license is not required to accommodate this temporary change.

3. **Recycled Water**

Mr. Sarvey's Comment: Because MEP proposes to truck water to the Mariposa site, there is no reason that Mariposa cannot procure recycled water from either Mountain House or Tracy.

***Staff's Response*:** The use of recycled water as a water supply for MEP could be a feasible alternative supply. However, the owner's petition was to build temporary storage so they can use their existing supply already approved by the Energy Commission. Use of recycled water would require additional planning and possibly permitting by the Regional Water Quality Control Board.

MEP is designed to use water supplied by BBID. BBID water quality would likely be different than a recycled water supply. The water treatment facilities currently in use at MEP are likely not designed specifically to accommodate recycled water. If additional treatment equipment would be required, changes and or an amendment to MEP would need to be submitted, reviewed and approved.

Timing for use of recycled water does not address the need for the emergency storage MEP proposes. Staff would encourage, where time permits or if circumstances change, having the owner evaluate the possible use of recycled water as a back-up or even primary supply in the future.

4. **Water Conservation Measures**

Mr. Sarvey's Comment: The mitigation measures that were designed to offset the water resources impacts from MEP are no longer effective as BBID is no longer diverting any water and the water conservation measures were designed around water saving from BBID's main water canal.

***Staff's Response*:** Please see response Number 1 above. The volume of BBID water conserved by the MEP mitigation is equal to approximately 25 years of MEP average annual water use. Also, as of the date of this response the canal was storing water and the lined area was reducing infiltration losses. Since it is likely that water will be stored in the canal during the curtailment to prevent structural damage that could occur if the canal was drained, the lined area also reduces the amount of make-up water to maintain canal water levels.

5. **Bruns Road**

Mr. Sarvey's Comment: Mr. Sarvey expressed his concerns that activities associated with the MEP amendment would further degrade Bruns Road, which, according to a nearby resident commenting at the February 2011 evidentiary hearings for the MEP, was already degraded by another construction project prior to MEP approval and construction. Mr. Sarvey further stated in his letter that in the Traffic and Transportation analysis of the proposed amendment, staff did not adequately analyze the impacts to Bruns Road or evaluate whether the MEP owner had restored the road to original conditions following completion of construction of the MEP, as required by Condition of Certification **TRANS-2**. He

stated that at the time of his last visit (date unspecified) to the project site, Bruns Road had not been restored to pre-project conditions.

***Staff's Response*:** In response, staff notes that as part of compliance activities for the originally approved MEP, staff received a letter dated May 30, 2013 from John Rogers of the Alameda County Construction & Development Services Department stating the County's satisfaction with the MEP owner's repairs to Bruns Road. (See **Attachment A** for the letter.) However, in order to determine the current status of the condition of Bruns Road and address Mr. Sarvey's comments, staff visited the MEP site on June 25, 2015. Staff found that Bruns Road is in good to excellent condition overall, with the exception of a few small areas of damage on Bruns Road between Kelso Road and the Byron Highway, on the Contra Costa County side of Bruns Road. The locations of these areas of damage are shown on the attached map. (See **Attachment B** for the map.) Staff found no areas of damage on the Alameda County side of Bruns Road.

The first area of road damage is labeled "1" on the attached map and is the most severe. Here, the pavement is crushed at the eastern edge of the northbound lane for a distance the length of a standard truck or SUV. (See **Attachment C** for a photo of this area of damage and other areas of damage corresponding to the locations shown on the map.) The second area of road damage, labeled "2" on the attached map, consists of a minor spider web of cracks. The final area of damage is labeled "3" on the attached map. Here, a crack results in a slight difference in grade in the northbound lane of Bruns Road, near the center divide.

Staff considers the only significant area of damage to be the area labeled "1". This damage occurred in an area that was recently paved. Staff spoke with Mr. Rich Montoya, Road Maintenance Supervisor of Contra Costa County, who said the fresh paving on Bruns Road was completed during the summer of 2014 by a utility company operating windmills in the area (TN 205295). Mr. Montoya also said that when he visited Bruns Road three or four weeks ago, the road damage that staff noticed was not present (TN 205296).

In response to staff's phone call, Mr. Montoya revisited Bruns Road and noted five areas of damage on the Contra Costa County side of Bruns Road (more than the three areas that staff noticed). Mr. Montoya contacted staff on July 6, 2015 and July 10, 2015 to report his observations and to inform staff that Contra Costa County will patch the holes within the week and probably repave them within the month. He stated that the road damage can probably be attributed to an unusually high volume of water trucks recently seen exiting the BBID facility on Bruns Road (TN 205296). Staff is attempting to contact BBID staff to find out more about the nature of these truck trips.

The letter from Alameda County and the fact that the damage to Bruns Road on the Contra Costa County side occurred within the last few weeks are evidence that the MEP owner met its obligations under **TRANS-2** to restore Bruns Road following construction of the original project. Staff would like to note that all conditions of certification for the original project would apply to the amended project. Therefore, if activities included in the amended project were to damage

any roads, the MEP owner would be responsible for restoring the roads and coordinating with the CPM and the applicable agencies in accordance with **TRANS-2**. Before and after construction of the water tanks, and also before and after water transportation and demolition activities associated with the end of water curtailment, the MEP owner would need to submit documentation of road conditions to the CPM, in compliance with **TRANS-2**, and repair any road damage caused by the project.

6. **Visual Impacts**

Mr. Sarvey's Comment: Visual impacts of the project have not been mitigated and the new water tanks will add additional industrial visual impacts.

***Staff's Response*:** Please see **Attachment D** for Visual staff's response.

ATTACHMENT A

30 May 2013

Bo Buchynsky
Mariposa Energy, LLC
333 South Grand Avenue, Suite 1570
Los Angeles, CA 90071

Notification of Acceptance of Repairs to Bruns Road (Alameda County Encroachment Permit Nos. R11 LD11478 and R11 LD11378)

Mariposa Energy, LLC has recently completed repairs to Bruns Road to satisfy conditions of the roadway encroachment permits associated with the construction of the Mariposa Energy Project. This letter is to inform you that the County of Alameda Public Works Agency staff has approved the road repairs completed on Bruns Road and Staff has determined that all terms and conditions of the County of Alameda Encroachment Permit Numbers R11 LD11478 and R11 LD11378 have been met. Please keep this letter as proof of completion.

If you have any further questions, please contact me at (510) 670-5402.

John Rogers

John Rogers
Construction & Development Services Department

ATTACHMENT B

Locations of Identified Damage to Bruns Road (Numbers correspond to photos)

ATTACHMENT C

Area of Damage 1

June 25, 2015

ATTACHMENT C

Area of Damage 2

June 25, 2015

ATTACHMENT C

Area of Damage 3

June 25, 2015

ATTACHMENT D
VISUAL RESOURCES STAFF RESPONSE TO COMMENT

Public Comment Received From Robert Sarvey

Robert Sarvey provided the following visual resources section related written comment, docketed June 19, 2015, in the matter of the Mariposa Energy Project Petition to Amend.

> "*Visual impacts of the project have not been mitigated and the new water tanks will add additional industrial visual impacts*."

Staff's Response to the Public Comment

The Commission Decision for the Mariposa Energy Project dated May 2011, included several conditions of certification to reduce aesthetic/visual resources related project effects to the landscape, to less than significant for the purposes of CEQA. The conditions include the following:

VIS-1 Surface Treatment of Project Structures and Buildings
VIS-2 Surface Restoration
VIS-3 Construction Activity Lighting
VIS-4 Permanent Exterior Lighting

VIS-5 (Publicly Visible Project-Related Signage) and VIS-6 (Landscaping) address LORS compliance and are not CEQA mitigations.

Staff reviewed the Mariposa Energy Project's compliance file pertaining to visual resources and performed a field observation on June 25, 2015. See photographs below.

Staff viewing the Mariposa Energy Project from Kelso Road, Alameda County on June 25, 2015.

View of Mariposa Energy Project from Kelso Road. (June 25, 2015)

View of Mariposa Energy Project from Bruns Road. (June 25, 2015)

Kelso Road looking east at Bruns Road, north of the Mariposa Energy Project. (June 25, 2015)

VIS-1 Surface Treatment of Project Structures and Buildings

Staff has provided photographs (below) taken by staff during a site visit on December 6, 2012, showing the surface treatment of project structures and buildings. Surfaces of all project structures and buildings visible to the public are treated to minimize visual intrusion, color contrast, and reflectivity in the landscape.

Surfaces were treated with ANSI 70, or Munsell Number 5BG 7.0/0.4 (“gray”), the color specified for most major elements of the power plant. Tanks and buildings are colored Desert Tan, or Munsell Number 2.6Y 8.4/1.4 (“tan”). Staff determined the facility remained compliant on June 25, 2015.

VIS-2 Surface Restoration

Staff has provided photographs taken by staff during site visits on September 20, 2012, and December 6, 2012, showing surface restoration. The project owner restored the ground surface to the pre-construction condition or better condition, and replaced vegetation removed during construction, where project development did not preclude it. Staff determined after the December 6th visit the facility was in compliance with **VIS-2**. Staff determined the facility remained compliant on June 25, 2015.

Surface restoration being performed in Sept. 2012.

Surface restoration completed. (Dec. 6, 2012)

Surface restoration completed. (Dec. 6, 2012)

Surface restoration completed. (Dec. 6, 2012)

VIS-3 Construction Activity Lighting

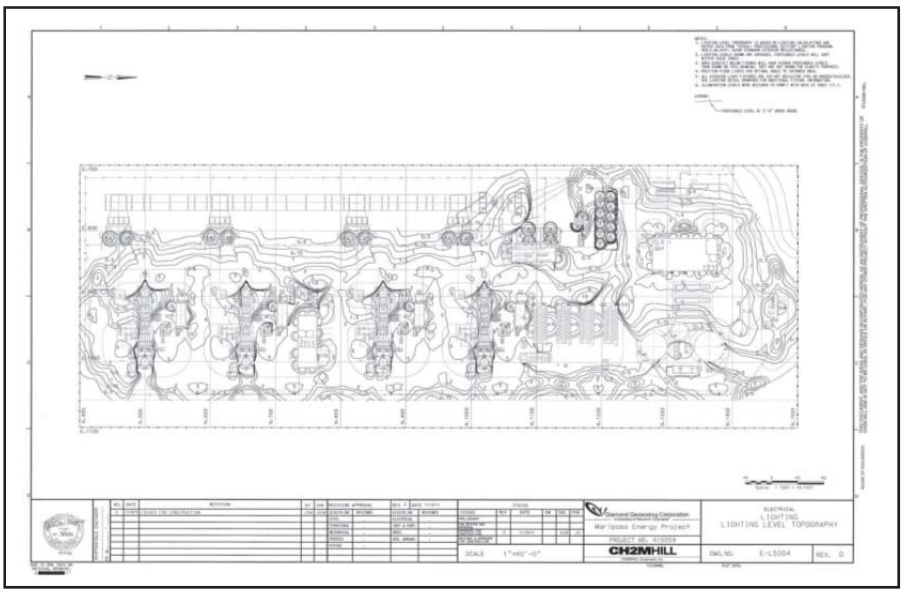
Construction activity lighting was removed from construction and facility sites on or before the December 6, 2012 site visit. Staff determined the facility complied with **VIS-3.**

VIS-4 Permanent Exterior Lighting

The installation of permanent exterior lighting for the facility was completed in May 2012. All exterior light fixtures are cut-off reflector type or hooded/shielded. Flood lights are positioned for optimal angle to intended area. See photos below. Staff found no written record of a light trespass complaint being received as of July 1, 2015.

Photo shows installed shielded light fixtures on the exhaust stacks and perimeter lighting fixtures (Holophane Mongoose lighting luminaires) for the Mariposa Energy Project. (Dec. 6, 2012)

Photo shows installed shielded light fixtures on the chiller air–cooled radiator and a flood light fixture directed downward. (Dec. 6, 2012)



Lighting level topography (dated Nov. 18, 2011) in the permanent exterior lighting plan filed with the CEC for the Mariposa Energy Project. The permanent exterior lighting plan was approved by staff on December 15, 2011.

VIS-5 Publicly Visible Project-Related Signage

Mariposa Energy, LLC, installed a publicly visible facility identification sign near the vehicle access gate, approximately 40 feet from Bruns Road. The framed sign dimensions are 4 feet wide by 6 feet tall supported by two painted aluminum posts with two feet of ground clearance underneath. The sign was reviewed by the Alameda County Community Development Agency. The sign was approved by Energy Commission staff on January 23, 2014.

Google Earth aerial view showing the installed facility sign identifying the Mariposa Energy Project near the vehicle access gate. (June 9, 2014)

View of the vehicle access gate to the Mariposa Energy Project (January 2014).

VIS-6 Landscaping

The Landscape and Irrigation Plan for the Mariposa Energy Project was reviewed by the Alameda County Community Development Agency. It was approved by staff on March 13, 2012. Mariposa Energy, LLC, installed drought tolerant plant species along the northern boundary of the facility site. The toyon species (an evergreen shrub to small tree usually grows to 6-8 ft. high and 4-5 ft. wide) was selected using the Alameda

County Recommended Tree List, Calflora Database, and Fire Wise Species List. Also, it met low water needs established by Water Use Classification of Landscape Species.

The hill side of the vehicle access was hydroseeded with the grass mix listed in the surface restoration plan required in **VIS-2**. Staff determined after a September 20, 2012, visit to the facility it was in compliance with **VIS-6**. Staff determined the facility remained compliant on June 25, 2015.

Aerial view of the northern boundary of the facility site shows planted toyon (dark dots) along the retention pond and grassland revegetation. (June 9, 2014)

As explained in staff's analysis for the additional water storage tanks, the water tanks are to be located on a portion of the site of the former Byron Power Cogeneration Plant, a two-acre site immediately north of the Mariposa facility site. The 6.5 megawatt plant was demolished sometime after 2012. About 1.3 acres of the site remains disturbed since the demolition of the cogeneration plant.

Aerial view of the Mariposa facility and the former Byron Power Cogeneration Plant site. The view also shows restored surface area. (2014)

View of the former Byron Power Cogeneration Plant from the Mariposa facility in Dec. 2012.

View of the former Byron Power Cogeneration Plant from Keslo Road in Sept. 2012. The Mariposa Energy Project is behind it.

The water storage tanks are to be 12 feet in height. The diameter of the Option 1 large tank is 160 feet. The diameter of the Option 2 large tank is 125 feet. As required by Condition of Certification **VIS-1**, the tanks are to have a color and finish that minimize color contrast and glare. The project owner proposes to color the tanks dark green.

Existing visually discordant man-made elements in the landscape include multiple tall transmission lines and the Mariposa power plant. Sloping terrain provides some view limitations. The man-made alterations and natural features in the landscape result in a view that lacks coherence. While the tanks will introduce an additional man-made element to the landscape, the tanks would not substantially degrade the existing visual character or quality of the site and its surroundings; a less than significant effect for the purposes of CEQA.

Staff concludes the existing facility is in compliance with the adopted Visual Resources Conditions of Certification in the Mariposa Energy Project Commission Decision, May 2011, and impacts have been mitigated as required.