CALIFORNIA ENERGY COMMISSION
1516 NINTH STREE T
SACRAMENTO, CA 95814-5512

February 5, 2002

Mr. Scott Busa
FPL Company
700 Universe Boulevard
Juno Beach, Fl. 33408-0420

Re: TESLA POWER PLANT - DATA REQUESTS

Dear Mr. Busa:

Pursuant to Title 20, California Code of Regulations, section 1716 and section 2025, the California Energy Commission staff 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.

Enclosed are data requests in the area of air quality, alternatives, biological resources, cultural resources, geology, hazardous materials management, land use, noise, power plant reliability, soils and water resources, traffic and transportation, transmission system engineering, and visual resources, waste management, and worker safety. Please provide written responses to the enclosed data requests on or before March 8, 2002.

If you are unable to provide the information requested, need additional time to provide the information, or object to providing it, then please send a written notice to both the Committee and me within 10 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 (f)).

If you have any questions regarding the enclosed data requests, please contact me at (916) 654-3929 or at jcaswell@energy.state.ca.us.

Sincerely,

Jack W. Caswell
Energy Facility Siting Project Manager

Enclosure

cc: Docket (01-AFC-21)
POS
Grattan & Galati
Lida Moussavian, Foster Wheeler

PROOF OF SERVICE (REVISED) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 2-5-02

Technical Area: Air Quality
Author: Brewster Birdsall

BACKGROUND

Emissions Calculation: Grading
The project would require a substantial amount of grading and earthwork to cut and fill 115,000 cubic yards over the construction period (AFC p. 3-54). Controlling fugitive dust emissions with water application and other dust suppression techniques normally provides an emission reduction of up to approximately 70%. Staff questions the ability of the project to achieve a 90% control efficiency, as was assumed in the emission calculations of Appendix K-3.

DATA REQUEST

1. Please provide documentation and references that support use of the proposed control efficiency of 90% (AFC Appendix K-3) and identify the specific measures that would be implemented to achieve this level of control for fugitive dust.

BACKGROUND

Emissions Calculation: Construction Equipment
Emission rates predicted for NOx, and possibly other pollutants, from onsite and offsite construction equipment appear to rely upon outdated or inappropriate emission factors. For example, NOx emissions from peak monthly onsite activity (AFC Table 5.2-18a) are less than those from peak monthly offsite activity (AFC Table 5.2-18b) largely as a result of emission calculations for pickup truck emissions. On-road pickup truck emissions may be estimated using on-road emission factors from the Air Resources Board, Motor Vehicle Emission Inventory (MVEI) model. Staff is concerned that emission rates may be over estimated for this type of equipment. This is a potential issue because the original modeling analysis (AFC p. 5.2-54) shows a violation of the 1-hour standard for NO_2. Additionally, strategies to manage NOx emissions during construction were not identified in the AFC.

DATA REQUEST

2. Please discuss if on-road emission factors were assumed for pickup truck emission rates shown in Appendix K-3, and, if appropriate, recalculate construction emissions for onsite activities with on-road emission factors. If the emission factors were not based on an assumption of on-road performance (e.g. were not based on the MVEI factors), then please describe the source of the emission factors.

3. To minimize project emissions of NOx during construction and mitigate potential violations of the 1-hour NO_2 standard, please identify what measures, if any, would be included with the project.

BACKGROUND

Construction Impacts: Modeling

In responses to Data Adequacy (refer to 11/29/01, Updated Modeling Analysis, Table 6) NO_2 impacts from construction were modeled using a first-order exponential decay of conversion of NO emissions to NO_2. The applicant relies on this method as a means of demonstrating that NO_2 concentrations from construction activities would be less than the ambient air quality standards. The ozone limiting method (OLM) originally used in the AFC (p. 5.2-21) predicted NO_2 concentrations above the standards (Table 5.2-29). Dispersion modeling of NO_2 impacts using a first-order exponential decay method was not identified in the modeling protocol of Appendix K-1. Based on staff's experience with another project, staff is concerned that the exponential decay method may not be specifically appropriate for characterizing the decay of NO to NO_2, but might actually be more appropriate for characterizing a broader range of NxOx decay. As a result, staff considers this approach unacceptable, and use of a U.S. EPA guideline method (such as OLM) is preferred. An alternative model is known as PVMRM. It considers near-field reactions of ozone with NOx while accounting for loss of ozone in that reaction. Staff can provide more information on this approach if the applicant is interested.

DATA REQUEST

4. Please remodel construction NO_2 impacts with a refined approach using for example, the OLM model. Please note to account for emission changes that may be caused by responses to other data requests. Also, please note that construction sources can be modeled using hourly temporal variables reflecting each source's day-time construction schedule.

BACKGROUND

Emissions Calculation: Availability

The anticipated availability of the power plant is claimed to be 96% on an annual basis (AFC p. 1-3 and 3-10). Based on 8,760 hours per year, this is equivalent to 8,410 hours of plant operation. In the responses to Data Adequacy (11/29/01, Updated Modeling Analysis), the maximum emissions are based on 8,201 hours per year of system operation (Table 1 of 11/29/01, Updated Modeling Analysis).

DATA REQUEST

5. Please revise emission estimates and the ambient air quality impact assessments so that they are based on the 96% anticipated availability of the

power plant or explain why emissions should be based on 8,201 hours per year of operation.

BACKGROUND

Operation Impacts: Short-Term Emissions

Maximum short-term emission rates for the four combustion turbines would equal 600 pounds of NOx per hour when all four turbines are in simultaneous startup mode (AFC Table 5.2-23 p. 5.2-42). A preliminary review of dispersion modeling files (submitted electronically on CD-R, updated November 2001, file "t1h98NOc.dta") for 1-hour NO_2 impacts indicates that worst case emissions were modeled assuming only two turbines in startup mode, contrary to the methodology presented in the text (AFC p. 5.2-42) and in Appendix K-4. Without further analysis, staff may recommend a Condition of Certification that allows only two turbines in startup mode at any one time.

DATA REQUEST

6. Please reevaluate 1-hour ambient air quality impacts with all four combustion turbines in startup mode and provide updated results as necessary or explain whether technical or design limitations would make simultaneous startup of all four turbines impossible.

BACKGROUND

Best Available Control Technology for Combustion Turbines

The AFC specifies that the proposed BACT levels from the combustion turbines will be 2.0 parts per million (ppmvd) of NOx and 6 ppmvd of CO on a three-hour average (AFC Table 5.2-13 p. 5.2-26). The U.S. EPA recently identified a federal Lowest Achievable Emission Rate (LAER) for this type of equipment to be 2 ppmvd for both NOx and CO on a 1-hour average for NOx and 3-hour for CO. (The U.S. EPA made this position on two occasions in the recent months. Attachment AQ-1 includes copies of an October 25, 2001 letter to the South Coast Air Quality Management District and a June 19, 2001 letter to the San Luis Obispo Air Pollution Control District.) Because the Tesla equipment is required to implement BACT, which would be as stringent as federal LAER (AFC p. 6.2-20), the proposed BACT levels should match the levels specified by the U.S. EPA.

DATA REQUEST

7. Please identify proposed BACT levels from the gas turbines that match the levels specified by the U.S. EPA, or provide an analysis that demonstrates such limitations are not achievable. If necessary, please update the emission calculations and dispersion modeling analyses that would be affected.

BACKGROUND

Mitigation of Primary PM_{10} Impacts

Paving roads has been introduced as a potential strategy for mitigating impacts from project PM_{10} emissions (AFC, p. 5.2-73). Staff is concerned that this approach would provide benefits to an area local to the controlled source and not in the area of the project impacts. Because road dust is normally of a mineral or geologic nature, these particles tend to be larger (greater than 2.5 microns) and less likely to disperse over great distances. Also, staff is concerned that control of geologic PM_{10} from roads would provide primarily summertime benefits near the affected road while the project's combustion-related PM_{10} impacts have the potential to be year-round. Without further analysis of the effectiveness of the mitigation strategy, staff is concerned that the proposed mitigation may not be adequate or appropriate for reducing project impacts. Staff believes that an air dispersion modeling analysis of the potential benefit of the PM_{10} offsets along with an analysis of ambient PM_{10} speciation in the Northern San Joaquin Valley will indicate whether the Applicant's proposed PM_{10} offset and mitigation strategy effectively mitigates the project's potential PM_{10} impacts.

DATA REQUEST

8. Please provide a PM_{10} dispersion modeling analysis showing the area of influence of the mitigation strategy. This should be accomplished by modeling the proposed emission reduction credits in the location of the credit source and estimating the change in PM_{10} concentrations for both the 24-hour and annual averaging times that would occur in the vicinity of the Tesla project impacts. To maintain consistency with the analysis in the AFC, use of the Industrial Source Complex model with Tracy meteorological data is preferred. Please illustrate the benefit provided by the proposed credits in the vicinity of Tesla by displaying the results of this modeling analysis in the form of isopleths, similar to those shown in AFC Figures 5.2-12 and 5.2-13.

9. Please provide an analysis of ambient PM10 monitoring data for the Tesla project area (available from the California Air Resources Board or San Joaquin Valley Air Pollution Control District) that characterizes the composition of the existing ambient PM10. This response should show how the existing contribution of geologic or mineral PM10 varies throughout the year and discuss how control of PM10 from roads would provide year-round benefit.

10. If the previous data requests reveal project impacts that would not be reduced by the benefits of the current mitigation strategy, please propose improvements to the mitigation strategy that would provide localized or year-round benefits, as necessary.

BACKGROUND

Mitigation of Secondary PM_{10} Impacts

Because sulfur oxides (SOx) are precursors to PM_{10} and the project affects areas that are designated nonattainment for PM_{10}, staff proposes that the applicant offer SOx offsets or other measures as means of mitigating the project's potential secondary PM_{10} impacts. Staff believes that project SOx emissions should be offset at a ratio of 1-to-1 to mitigate sulfur-based PM_{10} impacts.

DATA REQUEST

11. Please discuss the project's contribution to the formation of secondary PM_{10} as a result of SOx emissions and identify a strategy to mitigate sulfur-based secondary PM_{10} impacts.

BACKGROUND

Completeness of Offset Package

Additional information on the offset strategy must be provided to staff (to supplement AFC Section 5.2.5 and the confidential filing dated November 21, 2001). The total credits currently acquired by Tesla, reported in the confidential filing, fall short of those needed to mitigate the project. Staff recognizes that the task of obtaining offsets is continuing and credit procurement will evolve. In the Staff Assessment, staff must certify that all credits used to offset the project are real, quantifiable, surplus, permanent, and enforceable. In order for staff to complete this analysis, updates to the status of the offset strategy must be filed in a timely manner.

DATA REQUEST

12. Please submit to staff timely updates of the offset strategy. The details of the offset package may remain confidential, given the status of purchase and option negotiations until release of the Preliminary Determination of Compliance by the air district. The offset strategy will then be summarized in the Preliminary Staff Assessment.

BACKGROUND

The applicant has submitted an application to the BAAQMD for the Determination of Compliance (CEC Dockets for 01-AFC-21, BAAQMD letter December 20, 2001). The applicant has also informed CEC staff that negotiations to discuss project impacts are also underway with the San Joaquin Valley Air Pollution Control District (SJVAPCD). Staff recognizes that the applicant may prepare additional permitting-related information or other analyses, if they are requested, for submittal to the BAAQMD, the SJVAPCD,

or the U.S. EPA. Because ongoing submittals could affect staff's review of this case, staff needs to be aware of them.

DATA REQUEST

13. Please continue to provide CEC staff copies of permitting-related submittals (e.g., any written commitments or additional analyses) made to the BAAQMD, the SJVAPCD, or the U.S. EPA until such time as the Commission decision for this AFC has been finalized.

Technical Area: Alternatives
Author: Negar Vahidi and Marc Campopiano

BACKGROUND

Pursuant to CEQA, alternatives must be considered that have the potential to (a) meet most project objectives, and (b) reduce or eliminate impacts of the proposed project. While the Applicant's stated project objectives are fairly broad, the Applicant has limited alternative sites to a very small geographic area. Based on the Project Objectives described in Section 2.1, it would appear that the proposed project could alternately be located in many areas within California. Given the Alternative Site Selection Criteria described in Section 3.10.2,

DATA REQUEST

14. Please explain why alternatives are limited to the small geographic area surrounding the proposed project and why other alternative sites further from this area would not meet project objectives.

15. Provide a discussion of the possibility of use of land parcels immediately adjacent to the Tesla Substation for development of TPP. If sites adjacent to the Tesla Substation are not feasible, provide a list of reasons.

BACKGROUND

Pursuant to the California Public Resources Code § 25523 the proposed project should (to the extent possible) be compatible with relevant local land use plans.

DATA REQUEST

16. Provide a comparative analysis of the agricultural merits of the proposed site and the seven alternatives, given that the proposed site is currently under a Williamson Act Contract (California Land Conservation Act of 1965). In the analysis, include the parcel number of each alternative site and a description of whether each alternative site is under a Williamson Act Contract or a Farmland Security Zone contract. Include the California Department of Conservation, Farmland Mapping and Monitoring Program's 1998 Alameda County and 1998 San Joaquin County Important Farmland Map (IMF) classification for each alternative site, the proposed site, and lands through which linear facilities alignments traverse (include exact IMF classification, not just a "Yes/No" answer to whether parcels are considered significant, as described in Table 3.10-2).

17. If parcels are under any agricultural land preservation contracts, provide the duration remaining on the contract and the contract status.

18. Discuss the compatibility of the alternative sites with the Williamson Act (California Land Conservation Act of 1965) or any other agricultural land conservation laws and ordinances. Include linear features in the analysis.

BACKGROUND

Biological impacts need to be addressed for each alternative and compared to the proposed project.

DATA REQUEST

19. Provide a more complete description of the potential biological impacts of each alternative. Provide a table that clearly and explicitly specifies how much habitat would be lost/degraded (both permanently and temporarily) for special status species for each alternative, compared with the proposed project. Use Biological Resources Table 5.3-7 as an example. Include linear features in the analysis.

20. Provide a more quantitative analysis of the potential impact to riparian habitats mentioned in Alternatives B, D and G. Analyze the affect that the degraded habitat or riparian areas would have on sensitive or special-status species. Include linear features in the analysis.

21. Provide an analysis of potential biological impacts for Alternative G. This should include a quantitative description of how much habitat would be lost/degraded (both permanently and temporarily) for special status species and/or and riparian species.

22. Describe the mitigation measures that would be required by the USFWS, CDFG and any other regulatory agencies for potential biological impacts on alternative sites. Include linear features in the analysis.

Technical Area: Biological Resources
Author: Andrea Erichsen
Technical Senior: Jim Brownell

BACKGROUND

Federal and state listed species (listed in Table 5.3-1) are known to inhabit in the area, and potentially suitable habitat exists in the project area for some of the species. There are several permitting agencies and permit types listed in Table 5.3-9 as related to biological resources. The applicant must comply with all laws related to the protection of biological resources and the completion of required permits impacts the project schedule. Consultation with the U.S. Fish & Wildlife Service (USFWS) is required under the law and must be initiated by a third party agency, in this case, the Bay Area Air Quality Management District.

DATA REQUEST

23. Provide an update of permit progress and a detailed schedule for all of the permits listed in Table 5.3-9, including:

24. U.S. Fish & Wildlife Service (USFWS) Section 7 consultation;

25. California Department of Fish & Game (CDFG) Streambed Alteration Permit;

26. CDFG take permit or a consistency determination; and

27. Army Corps of Engineers (ACOE) permits required under the Clean Water Act.

28. Please provide a detailed update on the status and schedule for consultation with the National Marine Fisheries Service (NMFS) regarding potential impacts of the project's water use on listed Delta fish.

BACKGROUND

In the AFC page 5.3-31 and Appendix J-1-12 there are discussions of surveys for San Joaquin kit fox. The text on page 5.3-31 states that a survey conducted in June 2001 found 17 potential dens on the site. Staff requires detailed information on survey methods and survey results to determine the potential adverse impacts from the proposed project.

DATA REQUEST

29. Please provide additional information on the kit fox surveys. Were the survey methods approved by the USFWS (according to protocol) and who specifically conducted the surveys? This is unclear in Appendix J Figure 5-1. Provide a

reference for survey methods. How long were the cameras operated that were used to monitor the potential dens?

30. Why does the map provided (Map 5.3-3) only indicate one potential kit fox den at the northern terminus of the Ravenswood transmission line? Were the 17 potential dens found on site mapped? If so provide the detailed maps of potential den locations in relation to project facilities and activities.

BACKGROUND

On pages 5.3-30, 31, and 34 there are discussions of the gas and water supply lines that will be installed in areas containing burrowing owl nest sites. Page 5.3-42 discusses construction mitigation for disturbance to owl burrows. Recently updated maps were submitted for the gas line and this map, Figure 5.3-3 indicates that four burrows were detected between MP1.0 and MP2.0.

DATA REQUEST

31. Identify the distance zones the construction will actually be to the documented burrowing owl burrows?

32. Please identify the construction schedule that confirms that the gas and water pipelines will not be installed during burrowing owl breeding season, February1-August 31 (page 5.3-42).

BACKGROUND

In general the AFC lacks a clear description of construction mitigation measures related to avoiding and minimizing impacts to special status species and sensitive habitats. Staff acknowledges that sensitive habitats are proposed to be avoided as much as possible. Pages 5.3-42 and 5.3-43 discuss mitigation measures related to burrowing owl, San Joaquin kit fox, and California tiger salamander.

DATA REQUEST

33. Please provide a list of all general avoidance and minimization measures to be implemented to avoid impacts to all special status species and sensitive habitats potentially impacted by all construction and operation activities related to the project.

34. Please provide more detailed mitigation measures including the plan and process you intend to implement, to prevent injury to San Joaquin kit fox and California tiger salamander during construction.

BACKGROUND

On page 5.3-33 there is discussion of the transmission lines. Staff requires more detailed (higher resolution) mapping of habitats along the routes as well as methods and a tentative schedule (timeframe) for installing the lines. Staff also requires a list of all mitigation measures associated with transmission line construction. Staff needs this information to ensure proper mitigation for impacts to riparian and wetland habitats and special status species existing along the route.

DATA REQUEST

35. Please provide detailed methods for transmission line installation including the timeframe (duration of activity, time of year of the activity - to avoid impacts to sensitive biological resources), and more detailed maps and description of riparian areas including tree species and location. Will any trees be removed, if so how will they be mitigated?

BACKGROUND

In the AFC page 5.3-40 there is a brief discussion of operational indirect impacts of the proposed project. Staff requires more detail on the indirect impacts in order to ensure that an appropriate level of analysis has been complete and that all adverse impacts are mitigated to less than significant levels.

DATA REQUEST

36. Please provide a more detailed breakdown and analysis of indirect impacts such as traffic, lighting, air pollution and impacts to wetlands in the area (expand the literature review and provide maps showing wetlands and predicted paths of air pollution of concern), noise, and collision of birds with facility structures.

37. For all indirect impacts, please provide a list of mitigation measures including avoidance and minimization measures to be implemented during all phases of the project. Mitigation measures should be organized according to those applying during construction, operation, maintenance, "at all times", and those related to closure of the proposed project.

BACKGROUND

A Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP) is required under the AFC process. The BRMIMP will contain procedures, contacts, permits, schedules, and details of approved mitigation and monitoring measures to ensure that the construction and operation of the power plant do not significantly harm biological resources.

DATA REQUEST

38. Please provide an outline of the draft BRMIMP.

39. Please provide an outline and format concept(s) (i.e. video, posters, pamphlets, booklets) of the Worker Environmental Awareness Program (WEAP).

40. Please provide a timeframe for submittal of the draft BRMIMP and draft WEAP.

BACKGROUND

Table 5.3-7 of the AFC provides a summary of project facilities and permanent and temporary impacts to special status species, San Joaquin kit fox and burrowing owl. Staff requires a summary of total acres impacted as well as the Applicant's mitigation acreage range. Staff understands that the total may as yet be determined pending consultation with the USFWS and CDFG.

DATA REQUEST

41. Please provide the permanent and temporary acreage's for the project, separating out habitat types as necessary.

42. Please provide an update on the general features of off-site habitat mitigation, including range of acreage being considered, general areas being considered (no need to include confidential parcel information), proximity to project site, and the resource management organizations or mitigation banks being considered.

BACKGROUND

Staff is required to review the survey results for the special status species along all linear facility routes.

DATA REQUEST

43. Please provide detailed analysis of potential impacts to sensitive habitats, both temporary and permanent to the special status species along the gas pipeline alternatives (Fig. 3.10-2).

BACKGROUND

As identified in Table 3.10-1 C "* Land parcel C has recently been purchased for use as a habitat conservation area".

DATA REQUEST

44. Pleas explain whether the identified parcel part of the Haera Wildlife Mitigation Bank?

45. Please provide evidence that the project has permission for the installation of transmission lines within the Haera Wildlife Mitigation Bank or provide a schedule for accomplishing this task.

Technical Area: Cultural Resources
Authors: Mary Maniery

BACKGROUND

Staff needs to ensure that the project complies with all Federal, State and local LORS. The use of federal money or the requirement of federal permits for the project would require Section 106 review of the project. The AFC and Cultural Resources Attachment Cult-1, Cult-2 and Cult-4 note that the construction of the natural gas pipeline will require boring under the Delta-Mendota Canal, an eligible property. The AFC states that this action will require a permit from the United States Bureau of Reclamation (BOR). Federal involvement through a U.S. Army Corps of Engineers 404 permit or similar process could also necessitate compliance with Federal law 36 CFR Part 800 Regulations implementing Section 106 of the National Historic Preservation Act. Staff will need to know federal permitting agencies for easements or permits in order to coordinate with the federal agencies.

DATA REQUEST

46. Please identify any federal permits or easements required for this project that are defined as a federal undertaking under 36 CFR part 800 and Section 106 of the National Historic Preservation Act.

47. Please provide a schedule indicating when permits outside the authority of the Energy Commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.

BACKGROUND

The AFC Figure 5.16-1 and Confidential Report Figure 4.1-1 depict the area of potential effects (APE) and the area surveyed for the project site. In order to complete their analysis staff needs additional data regarding the APE and surveys done within the APE.

DATA REQUEST

48. Please provide a written description of the areas surveyed and a map (1:24,000 USGS) depicting the area described, including width of linear corridors.

49. Please provide a technical report documenting the survey of the plant site and all other components of the project.

BACKGROUND

The ethnographic background (Section 5.16) discusses the Bay Miwok and Northern Valley Yokuts tribes, indicating that the project area lies within the territory of both. Recent work by Randall Milliken (1995) has redefined the territory of these groups based on mission records.

DATA REQUEST

50. Please explain the geographic relationship of the Bay Miwok ethnographic territory to the project area in light of ethnographic sources used in the AFC and Milliken's research.

51. Please revise AFC Figure 5.16-1 (Map of Ethnographic Territories) to include Bay Miwok territory, if applicable.

52. Please provide copies of letters to each individual on the Native American Heritage Commission list.

53. Please provide copies of all responses from Native American individuals, including written responses and telephone logs.

BACKGROUND

The archaeological sensitivity or potential of a geographic locality is a function of local prehistory, history, and environmental factors. Prehistoric resources typically respond to a number of environmental factors that include topography, proximity of necessary and desirable resources, including water, food resources, and technologically important materials, and proximity of other cultural sites. The project area is in proximity to and can be compared and contrasted with the Los Vaqueros Reservoir environment in Contra Costa County and the Livermore-Amador Valley area. These areas have been the subject of intensive archaeological study in recent years by Contra Costa County Water District and California Department of Transportation respectively. In both of these areas significant buried prehistoric cultural resources have been identified under alluvium in the valley floor.

DATA REQUEST

54. Please provide a technical report that thoroughly evaluates the potential for undetected, buried or near surface archaeological resources in the project area, carefully considering the topography of the project's area of potential effect (power plant site, all linears including gas and water lines and transmission lines, and laydown and other ancillary areas).

BACKGROUND

Historical research is critical to the interpretation and evaluation of historic archaeological resources. The use of historic maps including General Land Office (GLO) plats, historic USGS maps, and historic county maps can be an important aid in identifying resources determining the age resources that have been discovered during fieldwork. County records can also be important source of information on historical resources in the county and can also provide insight into the significance the local community may place upon particular historic properties. Studies of transmission line development may provide insights on the use of temporary construction camps associated with the system.

DATA REQUEST

55. Please summarize, through time, the information available on historic maps for the project area, including USGS, GLO, and county maps, particularly the area containing "Site A" and the wooden pole line, providing citations of the maps consulted.

56. Please provide staff with copies of pertinent sections of consulted maps.

57. Please provide information from historic Alameda County Tax Assessor plats and roles and other county records regarding the location and ownership of the land containing Site A.

58. Please indicate whether local land owners, historians, or historical societies were interviewed regarding the function and context of Site A.

BACKGROUND

In some cases, local historical and archaeological societies have knowledge of cultural resources in an area of a project that may not be available through normal record sources.

DATA REQUEST

59. Please inquire with any local historical and archaeological societies in Alameda and San Joaquin counties that might have knowledge of historical or archaeological resources in the area of the project, including Site A. Please provide copies of the inquiry letters and any responses.

60. If any such resources are identified that could be impacted by the project or could have their immediate physical or visual surroundings altered (change in the integrity of the setting) by this project and it has not been recorded on Department of Parks and Recreation (DPR) 523 forms, then please record the

cultural resources on the appropriate DPR 523 form and provide a copy of the form.

61. If any of the resources could be impacted by the project or could have their immediate physical or visual surroundings altered (change in the integrity of setting) by this project, please provide a discussion of the significance of the resources under CEQA Guidelines Section 15064.5(a), (3), (A)(B)(C) and (D) and provide staff with a copy of the assessment and the specialist's conclusions regarding the significance.

BACKGROUND

The AFC Page 5.16-12 notes that the Altamont Speedway is "on the edge of the APE" and is over 50 years of age. The Speedway is serviced by Midway Road. To conduct a thorough analysis staff needs supporting documentation and evaluation of all historic resources.

DATA REQUEST

62. Please provide a tax assessment or similar map depicting the Altamont Speedway parcel and the project APE.

63. Please provide an historical context for the speedway and transportation system in the project vicinity.

64. If any of the resources (Midway Road, Altamont Speedway, other roads) could be impacted by the project or could have their immediate surroundings physically or visually altered (change in the integrity of setting) by this project, please provide a discussion of the significance of the resources under CEQA Guidelines Section 15064.5(a), (3), (A)(B)(C) and (D) and provide staff with a copy of the assessment and the specialist's conclusions regarding the resource.

65. If any such resources are identified that could be impacted by the project or could have their immediate physical or visual surroundings altered (change in the integrity of the setting) by this project, and it has not been recorded on Department of Parks and Recreation (DPR) 523 forms, then please record the cultural resources on the appropriate DPR 523 forms and provide a copy of the form.

BACKGROUND

Page 5.16-10 of the AFC mentions a "light scatter of random historic debris typical of agricultural land" was found during the survey of the project site. The discussion of the Ravenswood Reroute on page 5.16-12 of the AFC also states that "isolated finds of historic debris consistent with the field's agricultural use" were located. CEQA

Guidelines Section 15064.5 identifies historical resources as buildings, sites, structures, districts or objects that are over 45 years of age. Objects may be movable but are associated with a specific setting or environment. The historic debris mentioned in the AFC may qualify as objects. To conduct a thorough analysis staff needs supporting documentation and evaluation of all historic resources, including isolated finds (objects).

DATA REQUEST

66. Please provide descriptions of the "random historic debris" and "isolated finds" with mapped locations.

67. In accordance with Instructions for Recording Historical Resources Manual (State Office of Historic Preservation 1995), please provide appropriate DPR 523 forms for each isolated find or closely spaced group of isolated finds (minimally Primary Record form DPR 523A).

68. Please provide a discussion of the significance of the resources under CEQA Guidelines Section 15064.5(a), (3), (A)(B)(C) and (D) and provide staff with a copy of the assessment and the specialist's conclusions regarding the resource. Please consider the uniqueness or rarity of discarded agriculture related equipment in this discussion.

BACKGROUND

Page 5.16-10 of the AFC mentions a cattle chute and windmill within the project site and notes that the natural gas pipeline will run approximately from Midway Road to an existing pump station. To conduct a thorough analysis staff needs supporting documentation and evaluation of all historic resources.

DATA REQUEST

69. Please provide dates of construction for the windmill, and pump station. If any of these resources are over 45 years of age, then please record the cultural resources on the appropriate DPR 523 forms and provide a copy of the form.

70. If any of these resources are over 45 years of age, then please provide a discussion of the significance of the resources under CEQA Guidelines Section 15064.5(a), (3), (A)(B)(C) and (D) and provide staff with a copy of the assessment and the specialist's conclusions regarding the resource(s).

BACKGROUND

Signs at the intersection northeast of the existing Tesla substation commemorate the San Juan Bautista de Anza National Historic Trail that passes along Patterson and

Midway roads. A stone masonry bridge or culvert is visible immediately east of Midway Road under the recorded segment of the Southern Pacific Railroad. A ranch complex with barns, outbuildings and a house is visible just south of Bench Mark 352 (on Midway Road) just east of the Tesla substation. To conduct a thorough analysis staff needs supporting documentation and evaluation of all historic resources.

DATA REQUEST

71. Please provide a discussion of the San Juan Bautista National Historical Trail and evaluate potential effects of the project on this resource.

72. If any of the noted resources (bridge, ranch complex) could be impacted by the project or could have their immediate physical or visual surroundings altered (change in the integrity of setting) by this project, please provide a discussion of the significance of the resources under CEQA Guidelines Section 15064.5(a), (3), (A)(B)(C) and (D) and provide staff with a copy of the assessment and the specialist's conclusions regarding the resource.

73. If any such resources are identified that could be impacted by the project or could have their immediate physical or visual surroundings altered (change in the integrity of the setting) by this project and it has not been recorded on Department of Parks and Recreation (DPR) 523 forms, then please record the cultural resources on the DPR 523 form and provide a copy of the forms, (minimum of DPR 523 A, B and J).

BACKGROUND

Archaeological testing is commonly understood to refer to the post-survey use of subsurface exploration techniques to help define essential information about an archaeological resource, such as the area, estimated volume, and composition of the site assemblage.

DATA REQUEST

74. Please provide an explanation of how the size of the site was determined, including a description of field conditions that could have aided or hampered the field observations and the determination of site and artifact scatter surface area.

75. Please provide a map of the site indicating the location of the artifact scatter and indicate positions of the various "posthole" probes relative to the site boundary.

76. Please provide an estimate of data potential for the site based on estimated material recovery for Site A per cubic meter of deposit.

BACKGROUND

The Confidential Report submitted in the Response to Data Adequacy concludes that although bottles and burnt glass were recovered from the deposit at Site A "little domestic refused [sic] material was observed." The AFC page 5.16-13 concludes that the bottles and glass were domestic in nature. The interpretation and evaluation of historical archaeological sites must be based upon the nature of historical material recovered, the context within which it was deposited, and the uniqueness and scientific potential of that resource. Temporal estimates and site function assignments can be made using the types and technology of glass bottles, maker's marks, ceramics, cartridge head stamps and calibers, and mixes of nail types. The combination of data gathered through an analysis of the function and technology of all artifact types, the historical context, and overall site characteristics (lined pit, earthen pit, surface scatter of material, etc.), when viewed through a comparison with other similar sites in the region and current research issues, allows for a thorough interpretation and evaluation of a site. According to the *Instructions for Recording Historical Resources* Manual (State Office of Historic Preservation 1995:9) "While anyone can prepare the documentation supporting an evaluation, responsibility for the evaluation must be taken by persons meeting the Secretary of Interior's Professional Qualifications Standards [National Park Service 1983] in a discipline appropriate to the historic context within which the resources is being considered." For historical archaeology resources, responsibility for the evaluation must be taken by a qualified historical archaeologist.

DATA REQUEST

77. Please provide a discussion by a qualified historical archaeologist that considers the technology and nature of materials recovered from the posthole probes, offering an estimate of the age of the deposit based upon these collective data.

78. Please have a qualified historical archaeologist provide a functional classification of the material recovered and observed at the site to support or refute a domestic origin of the material.

79. Please have a qualified historical archaeologist justify the AFC (p. 15.16-13) conclusion that the "small amount of material found" indicates a dump as opposed to structural remains or an occupation site.

80. Please discuss the "limestone" rock found during the excavation of the posthole probes. Explain whether the rock was of local origin or introduced. If introduced, please have an historical archaeological specialist justify the conclusion that the rock is not related to a structural foundation or support system.

81. Please have a qualified historical archaeologist provide a reevaluation of Site A's data potential based upon its estimated size, estimated volume, depth, and estimated contents, and it historical age and context. Consider the probable site function given the nature and range of material recovered from the posthole

probes. Consider the full palette of historic land use in relationship to the contextual history of this site, including transmission line construction, agriculture, cattle ranching, transportation system development, and residential history of the vicinity.

82. Please have a qualified historical archaeologist provide a discussion of the value of this site compared to similar resources in the region and its scientific value in light of research issues regarding sites of similar function, association, and use. Evaluate the site significance employing criteria for inclusion on the California Register of Historic Resources [PRC Section 5024.1 (c) (1), (2), (3) and (4); CEQA Guidelines Section 15064.5(a), (3), (A)(B)(C) and (D)].

BACKGROUND

The AFC page 5.16-15 discusses construction phase impacts from the natural gas pipeline and water supply pipeline to cultural resources and notes that no cultural resources have been located along these linear areas of impact. To conduct a thorough analysis staff needs supporting documentation and evaluation of impacts to all historic resources.

DATA REQUEST

83. Please provide a discussion of the impacts to the eligible Delta-Mendota Canal from construction of the natural gas pipeline.

84. Please provide a discussion of impacts associated with construction of the Water Supply Pipeline to the Altamont Speedway, should it be considered a significant historic resource.

BACKGROUND

Instructions for Recording Historical Resources Manual (State Office of Historic Preservation 1995) requires evaluations of buildings and structures within a relevant historic context. This context is considered an "organizational format which groups information about related historical resources based on theme, geographic limits, and chronological period" (State Office of Historic Preservation 1995:11). Staff needs additional information to support significance statements included in the Confidential Appendix for buildings and structures.

DATA REQUEST

85. Please provide a copy of California State DPR 523 B and DPR 523J Forms for all linear resources recorded for this project. Forms included in the Confidential Appendix appear to be a combination of the DPR 523 J and DPR 523B forms and do not meet State standards. As per state standards, please provide a thorough historic context to support significance evaluations.

Technical Area: Geology
Author: Dr. Patrick Pilling, P.E., G.E.

BACKGROUND

The AFC states the Midway quadrangle is identified as an "Earthquake Fault Zone." The earthquake fault zone and associated fault only cross the Midway Quadrangle at the extreme south-western edge of the quadrangle.

DATA REQUEST

86. Please clarify whether or not the entire Midway quadrangle is considered an earthquake fault zone (refer to CDMG SP42).

BACKGROUND

The AFC references the West Side Fault on Figure 5.5-3; however, this fault is not present on Figure 5.5-3 but rather on Figure 5.5-2.

DATA REQUEST

87. Please provide the location of the West Side Fault and appropriate references on Figure 5.5-3.

BACKGROUND

The AFC states on Page 5.5-21 that the liquefaction potential of the site is low; however, Page 9 of Appendix G-1 of the AFC states that liquefiable soils may be present at the site.

DATA REQUEST

88. Please clarify the inconsistency in the AFC stating that liquefiable soils may be present at the site.

BACKGROUND

The AFC states on Page 5.5-20 that highly expansive soils were not observed at the site; however, Page 9 of Appendix G-1 of the AFC states that expansive soils may be present at the site.

DATA REQUEST

89. Please clarify the inconsistency in the AFC that expansive soils may be present at the site.

BACKGROUND

Linear improvements will include septic leach line, water, gas, and transmission lines to and from the site. Some of these linear improvements will cross the Midway fault. The AFC states on Page 5.5-23 that the pipelines and transmission lines will cross the fault perpendicular to the fault trace to minimize the potential for damage. Rupture of the lines could severely impact proper functioning of the facilities.

DATA REQUEST

90. Please provide additional discussion of how fault rupture will be mitigated with respect to proper functioning of any linears which will cross the fault zone.

BACKGROUND

Figure 5.5-2 of the AFC indicates the Midway fault passes through the northeast portion of the site, while Figure 5.5-5 indicates the Midway fault zone just encroaches on the very northeast corner of the site.

DATA REQUEST

91. Please clarify the inconsistency in the AFC that the Midway fault zone just encroaches on the very northeast corner of the site.

BACKGROUND

Page 10 of Appendix G-1 of the AFC states that corrosive soils may be present at the site; however, no mention of soil corrosivity and associated mitigation is mentioned in the AFC.

DATA REQUEST

92. Please address the site soils' potential to corrode buried steel and concrete and how such potential, if present, will be mitigated.

Technical Area: Hazardous Materials Management
Author: Alvin Greenberg, Ph.D.
Technical Senior: Rick Tyler

BACKGROUND

The precise location of the hydrogen gas storage cylinders was not identified on the facility Site Plan (AFC Figure 3.4-1). The location of the hydrogen gas cylinders is needed in order to properly assess the potential risk to the public.

DATA REQUEST

93. Please provide the precise location of the hydrogen gas storage cylinders on the Site Plan (Figure 2.2-1).

Technical Area: Land Use
Author: Mark R. Hamblin/Negar Vahidi

BACKGROUND

AFC pg. 5.6-1 states that the subject property will consist of 60 acres. The applicant states that "Midway Power has an option to purchase 160 acres that historically were contiguous. However, many decades ago the land was physically divided by a railroad right-of-way, breaking the property into a northern parcel of approximately 100 acres and a southern parcel of approximately 60 acres . . . The two parcels have separate assessor parcel numbers and have been legally conveyed and recognized as separate parcels multiple times over the past 50 years. Each parcel was recently evaluated under the Subdivision Map Act and granted Certificates of Compliance (CC-193A and CC-193B) from Alameda County on 9/13/01."

DATA REQUEST

94. Please provide a copy of the recorded Certificate of Compliance issued by the County of Alameda for the 60 acre subject property.

BACKGROUND

The Williamson Act Contract (Contract No. 72-26427) executed between the original property owner (Antonio Martin & wife) and the County of Alameda in 1972 on the approximate 160 acre subject property does not identify a power plant as a compatible use under Exhibit "B" of the contract (see Government Code 51238.3 (c)(2)). Exhibit "B" lists allowed uses for the land under the contract. The Williamson Act Contract runs with the land and renews automatically unless a nonrenewal or cancellation request is filed by the current property owner with the County. The filing of a recission, nonrenewal or cancellation request of the Williamson Act contract has not occurred.

DATA REQUEST

95. Provide evidence of the cancellation of the Williamson Act Contract No. 72-26427 from Alameda county prior to the evidentiary hearings and provide a schedule to show that the cancellation process will meet with the proposed project schedule.

96. Submit a letter from the California Department of Conservation demonstrating that the Department has concluded that the proposed power generation facility is a land use consistent with the Williamson Act.

BACKGROUND

The incremental conversion of agricultural land to nonagricultural uses threatens the long-term health of the state's agricultural industry and presents a potential impact under the California Environmental Quality Act (CEQA). The level of significance regarding this project can not be determined since the fundamental issue that was required to be assessed (the impact generated by agricultural land being removed from agricultural use and converted to a nonagricultural use) was not analyzed thoroughly.

The agricultural productivity of the site, water resource availability, surrounding agricultural lands, soil capability, and surrounding protected resource lands (i.e. Williamson Act Contracted Land) are a few of the necessary areas that need to be considered in the determining the level of significance for the conversion of agricultural land.

The California Department of Conservation, Office of Land Conservation has prepared a rating system for land resources called the California Agricultural Land Evaluation and Site Assessment (LESA). The use of LESA criteria provides a methodology for assessing the potential environmental impact of state and local projects on agricultural lands and its conversion. LESA provides an approach for rating the relative quality of land resources based upon specific measurable features. The California LESA is composed of six different factors. Two Land Evaluation factors are based upon soil resource quality. Four Site Assessment factors provide measures of a given project's size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands.

DATA REQUEST

97. Please provide a completed California LESA application and its supporting documentation (i.e. maps, soil information, cropping patterns, etc.) to the Energy Commission.

98. Depending on the LESA point score for the conversion, the project owner is to provide in writing the proposed mitigation(s) to be used to resolve the conversion of agricultural land for the project.

BACKGROUND

AFC, page 5.6-3 states "The proposed TPP site and all of its related facilities consist, at least partly, of soils that qualify as Farmland of Statewide Importance." The potential conversion of at least 25 acres of land from an agricultural use to a nonagricultural use represents a potential LORS non-conformity with the County of Alameda's General Plan Policy 75.

DATA REQUEST

99. Provide a letter from the Alameda County Community Development Agency stating whether or not the proposed land use is consistent with Policy 75 of the Alameda County's East County Area Plan (ECAP); and will the county require mitigation? If so please describe that mitigation

BACKGROUND

The applicant states on AFC pg. 5.7-10 that the Tesla Power Plant "would constitute a public or quasi-public use allowable under the Area Plan. Measure D, recently enacted component of the Area Plan, allows for the construction of "infrastructure," if the infrastructure has no excessive growth inducing effect on the East County area."

The ECAP "Large Parcel Agriculture" description was amended by Measure D, a County voter approved initiative on November 7, 2000, to include the following language:

> "Subject to the provisions of the Initiative, this designation permits agricultural uses, agricultural processing facilities... limited agricultural support service uses... secondary residential units, visitors-serving commercial facilities... recreational uses, public and quasi-public uses, solid waste landfills and related waste management facilities, quarries, windfarms and related facilities, utility corridors, and similar uses compatible with agriculture."

It is important to note that the Measure D amendment deleted from this list of allowable uses "other industrial facilities appropriate for remote areas and determined to be compatible with agriculture."

DATA REQUEST

100. Please provide a letter from the Alameda County Community Development Agency stating that a power generation facility (e.g. Tesla Power Plant) is a use consistent with the "Large Parcel Agriculture" amended description approved by Measure D for the ECAP.

BACKGROUND

The proposed project includes four 200 foot exhausts stacks and 230kV double-circuit steel transmission lines poles that are approximately 100 feet in height and are potentially taller than the Alameda County height limit set forth in section 17.52.090, Section 17.52.090 of the Alameda County General Ordinance Code - Zoning regulations states

"a) Schools, churches, hospitals, and other buildings of an institutional character permitted in a district may have a building height in excess of the district limitations but not in excess of 75 fee. A television or radio antenna may be of a height not exceeding ninety (90) feet. The project's proposed exhaust stacks and 230 kV poles.

DATA REQUEST

101. Explain any plans to modify the structures to be in compliance with the County height requirement.

102. Describe plans and your schedule for requesting a variance from Alameda County Community Development Agency related to the County height requirement ("findings" for the issuance of a variance are established by Section 65906, State Planning & Zoning Law).

103. Describe any plans and a schedule for obtaining a letter from the Alameda County Community Development Agency stating that the proposed structures are in accordance to the height requirement of Alameda County General Ordinance Code.

BACKGROUND

Although the land use section in the AFC provides maps of existing land uses and land use and zoning designations surrounding the proposed plant and linear facilities, these maps are difficult to read. In addition, the supporting text in the section does not clearly provide a picture of land use in the project's vicinity. Given that there are a few residences within 1-mile of the project site, and the existence of recreational uses and sensitive receptors within 4 miles of the site, a more detailed description of land uses are necessary.

DATA REQUEST

104. Provide a set of color maps, which include:

    a) Label sensitive receptors and residences;
    b) Label roads and show the right-of-way (ROWs) along the linear facilities route and adjacent to the proposed plant;
    c) Linear facilities, land uses and zoning designations should be delineated in color; and
    d) Show the footprint of the proposed water pump station adjacent to the California Aqueduct.

105. Provide a description of nearby land uses, including recreational facilities and sensitive receptors.

Technical Area: Noise
Author: Ron Brown

BACKGROUND

The CEC requires estimates of the noise levels within the project boundaries for both construction and plant operation and the potential impact to workers. Although the applicant stated that OSHA requirements would be met, they should estimate the areas and sound levels where workers could be exposed to hazardous noise levels.

DATA REQUEST

106. Please provide estimates of in-plant noise levels in the noisiest areas during operation.

107. Please provide estimates of noise levels for construction of all linear facilities.

108. Please provide estimates of worker noise levels during the steam blows and protective measures that will guarantee their safety.

BACKGROUND

The CEC requires definition of the major noise sources of the operating plant, including the tonal and frequency characteristics of the noise emitted. Table 5.9-5 of the AFC shows the same near-field levels and different far-field levels for different equipment. It is also unclear whether low frequency sources, such as Forced Draft fans have been considered.

DATA REQUEST

109. Please provide a discussion of the potential for generation of tonal and low frequency components of the major noise sources.

BACKGROUND

The initial start-up of a combined cycle power plant typically includes steam pipe cleaning by means of "steam blows." The discussion for this aspect of the project is good but it may be prudent to provide silencers for this activity to protect even the few residents and casual visitors in the area. An alternative could be signs posted on the roads near the project.

DATA REQUEST

110. Please provide a discussion of the mitigation measures that will be employed to protect the public in the area from potentially high noise levels associated with steam blows for the proposed project.

Technical Area: Reliability
Authors: Shahab Khoshmashrab

BACKGROUND

As designated in the AFC, the applicant states that the overall annual availability factor of the project is expected to be in the range of 92 to 96 percent (TPP 2001a, AFC §§ 1.6, 3.4.2, 4.3.1). Subsequently, the applicant states that this availability factor is expected to be in the range of 92 to 98 percent (TPP 2001a, AFC § 3.8).

DATA REQUEST

111. Please clarify which range of availability factor is expected for this project.

Technical Area: Traffic and Transportation
Author: Steve Brown/Brian Welch

BACKGROUND

Siting Regulations Appendix B (g)(5)(B)(ii), entitled "Current daily average and peak traffic counts," requires that traffic data be current. The count date in the AFC for Midway Road -- a primary access facility in Alameda County to the Tesla project site -- is 1991. This is not a current daily average traffic count.

DATA REQUEST

112. Please provide staff with a current average daily traffic count for Midway Road and Identify time periods when the count was taken.

Technical Area: Transmission System Engineering
Author: Ajoy Guha, P. E.
Technical Senior: Al McCuen

BACKGROUND

The applicant needs to identify any mitigation that may be necessary to the interconnection facilities studies and any new and/or modified downstream facilities necessary to support interconnection of the Tesla Power Project to the Pacific Gas and Electric (PG&E) system. Such interconnection should comply with Utility Reliability and Planning Criteria, North American Electric Reliability Council (NERC) Planning Standards, Western Systems Coordinating Council (WSCC) Reliability Criteria, and California Independent System Operator (CAISO) Reliability Criteria.

The System Impact/Facility Study (SI/FS) filed with the AFC (Application for Certification) was for interconnection of 1156 MW nominal generation output with 2004 summer peak and heavy spring base cases. In Sections 6.2.1 and 6.2.2, the study report included the transmission facilities which will violate the overload criteria for CAISO Category B and C outage conditions. However, in Sections 3.1 and 12.3 of the SI/FS, staff observes that the mitigation alternatives were considered, but not selected for each overloaded facility.

DATA REQUEST

113. Identify selected mitigation measure for each overloaded facility (refer to Table 2 of section 6.2.1 and Table 4 of section 6.2.2 of the SI/FS) under CAISO Category B contingency conditions.

114. For the overloaded facilities under CAISO Category C contingency conditions (refer to Table 3 of section 6.2.1 and Table 5 of section 6.2.2 of the SI/FS), state whether the mitigation measure is selected as Special Protection Scheme (SPS). Otherwise, identify selected mitigation measure for each overloaded facility.

115. Provide electronic copies of the PSLF *.sav & *.drw files of the base cases, and EPCL and/or AUTOCON contingency files.

116. Provide a full description of the new interconnection facilities and downstream facilities, and the downstream facilities requiring modifications, reconductoring or any other change (for example: Tesla-Ravenswood 230 kV line or any other). For their environmental settings and impacts, provide routes and detailed environmental analysis (including other technical areas as Biology and others) and any recommended environmental mitigation measures.

Technical Area: Visual Resources
Author: Melinda M. Rivasplata, AICP, and Brewster Birdsall

BACKGROUND

Staff will need to make use of the Applicant's figures presented in the AFC and supplemental filings.

DATA REQUEST

117. Please provide one set of electronic files on CDs of the following figures or their revisions: 3.2-1 (Regional Location), 3.2-2 (Location of Project Facilities), 3.7-5 (Conceptual Landscape Plan), and all figures contained in the Visual Resources Section of the AFC.

118. Please provide one set of electronic files on CDs of the revisions to existing figures and new figures as requested in the following Data Requests.

BACKGROUND

The photosimulations of the project (Figures 5.10-4b and 5.10-4c) as it would be seen from Key Observation Point (KOP) 1 do not show the entire project.

DATA REQUEST

119. Please provide a composite existing view photograph and photosimulations showing the entire project as viewed from KOP 1.

BACKGROUND

In Section 3.4.6.2 of the AFC, the water source is described as being non SWP water that would be pumped from the California Aqueduct and delivered via a newly constructed pipeline to the project site. Delivery of water would require construction of pumping facilities at the point where water is taken from the California Aqueduct. The pump station would occupy approximately 0.5 acres.

DATA REQUEST

120. Please provide a description of the area where the pumping facilities would be located, and a description and illustration of the pump station appearance (height, materials, color). Please indicate whether an access road would have to be constructed (for construction and/or operational maintenance), and if so, provide the location of the access road.

121. Please state whether there would be any views of the pump station or access road from residences or public roadways, trails, or other areas used by the public.

122. If the pumping facilities or access road would be visible from residences or public areas please provide photographs of existing conditions, visual simulations from appropriate KOPs, and an assessment of visual impacts of the pump station.

BACKGROUND

Section 3.4.5 of the AFC describes the fuel supply for the proposed TPP. Natural gas would be supplied via a newly constructed 2.8-mile, 24-inch pipeline from an existing PG&E pipeline south of the intersection of I-205 and Patterson Pass Road. Section 3.7.2 indicates that above ground equipment, such as meters, regulators, and valves would be required at the tie-in point with PG&E Line 401.

DATA REQUEST

123. Please describe the visual characteristics and dimensions of the above ground facilities needed for the gas delivery system at the point of tie-in or along the pipeline to the PG&E natural gas pipeline. Please provide an illustration of the proposed above ground facilities. Please indicate whether an access road would have to be constructed (for construction and/or operational maintenance), and if so, provide the location of the access road.

124. Please state whether there would be any views of the tie-in facilities or access road from residences or public roadways, trails, or other areas used by the public.

125. If the facilities are visible from residences or public areas please provide photographs of existing conditions and an assessment of visual impacts of the facilities.

BACKGROUND

The AFC provides a conceptual landscape plan that is described in Section 3.7.7 and 5.10.2.3. The AFC text states that the conceptual landscape plan uses "mainly indigenous plants". The plant list shown on Figure 3.7.5 does not support this statement. The existing tree and shrub vegetation natural to the area consists mainly of native cottonwood trees (*Populus fremontii* or *P. trichocarpa*) growing in the drainages. The only other tree present in significant number are non-native pepper trees (*Schinus molle*), which appear to have naturalized in the area. The landscape plan plant list includes coast redwoods (*Sequoia sempervirens*), coast live oak (*Quercus agrifolia*), and numerous non-native species. The AFC states that "historically, the rolling hills were covered with dense groves of bay and oak trees similar to the vegetation around

Mount Diablo". Staff considers this to be unlikely since the project site is located in the rain shadow of the coast range, and is too far from the coast to experience summer fog. Therefore, the plant selection may not be appropriate for the site.

Additionally, the conical evergreens and dense hedge-like structure of the plan are out of character with the surrounding landscape. The appearance of the proposed plan would be more compatible with the character of the surrounding landscape if it were to incorporate more plants having a rounded canopy aspect and species that are adapted to drier conditions – California buckeye (*Aesculus californica*), interior live oak (*Quercus wislizeni*), and toyon (*Heteromeles arbutifolia*) for example. A more natural spacing of the plants instead of the dense hedge effect would be more effective in enhancing the visual aspects of the project site. Given the size and bulk of the plant (especially as viewed from KOP 1), total screening of the plant from the roadway is not possible, and a more naturalized landscape structure could soften the appearance of the structures while adding interest to the view.

Furthermore, Policy 113 in the East County Area Plan states that the County shall require the use of landscaping in both rural and urban areas to enhance the scenic quality of the area and to screen undesirable views. Choice of plants should be based on compatibility with surrounding vegetation, drought tolerance, and suitability to site conditions; and in rural areas, habitat value and fire retardance.

DATA REQUEST

126. Please revise the landscape plan to provide a more naturalized appearance (plant spacing and mix), using more drought tolerant California native plants that are compatible with the character of the surrounding landscape. Please provide a comparable level of detail on the selected plants that was provided on the original landscape plan, including size at planting, number of plants, expected heights at 5, 10, and 20 years, maximum height, and growth rates.

127. Please provide revised photographic simulations showing the revised landscape configuration at the start of project operation, at 5 years of growth, and at 20 years of growth.

BACKGROUND

Section 5.10.2.4 describes lighting control measures for project operation but does not describe the extent to which lighting would be visible from the KOPs nor is lighting during project construction discussed.

DATA REQUEST

128. Please describe existing visible night lighting in the immediate project vicinity and identify the extent to which existing night lighting is visible from each KOP.

129. Please describe the extent to which nighttime lighting during project operation would be visible from each KOP.

130. Please describe the extent to which night lighting would be required during project construction and how construction lighting would be limited to the immediate area where construction activities would occur.

BACKGROUND

Visible vapor plumes from the cooling towers were discussed in the Air Quality section of the AFC (Section 5.2.4.6, p. 5.2-69 to 71). The cooling tower would be a wet/dry type that would be operated in plume abatement mode on an "as-needed" basis (AFC Section 3.4.3.4, p. 3-21). The applicant claims that the visual impact of the abated plumes would be infrequent and would not cause a significant effect (AFC p. 5.10-15). To confirm and verify the results of the applicant's analysis with the Seasonal Annual Cooling Tower Impact (SACTI) modeling method, staff will conduct an independent assessment of the cooling tower plume frequency. Staff requires the information about this analysis to independently evaluate project impacts.

DATA REQUEST

131. Please describe the meteorological data years included in the SACTI analysis and the meteorological station location.

132. Please provide electronic copies of the SACTI modeling files including input and output files, meteorological files, and executables.

BACKGROUND

Limited information is provided in the AFC about the plume abatement strategy for the cooling tower and the cooling tower exhaust conditions. Staff requires additional project and site data to complete an independent visible plume modeling analysis for the cooling tower and the combustion turbine/HRSG exhausts.

DATA REQUEST

133. Please provide vendor information for the cooling tower including manufacturer and model information and design specifications.

134. Please provide operational and performance data for the cooling tower plume abatement strategy. For example, please provide the design point of the abatement system and the plant load and ambient conditions that would trigger use of the plume abatement mode.

135. Please identify if there are certain ambient conditions (i.e., temperature and relative humidity) where the foggers would not operate.

136. Please summarize for the cooling tower exhausts in the table below, the conditions that affect vapor plume formation including exhaust temperature, exhaust mass flow rate, and moisture fraction by weight. These values should account for a range of ambient conditions for a reasonable worst-case operating scenario. For example, ambient conditions from the heat and water balances of AFC Tables 3.4-2 through 10 are provided in the table below; however a similar, alternative range of conditions may be provided in the response. Update any information provided within the table, if necessary.

PARAMETER	Cooling Tower Exhausts				
Number of Cells	22 cells (in 1 x 22 array)				
Cell Height	55 feet (each cell)				
Cell Diameter	30 feet (each cell)				
Ambient Temperature/ Relative Humidity	17°F / 83% RH	40°F / __% RH	62°F / 70% RH	97°F / 21% RH	112°F / 15% RH
Duct Burner	On and Off	On and Off	On and Off	On and Off	On and Off
Inlet Air Flow Rate (lb/hr)					
Heat Rejection (MMBtu/hr)					
Liquid/Gas Mass Flow Ratio					
Exhaust Temperature (°F)					
Exhaust Flow Rate (lb/hr)					
Moisture Content (% by wt) (if cells are plume-abated)					
Molecular Weight (estd)	Approximately 28.8 lb/lb-mol				

137. Please summarize for the HRSG exhausts in the table below, the conditions that affect vapor plume formation including stack temperature, exhaust mass flow rate, and moisture fraction by weight. For example, provide sufficient operating data to fill the following table. Update any information provided within the table, if necessary (data obtained from AFC Appendix K-4).

PARAMETER	HRSG Exhausts				
Number of Stacks	4 CTG/HRSGs				
Stack Height	200 feet (each stack)				
Stack Diameter	19 feet (each stack)				
Ambient Temperature / Relative Humidity	17°F / 83% RH	40°F / __% RH	62°F / 70% RH	97°F / 21% RH	112°F / 15% RH
Duct Burner	On	On	On	On	On
Exhaust Temperature (°F)	186	___	186	186	186
Exhaust flow rate (MMlb/hr)	3.859	___	3.580	3.479	3.425
Moisture Content (% by wt)	___	___	___	___	___
Molecular Weight (estd)	28.3 to 28.5 lb/lb-mol				

Technical Area: Waste Management
Author: Alvin Greenberg, Ph.D.
Technical Senior: Mike Ringer

BACKGROUND

The State of California requires a minimum of 50% of all solid waste generated to be recycled. The AFC does not provide information on the amounts of recycling the applicant intends to do on either construction or operation waste. This information is necessary in order to determine the impacts on the environment and the waste disposal facilities.

DATA REQUEST

138. Please provide a draft Waste Management Plan indicating how the applicant plans to comply with waste diversion requirements of state and local ordinance. Please also indicate the percentage of hazardous and non-hazardous wastes that would be diverted from landfill disposal.

Technical Area: Soil and Water Resources
Authors: Kristine Uhlman, John Kessler and Antonio Mediati

BACKGROUND

The 1,120-megawatt Tesla Power Project (TPP) will consist of a natural gas-fired combined cycle power plant, and will require approximately 5,100 AF/year of fresh water to support facility operation. A zero liquid discharge system will eliminate wastewater discharge and allow for recycling (approximately 20 cycles of concentration) of the cooling water and an approximate 10% reduction in cooling water requirements. Water will be supplied under an agreement with the Rosedale-Rio Bravo Water Storage District in Kern County, and will be delivered via a 1.7 mile pipeline from the California Aqueduct under contract with the Alameda County Flood Control and Water Conservation District – Zone 7.

The 60-acre project site consists of 10 to 50 inches of soils formed on Neroly Formation shales and sandstones within the drainage of Patterson Run, an intermittent stream that discharges to the San Joaquin Valley. Storm water runoff will be collected within an approximately 1.5 acre detention basin (sized to retain 5 AF) prior to discharge to the natural drainage. Sanitary wastewater will be discharged to an on-site septic system and leach field proposed to be located north of the facility footprint.

DATA REQUEST

139. Project operation will require a maximum of approximately 20 (Section 1.8.11) to 36 (Section 1.1) employees. Table 3.4-10 Water Balance allocates 5 gpm of potable water to sanitary users and eventual leach field discharge. Recalculation of the anticipated sanitary wastewater volume expected to be generated with 30 employee/units per day results in a total flow of 0.30 gpm. Please explain the need for more than 16 times the volume of water to support the plant's sanitary needs.

140. What will be the source of landscaping water for the Project?

141. Does the project have a backup water supply? If so, please fully describe the backup water supply system and supply sources.

142. Table 3.10-5 provides calculated volumes of water necessary to support wet, dry and wet/dry cooling technologies. It should be noted that AFC Section 3.10.5, Water Supply Alternatives, identifies wet-dry cooling as a rejected cooling technology, however Section 3.4.2 states that "Cooling water from the condenser tubes is circulated to a wet/dry cooling tower..." and Section 3.10.6.6 states that wet cooling technology is to be implemented. Please explain the discrepancy.

143. Please provide an estimate of how long, how often and when plume abatement will be required. As well as, the potential for fogging and icing of Midway Road as described in Section 3.4.3.4 of the AFC.

144. Please provide an estimate of the performance reduction and water demand reduction when using plume abatement.

145. Please provide an evaluation of the use of dry and wet/dry cooling alternatives. The analysis should include the impacts of water use and waste discharge, economic impacts (capital and operating costs), plant efficiency and output, and environmental impacts.

146. Please discuss the cumulative impact on water supply if the East Altamont Energy Center were to come on-line.

BACKGROUND

In reference to AFC Section 5.6.1.2, the proposed TPP site and all its related facilities consist, at least partly, of soils that qualify as Farmland of Statewide Importance.

DATA REQUEST

147. Please estimate the amount of Farmland of Statewide Importance that will be impacted by the project. Please distinguish the areas affected by project component as shown in AFC Table 3.7-3 on Page 3-72.

148. Please estimate the amount of Farmland of Statewide Importance that will be permanently impacted by the project.

BACKGROUND

Site topography ranges from approximately 360 to 400 feet above mean sea level (amsl) with final facility grading elevation estimated to be about 380 feet amsl. Currently, the site is undeveloped agricultural land used for grazing. The proposed TPP site and it's related facilities will be located in areas that include soils with moderate to severe erosion potential. Quantification of accelerated soil loss has been supplied in the data adequacy responses.

Figure 3.5-2, Grading and Drainage Plan, suggests that nearly 15 to 20 feet of excavation will be necessary during site grading within the northwest portion of the facility layout. The average thickness of the alluvial deposits in the vicinity of the plant site is reported to be estimated at five to ten feet (AFC Section 5.5.1.4). Depth to bedrock is reported to be approximately one to twelve feet (AFC Section 5.5.1.7). The Fault Investigation Report (Geocon 2001b, Appendix H) Section 4.1.3.1 states that the depth to bedrock ranges from less than one foot on the western edge of the project site.

DATA REQUEST

149. Please describe and locate on a map any areas of accelerated erosion, unstable areas or areas of mass wasting associated with the proposed plant or linear features.

150. Please provide information of how the numbers for the quantification of accelerated soil loss were calculated. Are these expected soil losses with BMPs in place? If not, please provide calculation with BMPs in place.

151. A contradiction exists between AFC Section 5.5.1.7 and Appendix G. The Engineering Geology Assessment Report (Geocon, 2001a) states that liquefaction potential (as well as soil corresivity) were not analyzed. The AFC states that there is an "...absence of liquefaction features...." and also that the sediments underlying the site have a "....low potential for liquefaction (ABAG, 2001)". The ABAG reference is not listed within the References. It should be noted that Section 3.2 of Geocon 2001a states that "...areas where liquefiable soils may be present were observed ...." and a "...drilling program will need to be conducted in order to assess the liquefaction potential...." at the site. Please clarify the discrepancy. Has there been additional site characterization that has not been included in the AFC? If so, please provide the additional site characterization.

152. Specify the cut and fill areas, quantities and stabilization methods. Please illustrate the grading plan with representative profiles and cross-sections showing existing vs. proposed project site conditions.

153. Existing surface water drainage features are noted on the USGS Midway California Quad, and one appears to be within the facility footprint. AFC Section 5.4.1.2 states "...The project site has no surface water resources or defined drainages." In addition, Geocon 2001a, Section 3.7.1, Surface Water, states (page 10, Appendix H) "....Semi-permanent bodies of surface water were observed ...." on the site. Please clarify these discrepancies.

154. It should be noted that Appendix H, Geotechnical Engineering Investigation (Geocon 2001a) recommends that flood and runoff modeling and analysis be performed using the USACOE HEC-HMS because of the steep topography of the site. Although Applicant's response to Data Adequacy WR-5 is correct in stating the project site is not subject to localized flooding from Patterson Run Creek, tributaries to Patterson Run are mapped across the site and are subject to flooding when subject to localized heavy rain. Please identify the flooding potential at the site.

155. Excavation in the north west portion of the proposed TPP footprint may encounter shallow bedrock and/or shallow ground water. Will blasting be necessary to excavate? Please estimate the volume of water that may be

encountered for excavation dewatering and identify how this water, if encountered, would be managed.

BACKGROUND

The drainage facilities will be designed to prevent flooding from a 10-year, 24-hour storm event. Stormwater will drain to on-site catch basins, which will then drain to a stormwater detention basin prior to release to the natural drainage. Water from the stormwater detention basin will be tested prior to release to the natural drainage. If the stormwater quality is not satisfactory it will be removed by vacuum truck or sump pumps.

Stormwater runoff from within the generating portions of the site where impacts from process equipment operation and maintenance could occur will be collected and sent to the zero-discharge system. Process area runoff collection and treatment will include an oil/water separator and wastewater holding tank.

The stormwater detention basin will be sized to store 5 acre-feet of water without a short-term release flow greater than that calculated for the site as it currently exists.

Construction of the TPP may induce water and wind erosion at the power plant site. Surface water runoff is to be directed around the construction site to minimize erosion and pollutant loading. A Storm Water Pollution Prevention Plan (SWPPP) will be required.

DATA REQUEST

156. Please provide an Erosion Control Plan with associated monitoring programs showing conceptual design and locations proposed for temporary and permanent BMPs for erosion control.

157. Please provide a description of the detention basin that includes information on how water will be retained prior to testing, the capacity of the containment area, and discharge mechanism.

158. Please provide an estimate of the rate at which water could be removed by vacuum truck or sump pump.

159. Please provide information on the capacity of the oil/water separator.

160. Please include grading and drainage plans with existing and proposed contours showing existing and proposed watershed areas, drainage channels, peak discharge rates and volumes at key concentration points, and conceptual design and capacities of the proposed conveyance systems, erosion control features, detention basin and holding tank. The contact and non-contact drainage

systems and design should be clearly differentiated in terms of location, watershed area, drainage conveyance design, storage system design, peak flow rates and runoff volumes. The plan should include pre-development and post-development storm water discharge rates and volumes for contact and non-contact areas for the 5, 10, 25- and 100-year recurrence intervals, and a description of how frequently runoff volumes are expected to exceed the capacity of the detention basin and holding tank, and how excess runoff will be accommodated and prevented from carrying contaminants off-site in the event of back-to-back storms or storms in excess of the storage capacity. Please provide a narrative description as well as conceptual plans and design details with all back-up hydrologic and hydraulic calculations used in developing the drainage concept design.

161. Please describe the existing natural off-site drainage where storm water will be discharged, clearly indicating its location in a drainage plan, and characterizing its capacity to carry storm water in relation to pre and post-development flows.

162. Please provide written evidence of consultation with the County regarding conformance of the proposed grading plan and storm water facilities with County regulations and policies.

163. Please provide written evidence of consultation with the Regional Water Quality Control Board confirming expected compliance of the TPP project under the General Permit for Discharge of Stormwater Associated with Industrial Activity.

BACKGROUND

All chemical feed areas will be provided with engineered methods to contain and capture spillage, overflows, and washdowns (Section 3.4.7.3.4). If contained water is contaminated, the AFC states that it will be removed by truck for offsite treatment and disposal.

DATA REQUEST

164. What volume of water is anticipated to be generated during routine washdowns? What are the anticipated contaminants and concentrations? If the water is not found to be contaminated, how and where will the water be managed?

165. To evaluate how washdown water is to be contained and recycled, please provide an on-site water/wastewater/stormwater piping plan at a scale of 1" = 100', or larger. Label drain pipes and identify pipe sizes and pumping facilities as necessary.

BACKGROUND

According to the AFC, a septic tank is proposed for disposal of domestic sanitary wastes.

DATA REQUEST

166. Please provide a description of the septic system.

167. Please provide a plan showing the proposed septic system, the location of and distance to the nearest groundwater wells.

168. Please provide written evidence of consultation with the County regarding conformance of the proposed septic system with County regulations and policies.

BACKGROUND

The WR-3 Response in the Data Adequacy Worksheet states, "The project will not use groundwater and no impacts to groundwater are expected from project construction or operation." The AFC states that groundwater will be used for construction with an average daily use estimated at 8,000 gallons (approximately 6 gpm) and maximum daily usage at 85,000 during hydrotest.

Applicant's Data Adequacy Response WR-3 identified the water well on site as Well Number 02504E29N01M. It should be noted that the correct number (following DWR protocol) should be 02S04E29N01M. It is presumed by DWR staff that the well was installed by the US Bureau of Reclamation to monitor seepage from the California Aqueduct.

DATA REQUEST

169. Please provide a breakdown of daily and total water to be used for construction by source and activity (i.e. dust suppression, pipeline tests, etc.)

170. Please provide basic well description (including location, depth, age, gpm, etc).

171. Please provide the as-built well construction diagram for the well and document the current water quality and depth to water in this well. In addition, please provide historic data available for this well.

172. Please identify well head and pump restoration activities necessary to bring this well on-line.

173. Provide an analysis of calculated drawdown that would be caused by the project well, which uses localized aquifer conditions for the groundwater basin, including

available data for aquifer tests, well logs, well capacity tests, and previous hydrogeologic studies for the area.

174. If this well will not be used by the TPP project, what procedures will be used to seal and abandon the well?

BACKGROUND

The proposed TPP will use water from the California Aqueduct delivered though a new turnout to be constructed in Zone 7. The water supplier is Rosedale-Rio Bravo Water Storage District. Rosedale will be entering into an agreement with Buena Vista Water Storage District to acquire Kern River floodwaters to be supplied to the TPP. Project raw water will be stored in one 8,365,000 gallon tank with 300,000 gallons held in reserve for fire protection; this quantity is sufficient to cover a 24-hour interruption to water supply. No backup water supply has been proposed.

Table 3.4-10, Water Balances, calculates the raw water supply requirements as varying between 2,182.5 to 6,111.4 gpm (if use at these flow rates were continuous, the total volume of water would be from 3,525 to 9,871 AF/y). The AFC approximates the project water requirements at 5,100 AF/year, whereas the January 10th, 2002 Attachment 'B' to the AFC states that the project will require approximately 6,400 AF/yr. It is understood that the water needs will vary seasonally, and it is expected that water demands will be greatest during the hot and dry summer when agricultural and other demands must be met by the water supplier.

DATA REQUEST

175. What are the design average and maximum daily operation volumes of the new turnout? Please provide staff with all appropriate documentation associated with the turnout to be constructed.

176. Please provide the environmental documentation for the acquisition and transfer of the floodwaters.

177. Please provide the historical data for the banking and use of the floodwaters.

178. The January 10th, 2002 Attachment 'B' submittal in support of the AFC makes reference to evaporation ponds on page 9. Is this in reference to specific

179. requirements of an alternate water source (the City of Tracy) or an error? There is no mention of evaporation ponds within the AFC.

180. Please identify the water supply and/or irrigation turnout connections to the California Aqueduct immediately upstream and downstream from the proposed TPP connection.

181. Please provide historic daily (or monthly, if daily is not available) flow data (hydrograph) on the volume of water flow measured in the Aqueduct at a location nearest to the project site.

182. Please provide historic information of past occurrences of interrupted Aqueduct flow, including data on the season, duration, precipitation conditions, and frequency of occurrence. Are these interruptions in service and water quality seasonal in nature?

183. At what level of turbidity will Aqueduct water be unacceptable for use by the project? Please provide, based on historical water quality data at a location nearest the proposed turnout, information on how often the Aqueduct water will likely exceed this level. Please discuss the treatment that would be required during elevated turbidity events. How often does the applicant expect the water quality and turbidity of the Aqueduct water to be unacceptable?

184. Please provide information on any seasonal variability in the water allocation or other timing restrictions.

185. Please provide will-serve letters for Rosedale-Rio Bravo Water Storage District and Buena Vista Water Storage District.

BACKGROUND

The AFC and Supplement provides a water source alternatives cost evaluation table, which is in summary form and does not provide details for each cost component.

DATA REQUEST

186. Please provide information on how these costs were derived and distinguish between initial capital vs. annual expenses projected over the life of the project. Please prepare a more detailed comparative feasibility analysis on the use of Alternative Sources of Water Supply for cooling purposes, focusing on opportunities for Reclaimed Water such as from the Cities of Tracy and Livermore, and Mountain House Community Services District (MHCSD). For the City of Tracy, please recognize their plans and grant funds to improve their wastewater treatment to tertiary, and consider options with the City to reduce total dissolved solids either at City of Tracy's wastewater treatment plant or at the proposed TPP. For the MHCSD, please confirm the quantities of tertiary treated wastewater that would be available. Staff has received projections from MHCSD that are significantly higher than MHCSD originally projected, and the status of commitments to other projects may be changing considering construction of other projects may be put on-hold. Include data for the alternatives in comparison to the proposed use of fresh water supplied via Zone 7 in this analysis. The financial portion of the analysis should consist of a discussion of the following: a) water currently and projected to be available over the next 30

years; b) impacts on water use and waste discharge; and c) economic impacts (listing primary capital and operating costs including water purchase price). Data and results should also be summarized and presented in tabular form.

187. Please provide estimated cost of the proposed water supply plan.

188. Please provide details on the feasibility and environmental impact analysis conducted by the applicant regarding alternative water supplies and cooling methods in comparison to the proposed use of State Water Project. The analysis should include, as a minimum:

(a) impacts on water use, other users and waste discharge in comparison to those currently proposed for the project;
(b) all economic factors considered (such as capital and operating costs including water purchase and infrastructure price; efficiency losses and economic impacts; etc...) and all assumptions and or vendor data to support these estimates;
(c) changes in plant and linear facility infrastructure required to support each technology;
(d) plant efficiency and output calculations and assumptions for each alternative considered; and
(e) analysis to support determinations on environmental impacts (particularly land use, biological and cultural resources, agriculture and soils, geologic hazards, traffic & transportation and water resources).
(f) All information sources and appropriate references.

BACKGROUND

In reference to Figure 5.3-2, the proposed natural gas pipeline may cross Patterson Run Creek and associated wetlands. AFC Table 6.1-1 suggests that the TPP may require a Streambed Alteration Agreement with CA Department of Fish and Game (CDFG) and a Section 404 Permit from the Army Corps of Engineers (COE).

DATA REQUEST

189. Please confirm where such work activities are proposed, including the nature of the facility, and its potential for disturbance to natural streams or wetlands.

190. Please provide evidence of consultation with CDFG and the COE, and with the SWRCB regarding Section 401 Water Quality Certification, to the extent applicable, defining permit requirements and any conceptual BMP's that may be necessary to avoid adverse impacts. Include any completed permit applications.

BACKGROUND

191. In Section 5.4.2.3 of the AFC, it describes a number of sources of water supply from various parties, and sources of water for groundwater recharge and conjunctive use available to Rosedale-Rio Bravo Water Storage District (Rosedale). The ultimate source of Rosedale's fresh water proposed for exchange with State Water Project (SWP) water for supply to TPP could derive from one or more of Rosedale's sources. In supplying water to the proposed TPP, it could potentially result in a change in historic patterns of use that may not yet have been evaluated under CEQA, or considered under State Water Code as a Change in Place of Use.

DATA REQUEST

192. Please list each potential individual element of supply and exchange, indicating whether it is subject to change, characterizing or quantifying the extent of change from current/historical practices to those proposed, and identify whether the proposed change has been previously evaluated under CEQA. If so, please reference relevant excerpts from the source document, and provide the documents.

193. Please provide evidence of Buena Vista's right to Kern River Flood flows.

194. What portion, if any, of the water to be supplied to Rosedale by Buena Vista is SWP entitlement water.

195. Please provide a full and detailed accounting for the water acquired and allocated by Rosedale and Buena Vista.

196. Please provide evidence that the water to be exchanged by Rosedale and Buena Vista is exportable water.

197. Please identify whether any of the proposed elements of supply or exchange attributing to the TPP water supply would prompt and necessitate filing with the SWRCB a Petition for Change in Place of Use as it relates to water rights.

198. Please explain the basis for the statement in the last paragraph of AFC Section 5.4.2.3, that "The Rosedale Master Environmental Impact Report (Rosedale 2000) also shows that District supplies consistently exceed use", in comparison to Table 2 – RRBWSD Water Balance (1995 – 2000) of the MEIR that appears to indicate a deficit in supply during 1999 and 2000.

199. Please provide Rosedale's Water Balance for the year 2001.

200. Please provide an assessment of the impact to the users that currently receive the SWP water that is to be exchanged by Rosedale with regards to the difference in water quality between SWP water and the water to be exchanged.

BACKGROUND

The Applicant has submitted "Attachment B" as part of the Data adequacy response. Page 3 of Attachment B discusses the water agreement proposed between Rosedale and Buena Vista.

DATA REQUEST

201. Please clarify the statement "Rosedale will enter into an agreement with Buena Vista... for the acquisition and placement into storage of 40,000 AF of existing groundwater and 6,400 AFY of Buena Vista's supply of Kern River flood waters. Is the water being exchanged, sold or stored for Buena Vista?

202. Please clarify the statement "Buena Vista will provide Rosedale with approximately 11,657 AFY in a manner that will allow Rosedale to make approximately 6,400 AFY of said supply available to the TPP. What is the "manner" that will allow this?

203. Please clarify the statement "The source of the first 6,400 AFY provided to Rosedale shall be from Buena Vista's supply of Kern River flood water. Is the rest of the water to be supplied to TPP to be from a different source?

204. Please provide an accounting for and right to the "preconsolidation water" derived from pre-1914 Kern River diversions.

Technical Area: Worker Safety and Fire Protection
Author: Alvin Greenberg, Ph.D.
Technical Senior: Rick Tyler

BACKGROUND

To assess the potential for impacts on workers and the public associated with an accidental fire at the facility, staff needs specific information about the level of staffing and on-site fire response.

DATA REQUEST

205. Please provide a description of the number of trained staff that would be on-site at any given time, their duties and responsibilities in the event of a fire at the facility, and their ability to respond to a fire using on-site fire-fighting resources including automatic and manual activated systems.

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION
OF THE STATE OF CALIFORNIA

APPLICATION FOR CERTIFICATION FOR THE ***TESLA POWER PROJECT*** ***BY MIDWAY POWER LLC.***	*DOCKET NO. 01-AFC-21* (AFC ACCEPTED 01/09/02) **PROOF OF SERVICE**

I, **PAT OWEN**, declare that on **February 5, 2002**, I deposited copies of the attached **TESLA POWER PLANT – DATA REQUESTS** in the United States mail at Sacramento, CA with first class postage thereon fully prepaid and addressed to the following:

DOCKET UNIT

Send the original signed document plus the required 12 copies to the address below:

CALIFORNIA ENERGY COMMISSION
DOCKET UNIT, MS-4
***Attn: Docket No. 00-AFC-21**
1516 Ninth Street
Sacramento, CA 95814-5512
docket@energy.state.ca.us

* * * *

In addition to the documents sent to the Commission Docket Unit, also send individual copies of any documents to:

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San Joaquin Valley Unified Air Pollution Control District, Northern Region

Revisions to POS List, i.e. updates, additions and/or deletions.

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

[signature]

Revisions to POS List, i.e. updates, additions and/or deletions.

* * * *

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Revisions to POS List, i.e. updates, additions and/or deletions.