CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

March 15, 2006

Mr. Tom McCabe,
Regional Vice President-Environmental Health & Safety
Edison Mission Energy
18101 Von Karman Ave, Suite 1700
Irvine, CA 92612-1046

Dear Mr. McCabe,

SUN VALLEY ENERGY PROJECT (05-AFC-3) DATA REQUESTS

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission (Energy Commission) staff requests that Valle del Sol, LLC, supply the information specified in the enclosed data requests.

The subject areas addressed in the enclosed data requests 1 through 80 are air quality, biological resources, cultural resources, land use, public health, socioeconomics, traffic and transportation, visual resources, visual plume analysis, and waste management. Data Requests for soils and water resources will follow at a later time. The information requested is necessary to understand the project, assess whether the project would result in significant environmental effects, and to assess project alternatives and mitigation measures.

Written responses to the enclosed data requests are due to the Energy Commission staff by April 17, 2006, or a later date agreed upon by the Energy Commission staff and the applicant.

If you are unable to provide the information requested in the data requests or object to providing it, you must notify the committee assigned to the project and the project manager, within 10 days of receiving these requests, stating your reason for delay or objection.

If you have any questions regarding the enclosed data requests, please call me at (916) 651-8853.

Sincerely,

Robert Worl

Robert Worl
Project Manager

Enclosure
cc:
Proof of Service
Docket (05-AFC-3)

SUN VALLEY ENERGY PROJECT
05-AFC-3
DATA REQUESTS

Technical Area: Air Quality
Author: Tuan Ngo, P.E.

BACKGROUND: CARBON MONOXIDE RE-DESIGNATION

The applicant proposes to rely on the pending re-designation of the South Coast Air Quality Management District (District) as attainment of the national carbon monoxide (CO) standards to avoid having to provide CO offsets. If the re-designation does not occur within the time frame of the project licensing proceeding, the applicant proposes to provide offsets by purchasing CO emission reduction credits (ERCs), or by participation in the District's Priority Reserve program.

DATA REQUEST

1. Please provide a status report of the CO re-designation at the District, the California Air Resources Board (CARB) and the United Stated Environmental Protection Agency (US EPA), and the dates and a schedule of critical milestones (e.g., resolution to proceed with the request by the District Governing Board, the District re-designation request to CARB, the re-designation request from CARB to the US EPA, and a decision by the US EPA).

BACKGROUND: EMISSION REDUCTION CREDITS AND OFFSETS

Pending CO attainment re-designation, revision of the Priority Reserve, and a petition for the project to enter the sulfur oxides (SOx) RECLAIM program, the District's Regulation XIII still requires that the project's emissions of CO, SOx, volatile organic compounds (VOC) and particulate matter less than 10 microns (PM10) must be offset with ERCs or Priority Reserve Credits. The AFC does not provide documentation that any ERCs have been secured, either through option contracts or outright ownership, or that the project will be eligible for the Priority Reserve program. For staff to complete its analysis and to present testimony that the project is fully mitigated, evidence needs to be provided by the applicant that credits have been secured.

DATA REQUEST

2. Please identity ERCs owned by the applicant or any affiliate that the District might require to be surrendered credits as a condition for participation in the Priority Reserve. Please include the ERC number, the pollutant type and amount in pounds per day, and ERC source location and name.
3. Please provide option contracts and/or evidence of acquisition of ERCs for the CO, SOx, VOC and PM10 liability of the project.

4. If the applicant is unable to adequately respond to the Data Request above, please provide a status report starting May 1, 2006 and continuing monthly until the report identifies option contracts and/or evidence of acquisition of ERCs for the CO, SOx, VOC and PM10 liability of the project, or the start of project Air Quality Evidentiary Hearings. The report should be specific to each pollutant and provide new information and update information from previous monthly status reports as appropriate. The reports should include:
   a. contact names and telephone numbers;
   b. company or source names;
   c. pollutant credit types and amounts in lbs/day;
   d. ERC certificate numbers;
   e. the methods of emission reductions (e.g., shutdown, reduction of hours of operation, emission controls, etc.);
   f. the status of ERC or option negotiations;
   g. prices or potential prices; and,
   h. the location of the emission reduction credits.

BACKGROUND: PRIORITY RESERVE

A critical mitigation option is revision of the District's Priority Reserve program for PM10, and possibly SOx, VOC and CO credits. However, significant modifications and revisions (February 16, 2006) of the Priority Reserve rule (1309.1) are required to allow power plants to participate in the program and also to ensure funding (of credits) at levels to match the amounts the power plants may require. The rulemaking is underway, but the timing and the scope of the revisions are uncertain.

DATA REQUEST

5. Please provide a status report starting May 1, 2006 and continuing monthly until the rule is revised and adopted by the District Board and the District has approved the project's participation in the Priority Reserve under the revised rule, or until the start of the project Air Quality Evidentiary Hearings. The report should provide new information and update information from previous monthly status reports, and include:
   a. any additional rule changes and revisions needed to enable the applicant to qualify and participate in a revised Priority Reserve program, and that ensure sufficient quantities of credits are in the program;
   b. steps that the applicant will take to meet the proposed revised rule requirements, including

i. all existing stationary sources under common ownership (applicant and any affiliate identified by the District) will meet Best Available Retrofit Control Technology (BARCT) and will comply with Section (c)(1) of Rule 1309.1.

ii. that the applicant will satisfy the due diligence requirement of Section (c)(3) of Rule 1309.1;

iii. that the applicant will satisfy the 1.2 to 1.0 offset ratio requirement of Section (c)(4) of Rule 1309.1;

iv. that the applicant will be fully and legally operating within 3 years of a District Permit to Operate or Commission Decision pursuant to Section (c)(5) of Rule 1309.1; and,

v. the status of negotiations for power sales contracts with the State of California pursuant to Section (d)(1) of Rule 1309.1.

BACKGROUND: FINE PARTICULATE MATTER (PM2.5)

The applicant has not provided any discussion about mitigation of the facility's PM2.5 impacts (generally 100 percent of natural gas combustion particulate matter is PM2.5) on the local and regional air quality. Because the District does not have a priority reserve program for PM2.5, staff is concerned that the current or revised Priority Reserve program will not be able to specifically provide PM2.5 equivalent credits, thereby making it difficult to conclude that the project's PM2.5 liability is mitigated.

DATA REQUEST

6. Please provide proposal(s) to mitigate the facility's potentially significant PM2.5 impacts.

7. Please discuss changes in the Priority Reserve necessary to ensure that PM2.5 emission reduction credits will be identifiable and available to mitigate project PM2.5 emissions.

8. Please investigate and report on the potential for local emission reductions and mitigation measures.

BACKGROUND: SULFUR OXIDES (SOX) RECLAIM

The applicant proposes to rely on the District's RECLAIM program to acquire SOx emission reduction credits to mitigate the project's SOx emission impacts. The RECLAIM rule specifically excludes power plants from the SOx portion of the rule. However, power plants can petition to participate. The District indicated it is unlikely that they would be allowed to participate, as other power plants have tried (e.g., Inland Empire Energy Center Project (01-AFC-17)) and only during the power emergency of 2000/2001 did the AES Huntington Beach power plant succeed. If a petition to participate in SOx RECLAIM is not pursued by the applicant or is denied by the District, the project's SOx emissions would have to be offset with ERCs or Priority Reserve Credits, pursuant to the offsetting requirements of the District's Regulation XIII.

DATA REQUEST

9. Please provide a status report, starting May 1, 2006 and continuing monthly until the start of the project Air Quality Evidentiary Hearings regarding the petition or potential petition that the applicant has filed with the District to participate in the SOx RECLAIM program that includes:
   a. the petition itself and supporting documentation that the applicant filed with the District; and,
   b. a schedule for review and decision by the District of the application for participation in SOx RECLAIM.
10. Please provide a list of RECLAIM SOx trading credits that the applicant already owns or has under option contract.

BACKGROUND: NITROGEN OXIDES

The applicant proposes to rely on the District's nitrogen oxides (NOx) RECLAIM program to acquire emission reduction credits to mitigate the project NOx emission impacts.

DATA REQUEST

11. Please provide a list of NOx RECLAIM trading credits (RTCs) that the applicant owns or has under option contract.
12. Recent revisions to NOx RECLAIM will reduce NOx RECLAIM trading credits by about 15 percent and probably increase prices from existing levels. Please include in the initial status report above a discussion of how the changes to the NOx RECLAIM market would affect the ability of the applicant to purchase sufficient quantities of NOx RECLAIM trading credits.

BACKGROUND: START-UP AND SHUT DOWN EMISSION ESTIMATES

Sections 8.1.2.2, 8.1.5.2.3 of the AFC indicate that the project consists of five General Electric (GE) LMSM100 gas turbine units equipped with water injection and selective catalytic reduction (SCR) systems to minimize NOx emissions. In addition, a carbon monoxide (CO) oxidation catalyst system would also be utilized to minimize the turbines' volatile organic compounds (VOC) and CO emissions.

Appendix 8.1A provides manufacturer's emission guarantees and tables summarizing the estimated emissions of the turbines, cooling towers, and fire pump engines. It is not clear how these estimated emissions were derived. For example, the GE-provided emissions estimates indicate that a LMS100 turbine emits 25 ppm NOx at 15 % oxygen, which is equivalent to 81 lbs/hr if the SCR is not in operation. The start-up duration for each turbine is approximately 35 minutes (A0 FC Section 8.1.2.2) during which time the SCR is not expected to be fully operational; therefore, staff expects that the turbine start-up emissions will be higher than the 7 lbs/start-up identified (AFC Appendix 8.1A).

DATA REQUEST

13. Please provide assumptions and calculations used to derive the individual turbine start-up emissions for NOx, CO and VOC of 7, 15.4 and 2.1 lbs/event, respectively.
14. Please provide assumptions and calculations used to derive the individual turbine shut down emissions for NOx, CO and VOC of 4.3, 18.2 and 1.6 lbs/event, respectively.
15. Please provide an explanation of how the turbine's start-up and shut down emissions and exhaust conditions (i.e., flow rate and temperature) were estimated for inputs into the modeling analysis.
16. If the start-up and shut down emissions rates and characteristics are revised, please provide a revised modeling analysis showing the facility impacts during start-ups.

BACKGROUND: COMMISSIONING PERIOD

AFC Section 8.1.2.4.4 describes the analysis used to estimate the facility emission impacts during commissioning. The analysis was performed using a regulatory approved model ISCST3 with the total facility emission inputs estimated as maximum 175 lbs/hr for NOx and 255 lbs/hr for CO (AFC pp. 8.1-61, bottom page).

DATA REQUEST

17. Please provide a detailed discussion of turbine commissioning and the procedures to be used to limit the simultaneous operation of turbines that have no, or limited, emissions controls in place.
18. Please provide the assumptions and calculations deriving the turbine commissioning emissions such as those shown in Table 8.1A-10 and estimate maximum emissions from each turbine and the facility during commissioning.

BACKGROUND: TURBINE PM AND VOC EMISSIONS GUARANTEE

Appendix 8.1A contains manufacturer's guarantees for PM and VOC, which include a requirement that the turbine must be operated at a base-load level for at least 300 hours for the PM and VOC guarantees to be in effect.

DATA REQUEST

19. Please provide the steps that the applicant will take to ensure continuous operation at base-load to meet the 300 hours operational requirement.
20. If the operational requirement cannot be reasonably met, please provide discussions and analysis to show whether the facility can meet the turbines' PM and VOC emissions limits identified in the AFC. If these PM and VOC emissions levels cannot be met, please provide new estimates for the turbines' PM and VOC emissions, impacts and offsets.

BACKGROUND: NATURAL GAS SULFUR CONTENT

Section 8.1.2.2 and Appendix 8.1A of the AFC indicate that the facility will use natural gas with a maximum sulfur content of 0.25 grain per 100 standard cubic feet (gr/100scf). Staff has seen in previous siting cases that the delivered natural gas can contain as much as 1gr sulfur/100scf. If higher sulfur content natural gas fuel is used at the facility, SOx and PM emissions may be underestimated.

DATA REQUEST

21. Please provide assurance that the sulfur content of supplied natural gas will not be above 0.25 gr/100scf.
22. Please provide the steps the applicant would take to ensure that natural gas that has higher than 0.25 gr/100scf of sulfur will not be used at the facility.
23. Please provide the method for ensuring continuous compliance with the sulfur content limits specified for the supplied natural gas fuel.

BACKGROUND: FIRE PUMP ENGINE EMISSIONS

Appendix 8.1A, Table 8.1A-6 lists the expected emissions of the fire pump engines using standard diesel fuel. Staff believes that the use of ultra-low sulfur diesel, which contains no more than 15 ppm sulfur, can satisfy both the District's Best Available Control Technology (BACT) requirements and reducing the facility's SOx and PM emissions liability.

DATA REQUEST

24. Please provide discussion about the feasibility of using ultra-low sulfur diesel as fuel for the fire pump engines.
25. Given the scenario of using ultra-low sulfur diesel, please revise project emissions, and if appropriate, air dispersion modeling, based on the new fuel.

BACKGROUND: AIR QUALITY MODELING ANALYSIS DOCUMENTATION

Section 8.1.2.3 provides discussions of the method of selecting the appropriate air quality model to analyze the project impacts and tables listing the modeling results. Appendix 8.1B provides some modeling support data as well as modeling input and output files in electronic format. Missing from the AFC is a text file describing the modeling input and output files. Without this information, staff can not verify modeling results that were submitted in Section 8.1.2.3.

DATA REQUEST

26. Please provide a text file describing the provided input and output modeling files.

BACKGROUND: CUMULATIVE AIR QUALITY IMPACT ANALYSIS

Section 8.1.3 states that a cumulative air quality impact analysis was conducted in accordance with the protocol included in Appendix 8.1H. Staff cannot find the cumulative air quality impact analysis in the AFC.

DATA REQUEST

27. Please clarify whether an air quality cumulative impact analysis has been performed. If it has, please provide the modeling assumptions, model input and output files, and modeling results.
28. If a cumulative impact analysis has not been performed, please discuss the status of obtaining a list of projects near the Sun Valley project site that meet the criteria listed in Section 8.1H "Cumulative Impacts Analysis Protocol". If the aforementioned list has been obtained, please submit the list of the emission sources to be included in the cumulative air quality impacts analysis.
29. Upon staff's review and concurrence of the sources, please perform a cumulative impact analysis using the modeling method proposed in the AFC.

BACKGROUND: FACILITY EMISSION OFFSETS

The AFC's Table 8.1-40 lists the emission reduction credits needed to offset the facility's emissions that are subject to the District New Source Review (NSR) program. In this table, the emission reduction credits needed for PM10, VOC and CO are 63.5, 25.1, and 148.6 tons per year (TPY), respectively. Table 8.1G2 of Appendix 8.1G lists the offsets needed as being approximately be 8, 3.2 and 18 TPY for PM10, VOC and CO, respectively.

DATA REQUEST

30. Please provide a table that lists the correct amount of offsets required by the District's NSR rule.

Technical Area: Biological Resources
Author: John Mathias

BACKGROUND

The Sun Valley Energy Project (SVEP) is within the Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP) area and the Stephen's Kangaroo Rat Habitat Conservation Plan (SKRHCP) area.

The AFC indicates that participation in the WRCMSHCP and SKRHCP are subject to conditions of approval from the habitat conservation agencies. The AFC also states that incidental take permits have been issued to Riverside County through the federal Section 10 process, and the applicant will coordinate with local agencies regarding issuance of incidental take permits.

Given that the WRCMSHCP has been recently enacted, staff needs more information about the WRCMSHCP relative to the project to make a determination of the SVEP's compliance with LORS. Staff also needs a complete understanding of SVEP's participation in the habitat conservation plans and the process through which SVEP will obtain an incidental take permit.

DATA REQUEST

31. Please provide a detailed discussion of the approval process for participation in the WRCMSHCP and the SKRHCP.
32. Please provide a detailed discussion of all actions that must be taken for the project to be in compliance with the WRCMSHCP, including a discussion of what actions have been taken by SVEP and a schedule of future actions that must be taken.
33. Please provide a discussion of how mitigation fees are determined under the WRCMSHCP and specific fee amounts that will be required for SVEP.
34. Please provide a detailed discussion of all actions that must be taken for the project to be in compliance with the SKRHCP, including a discussion of what actions have been taken by SVEP.
35. Please provide a schedule of future actions that must be taken for the project to be in compliance with the SKRHCP.
36. Please provide contact information for the specific individuals at the habitat conservation agencies responsible for approving SVEP's participation in the WRCMSHCP and the SKRHCP.
37. Please provide copies of any past and future correspondence related to issuance of incidental take permits.

BACKGROUND

The AFC states that burrowing owl surveys are required under the WRCMSHCP, and that said surveys will follow protocols established by the California Burrowing Owl Consortium. In addition, spring botanical surveys and winter bird surveys will be completed. Staff needs survey results and information on mitigation measures required by the WRCMSHCP to complete its analysis.

DATA REQUEST

38. Please provide a schedule for and the results of spring botanical surveys, burrowing owl surveys, and winter bird surveys.
39. Please provide a detailed discussion of any mitigation measures required by the WRCMSHCP if burrowing owls or burrowing owl burrows are found during surveys.

BACKGROUND

The AFC states that the SKRHCP requires per-acre habitat compensation fees. However, the AFC does not discuss Riverside County Ordinance No. 663.10 (Stephen's Kangaroo Rat Mitigation Fee Ordinance). The AFC also states that the SVEP site will occupy approximately 20 acres and that a 600-foot transmission line will be constructed as well as one off-site transmission tower.

Staff needs a complete understanding of the habitat impacts for all project facilities to complete the project analysis, particularly as they relate to special-status species impacts such as Stephen's kangaroo rat. Staff needs a complete understanding of LORS as they relate to the project to complete its analysis.

DATA REQUEST

40. Please provide exact acreage calculations for permanent and temporary impacts from construction of the power plant, the transmission line, the transmission tower, and any other project features that may impact special-status species habitat.
41. Please provide a discussion of how mitigation fees are determined under the SKRHCP and specific fee amounts that will be required for SVEP, including a discussion of the amount of disturbed land that will and will not require mitigation fees under the SKRHCP.
42. Please provide a discussion of Riverside County Ordinance No. 663.10, its applicability to the SVEP, and a discussion of how SVEP will comply with the ordinance.

BACKGROUND

The AFC states that aquatic resources surveys will be conducted during the winter and early spring of 2005/6. It also states that a wetland delineation report will be prepared and submitted to the U.S. Army Corps of Engineers, if necessary. Staff needs a

schedule for these surveys, the survey results and project reports to complete its analysis.

DATA REQUEST

43. Please provide the results of aquatic resources surveys.
44. Please provide copies of any official correspondence with the U.S. Army Corps of Engineers regarding wetlands and wetland delineation, including the wetland delineation report.

BACKGROUND

For biological resources mitigation measures to be successful, it is important that there be a clear and detailed plan for responsible individuals to implement. Staff needs the proposed details on such a plan to complete its analysis. A recently submitted Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP) approved by the Energy Commission for the Inland Empire Energy Center (01-AFC-17) which is in the same area as the Sun Valley Energy Project may be helpful in this regard.

DATA REQUEST

45. Please provide a detailed outline of a draft Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP), including the applicant's proposed mitigation measures and any mitigation measures applicable under the SKRHCP, WRCMSHCP, and other LORS. At a minimum the BRMIMP outline should include the persons responsible for the BRMIMP implementation, agency contact information, potential compliance measures and habitat compensation, a Worker Environmental Awareness Program (WEAP), a schedule of proposed pre-construction biological resources surveys, post-construction surveys and landscaping, measures required during operation, temporary and permanent closure measures, and environmental compliance monitoring and a reporting plan.

Technical Area: Cultural Resources
Author: Beverly E. Bastian

If a response reveals archaeological site locations, please submit it separately under confidential cover.

BACKGROUND

It is the Energy Commission's responsibility to ensure that the Sun Valley Energy Project (SVEP) complies with all applicable federal, state, and local laws, ordinances, regulations, and standards (LORS). The AFC notes the preservation policy in the Riverside County General Plan, the Plan's assessment of proposed land use impacts on historic and prehistoric resources, and Riverside County's preparation requirements for cultural resources reports for privately initiated development projects, but the AFC does not indicate whether and how these local LORS apply to the proposed project.

DATA REQUEST

46. Please provide a summary of Riverside County LORS that pertain to cultural resources and explain whether and how they pertain to the SVEP.

BACKGROUND

Staff needs to identify all significant cultural resources in the vicinity of the proposed SVEP to assess the potential impacts of the project on these resources. AFC subsection 8.3.1.5 presents the results of the applicant's efforts to identify cultural resources, including: a California Historical Resources Inventory System (CHRIS) records check, a new archaeological survey of the footprints of project components, a new architectural survey of "the immediate project area", a Native American Heritage Commission sacred lands database check, and the outreach by mail to Native Americans having traditional ties to the proposed project area. Not all data obtained by the applicant were provided to staff in the AFC. Nor were all sources known to contain pertinent cultural resources data accessed or the access was not sufficiently comprehensive. The following needs remain:

DATA REQUEST

47. Under confidential cover, please provide copies of the Department of Parks and Recreation (DPR) forms 523 for the six previously recorded sites obtained from the CHRIS and discussed in AFC subsection 8.3.1.5.1. Two sets of copies of these confidential materials will be sufficient.

48. Under confidential cover, please provide copies of the seven previous technical reports (omitted from subsection 8.3.8, "References Cited or Consulted") obtained from the CHRIS and listed in Table 8.3-1 only as:

    Wells (1975)

Greenwood (1980)
Rector (1981)
McCarthy (1983)
Bouscaren (1984)
Drover (1988)
Smith (2000)

Two sets of copies of these confidential materials will be sufficient.

49. Please submit the following information (under confidential cover if site locations are included) on all archaeological survey(s) conducted by the applicant for this project.
    a. Personnel, coverage, methods, and results of survey(s)—
        i. Pre-Application Survey. The methods discussion should describe how the survey transects/intervals specified in the AFC were applied to each linear facility (transmission line, natural gas pipeline, water supply pipelines, and non-reclaimable water discharge pipeline), i.e., were the transects arrayed parallel or perpendicular to the routes? If the survey coverage was less than 100% of a 200-foot corridor centered on the linear alignments, or less than 100% of the plant site plus a surrounding 200-foot buffer zone, staff recommends that an additional survey should be completed to attain this coverage and the results should be provided. If this degree of coverage cannot be attained, please explain the limitations.
        ii. Additional, Pre-Certification Survey. If any areas in addition to the plant site and linear facilities routes will be utilized or altered by the project (for example, worker parking areas), and they have not been surveyed for cultural resources, please conduct an archaeological survey for each such area and provide the results.
        iii. Add to AFC Figure 8.3-1 the percentage of survey coverage and percentage of ground visibility (distinguished graphically) and the locations of all identified archaeological resources (see part b.(i.) of this question, below) in relation to the footprints of all project components.
        iv. Please provide the resumes of all persons who participated in the survey(s). If the person who conducted or directed the survey(s) does not meet the Secretary of the Interior's Professional Qualifications Standards for archaeology, a re-survey by a qualified person may be necessary.
        v. Please provide copies of DPR 523 forms for all archaeological resources identified in all current project survey(s). If a resource could be impacted by the project, its form should contain a discussion of its eligibility for the California Register of Historical Resources (CRHR). Two sets of copies of these confidential materials will be sufficient.

b. Information obtained by contacting local archaeological societies. Provide a list of archaeological resources identified through these sources located within 1/2 mile of the SVEP site.

   i. Plot the locations of the identified resources on the map requested in part a. (iii) of this question, above.

   ii. Copies of any information documenting the resources (DPR 523s, reports, field notes).

50. Please submit the following information on the architectural survey(s) conducted by the applicant for this project.

   a. The date(s) of the survey(s), the names of the personnel carrying out the survey(s), a delineation of the survey areas, a description of the methods used (including how the ages of the structures adjacent to the proposed project components were determined), and the results of new and/or additional surveys.

      i. Pre-Application Survey. Under "Architectural Reconnaissance," the AFC indicates that the applicant reconnoitered the project parcel, the "immediate project area," and "along" the natural gas pipeline and non-reclaimable waste water line, but identified no standing buildings or structures older than 45 years except for the BNSF Railway (pp. 8.3-14, 15). If the survey did not include other commonly overlooked linear facilities and related structures (roads, bridges, tunnels, culverts, dams, canals, irrigation systems, pumping stations, transmission lines, electrical substations) that are located within 1/2 mile of the SVEP site and that could be more than 45 years old, staff recommends that an additional survey should be conducted to identify these resources and the results should be provided.

      ii. Additional, Pre-Certification Survey. If any areas in addition to the plant site and linear facility routes will be utilized or altered by the project (such as worker parking areas), and they have not been surveyed for architectural resources, please conduct architectural survey for each such area and provide results.

   b. Add the locations of the architecturally surveyed areas and all identified architectural resources to AFC Figure 8.3-1 (see part f. (i.) of this question, below), in relation to the footprints of all project components.

   c. Please provide the resume of the architectural historian who conducted or directed the survey(s) and made the age and/or eligibility assessments for the identified cultural resources. If that person does not meet the Secretary of the Interior's Professional Qualifications Standards, a re-survey by a qualified person may be necessary.

   d. Please provide copies of DPR 523 forms for all architectural resources (including infrastructure) identified in all surveys. If a resource could be impacted by the project, Part B of the 523 form should be filled out and should contain a

discussion of the resource's eligibility for the CRHR, completed by a qualified architectural historian (meeting the criteria of the Secretary of the Interior's Professional Qualifications Standards for architectural history) or a historian with a specialty in industrial or agricultural history.

e. From Riverside County, City of Perris, City of Hemet local inventories or registers, or from local historical societies, please provide a list of architectural resources identified through these sources located within 1/2 mile of the SVEP site.

   i. Please plot the locations of the architectural resources identified through local historical societies and county and city registers or inventories, on the map requested in part b. of this question, above.

   ii. Please provide copies of any information documenting the architectural resources identified through local historical societies and county and city registers or inventories (DPR 523s, reports).

f. Please provide a discussion (more detailed than in the AFC), recordation (or updating of existing record), and evaluation of the BNSF Railway, a structure older than 45 years which forms the northern boundary of the SVEP plant site and which is possibly significant for its role in bringing permanent American settlement to the area. A qualified architectural historian (meeting the criteria of the Secretary of the Interior's Professional Qualifications Standards for architectural history) or a historian with a specialty in industrial or transportation history should complete or direct the completion/updating of a DPR 523 form (Parts A and B) for this resource, and a copy should be included.

51. Please provide photographic-quality color (for maps) copies of the following aerial photographs and historic maps cited in AFC Volume 2, Section 8.14:

    a. Aerial Photographs: 1938, 1953, 1967, 1980, 1989, 1994, and 2002

    b. Topographic Maps: 1901, 1947, 1953, 1973, and 1979

52. Please provide the following materials regarding Native American contacts:

    a. A copy of the letter and map showing the SVEP which CH2MHill sent to the Native Americans on the Native American Heritage Commission (NAHC) list of those wanting to be notified about projects in this area.

    b. Update of Appendix 8.3A with copies of any written responses received from Native Americans since the AFC was submitted. If any further responses were received by telephone, please provide written summaries of the conversations.

    c. Update of Appendix 8.3A with copies of telephone logs of applicant's follow-up telephone calls, advised by the NAHC, to those Native Americans who have not yet responded to letters, evidencing that the letters were received and documenting any additional information provided by the Native Americans.

BACKGROUND

Appendix 8.3 provided copies of letters from Native American groups responding to the SVEP informational letters sent by the applicant. The letters express several concerns. Most commonly, responders recommended having a Native American monitor on the construction site during ground-disturbing activities. Also common were a request to be notified of any prehistoric discoveries, a request to receive copies of cultural resources documentation generated by the project, and a request for additional information about the SVEP.

DATA REQUEST

53. Please provide a discussion of the steps the applicant is taking or will take to address the concerns expressed by Native American groups and individuals.

BACKGROUND

AFC Figure 2.1-1 shows a laydown area on the proposed plant site parcel, but no worker parking area is shown. Also, Figure 8.3-1 shows the area which was surveyed for archaeological resources, and this includes a large parcel south and a smaller parcel east of the proposed plant site parcel. Staff needs to know if any areas additional to the plant site and linear routes may be subject to impact from the construction and operation of this project.

DATA REQUEST

54. Please provide the location and planned use for any additional off-site areas that may be altered or used for some SVEP-related purpose. If any of these have not been surveyed for cultural resources, see the above request regarding additional surveys. Please depict each such area on a map at a scale of 1:24,000 and describe all ground-disturbing activities which will occur there. Also, please describe all ground disturbance expected at the laydown area.

BACKGROUND

The AFC does not discuss depths or extent of excavation at the plant site or on the non-reclaimable water discharge pipeline trench. Staff needs this information to evaluate impacts to cultural resources.

DATA REQUEST

55. Please identify the maximum and average depth of excavation at the plant site for construction of the proposed project. Please also discuss the maximum depth and width of excavations for the non-reclaimable water discharge pipeline trench. Please address whether the pipeline will be located on the shoulder or in the middle of roads.

BACKGROUND

The discussion of cumulative impacts in subsection 8.3.3 of the AFC does not provide information on other projects in the area that could impact cultural resources in combination with the proposed SVEP. Subsection 8.6.1.4 includes a list of projects within one mile of the SVEP that have undergone discretionary review within the past 18 months by Riverside County or the California Energy Commission, but the discussion of cumulative impacts to cultural resources in Section 8.3 should identify the impact of other projects on cultural resources and consider the SVEP impacts in combination with those other projects. Additional information is needed to complete the staff analysis.

DATA REQUEST

56. Please describe all other projects within a ½-mile radius of the SVEP, including the status of their construction and their potential impacts to cultural resources. Also, please depict and label those projects on a map at a scale of 1:24,000 and provide this map to staff. Finally, please provide a discussion of the potential cumulative impacts to cultural resources of the SVEP in combination with impacts from the other projects planned or already underway in the area.

Technical Area: Land Use
Author: Amanda Stennick

BACKGROUND

Section 8.6.1.1 of the Sun Valley Energy Project Application for Certification (AFC) states that the SVEP property consists of five parcels of land totaling about 37 acres (Assessor's Parcel Numbers 331-250-08, -14, -18, -19, and -20), and that the project would be constructed on parcels 331-250-19 and -20, which total about 23 acres.

DATA REQUEST

57. To ensure that staff has a complete project description, please state any planned project-related uses, or other intended uses including any temporary construction features, for Assessor's Parcel Numbers 331-250-08, -14, -18.

BACKGROUND

Appendix 1A shows an underlying subdivision on parcel 331-250-19. Appendix 1B does not clearly show the presence of an existing road or easement to the proposed project site. Based on the information provided, it appears that the project may not conform to Riverside County's requirements due to the underlying subdivision lines and the fact that one or more parcels may be landlocked.

DATA REQUEST

58. Please provide written verification of the applicant's intention to eliminate the underlying lot lines, merge parcels 331-250-19 and -20, and build the entire project on one parcel. Explain how this plan will comply with Riverside County Ordinances.
59. For staff to determine whether parcels 331-250-8,-18,-19 and -20 have legal access, please provide a Grant Deed and Title Report for those parcels.
60. Please provide a plot plan that shows the planned access route to key areas of the proposed project site including the proposed laydown area shown on the east side of parcel 331-250-19.

Technical Area: Public Health
Author: Ramesh Sundareswaran

BACKGROUND

In Appendix 8.1D of the AFC, Figure 8.1D-4 shows the location of the point of maximum impact without a scale. Figure 8.1D-1 identifies the 25 known sensitive receptors within a six-mile radius of the project, but does not identify the point of maximum impact. Further, maps that illustrate the risk assessment results through multipathway cancer risk and noncancer acute and chronic hazard index contours are lacking.

DATA REQUEST

61. Please provide a map (i.e., one that shows water bodies, structures, etc), drawn to scale, that includes, at a minimum, the facility emission points, property boundary, the Menifee Valley Ranch development, the point of maximum impact, and the 25 identified and any known planned sensitive receptors for the cancer and non cancer acute and chronic risks. U.S. Geologic Survey 7.5 minute maps are an appropriate base map choice.

62. Provide maps, at the same scale as that prepared for the previous data request that show cancer risk assessment contours for the probability of 1 occurrence and for 10 occurrences in a million, and the noncancer acute and chronic hazard index contours for levels of 0.5 and for 1.0. Include the facility location and property boundary on the maps.

Technical Area: Socioeconomics
Author: Joseph Diamond Ph. D.

BACKGROUND

In the AFC Socioeconomics Section 8.10, only the construction payroll costs identify year (2005 dollars). The time value of money should be reflected for all economic estimates. Staff needs to know the year that corresponds to the dollar estimates.

DATA REQUEST

63. To the extent possible, please indicate the year for all economic estimates (i.e., project capital costs, economic impact analysis results using The Impact Analysis For Planning (IMPLAN) input-output model, estimates of total and locally purchased materials and supplies during construction, operations payroll, and operations and annual maintenance budget).

Technical Area: Traffic and Transportation
Author: Gary Collord

BACKGROUND

According to the AFC, access to the site will occur via Junipero Road from the north during the construction stage and from the South during the operational stage of the project. Junipero Road is currently described as an undeveloped road right-of-way between agricultural fields on the site's western boundary. Table 8.12-11 indicates an encroachment permit for pipelines and road improvements will be needed and that a temporary railway grade crossing will be secured (presumably) to access the Junipero Road right-of-way for the construction phase of the project. However, it is not clear whether the applicant currently has legal access to the site via the Junipero Road right-of-way.

DATA REQUEST

64. Staff would like information regarding the current status of Junipero Road improvements and access for the project:
    a. Please clarify the legal status of access to the Junipero Road right-of-way to accommodate the project's construction.
    b. outline the applicant's plans and timeframe for improving the right-of-way for use during the construction and ongoing operational stages of the project.

BACKGROUND

Local school districts in the project's vicinity (Romoland and Perris Union High) may have bus routes and stops along the roads to be used for vehicle access during the project's construction phase (i.e., Ethanac, Matthews and Junipero). Since these roads have little or no shoulders, there is concern about the safety of students being picked up and let off during periods of heavy construction traffic.

DATA REQUEST

65. Staff would like information regarding the two School Districts bus routes in the vicinity of the SUEP:
    a. Please indicate whether the local school districts have bus routes and stops along the proposed construction access route, and the school districts planning process for establishing bus routes each school year.
    b. If any such routes exist, please discuss the mitigation measures that will be taken to ensure the construction traffic will not reduce student safety.

Technical Area: Visual Resources
Author: James Adams

BACKGROUND

The photographic scale of the visual simulations and the 81/2 inch by 11 inch format in the AFC does not adequately reveal the actual view and the project's potential visual impact. In particular, the simulations do not represent a life-size scale when viewed from a normal reading distance.

DATA REQUEST

66. Please re-scale the KOP views and simulation images to achieve life-size scale. After re-scaling the images, please provide four high quality 11" x 17" color photo copies of the existing view and simulation showing the power plant for each of the three KOPs.

Technical Area: Visible Plume Modeling
Author: Tuan Ngo, P.E.

BACKGROUND

The visible water vapor plume discussion provided in the Visual Resources section of the AFC (Section 8.13.2.3.7, pg. 8.13-18) states that formation of the visible plumes is a rare occurrence, and when present, the plumes would be relatively small. It is not clear if the applicant conducted a modeling analysis of vapor plumes to support this conclusion since the AFC did not contain any supporting analysis.

DATA REQUEST

67. If the applicant performed a visible plume modeling analysis in support of the AFC Visual Resources conclusion, please provide the modeling results, any meteorological data used in the analysis, a full discussion of all assumptions, the name and version of the model used, and all model input and output files. If a modeling analysis was not performed, please provide any analysis that supports the visible water vapor plume discussion in the AFC.

BACKGROUND

Staff intends to conduct a plume modeling analysis using the Combustion Stack Visible Plume (CSVP) model and the Seasonal Annual Cooling Tower Impact (SACTI) model for the Sun Valley project, as is done for all projects with cooling towers. Staff will provide the applicant with a copy of the CSVP model training manual upon request.

DATA REQUEST

68. Please provide five years of meteorological data files in either the National Climate Data Center (NCDC) CD144 (surface data), NCDC-TD3280 (hourly surface observations with precipitation), or Hourly United States Weather Observations (HUSWO) format. The files should be the most recent years available. The files must include location, present weather, cloud cover, and visibility data. Please include a complete description of the source of this data (i.e. specific location, anemometer height, etc), and a discussion of why the data is representative of the area. Please also provide an electronic copy of the raw meteorological data file for each year.
69. Please also provide meteorological data files for the same five years in Industrial Source Complex (ISCST3) modeling format from the above data source. These files must include stability class data.
70. Please provide the values for heat rejection (MW/hr), exhaust temperature, and exhaust mass flow rate that affect cooling tower vapor plume formation for a range of ambient conditions that represent reasonable worst-case operating scenarios. At a minimum, please fill in all blanks in the table below. Please also update/correct the table, if necessary.

Parameter	Cooling Tower Exhausts		
Number of Cells	5 cells (in 1x5 array)		
Cell Height*	11.89 meters		
Cell Diameter*	6.71 meters		
Tower Housing Length*	66.53 meters		
Tower Housing Width*	11.28 meters		
Ambient Temperature	20 °F	59 °F	95 °F
Ambient Relative Humidity	60 %	60 %	60 %
Heat Rejection (MW/hr)			
Exhaust Temperature (°F)			
Exhaust Mass Flow Rate (lb/hr)			

*Stack dimensions from AFC Table 8.1B-2. Tower length and width (not including circulating pumps) estimated from AFC Table 8.1B-3 and 8.1B-4.

Staff intends to model the cooling tower using hourly estimated exhaust conditions based on the hourly ambient conditions of the meteorological file. Staff will assume saturated cooling tower exhaust at the exhaust temperature determined through interpolation for the hourly ambient conditions. Therefore, additional combinations of temperature and relative humidity, if provided by the applicant, will more accurately represent the cooling tower exhaust conditions.

71. Please indicate if the cooling tower has any plume mitigation features that would reduce the exhaust moisture content below the saturated level.
72. Please provide the cooling tower make and model number, and any vendor documentation available for the specific model.
73. Please provide a fogging frequency curve from the cooling tower vendor, if available.
74. Please indicated how many cooling tower cells will be turned on under different potential partial load conditions (i.e. when will all five cells be on, when will four cells be on, when will two cells be on, etc.?). Please also note if ambient conditions, such as cold temperatures, dictate when cells may be turned off.
75. Please confirm that the cooling tower fan motors will not have a variable speed/flow controller.

Technical Area: Waste Management
Author: Ramesh Sundareswaran

BACKGROUND

Section 8.14.1.1 (page 8.14-1) of the AFC recognizes that historic agricultural activities at the site could have resulted in the release of hazardous substances. It recommends that an investigation be undertaken to (i) confirm the absence/presence of such substances (ii) define the extent of any releases (iii) evaluate the human and ecological threats posed by any confirmed releases, and identify any remedial options to abate the threats.

DATA REQUEST

76. Please provide a protocol and schedule for conducting the above investigation and any applicable remediation for the power plant area, associated laydown area, and all appurtenant locations. The schedule will need to reflect best and worst case planning scenarios with all applicable assumptions and milestones. The protocol would be subject to the approval of Energy Commission staff and that of the Department of Toxic Substances Control (DTSC). The Applicant is encouraged to enter into a Voluntary Cleanup Agreement with the Cypress regional office of DTSC to avail of any post investigation/remedial certification from DTSC. Copies of all correspondence between the Applicant and DTSC that are applicable to a Voluntary Cleanup Agreement shall be made available to the Energy Commission on a timely basis.

BACKGROUND

Sections 8.14.1.2.1 and 8.14.1.2.2 (pages 8.14-1 to 8.14-3) indicate that approximately 115 tons of non hazardous waste will be generated during construction and about 35 tons/year of non hazardous waste during operations. Section 8.14.2.4 (page 8.14-7) however, suggests that approximately 850 tons of nonhazardous waste will be generated during construction and 14,000 tons/year (including 3 tons of hazardous waste) during operations. Further, the operational phase hazardous waste estimates in Table 8.14-1 (page 8.14-4) do not reconcile with the 3 tons identified in Section 8.14.2.4.

DATA REQUEST

77. Please clarify the tonnages of hazardous and nonhazardous wastes applicable to this project.

BACKGROUND

The waste management hierarchy discussed in Section 8.14.4 (page 8.14-8) mentions use of waste minimization, reuse and recycling and treatment in the project's life cycle. However, it does not identify any measurable goals/targets for minimization, reuse and recycling and treatment and how these goals will be measured for effectiveness.

DATA REQUEST

78. Please expand the discussion in Section 8.14.4 to include goals/targets (e.g., annual recycling goal of 25 percent during first three years of operation) that the applicant plans to commit to for each hierarchical approach and also identify the procedures that will be put in place to measure effectiveness.

BACKGROUND

In Section 8.14.4.2.2 (page 8.14-9), the applicant proposes the use of licensed waste haulers, recyclers and disposal facilities. However, the discussion does not mention the protocol the applicant will use for evaluating and selecting these businesses, prior to use. Further, the proposed secondary containment for the on-site hazardous waste storage area includes a safety margin of 20 percent to accommodate precipitation. However, the proposal lacks details on how this margin was selected.

DATA REQUEST

79. Describe the protocol that will be used to evaluate and select these businesses and whether the applicant intends to audit or use equivalent methods, prior to use.

80. Provide a discussion justifying that the 20 percent margin will be adequate for containment of hazardous wastes. Include in the discussion, any detailed back up calculations leading to the specifications of the proposed containment.

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

APPLICATION FOR CERTIFICATION FOR THE SUN VALLEY ENERGY PROJECT (SVEP)	DOCKET NO. 05-AFC-3 (Revised 3/3/2006)

PROOF OF SERVICE LIST

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. **05-AFC-3**
1516 Ninth Street
Sacramento, CA 95814-5512
E-mail: docket@energy.state.ca.us

* * * *

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

APPLICANT

Jenifer Morris
Project Manager
NJ Resources, LLC
7240 Heil Ave.
Huntington Beach, CA 92647
jenifer@njr.net

*** Tom McCabe**
Edison Mission Energy
18101 Von Karman Avenue
Irvine, CA 92612
tmccabe@edisonmission.com

APPLICANT'S CONSULTANT

CH2M HILL
Douglas M. Davy, Ph.D., Sr. Project Manager
2485 Natomas Park Dr., Suite 600
Sacramento, CA 95833
ddavy@ch2m.com

COUNSEL FOR APPLICANT

Galati & Blek, LLP
Scott Galatti
Plaza Towers
555 Capitol Mall, Suite 600
Sacramento, CA 95814
sgalati@gb-llp.com

INTERESTED AGENCIES

None listed as of 3/3/2006

INTERVENORS

California Unions for Reliable Energy
(CURE)
C/O Marc D. Joseph
Gloria D. Smith
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, California 94080

DECLARATION OF SERVICE

I, **Evelyn M Johnson** declare that on **March 15, 2006** I deposited copies of the attached **RE: Data Requests** in the United States mail at Sacramento, CA with first class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above. Transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210.

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

Evelyn M Johnson
[signature]

* * * *

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Gary Fay
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Project Manager
Robert Worl
MS-15

Staff Counsel
Paul Kramer
MS-14

Staff Counsel
Deborah Dyer
MS-14

PUBLIC ADVISER

Margret Kim
Public Adviser
1516 Ninth Street, MS-12
Sacramento, CA 95814
pao@energy.state.ca.us