

CALIFORNIA ENERGY COMMISSION

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



November 14, 2008

DOCKET 08-AFC-5

DATE	NOV 14 2008
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Robert B. Liden,
Executive Vice President
SES Solar Two, LLC
2920 E. Camelback Road, Ste. 150
Phoenix, AZ 85016

**RE: STIRLING ENERGY SYSTEMS SOLAR TWO PROJECT (08-AFC-5) - DATA
REQUESTS SET 1, PART 1 (#s 1-52)**

Dear Mr. Liden:

Pursuant to Title 20, California Code of Regulations, Section 1716, the Bureau of Land Management (BLM) and California Energy Commission (Energy Commission) staff seek 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.

Part 1 of this set of data requests (#1-52) is being made in the areas of Biological Resources (#1-15); Land Use (#16-23); Power Plant Efficiency (#24-26); Project Description (#27); Socioeconomics (#28); Soil and Water Resources (#29-38); Traffic and Transportation (#39-41); Visual Resources (#42-45); and Waste Management (#46-52). Part 2 will follow by November 20, 2008 and will include Air Quality and Cultural Resources. Written responses to the enclosed data requests are due to the BLM and Energy Commission staff on or before December 9, 2008, as agreed to by the applicant, or at such later date as may be mutually agreeable.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, you must send a written notice to both the Committee and me within 20 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, please call me at (916) 653-1639 or email me at cmeyer@energy.state.ca.us.

Sincerely,

Christopher Meyer,
Project Manager

Enclosure

cc: Docket (08-AFC-5)
Proof of Service List

PROOF OF SERVICE (REVISED 11/12/08) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 11/14/08

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Technical Area: Biological Resources
Author: Joy Nishida

BACKGROUND

AFC Section 5.6.1.3 discusses jurisdictional waters. Page 5.6-14 jurisdictional delineation results identify ephemeral washes which display defined bed and banks that may be considered waters of the state. The section states that “None of the washes that occur on-site or along the off-site transmission line connect to USACE-defined navigable waters. Therefore, none of the washes associated with the Project would be considered under federal jurisdiction.” According to the Surface Water Quality Section 5.5.1.3 page 5.5-4, “Project surface water that does not infiltrate or evaporate ultimately drains approximately 30 miles north to the Salton Sea,” which establishes a surface water connection to a body of water which is under USACE jurisdiction (see *Colvin v. United States*). According to email correspondence with Laurie Monarres of the U. S. Army Corps of Engineers (USACE), an approved jurisdictional determination is still to be completed. Also, since waters of the state are likely on-site, impact to potential waters of the state will require a Streambed Alteration Agreement by California Department of Fish and Game (CDFG) before any disturbance. Staff needs this information to complete its analysis.

DATA REQUESTS

1. Please provide the wetland delineation report and the final determination from the USACE regarding whether or not jurisdiction will be asserted. Should the USACE assert jurisdiction, please explain the project-specific circumstances that would necessitate substantial temporary or permanent impacts to jurisdictional waters.
2. Please contact CDFG and provide a record of correspondence regarding the need to complete a Streambed Alteration Agreement. Should a Streambed Alteration Agreement be needed, please explain the project-specific circumstances that would necessitate substantial temporary or permanent impacts to jurisdictional waters of the State.
3. Please provide the anticipated schedule of USACE and Regional Water Quality Control Board (RWQCB) permitting for (and verification of) jurisdictional waters, and expected mitigation measures likely to be included in USACE and RWQCB permits, if appropriate.

BACKGROUND

AFC Section 3.1 discusses the modularity design of the SunCatcher. The AFC states that the “modularity allows the units to be installed on sloping land with up to a 5 percent grade.” The project site may be located on a gently sloping alluvial surface, but as stated in Section 5.5.1.1 page 5.5-1, “Local slopes are much greater, and the terrain varies from level to steep hills and valleys.” The AFC lacks a detailed project description of grading and the potential for impacts to protected species. Additional information is needed by staff to analyze impacts because project-related ground disturbance increases the likelihood of flat-tailed horned lizard (*Phrynosoma mcallii*) and burrowing owls (*Athene cunicularia*) injuries/fatalities.

DATA REQUEST

4. Please provide an analysis of the biological resource impacts expected to occur to flat-tailed horned lizard and burrowing owls during grading for the proposed project. Also provide species-specific measures to mitigate project-related grading impact.

BACKGROUND

AFC Section 5.5.2.3 page 5.5-12 discusses wastewater discharge from the reverse osmosis unit. Two lined evaporation ponds, double-lined impoundment, or equivalent each sized to hold 3 million gallons, will be used to undergo a 1 year evaporation process. While one pond is undergoing the evaporation process, the other pond will be placed in operation to collect the wastewater discharge. The total dissolved solids such as sodium in the wastewater ponds on the project site anticipated in the brine is expected to be up to four or five times the concentration of the raw water source. Monitoring plans and methods were not discussed in Section 5.5. Sodium toxicity is known to be a significant threat to birds especially when associated with man-made bodies of water such as evaporation ponds in desert environments. Staff needs detailed information on the proposed evaporation pond monitoring plan and methods to determine if this will adequately address potential impacts to migratory birds.

DATA REQUEST

5. Please provide a detailed monitoring plan for the evaporation ponds, including:
 - a. a discussion of the frequency and nature of monitoring;
 - b. elements that will be monitored (e.g., sodium);
 - c. a list of resident and migratory species that could be at risk;
 - d. remedial actions that could be taken if the ponds become a hazard for wildlife; and
 - e. events that might trigger implementation of those remedial actions.
6. Please provide details on how the evaporation ponds will be designed, built, and operated to discourage wildlife use.

BACKGROUND

The AFC did not discuss raven predation on flat-tailed horned lizard, a protected species. Ravens are known to prey upon flat-tailed horned lizard. The SunCatchers and perimeter fencing pose as potential perching sites, thus increasing predation on flat-tailed horned lizard. However, ravens are migratory species, which are state and federally protected by the Migratory Bird Treaty Act. Staff needs details on a raven monitoring program, a proposed plan of action if raven populations prove to be increasing and posing a threat to flat-tailed horned lizard and other wildlife, and a commitment to mitigation. Staff needs this information to complete its analysis.

DATA REQUEST

7. Please provide a detailed raven monitoring and control plan that discusses:
 - a. how the monitoring and control plan will be coordinated with CDFG and USFWS;
 - b. area covered by the plan;
 - c. potential use of perch-deterrent devices and locations of their installation;
 - d. measures that might reduce raven presence and nesting activities (e.g., removing food items, garbage, and access to water);
 - e. a monitoring plan, including discussion of survey methods and frequency for establishing baseline data on pre-project raven numbers and activities, assessing post-project changes from this baseline, and the funding mechanism for the monitoring plan;
 - f. remedial actions that would be employed (e.g., nest removal) if raven predation of flat-tailed horned lizard is detected; and
 - g. the circumstances that would trigger the implementation of remedial actions.

BACKGROUND

AFC Section 3.12 pages 3-77 and 3-78 addresses closure of the project following the cessation of facility operations and states that the decommissioning plan will ensure environmental protection. Permanent closure is an issue of concern regarding biological resources due to the proposed location on a large habitat area as well as the potential threats posed by abandoned equipment and hazardous materials. Although page 4.0-2 states that "Because the conditions that would affect the decommissioning decisions are largely unknown at this time, these conditions would be presented to the CEC, the BLM, and other applicable agencies," staff needs general information on facility closure as it relates to biological resources to complete its analysis.

DATA REQUESTS

8. Please describe the likely components of a facility closure plan (e.g., decommissioning methods, timing of any proposed restoration, restoration performance criteria) and discuss each relative to biological resources and specifically species of concern such as flat-tailed horned lizard and burrowing owl.
9. Please describe the potential funding (e.g., a bond) and/or legal mechanisms for decommissioning and restoration of the project site that could be used at the end of operations.
10. Please describe the potential funding and/or legal mechanisms for decommissioning and restoration of the project site that could be used in the event of bankruptcy or the untimely closure for financial reasons.
11. Provide a discussion of closure requirements of the County of Imperial, USFWS, CDFG, and any other agency that may have facility closure requirements.

BACKGROUND

AFC Section 5.6.2.1 page 5.6-18 states that wildlife impacts related to operational noise are considered less than significant since the species observed in the Project vicinity are species that are often found in disturbed or developed area and are expected to adapt to the new noise levels. However, noise and/or vibration levels associated with construction activities, such as the insertion of the pedestal of the SunCatcher that is driven into the ground by vibration, will exceed the background level. Burrowing owls, which are a California Species of Concern, occur on-site and can be vulnerable to noise and vibration. Other California species of concern, such as the Le Conte's thrasher, are also on-site, could nest near the shrubs along the washes, and be adversely affected by noise and vibration. The AFC also states that "Mitigation measures for construction noise levels as they relate to wildlife effects are included as Best Management Practices (BMPs) in Section 5.6.4, Mitigation Measures." These mitigation measures were not included in this section.

DATA REQUESTS

12. Please provide an analysis of the potential impacts to sensitive wildlife that could result from noise and vibration associated with the construction of the solar facility and water pipeline. As appropriate, provide species-specific measures to mitigate potential noise and vibration impact.
13. Please identify the BMPs to be implemented to minimize noise and vibration impacts during project construction to wildlife.

BACKGROUND

The Biological Resources Technical Report pages B-1 through B-4 in Appendix Y of the AFC lists the plant species observed on the Project site. Invasive species observed on the Project site include red brome (*Bromus madritensis*), Bermuda grass (*Cynodon dactylon*), crystalline iceplant (*Mesembryanthemum crystallinum*), Saharan mustard (*Brassica tournefortii*), and various species of tamarisk (*Tamarix* spp.) are considered by the California Department of Food and Agriculture and/or the California Invasive Plant Council to be noxious weeds. One of the BLM's primary responsibilities is to curtail the spread of invasive species since invasive species reduce natural habitat for native plants and wildlife and compete with native plants for water and other resources. The AFC lacked a discussion of mitigation measure to be implemented which would minimize the spread of invasive species. A Weed Management Plan must be developed for this Project for the BLM.

DATA REQUESTS

14. Please prepare and submit a Weed Management Plan to staff and BLM that includes a discussion of all methods to be implemented (e.g. equipment cleaning) to prevent the spread of weeds and herbicides to be used in control of undesirable plants.
15. Please describe specific methods for weed management under the SunCatcher structures (e.g., pre-emergent herbicide or other methods).

Technical Area: Land Use
Author: Negar Vahidi

INTRODUCTION

The Solar Two Project site is on public land that is administered by the BLM and Imperial County. The amount of land to be fenced and developed within the BLM-administered public areas is estimated to be 6,140 acres. In addition to BLM-administered public lands, approximately 360 acres of private land will be permitted for the Project site (as stated on AFC page 5.9-4). The total fenced area to be developed will encompass approximately 6,140 acres of BLM-administered public and private lands comprising portions of 52 contiguous parcels.

BACKGROUND

As stated on AFC page 5.9-10 in Section 5.9.1.3 (Site Control), “[t]he privately owned county administered lands within the Project Site are currently under option to purchase or will be leased by the Applicant prior to the start of construction. The Project Site would be owned and operated by Solar Two.” On page 5.9-4 of the AFC states, “[a] total of approximately 720 acres of private parcels exist within the Project boundary, of which approximately 480 acres are included as part of the Project. The remaining 240 acres are not a part of the Project. These lands are under the jurisdiction of Imperial County.”

DATA REQUESTS

16. Please clarify the exact amount of Project-related private land acreage under the jurisdiction of Imperial County (360 acres or 480 acres).
17. Please indicate which parcels comprise the private land portions of the Project within the jurisdiction of Imperial County.
18. Please clarify the statement above regarding ownership status of Project parcels. Does the applicant currently own the parcels within the non-BLM portion of Project lands? If not, please provide the timing for the applicant’s acquisition of these parcels.
19. Please specify if and when the applicant intends to merge the Project parcels within the non-BLM portions of Project lands into one legal parcel.
20. If the applicant intends to merge the private parcels, when would the parcel merger process be initiated with Imperial County? Please provide the timing for completion of this process.
21. If the applicant does not intend to merge the private parcels, please specify the reasons.

BACKGROUND

AFC Section 5.9.2.2 (Agricultural Land) states, *“the Project area does not contain prime farmlands, farmlands of statewide significance, nor farmlands of local importance, and no parcels within the Project area are subject to the Williamson Act. The Project Site is not within any specified agricultural areas and does not contain the preferred soils or water availability that facilitate intensive agricultural use. The Project Site therefore does not contain any farmland areas and will not contribute to loss of productive farmland.”* Although this section provides useful information, staff needs specific information regarding the Project site in order to analyze agricultural land impacts.

DATA REQUESTS

22. Please provide the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP) land use designation for the privately owned portions of the Project site and any off-site associated facilities (i.e., linear facilities).
23. For the BLM-owned federal land portions of the site, please provide the US Department of Agriculture (USDA) Natural Resources Conservation Service soil information regarding soil types. Note that the FMMP is also based on NRCS soil data. These two sources will help provide consistent data for both the private and federal lands that comprise the Project.

Technical Area: Power Plant Efficiency
Author: Steve Baker

BACKGROUND:

Staff must examine the efficiency with which a project consumes energy. A typical power plant consumes fuel, usually in the form of natural gas. The SES Solar Two Project will consume no natural gas directly, but will utilize hydrogen, both to initially fill the Stirling engines, and to replenish hydrogen that leaks from the engines. Hydrogen is commonly manufactured from natural gas, and thus represents fuel consumption by the project. Alternately, hydrogen can be produced from water by electrolysis, which consumes electricity. In California, this electricity likely comes from natural gas-fired power plants, thus representing fuel consumption by the project.

DATA REQUESTS

24. Please provide information on how much hydrogen would be required to initially fill all 30,000 Stirling engines, as well as the project hydrogen supply and storage system.
25. Please provide information on how much hydrogen would be required annually to replenish leakage.
26. Please describe the source of hydrogen for the project, including a description of the process employed and the consumption of natural gas and/or electricity by that process.

Technical Area: Project Description
Author: Christopher Meyer

BACKGROUND

AFC Section 3.5.5 (Buildings) states, *“Each assembly building will be 170 feet wide by 211 feet long by 78 feet in height and will contain two assembly lines. Each assembly building will be located on a concrete pad for the storage of SunCatcher components and assembled SunCatcher staging before field installation....These assembly buildings will be decommissioned and salvaged after all SunCatchers for the Project are installed.”* In addition, AFC Section 3.9.12 (Materials and Equipment Staging Areas) states, *“Two construction staging and laydown areas will be used for the Project. A 100-acre construction laydown area that includes a 25-acre construction staging area will be provided east of Dunaway Road within Section 14.”* The AFC does not address the use of these areas during the operational phase of the project.

DATA REQUESTS

27. Please clarify the proposed post-construction use(s) for the areas currently proposed for the three SunCatcher assembly buildings and the 100-acre construction laydown area east of Dunaway Road.

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

BACKGROUND:

Staff needs to know the year that corresponds to all dollar estimates. The time value of money should be reflected for all economic estimates.

DATA REQUESTS

28. Please verify the year for all economic estimates (e.g., construction cost, construction and operation payroll, property taxes, sales taxes, school impact fees, etc.), and IMPLAN construction and operation economic impacts (which include secondary impacts). Some dollar estimates in the AFC (Section 5.10.2.1 Construction Workforce for construction payroll page 5.10-14) are in 2008 dollars while in Fiscal Effect (Section 5.10.2.4 pages 5.10-22 to 25) are in 2007 dollars. 2007 dollars were also used in the AFC Supplement for Socioeconomics.

Technical Area: Soil and Water Resources
Author: Casey Weaver

BACKGROUND:

Areas within the project site have been mapped to be within the 100-year flood zone. The map showing the boundaries of the 100-year flood zone is not of a sufficient scale to identify proposed project structures in the vicinity of the mapped zones. Without knowing where project structures are proposed relative to the 100-year flood zone boundaries, staff cannot analyze the potential for the proposed project to impede or redirect flood flows.

DATA REQUESTS

29. Please provide a map depicting all proposed project structures in the vicinity of the mapped 100-year flood zones.
30. The transmission line alignment traverses an area designated as being within the 100-year flood zone. Please provide a scaled map showing the proposed locations of the transmission tower foundations within the 100-year flood zone and provide an explanation of how the towers may affect/be affected by the 100-year flood.

BACKGROUND

Project construction may induce water and wind erosion at the power plant site. Storm water runoff may also contribute to erosion and sedimentation as well as transport pollutants off site. Storm water will be collected, contained and managed under the State Water Resources Control Board NPDES General Permit requirements during construction and operation. Storm Water Pollution Prevention Plans will be required for both construction and operation of the power plant. The AFC briefly discusses some of the features and best management practices that will be implemented for this project; however, they are not described in sufficient detail to demonstrate that they will function as intended and/or comply with State and local requirements.

DATA REQUESTS

31. Please provide a draft Erosion and Sedimentation Control Plan (DESCP) that ensures protection of water quality and soil resources of the project site and all linear facilities for both the construction and operation phases of the project. This plan shall address appropriate methods and actions, for the protection of water quality and soil resources, demonstrate no increase in off-site flooding potential, meet local requirements, and identify all monitoring and maintenance activities. The draft plan shall be consistent with the grading and drainage plan and may incorporate by reference any storm water pollution prevention plan developed in conjunction with any NPDES permit.

Presented here for your use as needed, the final DESCP that you will ultimately be required to provide shall contain the following elements:

- a. **Vicinity Map** – A map shall be provided indicating the location of all project elements with depictions of all significant geographic features to include watercourses, washes, irrigation and drainage canals, and sensitive areas.
- b. **Site Delineation** – The site and all project elements shall be delineated showing boundary lines of all construction areas and the location of all existing and proposed structures, pipelines, roads, and drainage facilities.
- c. **Watercourses and Critical Areas** – The DESCPC shall show the location of all nearby watercourses including washes, irrigation and drainage canals, and drainage ditches, and shall indicate the proximity of those features to the construction site.
- d. **Drainage** – The DESCPC shall provide a topographic site map showing all existing, interim, and proposed drainage systems, drainage area boundaries, watershed sizes in acres, and the hydraulic analysis to support the selection of best management practices (BMPs) to divert off-site drainage around or through the site and laydown areas. Spot elevations shall be required where relatively flat conditions exist. The spot elevations and contours shall be extended off site for a minimum distance of 100 feet in flat terrain.
- e. **Clearing and Grading** – The plan shall provide a delineation of all areas to be cleared of vegetation and areas to be preserved. The plan shall provide elevations, slopes, locations, and extent of all proposed grading as shown by contours, cross sections, or other means. The locations of any disposal areas, fills, or other special features shall also be shown. Existing and proposed topography tying in proposed contours with existing topography shall be illustrated. The DESCPC shall include a statement of the quantities of material excavated or filled for each element of the project (for example, project site, transmission corridors, and pipeline corridors), whether such excavations or fill is temporary or permanent, and the amount of such material to be imported or exported or a statement explaining that there will be no clearing and/or grading conducted for each element of the project.
- f. **Project Schedule** – The DESCPC shall identify on the topographic site map the location of the site-specific BMPs to be employed during each phase of construction (initial grading, project element excavation and construction, and final grading/stabilization). Separate BMP implementation schedules shall be provided for each project element for each phase of construction.
- g. **Best Management Practices** – The DESCPC shall show the location, timing, and maintenance schedule of all erosion- and sediment-control BMPs to be used prior to initial grading, during project element excavation and construction, during final grading/stabilization, and after construction. BMPs shall include measures designed to control dust and stabilize construction access roads and entrances. The maintenance schedule shall include post-construction maintenance of treatment-control BMPs applied to disturbed areas following construction.
- h. **Erosion Control Drawings**—The erosion-control drawings and narrative shall be designed and sealed by a professional engineer or erosion-control specialist.

32. Please provide a draft Storm Water Pollution Prevention Plan (SWPPP) consistent with the requirements for a NPDES General Permit for construction and operation of the site and associated linear facilities. This plan may be combined with the DESCOP or modified to include those elements identified for a DESCOP.

BACKGROUND:

30,000 SunCatcher mirrors are proposed for construction on the proposed site. The Applicant estimates that the mirrors on each SunCatcher will require washing once a month using high quality, treated, surface water. The Applicant estimates that 14 gallons of demineralized water will be required to adequately wash each SunCatcher (Table 5.5-3). However, the Daily Maximum use shown on the table is based on a three month period when all SunCatcher mirrors are given a scrub wash requiring up to three times the normal wash of 14 gallons. Additionally, the Annual Usage shown on the table is based on each SunCatcher being “normally” washed 8 times a year with one additional scrub wash. It is not clear from these three different descriptions of mirror washing how water is being characterized for the average and maximum use analysis.

DATA REQUEST

33. Please provide a description of the methodology, sequence, schedule, and estimated average and maximum water use for SunCatcher mirror washing operations.

BACKGROUND:

The US Gypsum Corporation’s Plaster City Gypsum Wallboard Manufacturing Facility is located immediately north of the proposed project site and it intends to expand its facility. The proposed project site is located in an area subject to significant wind transport of fine grain sediments. It is possible there will be airborne deposition of fine grain material from the gypsum plant onto the SunCatcher mirrors. The potential impacts on water use due to this condition have not been evaluated.

DATA REQUESTS

34. Please provide a description of the management measures US Gypsum employs to mitigate their generation of fugitive dust.
35. Please evaluate the potential for airborne gypsum to be deposited on the mirrors and explain whether additional water, beyond that estimated in the AFC, will be required for mirror washing.

BACKGROUND:

Appendix J provides water balance flow diagrams for various phases of project development. On sheet 4 of 4, Water Balance Flow Diagram – Summer Peak During Construction, the flow rate of raw water is shown to be 407 gallons per minute (gpm). However, the diagram indicates that flows for construction water would be 245 gpm, flows for dust control would be 155 gpm and flows delivered for water treatment would be 32.4 gpm. These flows add up to 432.4 gpm. Staff cannot analyze the accuracy of the water balance when the sum of the flows does not balance.

DATA REQUEST

36. Please provide a water balance flow diagram that shows the correct balance.

BACKGROUND

According to the AFC, the Imperial Irrigation District (IID) will provide the water supply for the project from its Westside Main Canal. The project will obtain raw canal water, which will be treated to provide an appropriate quality of water for mirror washing and to meet the standards for on-site drinking water. The applicant estimates that 33 acre-feet of water will be used annually for mirror washing and domestic use. There are no provisions in the AFC for a backup water supply.

DATA REQUESTS

37. Please discuss in detail the reliability of IID for providing the required water and the historical performance of the Westside Main Canal. This detailed discussion should include:
- a. The amount of IID water that can be obtained reliably on a month-to-month and year-to-year basis.
 - b. Citations from the IID, and other water agency planning documents to support the reliability discussed above.
 - c. The effect of the following on the available water supply over the life of the project: (1) single dry and multiple dry years; and (2) increased water supply demand as the region's population and economy grow.
38. Since the project has only one source of water with no backup supply, please discuss the dependability of the water source. The discussion should include:
- a. The available historical data for any interruptions to the proposed water supply or delivery reductions that have been required over the last 10 years.
 - b. A copy of a draft water supply agreement showing:
 - c. The agreed upon term of delivery;
 - d. The volume of water to be delivered;
 - e. A description of what, if any, reductions in delivery the applicant will be required to take in dry or drought years, or other reasons beyond the applicant's control;
 - f. A description of what, if any, other activities may be undertaken if water delivery from IID is reduced or temporarily halted.

Technical Area: Traffic and Transportation
Author: Heather Keresztes

BACKGROUND

Section 3.1 (Project Description) page 3-4 provides a description of access for the project during construction and at project completion. These access points are via Evan Hewes Highway and Dunaway Road; however, there are no plans provided to show the geometrics at these driveways or the widths of the driveway openings.

DATA REQUEST

39. Please provide scaled plans (40-scale) for each access to the site and the access to the laydown/construction area to the east of Dunaway Road, so that proper analysis of on-site access can be performed.

BACKGROUND

Section 5.11.1.7 (Level of Service Concept) page 5.11-6 indicates that Caltrans does not have a freeway segment analysis procedure to evaluate freeway segments based upon average daily traffic (ADT). There is no mention of peak hour analysis.

DATA REQUEST

40. Caltrans has procedures for analysis of freeway road segments during the AM and PM peak hour. Please provide the peak hour delay and Level of Service for the freeway road segments during the AM and PM peak hours for the eastbound and westbound directions on Interstate 8, west of Imperial Highway, between Imperial Highway and Dunaway Road and east of Dunaway Road for all studied scenarios. Also, please provide the associated back up data (i.e. peak hour volumes and analysis worksheets).

BACKGROUND

Section 5.18.3.10 (Traffic and Transportation) page 5.18-20 mentions a cumulative project: Desert Springs Resort.

DATA REQUEST

41. Please provide a copy of the traffic study for the Desert Springs Resort development so the traffic associated with this cumulative project can be reviewed.

Technical Area: Visual Resources
Author: James Adams

BACKGROUND

Figures 5.13-17 and 13-22 in the AFC show the existing view and a simulated view of the project site and the project itself, respectively. The AFC states that the photographs for these views were taken from the Ocotillo Vehicular (OTV) Recreation Area. The Plaster City Open Area is directly north of the Evan Hewes Highway and approximately .5 mile from the nearest project feature. The Ocotillo Vehicular Recreation Area is approximately 20 miles north of the site. The number of users of the adjacent off-highway vehicle recreation area on an annual basis is not mentioned. The applicant states on Pg. 5.13-30 that a landscaping plan has not been prepared. Staff would need to see a draft plan in order to complete our analysis. Finally, the applicant intends to construct a security fence at least ten feet high that will enclose the project. It is unclear how this would affect the simulations from all the KOPs. Therefore, staff needs additional information to address these issues.

DATA REQUESTS

42. Please clarify which off-highway vehicle recreation area is adjacent to the project.
43. Please provide the number of users at the adjacent off-highway vehicle recreation area for the most recent year.
44. Please provide a draft landscaping plan.
45. Please provide new simulations from all the KOPs reflecting the visual impact of the security fence.

Technical Area: Waste Management
Author: Suzanne Phinney

BACKGROUND

SES Solar 2 will consist of two phases. Phase II's construction and operation is contingent on development of additional transmission capacity (p. 1-3). It is unclear whether waste streams from Phase II are considered in the waste streams listed in Table 5.14-2 (construction) and Table 5.14-3 (operations) of the Application for Certification (AFC).

DATA REQUEST

46. Please clarify whether the waste quantities in Tables 5.14-2 and 5.14-3 are only for Phase I or include waste quantities for both Phase I and II.

BACKGROUND

Table 5-14-2 lists construction waste quantities in terms of estimated frequencies of generation without providing a total timeframe for construction.

DATA REQUEST

47. Please provide the number of months expected for construction. Also, please specify how this timeframe pertains to Phases I and II.

BACKGROUND

Three buildings (each 170 feet wide by 211 feet long by 78 feet tall) would be constructed for on-site SunCatcher assembly. The buildings will later be decommissioned and salvaged after installation of all project SunCatchers (p. 3-20). Also, a new 34.5-kV to 230-kV substation would be constructed in the center of the project site (p. 3-25). Waste streams from neither the Suncatcher assembly buildings nor the substation are discussed in Section 5 (Waste Management) of the AFC.

DATA REQUESTS

48. Please list and quantify any waste streams expected from the construction and decommissioning of the SunCatcher assembly buildings.
49. Please list and quantify any waste streams expected from the construction of the substation.
50. Please discuss how these wastes will be managed and disposed.

BACKGROUND

The Integrated Waste Management Act of 1989 (AB 939) established landfill waste diversion goals of 50 percent by the year 2000 for state and local jurisdictions. To meet the solid waste diversion goals, many local jurisdictions have implemented Construction and Demolition Waste Diversion Programs.

DATA REQUESTS

51. If Imperial County or a nearby city operates a Construction and Demolition Waste Diversion Program, please cite the jurisdiction to which the applicant would be accountable.
52. Please describe how the applicant will meet the requirements of the Construction and Demolition Waste Diversion Program.



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV

**APPLICATION FOR CERTIFICATION
For the SES SOLAR TWO PROJECT**

Docket No. 08-AFC-5

PROOF OF SERVICE

Revised 11/12/08

INSTRUCTIONS: All parties shall either (1) send an original signed document plus 12 copies or (2) mail one original signed copy AND e-mail the document to the address for the Docket as shown below, AND (3) all parties shall also send a printed or electronic copy of the document, which includes a proof of service declaration to each of the individuals on the proof of service list shown below:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 08-AFC-5
1516 Ninth Street, MS-15
Sacramento, CA 95814-5512
docket@energy.state.ca.us

APPLICANT

*Robert B. Liden,
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DECLARATION OF SERVICE

I, Mineka Foggie, declare that on November 14, 2008, I deposited copies of the attached Stirling Energy Solar Two (08-AFC-5) Data Request Set 1 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.

OR

Transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

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

Original Signature in Dockets _____
MINEKA FOGGIE

Attachments