Metcalf Energy Center
Data Requests and Responses (99-AFC-3)
Set 3B

(Responses to Data Requests: 3-207, 3-208, 3-209, 3-210, 3-211, 3-212, 3-213, 3-215, 3-218, 3-219, 3-220 (confidential), 3-221, 3-222, 3-223, 3-224, 3-225, 3-226, 3-227, 3-228, 3-229 and 3-230)

Submitted to:

CALIFORNIA ENERGY COMMISSION

Submitted by:

Calpine/Bechtel

January 4, 2000

Metcalf Energy Center
Data Requests and Responses (99-AFC-3)
Set 3B

Technical Area: Alternatives
Author: Gary Walker
MEC Author: John Carrier

Background

Staff understands that the applicant investigated a potential alternative project site near the Monta Vista substation, and perhaps another site or sites near one or more of the five PG&E substations (Monta Vista, Jefferson, Newark, Ravenswood, and San Mateo) that could be used to supply power to the South Bay.

Data Requests[1]

3-207. Please identify the site(s) on a map and describe it.

3-208. Please provide all information gathered regarding the feasibility of the site(s).

3-209. Please provide any environmental information gathered regarding the site(s).

Response to Data Requests 3-207, 3-208 and 3-209: As set forth in Calpine/Bechtel's December 20, 1999, notice and for the reasons set forth therein, Calpine/Bechtel continues to object to providing any confidential information requested in Data Requests 3-207 through 3-209. On December 13, 1999, Calpine/Bechtel filed non-confidential information on a potential site located near the Monta Vista substation. Calpine/Bechtel is currently gathering information on land availability and infrastructure on potential sites located adjacent to the Jefferson, Ravenswood and San Mateo substations. This information will be provided to the CEC as soon as it is available. Regarding Newark, the city has voiced concerns to having additional power generation facilities within the city.

It should also be noted that the only one of these sites that provide electrical benefits to south San Jose that are comparable to MEC is the Monte Vista site. One of the objectives of MEC was to provide electrical benefits to the Metcalf Substation and to parts of southern Santa Clara County. The other sites have not been studied in great detail and could provide other electrical benefits, but we have concluded thay they do not provide the relability to the south San Jose area that MEC does.

Background

Staff is aware that the applicant has investigated two potential power plant sites in the El Estero area of north San Jose north of State Route 237 but has recently withdrawn its applications for general plan amendments for those sites.

Data Requests

3-210. Please identify the sites on a map and describe them.

3-211. Please explain why the applications for general plan amendments were withdrawn.

3-212. Please provide all information gathered regarding the feasibility of the two sites.

3-213. Please provide all environmental information gathered regarding the two sites.

Response to Data Requests 3-210 through 3-213: In preparing our response to this data request, we assume that by "El Estero" the CEC is referring to the "Los Esteros" area. As set forth in

[1] **Note:** a "3-" has been entered in front of each number to distinguish them from duplicate numbers in Data Request Set #2 received from the CEC.

Calpine/Bechtel's December 20, 1999, notice and for the reasons set forth therein, Calpine/Bechtel continues to object to providing any confidential information requested in these Data Requests. The applications for the General Plan Amendments were withdrawn for a number of reasons, one of which was the delay in PG&E's plans to build a transmission line into the area. While a need for additional electrical resources has been identified in north San Jose, PG&E's transmission plans for the Los Esteros area are changing rapidly, making any development in north San Jose speculative.

Metcalf Energy Center
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Set 3B

Technical Area: Biological Resources
Author: Linda Spiegel
MEC Author: Debra Crowe

Background

At the Biological Resource workshop on October 27, 1999, serpentine soils expert Stuart Weiss (Center for Conservation Biology, Stanford University) stated that some of the assumptions used in the *Impact Analysis for Metcalf Energy Center NO_x Emissions, Santa Clara County, California* were incorrect. Based on his statements and his paper, *Cars, Cows, and Checkerspot Butterflies: Nitrogen Deposition and Management of Nutrient-Poor Grasslands for a Threatened Species*, the NO_x analysis should assume:

- ambient nitrogen deposition rates in the San Jose area of 10 –15 kg/ha/year
- 80% dry deposition
- 118 tons/day of ammonia from the power plant
- nitric acid vapor deposition on ridge tops to the north and east

Data Request

3-214. Please revise the NO_x impact analysis according or provide a justification and supporting documentation defending the assumptions chosen.

Response: Modeling is being perfomed in support of a revised nitrogen deposition impact analysis. The revised nitrogen impact analysis will be submitted to the CEC and served on all parties in February 2000. The amount of ammonia cited above should be 118 tons/year, not 118 tons/day.

Background

Calpine has submitted a *Draft Riparian Corridor Biotic Assessment for the Metcalf Energy Center* and is currently preparing the final report. For the final report, please identify on the tree survey maps and tables which trees are City Significant or Heritage Trees or would qualify as such, and which are County of Santa Clara Significant Trees or would qualify as such.

Data Request

3-215. Please provide a total number of how many of each of these ordinance trees will be lost.

Response: As noted in previous Data Responses to the CEC, Calpine/Bechtel will accept, as a condition of certification, annexation of the portion of the MEC site currently in the County into the City of San Jose. As the CEC is aware, the City of San Jose has raised concerns regarding structure heights and riparian corridor. As a result of these concerns and based on continuing discussions with the City and interested parties, Calpine/Bechtel is moving forward with a minor refinement of the site layout that meets the 100-foot riparian zone setback requirement. Calpine/Bechtel intends to submit a supplement to the MEC AFC in February 2000. No MEC structures will be located in the riparian zone setback and no riparian trees will be removed. Table BR 3-215 provides a list of the tree species, the number of each species located on the site, and the number of each type of tree to be removed based on the city's ordinance.

TABLE BR 3-215
Trees to be Removed at the MEC Site

Tree Species	Total Number of Trees Present	Total Number to be Removed	Ordinance Trees to be Removed
RIPARIAN CORRIDOR AREA			
Cottonwood	1	0	0
Valley oak	27	0	0
Willow, elderberry, black walnut (in riparian corridor)	39	0	0
NON-RIPARIAN CORRIDOR AREA			
Almond	2	2	0
Black walnut	47	34	30
Coffeeberry	2	2	2
Elderberry	32	32	18
English walnut	6	5	0
Olive	1	1	1
Pear	1	1	1
Plum	3	3	1
TOTAL	**161**	**80**	**53**

Background

The Santa Clara Valley Water District (SCVWD) has a number of concerns including planting in the Fisher Creek riparian corridor.

Data Requests

3-216. To determine planting prescriptions in the flood plain, SCVWD has requested a hydraulic analysis for either elevating the site a minimum of 2 feet above the100-year flood elevations or for rebuilding the levee(s) to meet the FEMA flood protection requirements. Please provide the hydraulic analysis.

Response: A hydraulic analysis is being prepared. It will be provided as soon as it is available. It is expected that it will be available by March 2000.

3-217. Please provide responses to the nine questions raised by the SCVWD in their letter that was discussed at the recent Biological Resources workshop.

Response: As set forth in Calpine/Bechtel's December 20, 1999 notice, additional time is needed to respond. It is expected that a response will be provided in January 2000.

Metcalf Energy Center
Data Requests and Responses (99-AFC-3)
Set 3B

Technical Area: Cultural Resources
Author: Kathy Matthews and Dorothy Torres
MEC Author: Jim Bard

Background

Supplement A, to the Metcalf Energy Center Application for Certification (AFC) provided Figure 3.3-1 which details areas surveyed for potential archaeological sites. Staff requests information regarding the perimeters of the survey.

Data Request

3-218. According to Figure 3.3-1, two areas were surveyed for the presence of cultural resources. How many feet did the survey extend from each side of the proposed centerline of the trench?

Response: The survey extended for 50 feet from each side of the proposed centerline of the trench.

Background

Figure 8.3-4b, filed under confidential cover, identified CA-SCL-249 and CA-SCL-250 directly in the path of Route B.

Data Request

3-219. Has either site been proposed for eligibility to the National Register of Historic Places or for eligibility to the California Register of Historic Resources? If either site has been proposed for eligibility, please provide documentation that explains the findings of ineligibility or eligibility.

Response: To the best of our knowledge, neither site CA-SCL-249 nor CA-SCL-250 has been proposed for eligibility to the National Register of Historic Places or for eligibility to the California Register of Historic Resources. Site CA-SCL-249 was recorded in 1977 as a very diffuse scatter of chipped chert tools and myriad ground stone implements without observed midden. At that time, Kay Homes was planning to develop a 6.7-acre housing development. Site CA-SCL-250 was also recorded in 1977 as a cupule petroglyph present on a large rock outcrop. When these two sites were revisited in 1990, the 6.7-acre tract had already been developed into single-family residences—Bayliss Court and Bayliss Place. Only one single chipped chert flake was found in 1990 and the petroglyph cupule could not be relocated. Neither site, even in their "pristine" condition in 1977, would qualify for eligibility for either the California or National registers.

3-220. Please provide all site records for sites CA-SCL-249 and CA-SCL-250.

Response: These records are being submitted under a request for confidentiality.

3-221. Please explain, in detail, the procedures or methods that will be used to avoid, protect or mitigate potential impacts to these two sites.

Response: These two sites are probably destroyed and are unlikely to be relocated during construction related to the Metcalf Energy Center. The only procedure or method needed to protect or mitigate potential impacts to these two sites will be to have a qualified archaeologist present during subsurface/ground-disturbing construction to monitor/inspect the excavated sediments to check for the presence/absence of archaeological remains.

Background

Supplement A to the AFC describes an area referred to as the “elbow” (p. 3-4). This area was not surveyed due to lack of access.

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Data Request

3-222. Page 3-4 of Supplement A recommends monitoring by an archaeologist during construction in the "elbow area". Archaeological loci were found in the vicinity of the "elbow". Although access may not be obtained in time to include survey information in the Preliminary Staff Analysis, staff assumes that access to the area will be obtained prior to construction. Please provide staff with survey results as soon as access can be obtained and an archaeological survey can be conducted.

Response: Because Calpine/Bechtel does not own or have control over this area Calpine/Bechtel has not been able to obtain permission for access. All of the information on this area that is in the possession of Calpine/Bechtel has been provided to the CEC. If desired, Calpine/Bechtel can provide CEC staff with a point-of-contact for this area. However, an EIR related to the proposed development of Campus Industrial facilities on this parcel is expected to become available for public review at the end of January or early February 2000. A copy of the Draft EIR can be obtained from the City of San Jose at that time.

3-223. When do you anticipate access to the "elbow" area will be obtained?

Response: At this point, Calpine/Bechtel does not know when access to this area will be obtained. If desired, Calpine/Bechtel can provide CEC staff with a point-of-contact for this area.

Metcalf Energy Center
Data Requests and Responses (99-AFC-3)
Set 3B

Technical Area: Land Use
Author: Eric Knight
MEC Author: John Carrier, Chak Srinivasan

Energy Commission staff must assess the potential impacts on agricultural uses in the vicinity of the project.

Background

During construction of the MEC, 10 acres of an open agricultural field (currently planted in safflower, AFC Supplement A, page 3-2) south of the site will be temporarily disturbed for a construction laydown area. According to the AFC, the laydown area will be compacted and overlain with a layer of gravel or other material. The layer of material will be removed after construction is complete and the soil will be returned to its natural state for agricultural production (AFC page 8.2-40).

Data Request

3-224. Please describe the measures Calpine/Bechtel will use to restore soil disturbed by the construction laydown area to its natural state for agricultural production.

3-225. Please describe how Calpine/Bechtel will prevent the loss of topsoil while removing the layer of gravel or other material.

Response to 3-224 and 3-225: Approximately 4 acres of the designated 10 acres for the laydown area will be used for parking and temporary facilities. This area will be needed for roughly 24 months during project construction. Of the remaining 6 acres, all or part of this area will be in use for a shorter duration. The season and soil conditions at the time of use will determine the action to be taken to return the laydown area to its original condition. In all cases proper drainage will be implemented, a silt fence will be placed around the area perimeter, and the topsoil will be protected so the soil can be returned to its original state.

The preliminary subsurface investigation of the MEC site has identified that the surficial soil consists of a dark brown silt that classifies as ML (low plasticity silt) in accordance with the Unified Soil Classification System. The in-place compactness of the soil ranges from very loose to medium dense, which is equivalent to CBR (California Building Ratio) of 1 to 3. Based on these considerations and the need to preserve the existing agricultural soil, the following steps will be followed in preparing the laydown area, and after use, returning the land to its original condition.

Preparing the area used for parking, facilities, and other areas where traffic (and soil conditions) warrant:

- Trim all existing vegetation to the ground.
- Grade the area to promote adequate drainage, avoiding mixing topsoil with underlaying soil; excavation of existing soil is not required.
- Roll and moderately compact the existing soil.
- Cover the existing soil with a woven geotextile separator layer to protect underlying topsoil.
- Add an additional layer of structural geogrid over the separator fabric in heavy traffic areas, as required.
- Cover the geotextile layer with 8 to 12 inches of granular fill and compact.

Returning to natural state following use of parking, facilities, and traffic areas:

- Remove the granular fill.

- Remove and dispose of the geotextile / geogrid. Care will be taken when removing the geotextile fabric from the area to minimize the removal of the underlying topsoil.
- Till the existing soils thoroughly to aerate.
- Return to natural grade.

Preparing temporary laydown areas where heavy traffic protection is not required and soil conditions permit:

- No surface preparation needed. The laydown materials will be placed on appropriate wood dunnage.

Returning to natural state following use of non-traffic areas:

- Remove all dunnage and materials.
- Till the existing soils thoroughly to aerate.

Background

The AFC states that construction activities will be planned to accommodate the schedule of agricultural activities (AFC page 8.9-3). However, because construction is anticipated to take approximately 18 to 20 months, it would appear that use of the agricultural field south of the MEC site as a laydown area will preclude its use for farming during the construction phase of the project.

Data Requests

3-226. Please explain if Calpine/Bechtel intends to compensate the landowner for the value in lost crop production while the land is being used as a construction laydown area.

Response: Calpine/Bechtel will lease the land used for the construction laydown area. It is intended that the lease payment will compensate the landowner for the value of any lost crop production.

3-227. Please provide the status of negotiations Calpine/Bechtel has had with the landowner to use the land as a construction laydown area.

Response: As set forth in Calpine/Bechtel's December 20, 1999 notice, and for the reasons set forth therein, Calpine/Bechtel objects to this Data Request because it can reasonably be interpreted as seeking information that is confidential.

Background

Page 8.9-9 of the AFC (Agriculture and Soils) states that the domestic water line will impact land currently used for agriculture. However, page 8.4-5A (Land Use) states that the domestic water line is likely to be constructed within the Union Pacific Railroad right-of-way and would not disturb existing agricultural use.

DATA REQUESTS

3-228. Please clarify if land currently in agricultural use will be disturbed by construction of the domestic water line.

3-229. Please clarify if the domestic water line will be located entirely within the UPRR ROW.

Response to Data Requests 3-228 and 3-229: Originally it was thought that the domestic water line from the San Jose MUNI wells to the MEC site would be constructed within the UPRR right-of-way (ROW). However, since then it has been determined that obtaining easements from the property

owners would be more feasible than obtaining leases from the UPRR. Therefore, if the domestic water line is constructed from the MUNI wells to the MEC site it would be located on privately owned land adjacent to the UPRR ROW. If the domestic water line is constructed along Segment B-3, it would also be on private property. Using either route, the domestic water line will be located on land that is currently used for agriculture. Construction will be timed to minimize disruption to agricultural uses. As mentioned in response to Data Request 3-226, it is intended that the landowners would be compensated for the value of loss in agriculture production.

Background

Alternative water line segment B-3, which would contain a portion of the water supply, domestic water supply and industrial wastewater pipelines, would traverse agricultural land that lies south-southwest of the MEC site. According to AFC Supplement A, this land is currently planted in safflower, orchard trees, wheat, and row crop. If all three pipelines were included in segment B-3, a 66-foot wide construction corridor would be required. The supplement states that pipeline construction on agricultural land traversed by segment B-3 will temporarily impact the crops grown there. The supplement further states that direct loss of orchard trees will be avoided by strategically routing the pipeline corridor between trees or through more open areas (AFC Supplement page 3-3).

Data Request

3-230. Please provide information on the outcome of any discussions in regard to obtaining easements from the landowner(s) whose property would be traversed by segment B-3.

Response: As set forth in Calpine/Bechtel's December 20, 1999 notice, and for the reasons set forth therein, Calpine/Bechtel objects to this Data Request because it can reasonably be interpreted as seeking information that is normally supplied after certification of the project.

3-231. Please describe how Calpine/Bechtel will minimize impacts to agricultural activities on land traversed by segment B-3.

Response: As set forth in Calpine/Bechtel's December 20, 1999 notice, additional time is needed to respond to this Data Request. A response will be provided in January 2000.

3-232. Biological Resources subsection 3.2.3 of Supplement A states that a biological monitor will conduct pre-construction surveys within agricultural fields and orchards and identify potential trenching impacts to trees and modify the alignment of segment B-3 to avoid direct impacts. The supplement further states that if construction of segment B-3 indirectly causes a tree to die, Calpine/Bechtel will plant replacement trees in locations approved by the City of San Jose arborist. This discussion appears to apply only to non-agricultural trees and not orchard trees. Please explain how agricultural landowners would be compensated for the lost value in crop production if construction of segment B-3 indirectly causes an orchard tree to die. In your response also address, tree replacement ratios, and the size and location of the replacement trees.

Response: As set forth in Calpine/Bechtel's December 20, 1999 notice, additional time is needed to respond to this Data Request. A response will be provided in January 2000.