

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov



October 28, 2009

Mr. Bohdan Buchynsky
Diamond Generating Corporation
333 S. Grand Ave., Suite 1570
Los Angeles, CA 90071

DOCKET
09-AFC-03

DATE OCT 28 2009RECD. OCT 28 2009

RE: MARIPOSA ENERGY PROJECT (MEP) (09-AFC-3)
DATA REQUEST SET 1B (Nos. 58-68)

Dear Mr. Buchynsky:

Pursuant to Title 20, California Code of Regulations, Section 1716, the California Energy Commission staff seeks the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

This set of data requests (Nos. 58-68) is being made in the areas of Soils and Water Resources (Nos. 58-68). Written responses to the enclosed data requests are due to the Energy Commission staff on or before November 19, 2009, or at such later date as may be mutually agreeable.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, please send a written notice to both the Committee and me within 20 days of receipt of this notice. The notification must contain the reasons for not providing the information, and the grounds for any objections (see Title 20, California Code of Regulations, Section 1716 (f)).

If you have any questions, please call me at (916) 654-4781 or email me at choffman@energy.state.ca.us.

Sincerely,

Craig Hoffman
Project Manager

Enclosure

PROOF OF SERVICE (REVISED 9/15/09) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 10/28/09
MF

Technical Area: Soils and Water Resources
Authors: Vince Geronimo, PE and Rachel Cancienne, EIT

WATER SUPPLY AND USE

BACKGROUND

Process water for the Mariposa Energy Project (MEP) would be supplied by Byron Bethany Irrigation District (BBID) Canal 45 via a new 6-inch, 1.8-mile long pipeline. The new pipeline would be constructed adjacent to Bruns Road on BBID property until it reaches the MEP site. The applicant stated that “this source will provide water for process water, safety showers, fire protection, service water, and domestic uses.” Maximum water use at MEP for an average annual temperature of 59°F (assuming 4,000 operational hours per year and 300 startup/shutdown events) would be approximately 187 acre-feet per year (AFY). The applicant has suggested that a realistic operating scenario of 600 hours per year with 200 startup/shutdown events would yield a water use of 34.8 AFY. Since MEP would have air-cooled condensers rather than evaporative cooling, water usage would decrease at higher ambient temperatures. Chiller coil condensate would be collected at the higher temperature and used for process water (approximately 19 gallons per minute could be collected at 93°F).

DATA REQUEST

58. Although alternative water supplies, such as recycled water sources, were described in Section 6.0 of the AFC, no back-up water supply was identified. Please identify a back-up water supply should BBID Canal 45 water become unavailable.

BACKGROUND

During construction of the MEP site, water would be required for dust suppression, concrete washout, soil compaction, and hydrostatic testing. Approximately 2500 gallons of water per day will be required during construction. No source for water used during construction was provided.

DATA REQUEST

59. Please provide information regarding the source of the water to be used during construction of the MEP site.

WILL-SERVE LETTER

BACKGROUND

Section 5.15.2.1 of the AFC states that “in the unlikely event of continuous, maximum permitted operation (i.e., 4,000 hours/year) at the average expected annual temperature of 59°F, MEP would use approximately 187 acre-feet per year of water for plant uses.”

The will-serve letter provided by Rick Gilmore, General Manager of Byron-Bethany Irrigation District (“BBID” or “District”) suggests that Diamond Generating Corporation (DGC), the parent company of Mariposa Energy, LLC (Mariposa Energy), requested more water for the MEP (aka DGC Kelso) than the expected maximum usage that was reported in Section 5.15.2. The will-serve letter states:

“It is the District’s understanding DGC Kelso projects a water demand of 250 gallons per minute and an annual average usage of 185 acre-feet per year. In peak years, demand could be as high as 275 acre-feet per year. BBID has sufficient water to meet these projected demands of the DGC Kelso project and hereby advises DGC that the District is willing and able to provide water service to the DGC Kelso facility.”

DATA REQUEST

60. Please clarify the discrepancies between statements in the AFC and the Will-Serve Letter for the values for maximum and expected average water usage at MEP.

WASTEWATER

BACKGROUND

Process wastewater and contact stormwater at the proposed MEP site would be collected through a series of drains, sumps, and pipes and delivered to an onsite oil/water separator prior to treatment by an activated carbon filtration zero liquid discharge (ZLD) system. Treated ZLD reclaim water would be recycled to the raw water storage tank for process water usage. Oily waste collected from the separator, as well as wastewater from combustion turbine water washes, would be contained in an on-site drum and hauled offsite for disposal.

DATA REQUEST

61. A. Identify the offsite disposal location and identify the licensed hauler that will be used to transport the oily and combustion turbine wastewater.
- B. Estimate the anticipated frequency of offsite disposal of oily and combustion turbine wastewater.

BACKGROUND

The applicant states that a secondary wastewater collection system would collect sanitary wastewater from sinks, toilets, showers, etc. and “route it to an onsite septic tank for either discharge through an onsite leach field or removal for offsite treatment.” The septic system would receive approximately 478 gallons per day.

DATA REQUEST

62. Please identify whether onsite leach field or offsite treatment would be utilized for sanitary wastewater disposal.

STORMWATER MANAGEMENT

BACKGROUND

Stormwater from areas offsite would be diverted around the project facilities in two constructed swales. The constructed swales would require a significant excavation of the existing grade and result in steep slopes that drain toward the swales.

DATA REQUEST

63. Please describe the methods or Best Management Practices (BMPs) that will be implemented to prevent erosion on the steep finished grade slopes and verify that the BMPs would be effective for preventing sediment from discharging offsite.

BACKGROUND

Onsite stormwater at the proposed MEP site would be collected in a series of inlets and storm drain pipes and drained to a proposed onsite extended detention basin. The proposed extended detention basin would be sized to contain the facility site 100-year storm event and would release the volume over a minimum 48-hour period into the northeasterly-aligned constructed swale. The extended detention basin discharge would join with stormwater from offsite areas and pass through a 36" diameter culvert to discharge offsite.

DATA REQUESTS

64. Please state the basis for the proposed extended detention basin instead of an evaporation / percolation (retention) basin.
65. Please identify the receiving water (i.e. a stream, land, sewer, etc.) for the 36" diameter stormwater culvert outfall and verify that this discharge will not impact adjacent properties or affect the quality of US Waters or Waters of the State.

BACKGROUND

During construction, approximately 15 acres of land associated with the MEP project would be disturbed for proposed project laydown, temporary parking, and the proposed MEP site. The General Permit for Stormwater Discharges associated with Construction Activity, administered by the State Water Resources Control Board (SWRCB), requires a Storm Water Pollution Prevention Plan (SWPPP) be prepared for the construction site. The SWPPP would include best management practices BMPs for erosion and sediment control. The SWPPP would be prepared prior to construction of the MEP project. The draft Construction SWPPP was not provided with the AFC.

DATA REQUESTS

66. Please provide a draft construction SWPPP.

67. Please provide all conceptual erosion control plans and information for project construction.

BACKGROUND

To mitigate potential impacts to water and soil resources from the construction of the MEP project, the Energy Commission requires preparation and implementation of a Drainage Erosion and Sediment Control Plan (DESCP). The DESCP would be updated and revised as the project moves through the design process. The DESCP is a complement to the Construction SWPPP. The DESCP submitted prior to site mobilization must be designed and sealed by a professional engineer/erosion control specialist.

DATA REQUESTS

68. Please provide a draft DESCP containing elements A through I below outlining site management activities and erosion/sediment control BMPs to be implemented during site mobilization, excavation/demolition, construction, and post-construction activities. The level of detail in the draft DESCP should be commensurate with the current level of planning for site grading and drainage.

- A. **Vicinity Map** – A map(s) at a minimum scale 1"=100' indicating the location of all project elements (construction site, laydown area, pipelines, etc.) with depictions of all significant geographic features including swales, storm drains, and sensitive areas.
- B. **Site Delineation** – All areas subject to soil disturbance for the MEP (project site, laydown area, all linear facilities, landscaping areas, and any other project elements) shall be delineated showing boundary lines of all construction/demolition areas and the location of all existing and proposed structures, pipelines, roads, and drainage facilities.
- C. **Watercourses and Critical Areas** – The DESCP shall show the location of all nearby watercourses including swales, storm drains, and drainage ditches. Indicate the proximity of those features to the MEP construction, laydown, and landscape areas and all transmission and pipeline construction corridors.
- D. **Drainage Map** – The DESCP shall provide a topographic site map(s) at a minimum scale 1"=100' showing all existing, interim and proposed drainage systems and drainage area boundaries. On the map, spot elevations are required where relatively flat conditions exist. The spot elevations and contours shall be extended off-site for a minimum distance of 100 feet in flat terrain.
- E. **Drainage of Project Site Narrative** – The DESCP shall include a narrative of the drainage measures to be taken to protect the site and downstream facilities. The narrative should include the summary pages from the hydraulic analysis prepared by a professional engineer/erosion control specialist. The

narrative shall state the watershed size(s) in acres that was used in the calculation of drainage measures. The hydraulic analysis should be used to support the selection of BMPs and structural controls to divert off-site and onsite drainage around or through the MEP construction and laydown areas.

- F. **Clearing and Grading Plans** – The DESCPC shall provide a delineation of all areas to be cleared of vegetation and areas to be preserved. The plan shall provide elevations, slopes, locations, and extent of all proposed grading as shown by contours, cross sections or other means. The locations of any disposal areas, fills, or other special features will also be shown. Illustrate existing and proposed topography tying in proposed contours with existing topography.
- G. **Clearing and Grading Narrative** – The DESCPC shall include a table with the quantities of material excavated or filled for the site and all project elements of the MEP project (project site, lay down area, transmission corridors, and pipeline corridors) whether such excavations or fill is temporary or permanent, and the amount of such material to be imported or exported.
- H. **Best Management Practices Plan** – The DESCPC shall identify on the topographic site map(s) the location of the site specific BMPs to be employed during each phase of construction (initial grading/demolition, project element excavation and construction, and final grading/stabilization). BMPs shall include measures designed to prevent wind and water erosion.
- I. **Best management practices narrative** – the DESCPC shall show the location (as identified in H above), timing, and maintenance schedule of all erosion and sediment control BMPs to be used prior to initial grading, for all project elements (site, pipelines, etc.) related to excavations and construction, final grading/stabilization, and post-construction. Separate BMP implementation schedules shall be provided for each project element for each phase of construction. The maintenance schedule should include post-construction maintenance of structural control BMPs, or a statement provided when such information will be available. Include provisions for wet-season work.



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 9/15/09)

APPLICANT

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INTERVENORS

ENERGY COMMISSION

DECLARATION OF SERVICE

I, Mineka Foggie, declare that on October 28, 2009, I served and filed copies of the attached Mariposa Energy project Data Request Set 1B (Nos. 58-68) dated October 28, 2009. 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:

(Check all that Apply)

For service to all other parties:

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

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

AND

For filing with the Energy Commission:

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

OR

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

CALIFORNIA ENERGY COMMISSION

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

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

Originally Signed By _____
Mineka Foggie