

STATE OF CALIFORNIA

Energy Resources Conservation
And Development Commission

In the Matter of:)	Docket No. 01-AFC-19
)	
Application for Certification)	Staff's Opening Brief on the Second
of SMUD's Cosumnes Power)	Evidentiary Hearing and Reply Brief
Plant Project)	on the First Evidentiary Hearing
_____)	June 13, 2003

INTRODUCTION

On May 16, 2003, the Cosumnes Power Plant Project (CPP) Committee (Committee) issued a Briefing Order (Order) for the CPP. That Order established a filing date for staff and the applicant, Sacramento Municipal Utility District (SMUD), of June 13, 2003, for both Opening Briefs on issues addressed during the second set of evidentiary hearings and Reply Briefs on issues addressed during the first set of evidentiary hearings. This is staff's combined brief on both sets of topics, addressing the arguments contained in Opening Briefs on Group 1 topics, as well as Biological Resources, Alternatives, and issues associated with Public Health and Air Quality that were not addressed until the second set of evidentiary hearings.

REPLY BRIEF ON THE FIRST EVIDENTIARY HEARING

I. Staff's Testimony on Visible Plumes is Unbiased and Supports a Finding that the Project's Plumes Will not Constitute a Significant Adverse Impact.

In her Opening Brief, Intervener Ms. Kathy Peasha stated that staff's analysis of visible plumes was biased and incomplete. (Peasha Brief on Phase 1 Issues, p. 2) She bases this claim on the fact that the staff consultant who prepared the visible plumes portion of the Preliminary Staff Assessment is not the same person who sponsored the visible plumes testimony in the Final Staff Assessment (FSA). However, Intervener Ms. Peasha ignores the testimony of the consultant himself, who stated that he did not know what conclusions he would reach about the significance

of the plumes using the modeling results that are the basis of the staff's analysis. (3/14/2003 RT, p. 106:19-25 – 107:1-3) Clearly, Ms. Peasha's criticism of staff's credibility is unsupported. Moreover, Ms. Peasha offered no evidence indicating that the visible plumes analysis that was sponsored by staff is flawed in any way.¹ The Committee should find that staff's analysis of the impacts of the project's visible plumes supports a conclusion that the plumes will not constitute a significant adverse impact.

II. Conditions Proposed by Staff and Agreed to by SMUD Provide Sufficient Mitigation for the Project's Contribution to Cumulative Visual Resources Impacts.

Intervener Ms. Peasha also claims that the project's contribution to significant cumulative visual resources impacts is not sufficiently mitigated. She bases this claim on her belief that it will take a long time for the landscaping that staff has proposed as mitigation to reach maturity. However, she did not specifically address the revisions to the Conditions of Certification that were filed prior to the hearings on visual resources. These revisions require the project owner to install landscaping at nearby residences beginning with project mobilization. (Staff's Supplemental Testimony and Revised Conditions of Certification, p. 54, filed March 13, 2003) This landscaping, which is in addition to that which will be implemented along SMUD's western property boundary and along the entire length of the plant site that fronts Clay East Road, will obviously provide effective screening for residents relatively quickly. Because residents can choose to have the project owner install the landscaping several years before the completion of the project, there will be a considerable amount of visual screening available to residents even as the project begins commercial operation.

Ms. Peasha offered no testimony to support her claims that the mitigation proposed for the project's contribution to significant adverse cumulative visual resource impacts will be insufficient. Given staff's expert testimony that the landscaping requirements will provide effective screening and minimize views of the new structures, the Committee should find that the

¹ Intervener Ms. Peasha also states that staff testified that the plumes would have a significant effect but for the existence of the Rancho Seco cooling towers. (Peasha Opening Brief, p. 2) This statement is incorrect. Staff cited a number of factors supporting its conclusion that the impact of the plumes would be adverse, but less than significant.

project's contribution to cumulative visual resource impacts will be appropriately mitigated through implementation of the proposed Conditions of Certification.

III. SMUD has Failed to Address the Health Impacts that May Be Caused by the Contribution of Ammonia Slip to Particulate Formation.

In its Opening Brief, SMUD argues that staff's recommendation for a 5 ppm ammonia slip level is unjustified because both it and the Sacramento Metropolitan Air Quality Management District (SMAQMD) have indicated that doing so will not provide any health benefits. (SMUD's Opening Brief, p. 6) SMUD, however, ignores the testimony of the SMAQMD witness who stated that the SMAQMD's review of the ammonia slip issue was limited to potential acute, chronic, and cancer risks from the ammonia itself. In fact, the SMAQMD did not consider the potential for secondary particulate formation *at all*. (3/13/2003 RT, p. 25:8-12) There is overwhelming evidence of the serious health impacts caused by exposure to excessive levels of particulates; that is why both the state Air Resources Board and the U. S. Environmental Protection Agency have recently promulgated new standards. (See 5/12/2003 RT, p. 380:25 – 381:1-9) Moreover, both the SMAQMD and SMUD agree that the ammonia slip from this project could contribute to secondary particulate formation. (3/13/2003 RT, p. 25:8-12; 3/13/2003 RT, p. 68:12-13) Given the potential for the project to contribute to higher levels of secondary particulates in an area that is already non-attainment for PM10, and is likely to be non-attainment for the new PM2.5 standards when those designations are made, it is simply not accurate to state that there is no health benefit from a lower ammonia slip level. Staff urges the Committee to recognize that the project has the potential to exacerbate existing violations of particulate standards, and to require that SMUD mitigate this impact by limiting its ammonia slip to 5 ppm.

SMUD also claims that staff has been inconsistent in its approach to ammonia slip. While it is not clear why this argument supports SMUD's request for the higher level in this case, we note that the appropriate ammonia slip level is a case-by-case determination, based on a number of factors. These factors include whether the local district considers the potential for secondary

particulate formation in its analysis, whether there is a BACT level for ammonia², and whether the area is in attainment for state and federal ambient air quality standards for particulates. We also note that SMUD's characterization of staff testimony in the San Joaquin Valley Energy Center proceeding is quite misleading. Testimony that the applicant should control its ammonia emissions to the lowest extent possible in that proceeding is *not* "diametrically opposed" to staff testimony in this case. Rather, staff believes that ammonia emissions should be controlled to the maximum extent possible and that the trend towards requiring projects to meet a 5 ppm ammonia slip level and a 2 ppm NO_x level (*See*, 3/13/2003 RT, p. 7-24) supports a similar requirement in this case.³

IV. SMUD has Mischaracterized the Stipulation Regarding Water Use for Phase I.

In February, 2003, staff and SMUD entered into a stipulation (Stipulation) that addresses water use for both phases of the project. In its Opening Brief, addressing Water and Soil Resources, SMUD asserts that, "the Stipulation requires SMUD to *study* the use of reclaimed water. . . for Phase II". (SMUD Opening Brief, p. 28, emphasis added) That is not what the stipulation requires. The Stipulation states that if reclaimed water is available within 15 miles, it will be used, to the extent the Energy Commission determines it is feasible.⁴ (FSA – Part 2, Water and Soil Resources Exhibit 1)

It is important to understand that the Stipulation between staff and SMUD arose out of concern by staff over the project's use of fresh water and the need for SMUD to construct Phase I in the immediate future. Although staff found that the use of recycled water in Phase I was infeasible due to these timing issues, staff nonetheless believes it is appropriate to minimize the use of fresh water overall. Under the stipulation, all of Phase II water needs, and possibly some of all of Phase I water needs, will be met through the use of recycled water. Because of the degree of concern expressed in virtually every Energy Commission licensing case in which fresh water is

² The only air district in the state that has established a Best Available Control Technology level for ammonia - the South Coast Air Quality Management District -- has adopted a 5 ppm level.

³ Staff notes that the proposed ammonia slip limitation contained in AQ-SC7 contains language allowing for exceedences during transient hours.

⁴ An offset of FSC water in Phase II by other reclaimed water may be considered under Item 4 of the Stipulation.

proposed to be used, Staff believes it is important to be very clear about this issue. Under the Stipulation, the Energy Commission will determine whether such a source is feasible, and if so, SMUD will be *required* to use it. Any discussion of this issue in the Presiding Member's Proposed Decision should reflect this fact.

OPENING BRIEF ON THE SECOND EVIDENTIARY HEARING

I. The Revisions to Staff's Testimony on the Sufficiency of Particulate Mitigation are Supported by the Record.

In testimony filed March 13, 2003, staff provided revisions to its Air Quality testimony. The most major revision concerned staff's conclusions about the sufficiency of the emission reduction credits (ERCs) identified in the Final Determination of Compliance (FDOC) issued by the Sacramento Metropolitan Air Quality Management District (SMAQMD). In the Final Staff Assessment - Part 1 (FSA - Part 1), filed February 11, 2003, staff concluded that the ERCs were insufficient to mitigate the project's contribution to potential PM_{2.5} violations. In the March 13, 2003 filing, staff revised its testimony and concluded that the ERCs were sufficient.

These revisions were based on three factors. First, staff initially assumed that 100% of the project emissions will be PM_{2.5}. In fact, only 95% of the emissions are likely to be PM_{2.5}. Therefore, the project's PM_{2.5} emission estimates were lowered. Second, in assessing the sufficiency of the ERCs identified in the FDOC in mitigating PM_{2.5} impacts, staff initially discounted *only* the road paving ERCs to reflect the PM_{2.5} portion. In the revision, staff also discounted two other ERCs that represent sources that primarily emit PM₁₀, reducing the amount of ERCs available.⁵ Finally, in the FSA - Part 1, staff included the distance ratio required by SMAQMD rules, the effect of which was to reduce the available ERCs. In its revision, staff pointed out that inclusion of the distance ratio was inappropriate for determining the sufficiency of PM_{2.5} ERCs under the California Environmental Quality Act (CEQA).

⁵ The ERCs are provided pursuant to SMAQMD rules requiring ERCs for PM₁₀ and derived from a variety of sources. Staff concurs with the SMAQMD that the project's PM₁₀ liability is met, but also evaluated the project's potential to contribute PM_{2.5} to the ambient air, due to the fact that staff believes the area will be designated non-attainment for the federal and state 24-hour PM_{2.5} standards. However, since districts are not yet required to have adopted attainment plans for PM_{2.5}, the SMAQMD did not evaluate the project's PM_{2.5} emissions.

Therefore, that discount was removed, increasing the amount of ERCs available to offset the project's PM2.5 liability.

As a result of the revisions, staff concluded that the project will not produce PM2.5 emissions in excess of the ERCs provided during the months that PM2.5 violations are most likely. Therefore, staff concluded that no additional mitigation is required and deleted its proposal to require that SMUD implement a wood stove replacement program. No party has presented any evidence indicating that staff's calculations are flawed. Staff urges the Committee to concur with staff and find that the ERCs identified in the FDOC will mitigate the impacts caused by the project's PM2.5 emissions.

II. The Conditions of Certification are Sufficient to Ensure that the Project will not Cause Significant Adverse Impacts to Biological Resources.

Staff filed its Biological Resources Testimony in the FSA - Part 3 on April 24, 2003. In that testimony, staff provided an extensive discussion of the project setting, the potential impacts that could be caused by project construction and operation, and included a comprehensive set of Conditions of Certification to ensure that any potential impacts are adequately mitigated. Although Intervener Ms. Peasha conducted extensive cross-examination of SMUD's biological resources witnesses at the hearings, the testimony she filed (sponsored by Diane S. Moore) was quite brief. Basically, the testimony states that there has not been enough time to review important information about biological resources and that the inventories and surveys of biological resources are inadequate.

Staff disagrees with Intervener Ms. Peasha's conclusions. As staff testified with respect to burrowing owls, the surveys that were done provide sufficient information on which to base a professional conclusion about potential significant impacts. (5/12/2003 RT, p. 261:17) Moreover, the fact that pre-construction surveys are required means that presence at the time of construction will be assessed and mitigation required if presence is confirmed. (*Id.* at 261:17-23) Similarly, the two pre-construction surveys required by **BIO-18** for California tiger salamander, Swainson's hawk, and nesting birds will ensure that any other sensitive species present will be

detected. Other conditions of certification also require mitigation for any such species that are encountered. (See, e.g. **BIO-14 –BIO-20**)

In addition, staff disagrees that the inventory of suitable habitat for vernal pool species is inadequate. Staff notes that the testimony sponsored by Ms. Moore does not identify any additional information that is needed, nor does it indicate that any of the information relied upon by staff is incomplete. Instead, she appears to be stating that staff should not assume that the federal agencies will concur with staff’s assessment of impacts to vernal pool species and habitat. Staff recognizes that other federal agencies may ultimately differ from staff about the appropriate amount of habitat loss for which SMUD must compensate. It is for that reason that staff’s proposed Condition of Certification **BIO-14 – BIO-22** identifies a minimum amount of compensation acreage (based on staff’s impact assessment), and that proposed Conditions of Certification **BIO-10** and **BIO-11** require SMUD to obtain federal permits and include any conditions contained therein in the Biological Resources Mitigation, Implementation, and Monitoring Plan (BRMIMP). Thus, staff has completed an assessment and identified appropriate measures to mitigate identified impacts. Should federal agencies require additional measures, those will be included in the Commission’s Conditions of Certification through incorporation in the BRMIMP.⁶

In short, staff’s assessment of the impacts to biological resources that may be caused by the project is complete, and the mitigation measures identified in the proposed conditions of certification are sufficient to ensure that no significant adverse impacts will occur. Staff urges the Committee to adopt staff’s proposed conditions of certification and find that the project, as modified by the conditions of certification, will comply with applicable laws and not cause significant adverse impacts to biological resources.

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⁶ Unfortunately, as of the time of this brief, staff discussions with the U.S. Fish and Wildlife Service and the California Department of Fish and Game indicate that SMUD has made little to no progress in finalizing the contracts needed to purchase the compensatory habitat required under the proposed Conditions of Certification for Vernal Pool Preservation Habitat, Vernal Pool Creation Habitat, Giant Garter Snake Habitat, and Swainson’s Hawk Habitat.

III. There is No Evidence in the Record that the Project Will Cause Significant Impacts to Public Health.

Intervener Dr. Roskey filed testimony in which he stated that the project's air emissions could cause between 3 and 9.2 deaths per year. (Testimony of Michael Roskey, p. 12) As staff persuasively demonstrated at the hearing, Dr. Roskey's conclusions are flawed. First, Dr. Roskey completely ignored the benefit of the ERCs being provided by SMUD; in other words, he based his conclusions only on the project's particulate emissions and ignored the concomitant reductions in particulate emissions that will occur. Staff agrees that if left unmitigated, the project's particulate emissions could cause health effects; that is why staff evaluated the sufficiency of the particulate offsets in its analysis. In fact, staff's conclusion that the project will not cause health impacts due to particulate emissions is based on the fact that these emissions are fully offset.⁷ (5/12/2003 RT, p. 381:18-25)

In addition, Dr. Roskey inappropriately used an exposure value (derived from modeling) that represents the highest annual increase and applied it to the population as a whole. As staff explained, the maximum impact occurs at a single specific location; the increase in ambient concentrations due to the project is less at all other locations. (*Id.* at p. 383:16-25 – 384:1-3) Therefore, assuming that the entire population is exposed to the maximum increase is inappropriate. Moreover, staff explained that the modeling used to derive these estimates tends to be conservative and that ground level estimates of increases used by Dr. Roskey are overstated. (*Id.* at p. 387:8-11) Finally, staff provided testimony demonstrating that it is inappropriate to determine project-specific impacts from epidemiological studies. (*Id.* at 387:17-18) In short, the expert testimony presented by staff indicates that with the ERCs provided, the project's air emissions will not have a significant effect on public health.

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⁷ Similarly, in his Opening Brief, Dr. Roskey states that "Commission staff and the applicant have preferred to bow to the 'inevitability' of growth while shrugging their shoulders at the consequences for the population that must live and work in the environment that is created." (Opening Brief of Michael Roskey, p. 3) This statement also completely ignores the fact that the project's emissions are fully offset by the ERCs provided by the applicant and that the regional ambient air will be no different before the project than after. (5/12/2003 RT, p. 383:10-12)

CONCLUSION

In conclusion, staff believes that all issues associated with SMUD's proposed project can be adequately addressed by adopting the proposed conditions of certification identified by staff. These conditions will ensure that the project is constructed and operated in a manner that complies with applicable laws and protects environmental quality.

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Respectfully submitted,

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