

STATE OF CALIFORNIA

Energy Resources Conservation
And Development Commission

In the Matter of:)	Docket No. 01-AFC-19
)	
Application for Certification)	Staff's Comments on the PMPD
of SMUD's Cosumnes Power)	
Plant Project)	
_____)	September 3, 2003

INTRODUCTION

On August 6, 2003, the Cosumnes Power Plant Application for Certification Committee (Committee) issued a Presiding Member’s Proposed Decision (PMPD) for the Sacramento Municipal Utility District (SMUD) Cosumnes Power Plant Project (project). The PMPD addresses the legal and factual issues raised in testimony received into evidence at two separate sets of hearings that took place earlier this year. In a Notice of Availability filed concurrently with the PMPD, the Committee called for parties to file and serve written comments on the PMPD by September 8, 2003. This document contains staff’s comments on the PMPD.

Staff comments fall into three categories. The first consists of our position on several issues where we believe the Committee has misunderstood either the evidence or applicable legal requirements and as a result, has reached conclusions that staff recommends be amended. The second category of comments consists of staff’s response to the PMPD comments filed by SMUD on August 26, 2003. These first two sets of comments are presented below. Finally, we identify minor grammatical or typographical corrections in Appendix A, using underline/~~strikeout~~ format.

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SUBSTANTIVE ISSUES

A. Licensing of Phase 2

Staff encourages the Committee to include the language identified by staff in the FSA, Part 3 (April 23, 2003) regarding the scope of review that will be conducted during licensing of Phase 2. This language, with minor non-substantive edits, is as follows:

Provided that the project owner submits an application for Phase 2 within 3 years of the effective date of a Commission decision to approve Phase 1 of the project, the Commission's review of the application shall be limited to Air Quality, Water and Soil Resources, Transmission System Engineering, and the use of recycled water for cooling based on the stipulation between SMUD and Commission staff, unless any of the circumstances identified in Title 14, California Code of Regulations, section 15162(a)(1)-(3) regarding substantive changes or new information have occurred or there have been changes to applicable laws. The Commission shall issue its findings and render a final decision on Phase 2 within 12 months after the supplemental application is deemed complete, or, if the provisions of Title 20, California Code of Regulations section 2021 et seq. for expedited permitting are met, within 6 months after the application is deemed complete, provided that Pub. Resources Code section 25550 et seq. has been extended. If an application is not filed within 3 years, a new AFC will be required.

B. Air Quality

1. *Ammonia Slip*: In the PMPD, the Committee found that, "in other past siting decisions, the Commission finds (*stet*) that in already ammonia rich setting, such as the Cosumnes Project, an ammonia slip limit of 10 ppm is appropriate." (PMPD, p. 18) Staff respectfully disagrees. We note that although 10 ppm is the level identified in the Determination of Compliance, the Sacramento Metropolitan Air Quality Management District (District) itself testified that its review of the ammonia slip issue was limited to potential acute, chronic, and cancer risks from the ammonia itself. The District did not consider the potential for secondary particulate formation *at all*. (3/13/2003 RT, p. 25:8-12)

Given the concurrence of the parties and the District that the ammonia emissions from this project could contribute to secondary particulates (3/13/2003 RT, p. 25:8-12;

3/13/2003 RT, p. 68:12-13) and the overwhelming evidence of the serious health impacts caused by exposure to excessive levels of particulates, staff strongly recommends that a 5 ppm ammonia slip be required in order to ensure that this project does not contribute to continuing violations of the particulate standards. There appears to be no dispute that such a requirement is feasible; in fact 5 ppm is Best Available Control Technology in the South Coast Air Quality Management District. Staff believes that ammonia emissions associated with a 10 ppm ammonia slip level could exacerbate existing violations of particulate standards, as well as cause concomitant health impacts. We urge the Committee to revise the PMPD and require an ammonia slip level of 5 ppm.

2. *Construction Conditions:* Staff continues to recommend that the Committee adopt the Conditions of Certification recommended by staff in the FSA for the control of construction emissions (**AQ-SC1 - AQ-SC4**). We believe that these will provide the greatest assurance that the project's construction emissions do not contribute to violations of the ambient air quality standards.

3. *Reporting Requirements:* Staff believes that the reporting requirements identified in **AQ-34** are necessary for staff to monitor the ongoing performance of the project. As staff testified, the District doesn't require that routine emissions data be reported. Instead, the District only requires reporting when there are anomalies or violations. Staff, on the other hand, believes that it is important for the Energy Commission to obtain routine operations data in order to assess how each plant it licenses performs over time. Moreover, staff collects this type of data from all plants certified by the Energy Commission to identify trends that could help identify more effective control strategies. Exempting SMUD from this kind of reporting requirement would create an unfortunate data gap. Staff recommends that the reporting requirements identified in the FSA and the Supplemental Testimony and Revised Conditions of Certification filed March 12, 2003 be included in the decision for this project.

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General Conditions

Staff recommends that the following changes be made to **COM-8**:

Thirty (30) days prior to commencing construction, a site-specific Security Plan for the construction phase shall be developed, implemented, and maintained at the project site. At least sixty (60) days prior to the initial receipt of hazardous materials on-site, a site-specific security plan and Vulnerability Assessment for the operational phase shall be developed, implemented, and maintained at the project site. The operational site security plan shall include requirements for Hazardous Materials vendors to prepare and implement security plans as per 49 CFR 172.800 and to ensure that all hazardous materials drivers are in compliance with personnel background security checks as per 49 CFR Part 1570, Subparts A and B. In addition, the Vulnerability Assessment shall address the storage and use of acutely hazardous materials, hydrogen gas, Liquified Petroleum Fuels, sulfuric acid in concentrations greater than 90%, and any material poisonous by inhalation as defined in 49 CFR §171.8.

The project owner shall notify the CPM in writing that the Plan is available for review and approval at the project site. Only Energy Commission personnel who have proper training and proper security clearance, as determined by the ~~Energy Commission~~ CPM after consultation with the project owner, shall review and approve the plan. The CPM may authorize modifications to these measures, or may require additional measures depending on circumstances unique to the facility, and in response to industry-related security concerns.

This new language reflects regulations recently adopted by the federal Department of Transportation and the Department of Homeland Security regarding the handling of hazardous materials, and should be included in **COM-8**.

C. Water Resources

In its discussion of the use of recycled water for Phase 2 of the project, the Committee references an agreement made by SMUD to use recycled water. Staff encourages the Committee to include a more complete discussion and description of the Joint Stipulation signed by SMUD and by Energy Commission staff and found in the FSA Part 2, filed February 28, 2003. This agreement was a significant factor in staff's conclusion that the project would not create significant adverse water resource impacts

and staff believes that a more complete discussion would better support the conclusions of the PMPD in this area.

D. Biological Resources

In the PMPD, the Committee proposes to delete **BIO-6**, apparently because it believes that the subject of **BIO-6** is addressed in the general conditions for facility closure. Staff points out that although there are three closure conditions -- two for permanent closure and the other for temporary closure (**COM-12 - COM-14**) -- none of them address the biological resources component of a closure plan. Staff recommends that staff's proposed **BIO-6** be included in the PMPD since activities related to facility closure could impact biological resources and mitigation measures should be in place at that time.

E. Waste Management

Staff notes that there are minor wording changes between the Conditions of Certification identified in the FSA and those included in the PMPD. In addition, **WASTE-3** and **WASTE-5** references the wrong state and local agencies. Staff recommends that the Committee adopt the Conditions of Certification identified in the FSA for Waste Management. Staff also notes that our May 9, 2003 filing (addressing Conditions of Certification discussed at the March 2003 evidentiary hearings) added **WASTE-7** in response to concerns expressed by the Committee and Intervener Peasha about the detention basin.

F. Cultural Resources

The PMPD identifies Conditions of Certification for Cultural Resources that were included in the FSA Part 1, filed February 11, 2003. However, after holding several workshops in early March, staff filed errata to those Conditions on March 13, 2003. There were a number of revisions to the Cultural Resources Conditions of Certification included in that filing, and SMUD agreed that the changes were appropriate. Staff recommends that the Committee incorporate those Conditions in the final decision.

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G. Visual Resources

In order to be consistent with the language of CEQA, staff recommends that the language on p. 168 be modified as follows:

The Commission finds that the incremental effect of the project is not cumulatively considerable ~~there is not a significant adverse cumulative impact caused by the project and the Rancho Seco Plant,~~ due to the comparatively overwhelming effect of Rancho Seco.”

H. Alternatives

In the Alternatives section of the PMPD, the Committee included a summary of the alternative sites, alternative technologies, and the no-project alternative. Staff recommends that the Committee include in its discussion a conclusion about whether any of the alternatives would feasibly obtain most of the basic objectives of the project while at the same time avoiding or substantially lessening any of the significant effects of the project, as well as an evaluation of the comparative merits of the alternatives.

I. Transmission System Engineering

As discussed at the PMPD hearing held August 28, 2003, SMUD recently made a compliance filing that is not consistent with the previous submittals discussing the way in which electricity would be transmitted from the site to the Rancho Seco switchyard. Staff’s FSA reflects its understanding of the AFC and subsequent submittals that a switchyard would be built at the project site, whereas the compliance filing (letter from Jaspal Deol, P.E., (SMUD) to Ms. Jeri Scott (Energy Commission compliance project manager) shows no switchyard, and instead shows that Phase 1 would include three 18 kV/230 kV transformers, three disconnect switches, and takeoff structures for three 230 kV circuits. SMUD has stated that it did not intend to construct the switchyard until Phase 2, and that its compliance filing is consistent with the description provided in Supplement B to the AFC (April 15, 2002). However, staff notes that Supplement B

refers to, “the addition of the second phase of the CPP switchyard” (Supplement B, p. 1-3), implying that at least part of the on-site switchyard would be built during Phase 1. In addition, the figures presented in Supplement B include a switchyard.¹ Staff therefore concludes that it is unclear whether the recent compliance filing made by SMUD is consistent with the project description provided in the AFC and its supplements. Staff believes that the elimination of the switchyard in Phase 1 in lieu of the transformers, disconnect switches, and takeoff structures would not create any environmental impacts, public health and safety concerns, electric reliability concerns, or non-conformity with applicable laws, ordinances, regulations, or standards. Staff has reviewed the compliance submittal and believes that the design is acceptable and is in accord with good engineering practices. Staff considers the degree of reliability realized with Phase 1 to be acceptable.

In addition, staff believes that the description of the transmission interconnection in the PMPD is consistent with what SMUD indicates the project will be at full build-out of the project (Phase 2). However, the PMPD is clear that only Phase 1 is being considered for licensing at this time. Therefore, staff recommends that **TSE-1(a)** be deleted or be replaced with the following:

TSE-1 The owner of the power plant switchyard and outlet facilities shall ensure that the design, construction, and operation of the proposed transmission facilities will conform to all applicable LORS including the requirements a) through g) listed below. The substitution of Compliance Project Manager (CPM) approved “equivalent” equipment and an equivalent substation configuration is acceptable.

a) The CPP Phase 1 (500 MW) outlet facilities shall consist of three 18 kV/230 kV transformers, disconnect switches, and takeoff structures for three 230 kV circuits. The CPP switchyard shall consist of 230 kV SF6 insulated circuit breakers and manually operated disconnect switches on each side of each breaker. A breaker and a half arrangement shall be used in the switchyard.

[No changes are recommended to the remainder of the condition or the verification portion of the condition.]

¹ These figures identify a power plant switchyard with 11 SF6 circuit breakers, 25 disconnect switches, three 18 kV/230 kV transformers, and a substantial bus configuration.

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RESPONSE TO SMUD'S PMPD COMMENTS

SMUD's comments on the PMPD (filed August 26, 2003) addressed a number of technical areas. Staff offers these comments in response to the SMUD filing.

A. Air Quality

Staff agrees with SMUD that it is appropriate to add the language to **AQ-36** that SMUD identified in its comments.

B. Biology

In its comments, SMUD proposes to reduce the setback for the seasonal stream and the swale in the construction laydown area from 100 feet to 25 feet, in order to achieve consistency with the application it submitted to the U.S. Army Corps of Engineers for a 404 permit. As staff pointed at the PMPD hearing, held August 28, 2003, the U.S. Army Corps of Engineers has not yet adopted a setback for the 404 permit. Moreover, regardless of the setback adopted in the 404 permit, staff believes that a 100-foot setback is appropriate. At the PMPD hearing, the Committee asked why any setback is necessary given the other mitigation measures contained in the PMPD. In response to that question, staff would like to point out that there are *no* avoidance and minimization measures for those areas identified in the PMPD. In fact, the only measure that addresses the swales is **BIO-13**, which states that clearing and grading won't begin until erosion and sediment control measures are in place and approved. That condition does not require avoidance of the swales.

It is important to realize that Data Response Set 13 states that the laydown area would be graded so water would flow off the laydown area to both the west swale and the east swale. In other words, SMUD is planning on directing flow towards the swales to carry

the water downstream. Therefore, the water from the laydown area could include sediments and other contaminants that would end up in the swales and downstream in wetlands, prior to the water being diverted to the stormwater detention basin. The closer that SMUD is to the bank of the swales, the more likely it is that if a sediment control device fails, the swales will be impacted, or the water flowing off the laydown area would impact the swales. Therefore, staff believes that a 100-foot setback is appropriate.

Staff has no objection to the recommendation made by SMUD with respect to **BIO-14**.

C. Geology

Staff has no objection to the recommendations made by SMUD with respect to Geology.

D. Hazardous Materials

Staff has no objection to the recommendations made by SMUD with respect to Hazardous Materials.

E. Land Use

Staff has no objection to the recommendation made by SMUD in Land Use.

F. Noise

Staff has no objection to the recommendation made by SMUD in Noise.

G. Waste Management

With respect to the issue of language addressing the appropriate local agency, see staff's comments above on this topic.

H. Adoption Order

With respect to the judicial review language offered by SMUD, staff notes that the Court of Appeal recently modified its decision in *Figueroa v. California Energy Resources*

Conservation and Development Commission, (2003) 110 Cal.App.4th 1115, 2 Cal.Rptr.3d 376. The Chief Counsel is currently reviewing these modifications. As a result, staff encourages the Committee to consult with him to determine the appropriate language to include with its decision regarding judicial review.

With respect to the issue of language addressing the appropriate scope of Phase 2 of the project, see staff's comments above on this topic.

Date: September 3, 2003

Respectfully submitted,

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Appendix A

Biological Resources

Page 46, fourth paragraph, second sentence: "There are ~~10.325~~ 9.844 acres of vernal pool invertebrate habitat along the gas pipeline route and at the site that would be disturbed as a result of constructing the proposed project."

*Comment: Staff recommends revising the amount of vernal pool mitigation to be consistent with the U.S. Fish and Wildlife Service approved Biological Assessment (approved on April 3, 2003). This amount would also be consistent with **BIO-21** of the PMPD.*

Page 48, California Tiger Salamander: "~~This salamander is a candidate species for federal listing and is a state-listed species of special concern. The project is within the historical range of the California tiger salamander and is within the vicinity of current known locations.~~ The USFWS has determined Distinct Vertebrate Population Segments (DPS) for the California tiger salamander and has proposed the Central California DPS as a candidate for listing as "threatened" (Fed. Reg. Friday May 23 Part IV 50 CFR part 17). The SMUD project is within this DPS. "

Page 49, first complete paragraph: "The habitat assessment demonstrates that the project site and laydown area could provide suitable California tiger salamander breeding and aestivating habitat. Predators of California tiger salamander are unlikely to get established in seasonal ponds, as their life cycles is adapted to permanent water bodies. SMUD completed a second year survey in the spring of 2003 and found tiger salamander larvae on the south side of Clay East Road 2.4 miles east of the intersection with Twin Cities Road (SMUD 2003, Group 2 Testimonies, attachment 2 page 5)."

Page 49, Giant garter snake: "The giant garter snake is a federally- and state-listed threatened species ~~and is classified as California Fully Protected.~~"

Page 71, **BIO-18**: "The project owner shall conduct the following surveys:

1. California tiger salamanders and western spadefoot toad surveys will be conducted the season prior to site or related facilities mobilization and potential aestivating sites (i.e., ground squirrel burrows) will be checked prior to site mobilization."

Comment: Based on the two years of survey results, staff believes that California tiger salamander aestivating habitat may be impacted by the CPP.

[No changes are recommended to the remainder of the condition or the verification portion of the condition.]

Cultural Resources

Page 75, first paragraph: Add the following as the last sentence: “The term cultural resources as defined in law includes buildings, sites, structures, objects, and historic districts.”

Comment: Staff recommends describing cultural resources as they are defined in law. The other definitions are somewhat general. These categories are evaluated for inclusion in the California Register of Historic Resources.

Page 76, first paragraph: “Historic archaeological resources are those materials usually associated with Euro-American exploration and settlement and the beginning of written historical records. Historic resources may also include archaeological deposits, sites, structures, traveled ways, artifacts, documents, and/or any other evidence of human activity. Prior to 1998, federal and state requirements identified historic resources as being greater than fifty years of age. Amendments to CEQA have removed the references to the fifty year designation, while the federal regulations maintain the requirement.” Historic resources that are not defined as archaeological would be part of the built environment. They would include, but not be limited to buildings, structures, objects; roads, transmission lines, bridges; historic districts and other aspects of the environment created by human beings.”

Comment: Staff recommends deleting these sentences. There is provision in both state and federal law for recognizing historic resources that are exceptional and that have obtained significance within the past 50 years. In California, this provision is found in Title 14, California Code of Regulations, section 4852(d)(2). National Register Bulletin #15 also provides guidance in assessing properties that are less than 50 years old. Because resources that are not yet 50 years old may be considered for eligibility to both the National and California Registers, staff relies on guidance from the State Office of Historic Preservation (OHP). The “Instructions for Recording Historical Resources,” March 1995, states, “The 45 year criteria recognizes that there is commonly a five year lag between resource identification and the date that planning decisions are made. It explicitly encourages the collection of data about resources that may become eligible to the NRHP or California Register of Historic Resources (CRHR) within that planning period” (OHP 1995, p. 2).

Page 81, Mitigation: “The Project Owner will designate a cultural resource specialist who will monitor excavation and, in the event of an unanticipated discovery, provide for the handling and curation of any recovered cultural resources. Conditions: ~~CULT-1~~ through ~~CULT-8~~ 9.”

Page 81, Cumulative Impacts, first paragraph: The potential for cumulative impacts may be associated with the degree of prehistoric and historic sensitivity. The project site is located in an area where both historic properties and archeological sites have previously been identified. ~~Most of the area proposed for use has already been disturbed by development. Therefore, cumulative impacts are not an issue at this time.~~

Comment: Staff recommends deleting these sentences. Adding additional disturbance to an area with cultural resources that has already been disturbed may increase rather than decrease cumulative impacts.

In addition, whether an area has been previously disturbed may not matter in terms of data that may be collected from a cultural resource. Stratigraphy would not be of much importance if the cultural resource was a single component archaeological site. Moreover, one might expect disturbance if a site was historic in nature, rather than prehistoric. If human remains are disturbed by the proposed project, whether they have previously been disturbed, is a significant impact.

Page 81, Cumulative Impacts, third paragraph: “However, project proponents for this and future projects in the area can mitigate impacts to as yet undiscovered subsurface archaeological sites to less than significant levels. Impacts can be mitigated by requiring construction monitoring, evaluation of resources discovered during monitoring, and avoidance or data recovery and curation for resources evaluated as significant (eligible for the CRHR or NRHP). If human remains are disturbed, then state law must be followed to mitigate the impact to less than significant.”

Comment: The sequence of mitigation is not complete without curation, if a significant cultural resource is found.

Page 90, STATE. Health & Safety Code 7050.5: “If potential Native American human remains are encountered, coroner notifies the Native American Heritage Commissioner within 24 hours.”

Page 90, STATE. Public Resources Code Section 5097.9: “If Native American human remains are encountered, the Native American Heritage Commissioner assigns Most Likely Descendent.”

Comment: There is no Native American Heritage Commissioner. There is a Native American Heritage Commission.

General Conditions

Page 98, PAL-2, first sentence: The project owner shall provide to the PRS and the CPM, for approval review, maps and drawings showing the footprint of the power plant, construction laydown areas and all related facilities.

Geology

Page 93, first complete paragraph: “SMUD indicates that the effects on the project site from a dam failure or other sudden release of water have been investigated. An instantaneous break 50 feet wide and the full height of the dam occurring simultaneously with the peak flow from a design storm would not flood the site. The resulting flow would be at least 10 feet below the design elevation (150 feet above mean

sea level) of the project construction pad. ~~The top of the engineered construction pad is 150 feet above mean sea level.~~"

Page 94, second paragraph, second sentence: "Loss of potential aggregate resources at the site ~~is~~ is not considered a significant impact because the resource is publicly owned by SMUD and it is not required by law to recover aggregate resources."

Page 102, PAL-5 Verification: "The project owner shall ensure that the PRS submits the summary of monitoring and paleontological activities in the MCR. (1) When feasible, the CPM shall be notified 10 days in advance of any proposed changes in monitoring different from the plan identified in the PRMMP. If there is an unforeseen change in the monitoring, the notice shall be given as soon as possible prior to implementation of the change. (2) The project owner shall ensure that the PRS submits the summary of monitoring and paleontological activities in the MCR."

Page 102, PAL-7, first paragraph, last sentence. "The PRR shall include an analysis of the collected fossil materials and related information and shall be submitted to the CPM for review and approval."

Noise

Page 123, third paragraph, first line: "Sound associated with the operation of the project will be produced by the ~~by the~~ inlets, ..."

Page 125, fourth complete paragraph, last sentence: "...R2 – a permanent residence on Kirkwood Street 5,100 – feet from the project."

Public Health

Page 137, PUBLIC HEALTH-1: "The project owner shall develop and implement a Cooling Water Management Plan to ensure that the potential for bacterial growth in cooling water is kept to an absolute minimum. The Plan shall include ~~weekly~~ monitoring of biocide and chemical biofilm prevention agents, periodic maintenance of the cooling water system to remove bio-film buildup, and testing to determine the concentrations of Legionella bacteria in the cooling water."

Visual Resources

Page 178, VIS-1: "**VIS-1** The project owner shall ensure or shall require the following as a condition of contract with its contractors to construct the gas pipeline:"

[No changes are recommended to the remainder of the condition or the verification portion of the condition.]

Water & Soils

Page 194, last paragraph: “If the groundwater generated from the dewatering activities is determined to have some level of contamination, mitigation will be required in order to satisfy the discharge limits of the ~~refinery’s~~ project’s NPDES permit.”

Page 197, last paragraph, last sentence: “The project would not contribute to cumulative water quality impacts through minor stormwater discharges that, ~~however,~~ will be controlled to a less than significant level through the use of BMPs addressed in the SWPPPs and the proposed Conditions of Certification.

*Page 200, **Water Quality-6:*** “All stormwater flow to the watercourse (referred to in this report as the East Tributary) currently entering the site at the location of a culvert across Clay East Road approximately 350 ft west of the ~~northeast~~ southeast property corner, plus that portion of the laydown area graded to drain to this watercourse, shall be diverted to the east around the site and into Clay Creek using new culverts and a drainage channel designed for the 100-year peak discharge.”