

CALIFORNIA ENERGY COMMISSION1516 NINTH STREET
SACRAMENTO, CA 95814-5512

May 10, 2001

Ms. Alicia Torre
Calpine Corporation
6700 Koll Center Parkway, Suite 200
Pleasanton, CA 94566

Dear Ms. Torre:

RE: EAST ALTAMONT ENERGY CENTER FIRST SET OF DATA REQUESTS

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission requests 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 first set of data requests (#1-9) is being made in the areas of visual resources and land use. Written responses to the enclosed data requests are due to the Energy Commission staff on or before June 8, 2001, or at such later date as may be mutually agreed.

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 me within 15 days of receipt of this notice. The notification must contain the reasons for not providing the information, the need for additional time and the grounds for any objections (see Title 20, California Code of Regulations section 1716 (e)).

If you have any questions regarding the enclosed data requests, please call me at (916) 657-4394.

Sincerely,

Cheri L. Davis
Energy Facility Siting Project Manager

Enclosure

cc: Dockets
Susan Strachan

**EAST ALTAMONT ENERGY CENTER
DATA REQUESTS
(01-AFC-4)**

Technical Area: Visual Resources

Author: Gary Walker, Michael Clayton, and Will Walters

Background

The visual simulations in the AFC were not sufficient for full disclosure of the project's potential visual impacts and for staff's analysis of the project. The simulations did not show the project at the start of operation, before the growth of landscaping. In addition, the simulations were not at a life-size scale from a normal reading distance. Also, the simulations did not depict the appearance of the project either with visible vapor plumes or with night lighting.

Data Request

- 1) Please provide five sets of high-resolution color photocopies, at life-size scale when viewed from a distance of 18 inches, of a photograph of the existing view toward the proposed project from each of Key Observation Points (KOPs) 1 through 6. The photograph from KOP 5 should be taken under sunny morning conditions required for the depiction of reasonable worst case vapor plumes, as discussed below.
- 2) Using the photographs requested in Data Request 1 as a base, please provide five sets of high-quality color photocopies, at life-size scale when viewed from a distance of 18 inches, of the following visual simulations.
 - a) The proposed project at the start of operation from each of KOPs 1 through 6;
 - b) The proposed project with proposed landscaping five years after the start of operation from each of KOPs 1 through 5;
 - c) The proposed project with proposed landscaping at maturity from each of KOPs 1 through 5; and
 - d) The proposed project at the start of operation with a visible cooling tower plume of dimensions predicted by the SACTI model for 10% of daylight no-fog hours from KOP 5. The simulations must encompass enough of the view to include all of the visible plume.
- 3) Please provide five sets of high-resolution color photocopies, at life-size scale when viewed from a distance of 18 inches, of a photograph of the existing view toward the proposed power plant site from KOP 5 at night.
- 4) Using the photograph requested in Data Request 3 as a base, please provide five sets of high-resolution color photocopies, at life-size scale when viewed from a distance of 18 inches, of a photograph of the proposed power plant from KOP 5 at the start of operation with night lighting.

**EAST ALTAMONT ENERGY CENTER
DATA REQUESTS
(01-AFC-4)**

- 5) Please provide 3 CDs containing electronic versions of the photos and simulations.

Background

The AFC (p.8.11-21) discusses visible vapor plumes from the proposed cooling tower. However, the AFC does not provide quantified calculations of the size, duration and frequency of the plumes.

Data Request

- 6) Using at least 5 years of meteorological data if available, please provide the following information regarding the project's cooling tower visible vapor plumes, using the SACTI model. If a model other than the SACTI model is proposed for use, please provide a copy and description of that model for staff review and approval prior to conducting the modeling analysis.
- a) The total number of daylight hours annually and seasonally;
 - b) The total number of daylight no-fog hours annually and seasonally;
 - c) The length, height, and width of plumes predicted to occur 10% of all daylight hours and all daylight no-fog hours annually and seasonally;
 - d) The total number of hours that a plume would be visible annually and seasonally;
 - e) The percentage of the total number of hours that the plumes would be visible annually and seasonally;
 - f) The total number of daylight hours that a plume would be visible annually and seasonally;
 - g) The percentage of daylight hours that the plumes would be visible annually and seasonally;
 - h) The total number of daylight no-fog hours that a plume would be visible annually and seasonally;
 - i) The percentage of daylight no-fog hours that a plume would be visible annually and seasonally;
 - j) Tables showing the dimensions of plumes that would occur under each of these conditions for different frequencies; and
 - k) The assumptions, calculations, and data (including meteorological data) used to derive these estimates. Please provide 3 sets of the data electronically on CDs in addition to the printed copies.

**EAST ALTAMONT ENERGY CENTER
DATA REQUESTS
(01-AFC-4)**

Background

The AFC (p.8.11-21) discusses visible vapor plumes from the proposed HRSG stacks. However, the AFC does not provide quantified estimates of the size and frequency of the plumes.

Data Request

- 7) Using at least 5 years of meteorological data if available, please provide the following information regarding the project's HRSG stack visible plumes, using the CSVP model. If a model other than the CSVP model is proposed for use, please provide a copy and description of that model for staff review and approval prior to conducting the modeling analysis. Please specify whether the calculations are for each stack or for all stacks. If the calculations are for each stack, please estimate the combined effects of all stacks.
- a) The total number of daylight hours annually and seasonally;
 - b) The total number of daylight no-fog hours annually and seasonally;
 - c) The length, height, and width of plumes predicted to occur 10% of all daylight hours and all daylight no-fog hours annually and seasonally;
 - d) The total number of hours that a plume would be visible annually and seasonally;
 - e) The percentage of the total number of hours that the plumes would be visible annually and seasonally;
 - f) The total number of daylight hours that a plume would be visible annually and seasonally;
 - g) The percentage of daylight hours that the plumes would be visible annually and seasonally;
 - h) The total number of daylight no-fog hours that a plume would be visible annually and seasonally;
 - i) The percentage of daylight no-fog hours that a plume would be visible annually and seasonally;
 - j) Tables showing the dimensions of plumes that would occur hourly and under each of these conditions for different frequencies; and

**EAST ALTAMONT ENERGY CENTER
DATA REQUESTS
(01-AFC-4)**

- k) The assumptions, calculations, and data (including meteorological data) used to derive these estimates. Please provide 3 CDs containing the data in addition to the printed copies.

Technical Area: Land Use

Author: Mark R. Hamblin

Background

AFC page 8.4-2 states that the Byron Airport in Contra Costa County is approximately 3 miles to the northwest of the proposed East Altamont Energy Center project site (see attached map).

Energy Commission staff was informed during a preliminary project review phone conversation with Dan Gargus, Aviation Safety Officer with Caltrans Aeronautics Program, that the proposed location of the power generation facility and/or transmission lines near the Byron Airport may potentially present a concern to the Federal Aviation Administration (FAA). A portion of the proposed project site is shown to be within the Clear Zone of the Byron Airport.

According to Mr. Gargus, the FAA during the past two years has spent \$18 million on the Byron Airport. Byron Airport is a County maintained and operated facility. The Airport is a general aviation facility that services the Bay Area as a reliever airport. The airport maintains a 6,000-foot X 100-foot runway that allows it to handle general aviation and business/corporate jets.

The airport has been approved by the FAA for instrument approach landings and therefore requires a greater clearance area free from above ground structures, including transmission line towers.

Mr. Gargus also presented potential concerns pertaining to the amount of on-site lighting that the new power generation facility may introduce into the airspace and the amount or level of electromagnetic interference that may be introduced to aircraft communication and navigation systems landing or taking off at the Airport. He suggests the applicant contact John Pfeifer, Manager, Airport Districts Office (650) 876-2778 at the FAA's Western Regional Headquarters.

Data Request

- 8) Staff requests that the applicant provide the following items:
 - a) a copy of the FAA's written determination to the applicant's filing of an FAA Form 7460 - "Notice of Proposed Construction or Alteration" for the project (see attached application form);

**EAST ALTAMONT ENERGY CENTER
DATA REQUESTS
(01-AFC-4)**

- b) a description of the amount of light to be generated into the airspace by the proposed project;
 - c) a description of the amount/level of electromagnetic interference that may affect aircraft communication and navigational systems taking-off or landing at the Byron Airport; and
 - d) a discussion of the potential for plumes that may be generated by the proposed facility to enter the airspace.
- 9) Staff requests that the applicant provide a copy of the current FAA approved “Approach and Clear Zone Plan” for the Byron Airport showing the exact location of the proposed power generation facility and transmission towers on it.